NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

8/23/94

SITE INVESTIGATION INFORMATION

1. SITE NAME	2. SITE NUMBER	3. TOWN/CITY/VILLAGE	4. COUNTY
Monroe Electronics	8370??	Village of Lyndonville	Orleans

5. REGION	6. CLASSIFICATION
8	N/A <-------- CURRENT P <------- PROPOSED MODIFY

7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location)

a. Quadrangle Lyndonville

b. Site Latitude _43_° _19_' _31_" Site Longitude _78_° _23_' _47_"

c. Tax Map Numbers 024.16.2

d. Site Street Address 100 Housel Avenue, Lyndonville, NY

8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)

Monroe Electronics manufactures non-contact electrostatic measuring instrumentation and A/V switching, timing and remote control equipment for the cable, wireless and telephony industries. In a 1986 Right-to-Know survey, Monroe Electronics admitted to dumping 2 tons of1,1,1-trichloroethane (1,1,1-TCA) at the facility. The facility is also the former location of a DuPont plant which manufactured agricultural dusts and sprays. Recent investigations regarding the Lyndonville West Avenue site #837002 indicate there is not a consequential amount of the pesticide/metal contamination associated with DuPont present on the Monroe Electronics property. The 1,1,1-TCA issues, however, were not resolved in the recent sampling.

a. Area __~3__ acres b. EPA ID Number _NYD002115822_

c. Completed ( )Phase I ( )Phase II ( ) PSA ( )RI/FS ( )PA/SI ( )Other

9. Hazardous Waste Disposed (Include EPA Hazardous Waste Numbers)

1,1,1-TCA - F001and/or F002

10. ANALYTICAL DATA AVAILABLE

a. ( )Air ( )Groundwater ( )Surface Water ( )Sediment (X)Soil ( )Waste ( )Leachate ( )EPTox ( )TCLP

b. Contravention of Standards or Guidance Values

There is not enough VOC data available to make a conclusive determination about the listing and category of the site.

11. **CONCLUSION**

A Right to Know form filled out by Monroe Electronics indicated ~2 tons of 1,1,1-TCA was disposed of on the property. Pesticide/met contamination is not present at the site in consequential amounts. Additional investigation regarding the 1,1,1-TCA is necessary.

12. SITE IMPACT DATA

a. Nearest Surface Water: Distance ___10_____ft. Direction____North_____ Classification __Drainage Ditch (D)____

b. Nearest Groundwater: Depth ___~5__ft. Flow Direction _____NE_____ ( )Sole Source ( )Primary (XX)Principal

c. Nearest Water Supply: Distance - 2400 ft Direction __north__ Active (XX)Yes ( )No

d. Nearest Building: Distance __on-site_ft. Direction _____ Use _____light industrial_____

e. In State Economic Development Zone?	( )Y	(XX)N	i. Controlled Site Access?	( )Y	(XX)N
f. Crops or livestock on site?	( )Y	(XX)N	j. Exposed hazardous waste?	( )Y	(XX)N
g. Documented fish or wildlife mortality?	( )Y	(XX)N	k. HRS Score __N/A_____		
h. Impact on special status fish or wildlife resource?	( )Y	(XX)N	l. For Class 2: Priority Category _N/A_		

13. SITE OWNER'S NAME	14. ADDRESS	15. TELEPHONE
Robert Vosteen	100 Housel Ave., Lyndonville, NY 14098	1-800-821-6001

16. PREPARER	17. APPROVED
Signature Date	Signature Date
David G. Pratt, P.E./ Environmental Engineer 2 / NYSDEC, Reg 8	Mary Jane Peachey, P.E. / Env. Eng. 3 / NYSDEC, Region 8
Name, Title, Organization	Name, Title, Organization

MONROE ELECTRONICS
SITE INVESTIGATION
REPORT

Site ID# 837013
Village of Lyndonville, Orleans County

Prepared By:

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New York State Department of Environmental Conservation
Division of Environmental Remediation
Region 8
6274 East Avon-Lima Road
Avon, NY 14414

July 2001

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1.0 SITE DESCRIPTION AND HISTORY

Monroe Electronics has been located on Housel Avenue in the Village of Lyndonville, Orleans County since 1972 (see Figure 1). In September 1986, Monroe Electronics completed a Hazardous Waste Disposal Questionnaire, also known as a right-to-know (RTK) survey, provided by the New York State Department of Environmental Conservation (NYSDEC). In the RTK, Monroe Electronics stated they disposed of 1 to 4 tons of 1,1,1-trichloroethane (1,1,1 - TCA) at their Housel Avenue facility. 1,1,1-TCA is a volatile organic compound (VOC) used in cleaning and degreasing operations.

Until the 1950s, the Monroe Electronics Housel Avenue facility was the historic location of a former DuPont/Barre Lime & Sulfur pesticide spray and dust mixture manufacturing plant. The Lyndonville West Avenue inactive hazardous waste disposal site #837002 (which originally included the Monroe Electronics facility, see Figure 2) centers on pesticide and arsenic contamination which originated at this manufacturing plant. Pesticide and arsenic contamination has been identified in a nearby landfill and drainage ditch; however, 1997 investigations (see Figure 3) did not identify a consequential amount of pesticide and arsenic present at the former plant site (currently Monroe Electronics). Investigations were not sufficient, however, to alleviate concerns over the VOCs which may be at the property. Because of this, the NYSDEC segregated the Monroe Electronics property from the Lyndonville West Avenue site description in November 1999. See Figure 4 for the current site boundaries of the Lyndonville West Avenue site.

2.0 INVESTIGATION AND SCOPE OF WORK

The field investigation took place on May 11 &12, 2000. The NYSDEC contracted with Zebra Environmental to perform soil boring activities.

The objectives of this SI project were:

- Further define the nature and extent of contamination at the Monroe Electronics plant site; and
- Determine if this site should be listed on the NYS Listing of Inactive Hazardous Waste Disposal Sites.

The scope of work for this project included surface soil sampling, direct push soil sampling and direct push ground water sampling.

Direct push soil samples

- 7 direct push borings were installed at the site (see Figure 5)
- 14 subsurface soil samples were obtained from disposable macro core sleeves during drilling. Soil samples were analyzed for the full Target Compound List (TCL).

Direct push ground water sampling -

- 7 ground water samples were obtained from each direct push boring and analyzed for volatile organic compounds and pesticides. The ground water samples were not tested for the full TCL due to low yield of ground water. Also, boring B-1 did not have pesticides analyzed due to low yield.

Surface soil samples (0-2")

- 4 surface soil samples were obtained by NYSDEC staff and analyzed for the full TCL.

2.1 Direct Push Soil Borings

2.1.1 Soil Borings

2.1.1.1 Decontamination Procedures

Prior to drilling, the driller decontaminated the direct push rig, rods and other pertinent equipment using a high pressure spray. This cleaning procedure was also used on sampling tools between each boring. These decontamination activities were performed in a designated on-site area. Throughout and after the cleaning processes, direct contact between the equipment and the ground surface was not permitted. The driller cleaned the rig and associated equipment upon completion of the investigation prior to leaving the property.

2.1.1.2 Soil Sampling Procedures

The direct push borings intercepted the top of the clay layer, estimated to be 12 ft. below the ground surface. Continuous macro core sleeve samples were collected at each of the boring locations.

2.1.1.3 Soil Sampling and Analysis

VOCs, SVOCs, pesticides, PCBs, and metal analyses were performed on the soil samples. Soil samples were submitted to an approved NYSDEC contract laboratory for analysis.

2.1.2 Groundwater Samples

Groundwater samples were obtained using temporary 1-inch diameter PVC wells.

2.1.2.1 Groundwater Sampling Procedures

Each temporary well was sampled by using dedicated poly tubing and check valves.

2.1.2.2 Groundwater Sample Analysis

Monitoring well ground water samples were collected from all direct push boring locations (7 total). Samples collected during this portion of the SI project were submitted to an approved NYSDEC contract laboratory for analysis. Ground water samples were analyzed for volatile organics (all borings) and pesticides (B-2 through B7).

2.2 Surface Soil Sampling and Analysis

Surface soil samples were collected by the NYSDEC representative at four (4) locations around the site. The exact locations were determined in the field by the NYSDEC representative based on visual evidence of staining and other factors. The samples were collected from the first two inches of soil after sod/surface debris had been removed. Surface soil samples were collected using new disposable plastic scoops.

The surface soil samples were submitted to an approved NYSDEC contract laboratory for analyses. Samples from each location were analyzed for volatile organics, semi-volatile organics, pesticides, PCBs, and metals.

3.0 RESULTS

3.1 Subsurface Soil Results

Results of the subsurface soil sampling are presented in Table 1.

3.1.1 VOCs

Boring B-2, located on the east end of the Monroe Electronics building, had the highest detections of chlorinated hydrocarbons with 320 ppb of trichloroethene (TCE) and 75 ppb of 1,1 dichloroethane (1,1-DCA) at 10 to 12 feet below grade. The TAGM 4046 levels for these compounds are 700 ppb for TCE and 200 ppb for 1,1-DCA.

Boring B-1, located southeast of B-2, also detected TCE, cis-1,2 dichloroethene (cis-1,2DCE), trans-1,2 DCE, and carbon disulfide at levels less than 100 ppb at 8 to 12 feet below grade.

Borings B-4 and B-5 are located on the northwest and west side of the Monroe Electronics building, respectively. These boring had levels less than 100 ppb of 1,2-dichloroethane (1,2-DCA), 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethene (1,1-DCE) and 1,1-DCA [B-4 @ 8 to 12 feet below grade and B-5 @ 1 to 4 feet below grade].

None of the VOCs were detected above TAGM 4046 cleanup objectives.

3.1.2 SVOCs

Borings B-5 and B-6 had detections of SVOCs at 1 to 4 feet below grade. These detection did not exceed TAGM 4046 levels.

3.1.3 Pesticides / PCBs

No pesticides or PCBs were detected above TAGM 4046 cleanup objectives.

3.1.4 Metals

No elevated levels of metals were detected in the subsurface soil samples.

3.2 Surface Soil Results

Results of the surface soil sampling are presented in Table 1.

3.2.1 VOCs

Acetone was detected in SS-03 and SS-04 at 110 ppb and 19 ppb, respectively. The TAGM 4046 cleanup objective for acetone is 200 ppb. 2-butanone was detected in SS-03 at 10 ppb. The TAGM 4046 cleanup objective for 2-butanone is 2700 ppb.

3.2.2 SVOCs

Benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, and dibenzo(a, h)anthracene were detected in SS-03 and SS-04 up to approximately one order of magnitude above TAGM 4046 cleanup objectives.

3.2.3 Pesticides / PCBs

4,4'-DDE and 4,4'-DDT were detected in SS-03 at levels of 32 ppm and 48 ppm, respectively. TAGM 4046 cleanup objectives for each of these compounds is 2.1 ppm.

3.2.4 Metals

Arsenic was detected in SS-03 at 419 ppm and in SS-04 at 24.8 ppm. The TAGM 4046 cleanup objective for arsenic is 7.5 or site background. Barium was detected in SS-03 at 1210 ppm. The TAGM 4046 cleanup objective for barium is 300 ppm or site background. Lead was detected in SS-03 at 864 ppm. The TAGM 4046 cleanup objective for lead is background, which may vary significantly with location. Mercury was detected in SS-03 at 0.22 ppm and SS-04 at 0.22 ppm. The TAGM 4046 cleanup objective for mercury is 0.1 ppm. Zinc was detected in SS-03 at 317 ppm and SS-04 at 471 ppm. The TAGM 4046 cleanup objective for zinc is 20 ppm or site background.

3.3 Ground Water Results

Results of the ground water sampling are presented in Table 2.

3.3.1 VOCs

Chlorinated VOCs were detected in every groundwater sample collected except for B-7, which was located upgradient (south) of the Monroe Electronics building. The highest levels detected were in B-2 with 290 ppb of 1,1 dichloroethane and 110 ppb of trichloroethene. B-1 had 190 ppb of trans-1,2 dichloroethene and 89 ppb of cis-1,2 dichloroethene. B-4 had 170 ppb of 1,2 dichloroethane and 91 ppb of 1,1 dichloroethane. Other chlorinated VOCs were also detected at lower levels.

3.3.2 SVOCs

SVOCs were not analyzed due to low sample volume.

3.3.3 Pesticides / PCBs

B-3, B-4 and B-6 had detections of pesticides. B-3 had the highest levels with 0.18 ppb of alpha-BHC (GW standard - 0.01 ppb), 0.045 ppb of gamma-BHC (AKA - lindane - GW standard 0.05 ppb), 0.67 ppb of beta-BHC (GW standard 0.04), 0.45 ppb of 4,4'-DDE (GW standard 0.3ppb), and 9.3 ppb of 4,4'-DDT (GW standard 0.2 ppb).

3.3.4 Metals

Metals were not analyzed due to low sample volume.

4.0 SUMMARY

4.1 Soil

Soil results indicated exceedences of TAGM 4046 levels only in surface soil at SS-03 and SS-04. These exceedences were for SVOCs, pesticides and metals. Both of these areas will be addressed under an investigation / remediation planned for the Lyndonville West Avenue site number 837002.

Surface and subsurface soil sample results did not identify a source area for VOCs.

4.2 Groundwater

Groundwater is contaminated above standards for VOCs and pesticides. The pesticide levels are highest in B-3, where the Lyndonville West Avenue site investigations are on-going.

VOC contamination is present around the Monroe Electronics building. No readily identifiable source area was located.

5.0 RECOMMENDATIONS

A consequential amount of hazardous waste was not identified at the Monroe Electronics site during this investigation and, therefore, listing on the New York State List of Inactive Hazardous Waste Disposal Sites at this time is not warranted. However, a PSA is recommended to determine whether the VOC contamination at the site is a result of a consequential amount of hazardous waste.

TABLE 1 - MONROE ELECTRONICS SOIL SAMPLE RESULTS

SOIL SAMPLE RESULTS (ppb)	B-1 1'-4' 184201	B-1 8'-12' 184202	B-2 1'-4' 184203	B-2 10'-12' 184204	184204RE	B-3 1'-4' 184205	B-3 9'-11' 184206	B-4 1'-4' 184207	-	B-4 8'-12' 184208	B-5 1'-4' 184209	B-5 8'-10' 184210
VOCs												
1,1- dichloroethene									-	8 J		
acetone					8 J				-			10 J
carbon disulfide		4 J					8 J		-			
trans- 1,2 dichloroethene		28 E							-			
1,1 dichloroethane				75	34				-	25	60	
cis-1,2 dichloroethene		14 E							-			
2-butanone (MEK)									-			
1,1,1- trichloroethane									-		33	
1,2- dichloroethane									-	39		
trichloroethene		73		320 E	160				-			
SVOCs												
2-methylphenol						86.6 J			-			
acenaphthene									-			
dibenzofuran									-			
fluorene									-			
phenanthrene									-		51.6 J	
anthracene									-			
carbazole						59 J			-			
di-n-butylphthalate	55.4 J					50.6 J		47.9 J	-			65.4 J
fluoranthrene									-		128 J	
pyrene									-		116 J	
benzo (a) anthracene									-		83 J	
bis(2-ethylhexyl)phthalate									-	148 J		
chrysene									-		95.6 J	
benzo (b) fluoranthene									-		96 J	
benzo (k) fluoranthene									-		90 J	
benzo (a) pyrene									-		96.2 J	
indeno (1,2,3-cd) pyrene									-			
dibenzo (a,h) anthracene									-			
benzo (g,h,i)perylene									-			

Pesticides/PCBs	B-1 1'-4' 184201	B-1 8'-12' 184202	B-2 1'-4' 184203	B-2 10'-12' 184204	-	B-3 1'-4' 184205	B-3 9'-11' 184206	B-4 1'-4' 184207	184207DL	B-4 8'-12' 184208	B-5 1'-4' 184209	B-5 8'-10' 184210
alpha-BHC					-	2.0 J						
gamma-BHC (lindane)					-	0.64 J						
beta-BHC					-	5.7 P		160 E	250 D	0.42 J		
delta-BHC					-							
4,4'-DDE			28		-	1.3 J		99 E	160 D	3.1 J	2.4 J	
4,4'-DDD			11		-			10	13 JD	2.6 J	0.39 J	0.96 J
4,4'-DDT			47		-	17		76 E	120 D	1.6 J	1.5 J	0.73 J
endosulphin sulphate					-							0.69 J

TABLE 1 (cont.) - MONROE ELECTRONICS SOIL SAMPLE RESULTS

SOIL SAMPLE RESULTS (ppb)	B-6 1'-4' 184211	B-6 9'-11' 184212	B-7 1'-4' 184213	B-7 8'-10.5' 184214	SS-01 0" - 3" 184215	SS-02 0" - 3" 184216	SS-03 0" - 3" 184217	- - -	SS-04 0" - 3" 184218	- - -
VOCs										
1,1- dichloroethene								-		-
acetone							110	-	19	-
carbon disulfide								-		-
trans- 1,2 dichloroethene								-		-
1,1 dichloroethane								-		-
cis-1,2 dichloroethene								-		-
2-butanone (MEK)							10 J	-		-
1,1,1- trichloroethane								-		-
1,2- dichloroethane								-		-
trichloroethene										
SVOCs										
2-methylphenol								-		-
acenaphthene								-	276 J	-
dibenzofuran								-	134 J	-
fluorene								-	231 J	-
phenanthrene	77.2 J						495	-	3340	-
anthracene							116 J	-	749	-
carbazole								-	353	-
di-n-butylphthalate	48 J	51.2	65 J		49.6 J	52.2 J	88.1 J	-		-
fluoranthrene	164 J				95.7 J	121 J	1010	-	3860	-
pyrene	177 J				82.7 J	126 J	921	-	3270	-
benzo (a) anthracene	97.4 J				44.1 J	53.8 J	351	-	1420	-
bis(2-ethylhexyl)phthalate						109 J		-		-
chrysene	143 J				60.5 j	59.8 J	704	-	1580	-
benzo (b) fluoranthene							576	-	1160	-
benzo (k) fluoranthene							612	-	1240	-
benzo (a) pyrene							498	-	1470	-
indeno (1,2,3-cd) pyrene							500	-	1070	-
dibenzo (a,h) anthracene								-	510	-
benzo (g,h,i)perylene							576	-	1210	-

Pesticides/PCBs	B-6 1'-4' 184211	B-6 9'-11' 184212	B-7 1'-4' 184213	B-7 8'-10.5' 184214	SS-01 0" - 3" 184215	SS-02 0" - 3" 184216	SS-03 0" - 3" 184217	184217DL	SS-04 0" - 3" 184218	184218DL
alpha-BHC							56			
gamma-BHC (lindane)							9.5 J			
beta-BHC							150			
delta-BHC							5.9 J			
4,4'-DDE	0.96 J	0.70 J	2.4 J		9.4	57	14000 E	32000 D	270 E	370 D
4,4'-DDD	2.2 J	2.0 J			0.34 J	0.87 J	580	560 JD	47	62 D
4,4'-DDT	1.4 J	0.61 J	0.78 J		5.8	37	17000 E	48000 D	320 E	510 D
endosulphin sulphate										16 JD

TABLE 1 (cont.) - MONROE ELECTRONICS SOIL SAMPLE RESULTS

METALS	PPM	B-1 1'-4' 184201	B-1 8'-12' 184202	B-2 1'-4' 184203	B-2 10'-12' 184204	B-3 1'-4' 184205	B-3 9'-11' 184206	B-4 1'-4' 184207	B-4 8'-12' 184208	B-5 1'-4' 184209	B-5 8'-10' 184210
Aluminum		5840	3550	8100	2620	6800	3040	11300	9400	8120	6760
Antimony		4.6 B	6.5 B	3.9 B	4.8B	4.8 B	5.1 B	7.0 B	6.8 B	5.6 B	6.6 B
Arsenic		0.82 U	0.82 U	10	2.4	0.81 U	6.6	1.4 B	3.8	2.1 B	0.83 U
Barium		19.9 B	31.1 B	82.4	18.0 B	43.0 B	10.9 B	48.3	104	75.3	58.9
Beryllium		0.03 U	0.03 U	0.28 B	0.03 U	0.19 B	0.03 U	0.10 B	0.03 U	0.03 U	0.03 U
Cadmium		1.5	1.3	1.4	0.83 B	1.0 B	1.1 B	0.73 B	0.71 B	0.60 B	0.44 B
Calcium		2250	34700	11100	30100	2440	27300	3900	44300	39400	3620
Chromium		8.2	6.7	11.2	3.9	8.3	5.8	13.8	14.4	11.1	12.2
Cobalt		5.2 B	4.2 B	5.1 B	3.6 B	3.3 B	3.7 B	8.6 B	9.6 B	8.7 B	6.7 B
Copper		9.6	6.6	28.9	4.0 B	6.5	5.7 B	8.1	11.9	12.5	7.1
Iron		11900	10800	11000	7250	8150	9200	18000	19600	15300	14900
Lead		4.9	0.75	12.7	0.54 U	4.4	0.97	10.5	3.1	6.6	5.8
Magnesium		1920	10000	1560	8580	1200	6390	3420	11500	8740	2810
Manganese		83.9	482	110	323	86.3	394	374	526	714	642
Mercury		0.01 B	0.01 B	0.02 B	0.00 B	0.02 B	0.00 U	0.03 B	0.01 B	0.02 B	0.01 B
Nickel		9.7	7.7 B	8.1 B	5.4 B	6.2 B	5.7 B	13.6	19	16.3	11.9
Potassium		594 B	612 B	449 B	502 B	296 B	580 B	764 B	1160 B	1190	681 B
Selenium		0.29 U	0.39 B	0.69 B	0.30 U	0.30 U	0.31 U	0.50 B	0.45 B	0.28 U	0.30 U
Silver		0.26 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.24 U	0.25 U	0.24 U	0.26 U
Sodium		980 B	1030 B	1020 B	1060 B	1050 B	1070 B	895 B	970 B	1040 B	1030 B
Thallium		1.7 B	3.4	2.7	2.1 B	2.0 B	2.5	1.5 B	4.8	4	2.8
Vandium		16.7	11.9 B	18.5	7.4 B	15.1	10.7	25.1	19.8	18.8	17.3
Zinc		32.3	37.9	52.2	20.5	123	22.6	47.4	56.7	41.6	37.1

B - Estimated Value

U - Not detected (level shown is quantitation limit)

710 - Indicates GW Standard/Guidance is exceeded

TABLE 1 (cont.) - MONROE ELECTRONICS SOIL SAMPLE RESULTS

Metals PPM	B-6 1'-4' 184211	B-6 9'-11' 184212	B-7 1'-4' 184213	B-7 8'-10.5' 184214	SS-01 0" - 3" 184215	SS-02 0" - 3" 184216	SS-03 0" - 3" 184217	SS-04 0" - 3" 184218
Aluminum	9850	3010	10900	3100	5640	10600	3830	11400
Antimony	6.5 B	4.8 B	6.4 B	5.7 B	4.2 B	7.7 B	11.8 B	7.5 B
Arsenic	0.75 U	0.84 U	0.83 U	0.97 B	6	2.6 B	419	24.8
Barium	67.3	16.6 B	32.6 B	13.3 B	30.8 B	66.5	1210	74.7
Beryllium	0.07 B	0.03 U	0.03 U	0.03 U	0.03 U	0.06 B	0.06 U	0.55 B
Cadmium	0.66 B	0.93 B	1.5	0.99 B	1.6	0.89 B	2.9	3.1
Calcium	44100	18900	1230	1870	27700	7600	10700	34000
Chromium	12.3	4.3	8.6	5.1	8.5	14.8	33.5	13
Cobalt	7.9 B	4.4 B	4.6 B	3.8 B	8.5 B	9.5 B	3.7 B	10.9 B
Copper	17.4	6.2	3.4 B	5.2 B	48.7	17.6	432	192
Iron	16200	7690	9980	8480	12700	18800	20200	19700
Lead	22	1.9	7.7	2.8	23.7	19.7	864	156
Magnesium	23000	6290	1810	1410	6730	4020	2150	18100
Manganese	524	448	223	313	456	602	335	473
Mercury	0.07	0.01 B	0.04 B	0.01 B	0.03 B	0.06	0.22	0.22
Nickel	14.3	5.9 B	11.5	6.3 B	9.9	16.3	10.0 B	22.7
Potassium	1160	470 B	362 B	431 B	819 B	1280 B	1460 B	1060 B
Selenium	0.34 B	0.31 U	0.45 B	0.29 U	0.39 B	0.40 B	0.86 B	0.61 B
Silver	0.23 U	0.26 U	0.26 U	0.25 U	0.24 U	0.30 U	0.44 U	0.37 U
Sodium	1050 B	1150 B	1110 B	932 B	1010 B	1030 B	1940 B	1640 B
Thallium	5.5	1.6 B	1.8 B	1.4 U	3.1	5.2	2.5 U	5.8
Vandium	21	9.2 B	13.4	10.5 B	14.3	24	12.6 B	19.3
Zinc	54.4	26.6	30.5	23.6	129	89.1	317	471

TABLE 2 - MONROE ELECTRONICS
GROUND WATER SAMPLE RESULTS (ppb)

DETECTIONS ONLY

	B-1 184219	B-2 184220	184220DL (x 2)	B-3 184221	- -	B-4 184222	B-5 184223	B-6 184224	B-7 184225	GW STANDARD
VOCs										
chloroethane								2 J		5
1,1- dichloroethene	1 J	18	17 DJ	2 J	-	39		6 J		5
acetone	11	6 J	6 DJ	6 J	-		3 J	3 J		50
carbon disulfide	2 J				-					-
trans- 1,2 dichloroethene	190	12	11 DJ		-					5
1,1 dichloroethane	7 J	280 E	290 D	4 J	-	91	12	19		5
cis-1,2 dichloroethene	89	9 J	8 DJ		-					5
2-butanone (MEK)	3 J	2 J			-					50 (G)
1,1,1- trichloroethane		3 J	3 DJ		-		1 J	23		5
benzene	1 J				-					1
1,2- dichloroethane		1 J			-	170				0.6
trichloroethene	99	150	110 D		-					5
1,2- dichloropropane					-	1 J				1
toluene	1 J				-					5

	B-1 184219	B-2 184220	- -	B-3 184221	184221DL	B-4 184222	B-5 184223	B-6 184224	B-7 184225	
Pesticides/PCBs										
alpha-BHC	NA		-	0.18	0.15 JD					0.01
gamma-BHC (lindane)	NA		-	0.043 J	0.045 JD					0.05
beta-BHC	NA		-	0.62	0.67 D	0.24				0.04
delta-BHC	NA		-	0.0092 J						0.04
4,4'-DDE	NA		-	0.45	0.42 JD			0.067 J		0.3
4,4'-DDD	NA		-	0.11 J	0.11 JD	0.35		0.28		0.2
4,4'-DDT	NA		-	7.7 E	9.3 D	0.31		0.071 J		0.2

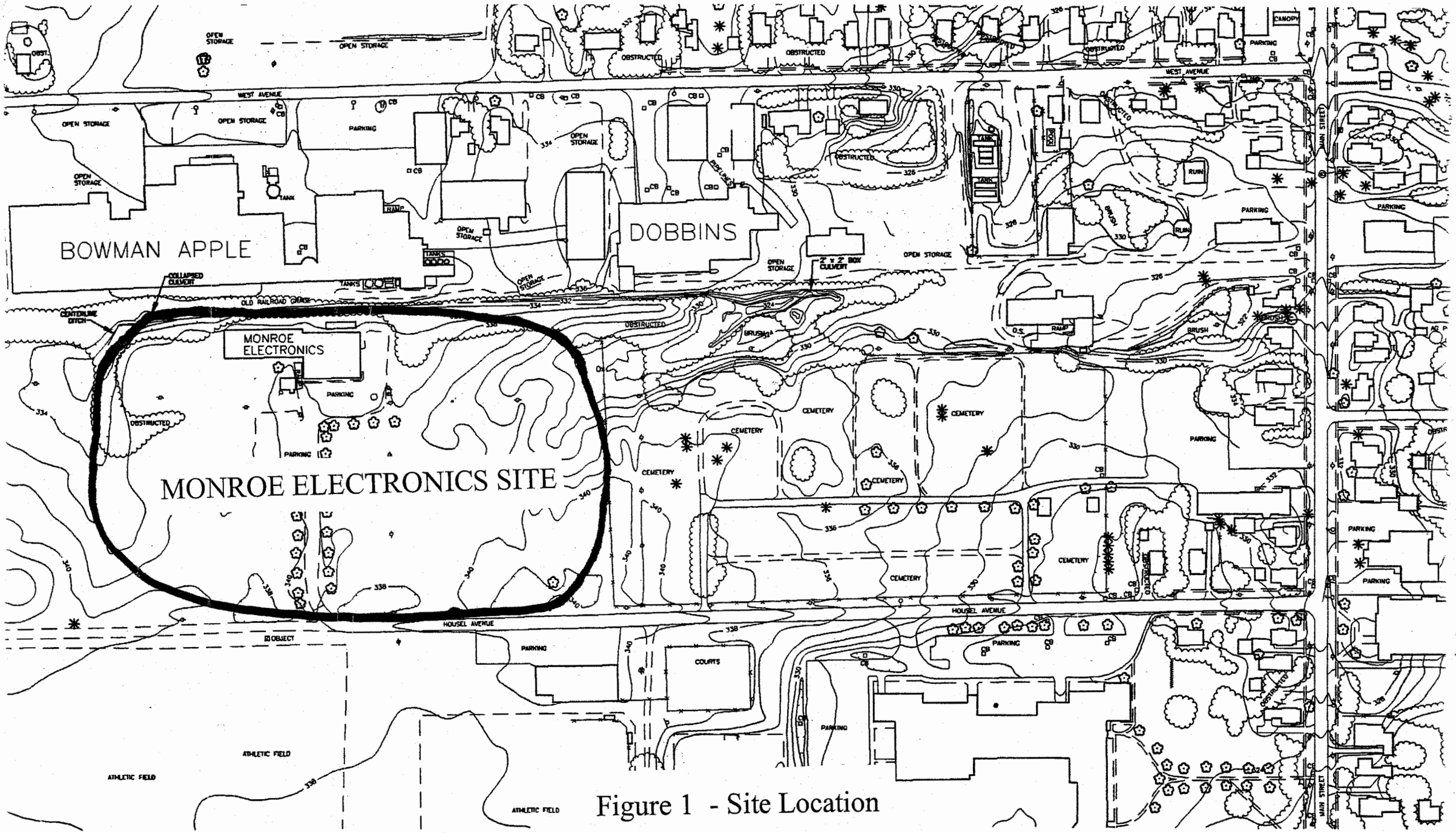


Figure 1 - Site Location

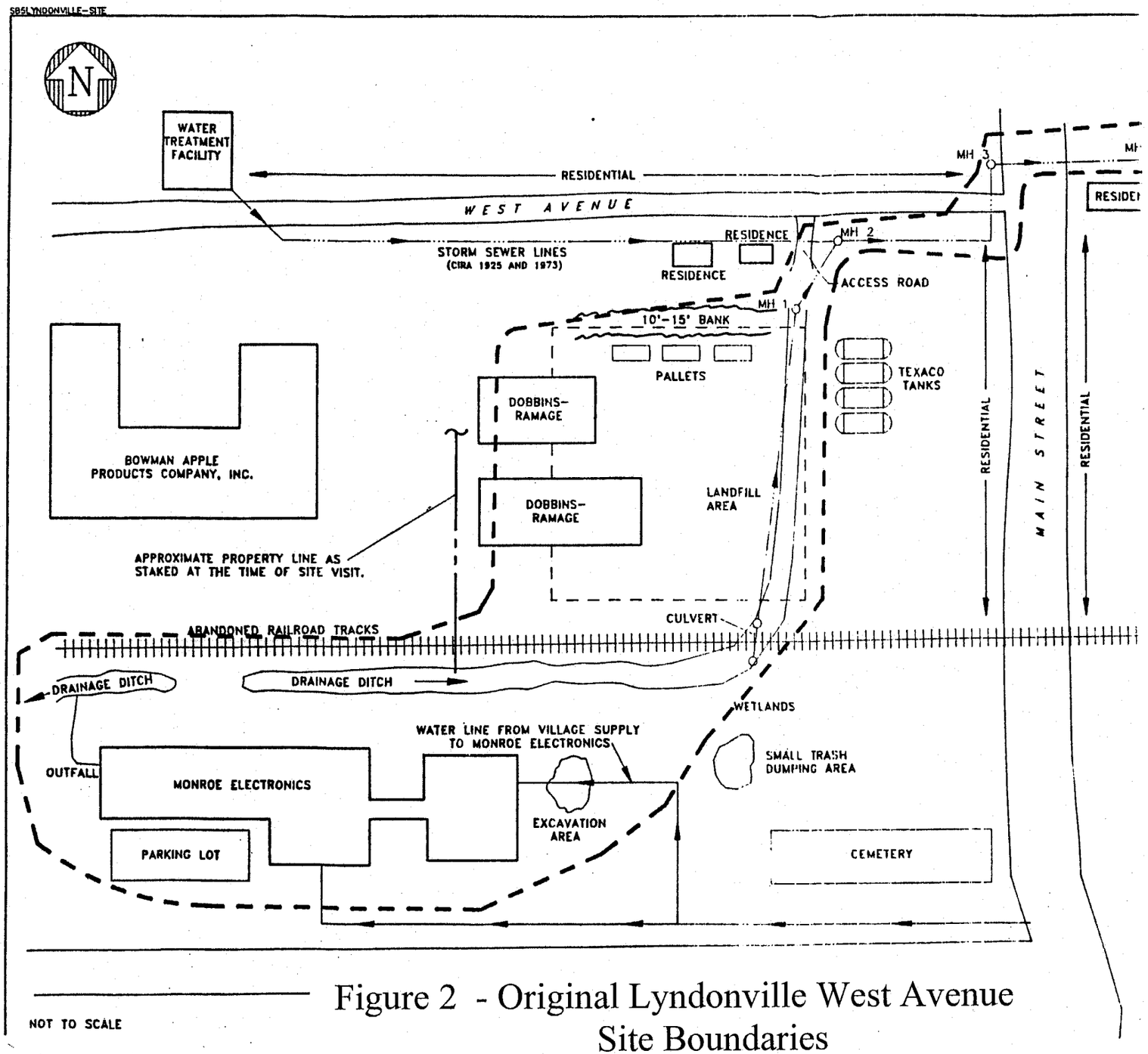
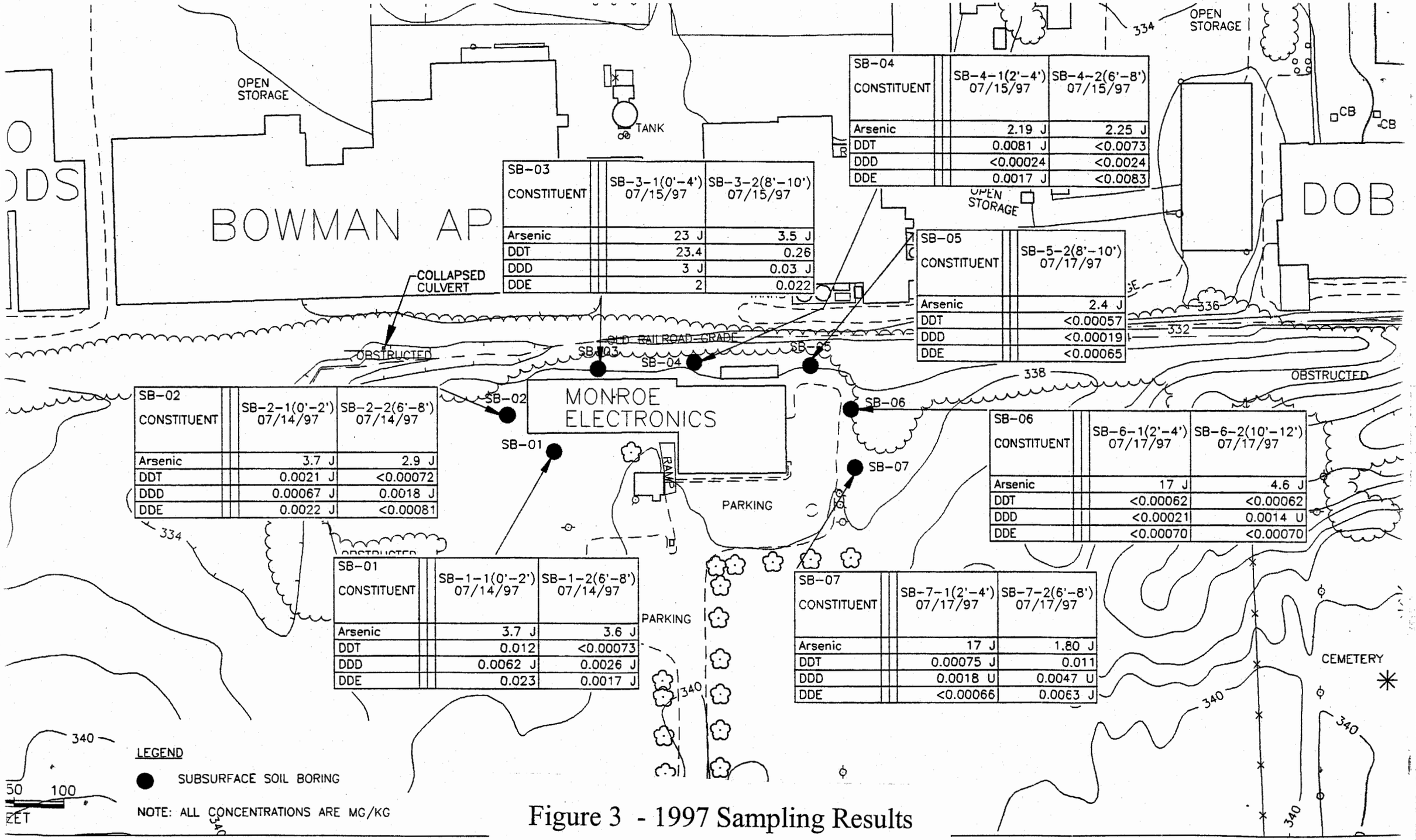


Figure 2 - Original Lyndonville West Avenue Site Boundaries



SB-03 CONSTITUENT	SB-3-1(0'-4') 07/15/97	SB-3-2(8'-10') 07/15/97
Arsenic	23 J	3.5 J
DDT	23.4	0.26
DDD	3 J	0.03 J
DDE	2	0.022

SB-04 CONSTITUENT	SB-4-1(2'-4') 07/15/97	SB-4-2(6'-8') 07/15/97
Arsenic	2.19 J	2.25 J
DDT	0.0081 J	<0.0073
DDD	<0.00024	<0.0024
DDE	0.0017 J	<0.0083

SB-05 CONSTITUENT	SB-5-2(8'-10') 07/17/97
Arsenic	2.4 J
DDT	<0.00057
DDD	<0.00019
DDE	<0.00065

SB-02 CONSTITUENT	SB-2-1(0'-2') 07/14/97	SB-2-2(6'-8') 07/14/97
Arsenic	3.7 J	2.9 J
DDT	0.0021 J	<0.00072
DDD	0.00067 J	0.0018 J
DDE	0.0022 J	<0.00081

SB-06 CONSTITUENT	SB-6-1(2'-4') 07/17/97	SB-6-2(10'-12') 07/17/97
Arsenic	17 J	4.6 J
DDT	<0.00062	<0.00062
DDD	<0.00021	0.0014 U
DDE	<0.00070	<0.00070

SB-01 CONSTITUENT	SB-1-1(0'-2') 07/14/97	SB-1-2(6'-8') 07/14/97
Arsenic	3.7 J	3.6 J
DDT	0.012	<0.00073
DDD	0.0062 J	0.0026 J
DDE	0.023	0.0017 J

SB-07 CONSTITUENT	SB-7-1(2'-4') 07/17/97	SB-7-2(6'-8') 07/17/97
Arsenic	17 J	1.80 J
DDT	0.00075 J	0.011
DDD	0.0018 U	0.0047 U
DDE	<0.00066	0.0063 J

Figure 3 - 1997 Sampling Results

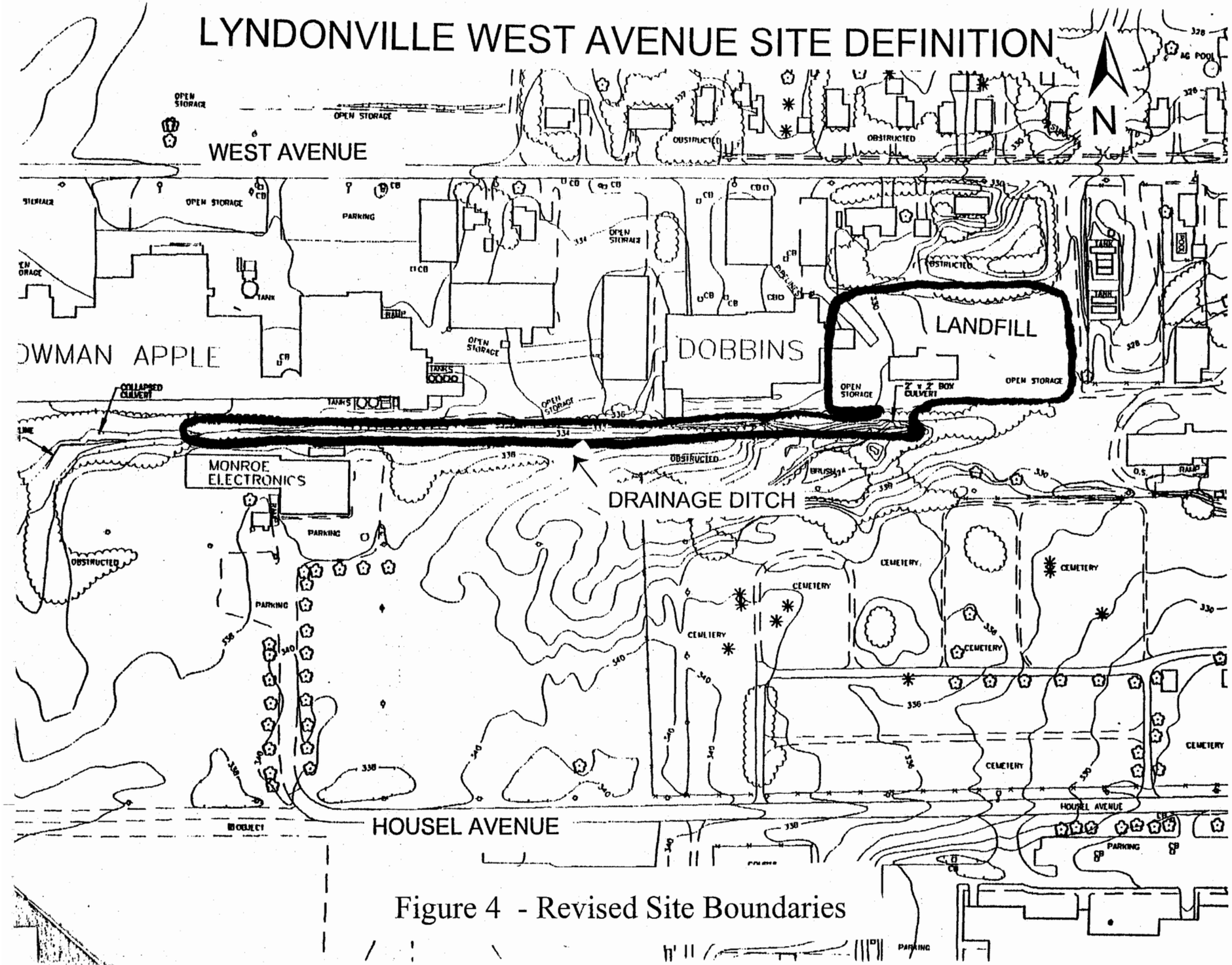


Figure 4 - Revised Site Boundaries

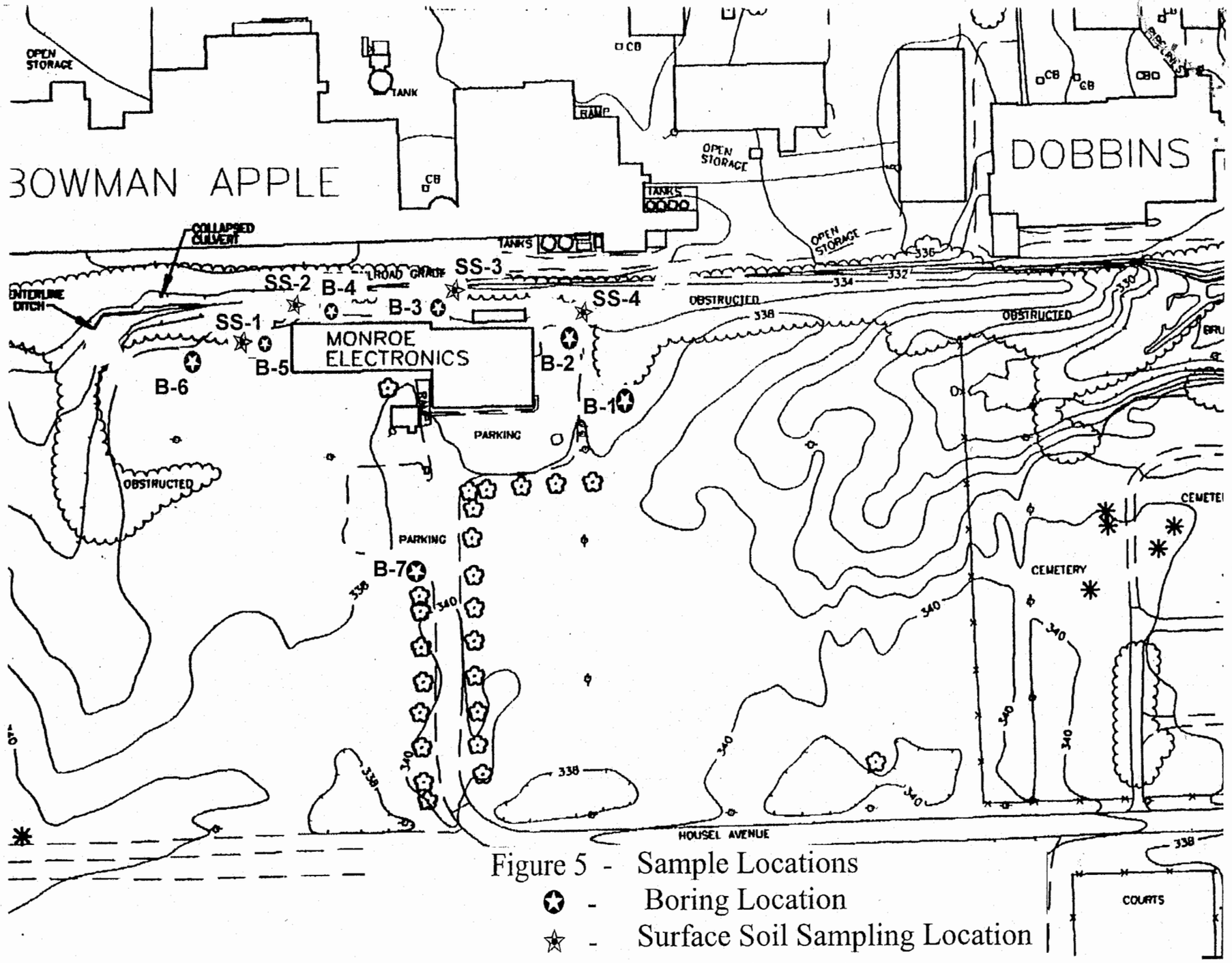


Figure 5 - Sample Locations

✪ - Boring Location

✯ - Surface Soil Sampling Location

5/11/00 Monroe Electronics IRM DAVID PRATT

9:00 Arrive site - Check in w/ Monroe Electronics office.

9:05 Zebra crew arrives - Kenny Eagan
Chris Donovan

9:30 Setting up @ B-1 (easternmost boring → working west)

Soil Sample [redacted] 1 → 1'-4' 9:40

Soil Sample 2 → 8'-12' 9:50

GW Sample 1 - 6'-11' - VOA only - highly turbid - 10:00

10:00 Setting up @ B-2

Soil Sample #3 - 1'-4' 10:05 - some Railroad ballast

Soil " #4 - 10'-12' 10:16

GW Sample #2 - 7'-12' - VOAs / Pesticides - 10:20

10:25 Setting up @ B-3

Soil Sample #5 - 1'-4' 10:30

" " #6 - 9'-11' 10:40

GW Sample #3 - 7'-12' - VOA / Pest. - 10:45

10:50 Set up @ B-4

10:58 - Soil sample # 7 1'-4'
11:05 - " " # 8 8'-12'
11:11 - GW Sample # 4 VOA/Pest.

11:20 - Decon equipment

11:30 - Set up @ B-5

11:35 - Soil Sample # 9 1'-4'
11:43 - " " # 10 8'-10'
11:47 GW Sample # 5 8'-12' VOA/Pest.

11:50 - Set up @ B-6

11:55 - Soil sample # 11 1'-4'
12:05 - " " # 12 9'-11'
12:10 - GW " # 6 8'-12' VOA/Pest

12:15 Set up @ B-7
12:25 Soil Sample # 13 1'-4'
12:35 " " # 14 8'-10.5'

12:45 - GW Sample # 7 7'-11' VOA/Pest

12:53 - 55-01 (#15)

12:57 - 55-02 (#16)

1:02 - 55-03 (#17)

1:10 - 55-04 (#18)