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LETTER OF TRANSMITTAL

TO: MS. SHEILA GLEASON ENVIRONMENTAL ANALYST REMEDIATION DIVISION BUREAU OF WATER PROTECTION AND LAND REUSE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION 79 ELM ST. HARTFORD, CONNECTICUT 06106-5127	DATE: JUNE 13, 2013 PROJECT NO.: 1018.WA8 RE: REMEDIATION REPORT FORMER FAIRFIELD HILLS MENTAL HEALTH HOSPITAL, NEWTOWN, CT

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REGARDS, RUSSELL

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Remediation Report

Former Fairfield Hills Mental Health Hospital

Newtown, Connecticut

Prepared For:

Town of Newtown, Connecticut

Prepared By:

R. W. Bartley & Associates, Inc.
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Tolland, Connecticut

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1 INTRODUCTION

This report details the environmental remediation of a portion of the Former Fairfield Hills Mental Health Hospital that was purchased by the Town of Newtown in 2002 (hereinafter referred to as the "Fairfield Hills", "FH", or "subject property"). The Town of Newtown filed a "Form III" under the Connecticut Property Transfer Act as the "Certifying Party" which obligates the Town of Newtown to investigate and remediate the subject property in accordance with the Connecticut Remediation Standard Regulations (RSRs) 22a-133k-1 through 22a-133k-3. The Connecticut Department of Energy and Environmental Protection (DEEP) retained the oversight for the investigation and remediation of the property; and therefore, all related documents are submitted to the DEEP for review and approval.

Remediation was performed in accordance with the RSRs, as detailed and amended in the "*Phase III Investigation Report and Revised Remedial Action Plan, Certain Parcels To Be Conveyed From The State Of Connecticut To The Town of Newtown, Former Fairfield Hills Hospital, Newtown, Connecticut, July 2004*" (hereinafter referred to as the "Remedial Action Plan" or "RAP"), and the "*RAP Soil Remediation Confirmation Sampling Plan, Former Fairfield Hills Mental Health Hospital, Newtown, Connecticut, September 2005*" (hereinafter referred to as the "Soil Confirmation Sampling Plan"). These reports have previously been submitted and approved by the DEEP. The remediation to be performed and detailed in the Remedial Action Plan was source removal of contaminated soil and natural attenuation of existing limited groundwater contamination.

This report details the source removal of contaminated soil in accordance with the RSRs, as detailed and amended in the approved Remedial Action Plan and Soil Confirmation Sampling Plan. This report also provides the post-remedial groundwater sampling plan to monitor the natural attenuation of the limited groundwater contamination now that the sources of contamination have been removed.

2 BACKGROUND

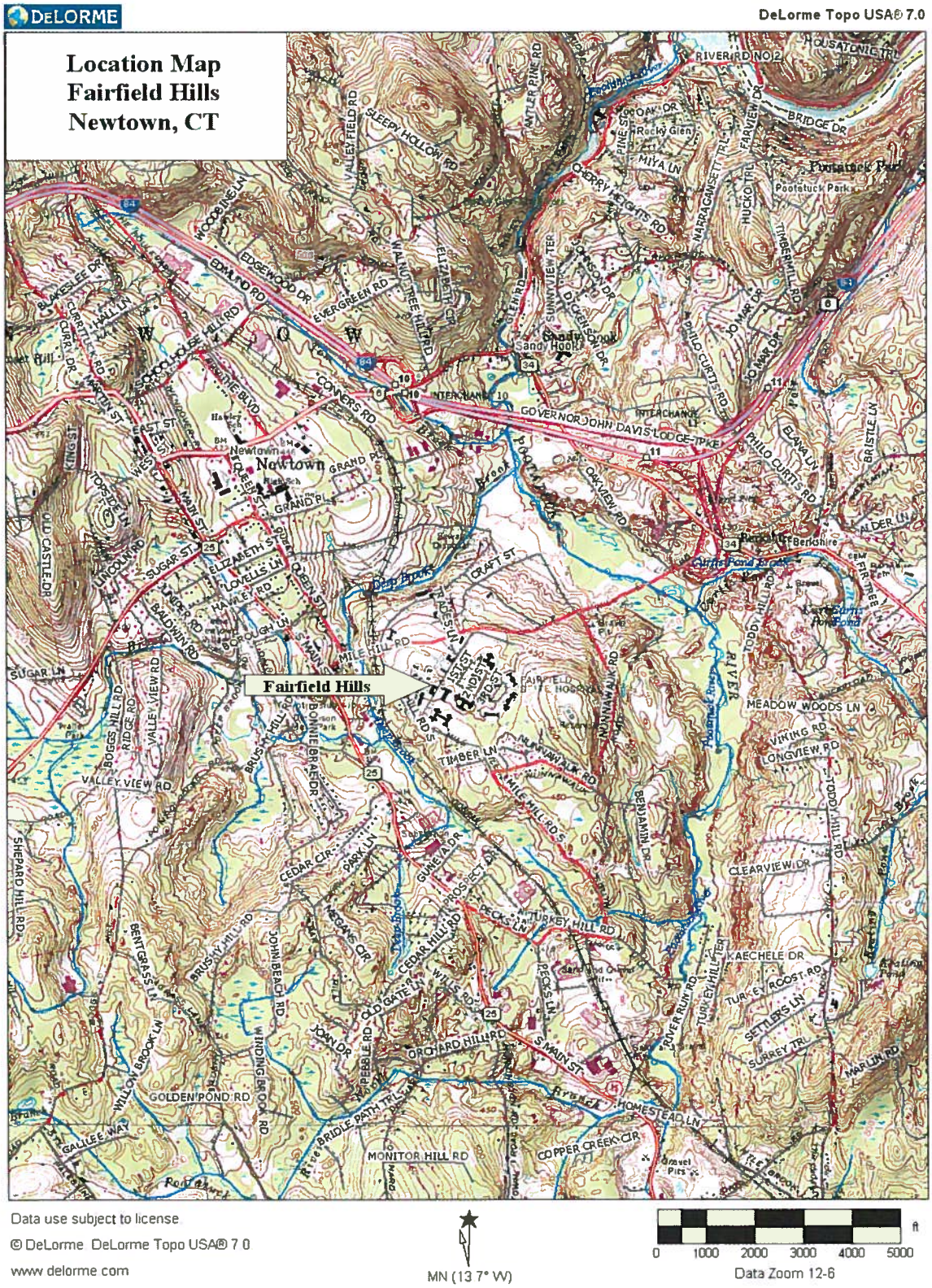
The Town of Newtown, Connecticut, purchased from the State of Connecticut a portion of the former Fairfield Hills Mental Health Hospital complex. The subject property purchased contains most of the hospital complex institutional buildings. The location of the subject property is shown on the "Location Map" figure provided below. The property boundaries are shown on the "Subject Property Plot Plan" figure as Parcel D containing the majority of the land and buildings, and Parcel E containing additional land and the Laundry building. The specific building locations are shown on the State of Connecticut Department of Public Works "Site Plan" prepared by the McGuire Group. Both of these figures are provided below.

Environmental investigations have shown that soil around buildings at the subject property contain pesticides and lead at concentrations greater than the applicable RSRs criteria. In addition, total petroleum hydrocarbon (TPH) contamination from a leaking underground storage tank (since removed) is present at the north side of Yale Laboratory building, and minor tetrachloroethylene (a.k.a. perchloroethylene and PCE) soil contamination is present at the northeast corner of the former Laundry building.

Prior to purchasing the subject property, the Town of Newtown submitted to the DEEP the Remedial Action Plan which proposed how the site was to be remediated to RSRs criteria. After review and comment by the Connecticut DEEP a revised Remedial Action Plan was approved by the DEEP. This revised Remedial Action Plan is referenced above and dated July 2004. This Remedial Action Plan provides details on how the site will be remediated to the applicable RSRs provisions and criteria.

The site Conceptual Model of the primary lead and pesticide contamination at the subject property is that there is significant lead and pesticide contamination of soil around the foundations of the buildings. The source of lead contamination in the soil around the foundations is the leaching of lead from the buildings' white trim lead paint. The source of the pesticides

contamination is historical application of pesticides around the buildings' foundations to control pests within the buildings.


DELORME
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Location Map
Fairfield Hills
Newtown, CT
Fairfield Hills
Newtown
Sandy Hook
Pootatuck Park
Data use subject to license
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www.delorme.com
MN (13.7° W)
0 1000 2000 3000 4000 5000 ft
Data Zoom 12-6

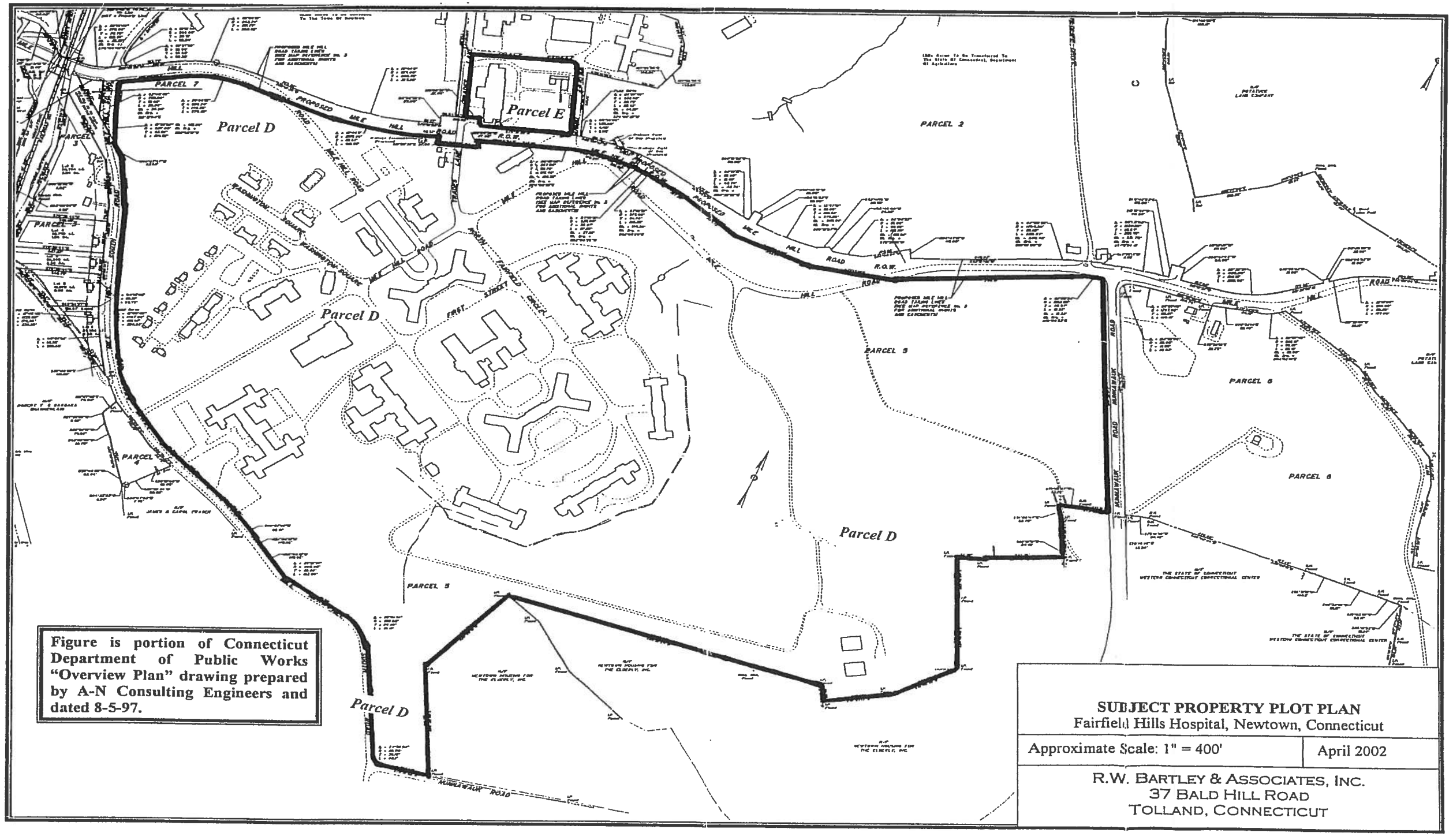
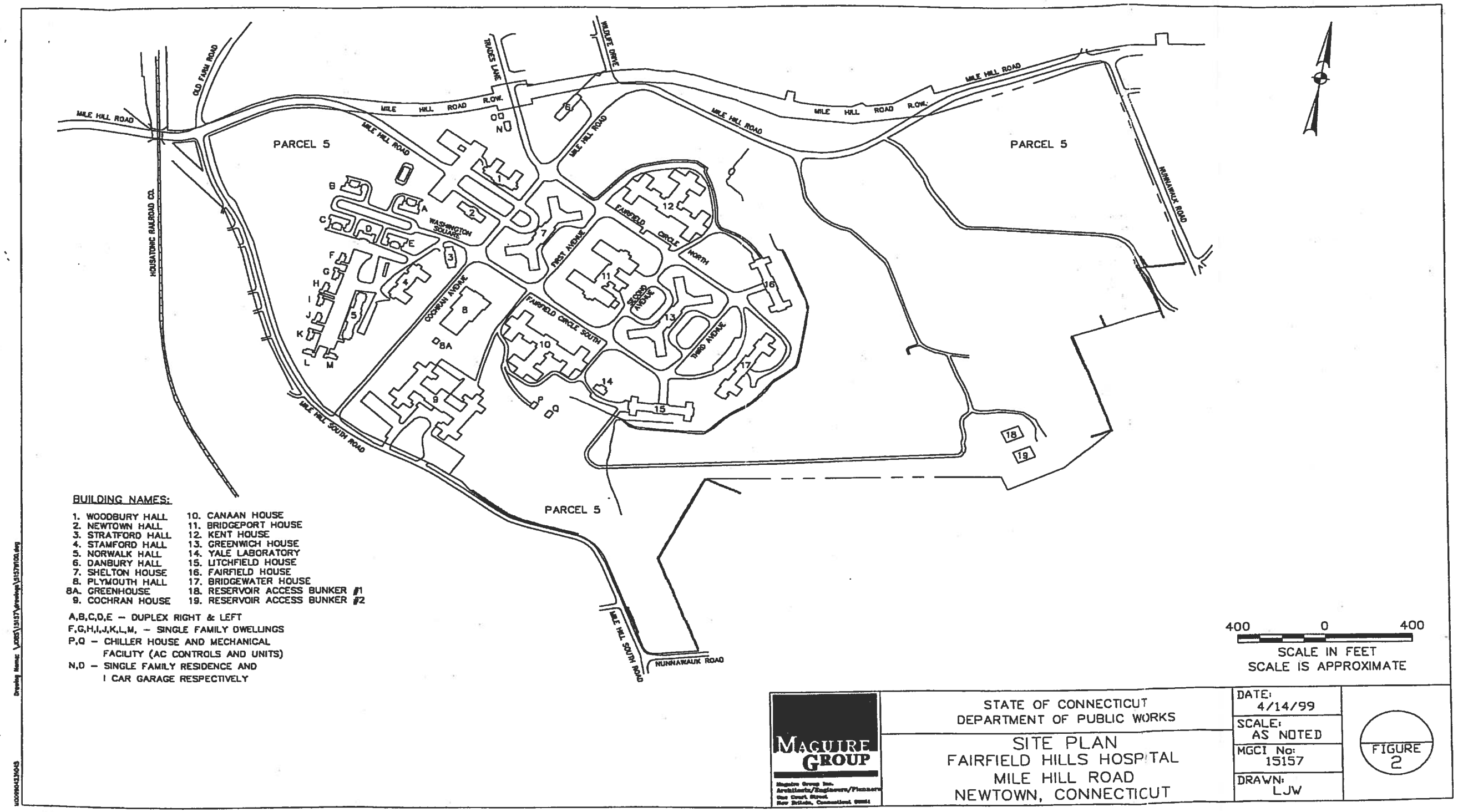
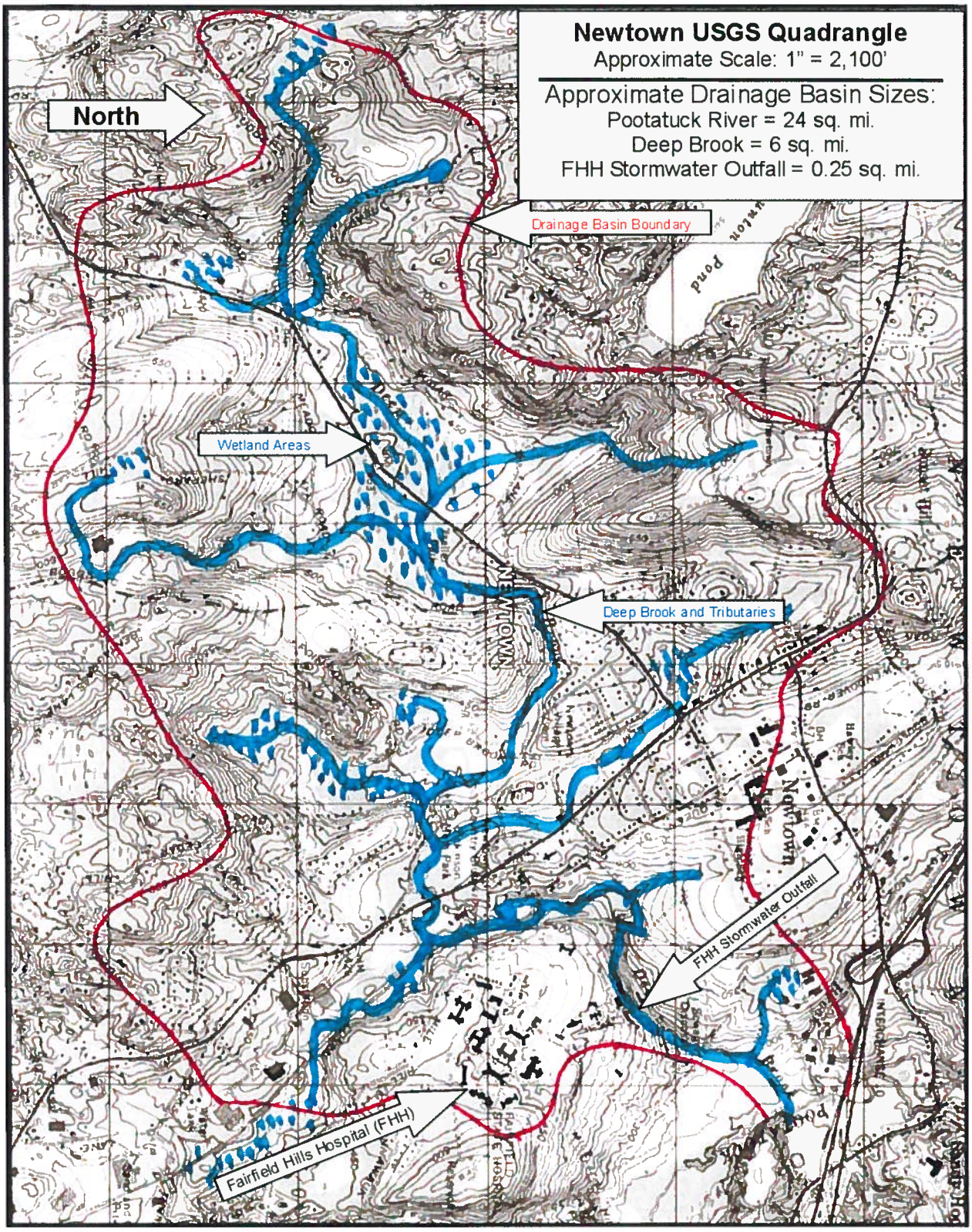


Figure is portion of Connecticut Department of Public Works "Overview Plan" drawing prepared by A-N Consulting Engineers and dated 8-5-97.


MILE HILL ROAD
OLD FARM ROAD
HOUSATONIC RAILROAD CO.
TRADES LANE
WILDLIFE DRIVE
MILE HILL ROAD R.O.W.
PARCEL 5
WASHINGTON SQUARE
COCHRAN AVENUE
FIRST AVENUE
SECOND AVENUE
THIRD AVENUE
FAIRFIELD CIRCLE NORTH
FAIRFIELD CIRCLE SOUTH
MILE HILL SOUTH ROAD
NUNNAWAUK ROAD
BUILDING NAMES:
1. WOODBURY HALL
2. NEWTOWN HALL
3. STRATFORD HALL
4. STAMFORD HALL
5. NORWALK HALL
6. DANBURY HALL
7. SHELTON HALL
8. PLYMOUTH HALL
8A. GREENHOUSE
9. COCHRAN HOUSE
10. CANAAN HOUSE
11. BRIDGEPORT HOUSE
12. KENT HOUSE
13. GREENWICH HOUSE
14. YALE LABORATORY
15. LITCHFIELD HOUSE
16. FAIRFIELD HOUSE
17. BRIDGEWATER HOUSE
18. RESERVOIR ACCESS BUNKER #1
19. RESERVOIR ACCESS BUNKER #2
A,B,C,D,E – DUPLEX RIGHT & LEFT
F,G,H,I,J,K,L,M, – SINGLE FAMILY DWELLINGS
P,Q – CHILLER HOUSE AND MECHANICAL FACILITY (AC CONTROLS AND UNITS)
N,O – SINGLE FAMILY RESIDENCE AND 1 CAR GARAGE RESPECTIVELY
400 0 400
SCALE IN FEET
SCALE IS APPROXIMATE
MAGUIRE GROUP
STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC WORKS
SITE PLAN
FAIRFIELD HILLS HOSPITAL
MILE HILL ROAD
NEWTOWN, CONNECTICUT
DATE: 4/14/99
SCALE: AS NOTED
MGCI No: 15157
DRAWN: LJW
FIGURE 2

This contamination, especially the pesticides contamination, migrated down through the soil around the building foundations and impacted groundwater local to the buildings. A series of footing drains around the buildings control a normally high groundwater condition. The groundwater around the buildings is drained by the footing drains and is directed to underground piping that leads to a primary outfall for the subject property which discharges to a small stream which leads to Deep Brook. Deep Brook discharges to the Pootatuck River. The subject property discharge is contaminated with the pesticide dieldrin which is the pesticide of primary concern. The pesticide dieldrin is the pesticide of primary concern at the subject property because of its higher solubility relative to its toxicity. The relative size of the drainage basins of the subject property, Deep Brook, and the Pootatuck River are shown in the figure below. The flow volume in the subject property drainage discharge, in Deep Brook, and in the Pootatuck River will be proportional to their drainage basin size.


Newtown USGS Quadrangle
Approximate Scale: 1" = 2,100'
Approximate Drainage Basin Sizes:
Pootatuck River = 24 sq. mi.
Deep Brook = 6 sq. mi.
FHH Stormwater Outfall = 0.25 sq. mi.
North
Drainage Basin Boundary
Wetland Areas
Deep Brook and Tributaries
FHH Stormwater Outfall
Fairfield Hills Hospital (FHH)

In addition to the pesticide contamination of the subject property outfall there is relatively minor local contamination of groundwater at some of the buildings.

The Remedial Action Plan states that the source of contamination, the contaminated soil, will be removed to applicable RSRs criteria with some exceptions. The removal of this contamination source is expected to cause concentrations of pesticide in the groundwater around the buildings to be reduced to applicable criteria. Whether the removal of this contamination source would lower the concentration of pesticides in the Fairfield Hills outfall was a matter of debate between the DEEP and the Town of Newtown. An agreement was reached between the Town of Newtown and the DEEP such that the concentration of dieldrin and lead in the outfall would be monitored after removal of the contaminated soil. If the removal of the contaminated soil did not lower the concentration of pesticides and lead in the outfall to below standards set by the DEEP, then it would be the responsibility of the State of Connecticut to treat the outfall waters to acceptable levels. As part of this agreement the Town of Newtown purchased a "Covenant Not to Sue", in accordance with Connecticut General Statutes Section 22a-133aa. The price of this Covenant Not to Sue was 3% of the purchase price of the property which was paid into the State of Connecticut Special Contaminated Property Remediation and Insurance Fund established under Connecticut General Statutes Section 22a-133t.

Additionally, as part of the Remedial Action Plan, soil contaminated with petroleum hydrocarbons at the Yale Laboratory Building at the location of the previously removed leaking underground storage tank would be excavated along with tetrachloroethylene soil contamination at one corner of the laundry building.

Once all of the contamination sources were removed, the Town of Newtown agreed to monitor the groundwater to see that the removal of the sources of contamination resulted in lowering any groundwater contamination concentrations to below the RSRs applicable criteria through natural attenuation.

The Remedial Action Plan states that soils contaminated with the pesticide dieldrin will be remediated to a RSRs GA Pollutant Mobility Criteria of 7 micrograms of dieldrin per kilogram of soil (micrograms per kilogram or μg/kg) and also that the higher alternative RSRs soil GA Pollutant Mobility Criteria for leachable dieldrin based upon the Connecticut Synthetic Precipitation Leaching Procedure (SPLP) test compared to the RSRs Groundwater Protection Criteria (RSRs Section 22a-133k-2(c)(2)(C)) would not be applied at buildings with footing drains. The Town of Newtown agreed to this more-restrictive criteria. The Town further agreed that dieldrin contaminated soil around Shelton, Bridgeport, and Greenwich buildings would be removed within two years of the property transfer, approximately July 28, 2006; and that the soil around the buildings Yale, Duplexes, Fairfield, Litchfield, and any other buildings where dieldrin was discovered in the pre-remediation, 50-foot sampling would be removed within three years of the property transfer, approximately July 28, 2007.

The method of soil remediation approved in the Remedial Action Plan is excavation of contaminated soil, removal of the excavated soil from the subject property, and disposal of the soil at an appropriately-licensed disposal facility. The Remedial Action Plan contains basic information on how remedial confirmation soil sampling is to be performed and the Town of Newtown agreed to provide additional details in a soil remediation confirmation sampling plan. This submitted and approved remediation Soil Confirmation Sampling Plan referenced above provides the results of pre-excavation soil sampling and provides detail concerning the particulars of confirmation soil sampling that were to be utilized to determine post-excavation compliance with the Remedial Action Plan and the RSRs. The information provided in this plan identifies buildings where dieldrin pesticide contamination must be removed in accordance with the Remedial Action Plan schedule and details of how confirmation sampling will be performed to verify that soils at the subject property have been remediated to applicable RSRs criteria, as modified and agreed to in the approved Remedial Action Plan.

The vast majority of soil contamination at the subject property is pesticide and lead contamination around the foundations of the subject property buildings.

3 REMEDIAL CRITERIA

At the time of the Remedial Action Plan, it was anticipated that the remedial soil criteria would be the RSRs Commercial/Industrial Direct Exposure Criteria, except at open areas where athletics may occur; and the RSRs GA Pollutant Mobility Criteria. It was anticipated that an RSRs Environmental Land Use Restriction (ELUR) would be placed on the property limiting activities at most areas to commercial/industrial activities and limiting disturbance of soils greater than four feet. Instead, all soils were remediated to at, or below, the RSRs GA Pollutant Mobility Criteria and Residential Direct Exposure Criteria.

3.1 GA POLLUTANT MOBILITY REMEDIAL CRITERIA

For substances where the GA Pollutant Mobility Criteria was established in the RSRs or by DEEP memorandum, that criteria was utilized. For substances where the GA Pollutant Mobility Criteria had not been established, or as an alternative to the GA Pollutant Mobility Criteria where it had been established, compliance was determined by performing a SPLP leachability test and comparing the results to 10 times the Groundwater Protection Criteria, or the Groundwater Protection Criteria itself, if there was not 15 feet of groundwater over bedrock. Borings were conducted to determine which buildings had 15 feet of groundwater over bedrock and which did not. The table below provides results of the boring investigations as given in the Remedial Action Plan.

Buildings Where Greater Than Fifteen Feet of Groundwater Above Bedrock is Estimated to be Present

Building	Estimated Fifteen Feet of Groundwater Over Bedrock?
Woodbury Hall	No
Newtown Hall	No
Stratford Hall	No
Stamford Hall	No
Norwalk Hall	No
Danbury Hall	Yes
Shelton House	No
Bridgeport Hall	Yes
Greenwich House	Yes
Staff Duplexes	Yes
Engineers Cottage	Yes
Yale Laboratory	Yes
Litchfield House	Yes
Fairfield House	Yes
Greenhouses (2)	Yes
Laundry Building	Yes
Canaan House	Yes
Kent House	Yes
Bridgewater House	Yes
Cochran House	No
Staff Homes	No
Plymouth Hall	No

For certain substances the mass analysis analytical detection limit was less than 1/20th of 10 times the GA Groundwater Protection Criteria. For these compounds a SPLP test did not have to be conducted if the mass analysis analytical result was less than the detection limit because the SPLP procedure has a built-in 20 times dilution factor in the result. These substances were the pesticides 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, Endrin, and Heptachlor Epoxide.

3.2 RESIDENTIAL DIRECT EXPOSURE CRITERIA

For substances where the Residential Exposure Criteria was established in the RSRs or by DEEP memorandum, that criteria was utilized except for lead and dieldrin. For lead, the RSRs criteria is 500 milligrams of lead per kilogram of soil (mg/kg). The remedial criteria for the subject property was lowered to 400 milligrams of lead per kilogram of soil. For dieldrin, the Residential Direct Exposure Criteria is 0.038 milligrams of dieldrin per kilogram of soil. For this project the remedial criteria was lowered to 0.007 milligrams of dieldrin per kilogram of soil on a mass analysis basis which is the GA Pollutant Mobility Criteria. The lowering of the Residential Direct Exposure Criteria to 0.007 mg/kg was a consequence of an agreement with the DEEP of not utilizing the alternative GA Pollutant Mobility Criteria of 10 times the Groundwater Protection Criteria by the SPLP test for dieldrin. This agreement was established because there was a presence of dieldrin in the Fairfield Hills storm water outfall that received groundwater from building footing drains.

Subject Property Remedial Criteria

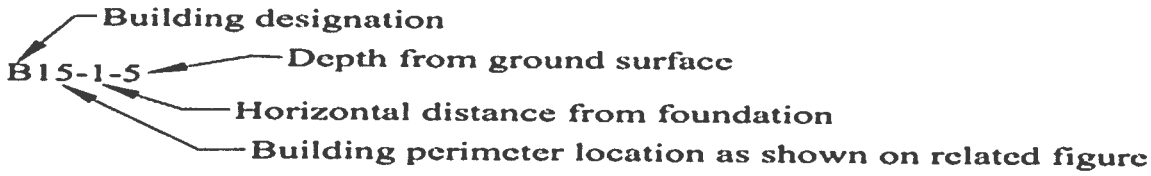
Compound and Units	Criteria without 15 feet GW	Criteria with 15 feet GW
Lead RDEC (mg/kg)	400.0	400.00
Lead GAGWPC SPLP (mg/l)	0.015	0.150
Aldrin GA PMC (mg/kg)	0.007	0.007
Dieldrin GA PMC (mg/kg)	0.007	0.007
Chlordane RDEC (mg/kg)	0.490	0.490
Chlordane GA PMC (mg/kg)	0.066	0.066
Chlordane GAGWPC SPLP (mg/l)	0.300	3.000
4,4'-DDD RDEC (mg/kg)	2.600	2.600
4,4'-DDD GAGWPC SPLP (mg/l)	0.150	1.500
4,4'-DDE RDEC (mg/kg)	1.800	1.800
4,4'-DDE GAGWPC SPLP (mg/l)	0.100	1.000
4,4'-DDT RDEC (mg/kg)	1.800	1.800
4,4'-DDT GAGWPC SPLP (mg/l)	0.100	1.000
Endrin RDEC (mg/kg)	20.000	20.000
Endrin GAGWPC SPLP (mg/l)	42.000	420.000
Heptachlor Epoxide RDEC (mg/kg)	0.067	0.067
Heptachlor Epoxide GAPMC (mg/kg)	0.020	0.020
GAGWPC SPLP Heptachlor Epoxide (mg/l)	0.200	2.000

4 REMEDIATION

Remediation was performed by excavation of contaminated soil with substance concentrations greater than the applicable criteria and transport of the soils to an off-site appropriately-licensed disposal facility. At each building, initial excavations were performed based upon existing sampling results from previous investigations. During remediation, additional soil samples were taken after initial soil excavation and the results of which were compared to the applicable criteria. Where applicable criteria was exceeded, additional soil was removed and additional samples taken. These procedures were repeated until all soils at each building foundation with concentrations greater than applicable criteria were removed. The confirmation sampling was carried out in accordance with a very intricate sampling plan approved by the DEEP. This sampling plan was detailed in the Soil Confirmation Sampling Plan report approved by the DEEP. The summary of the confirmation sampling plan as detailed in the Soil Confirmation Sampling Plan is reproduced in italics in Sections 4.1 and 4.2 below.

4.1 SAMPLE IDENTIFIERS

The location of each sample given in the included tables can be determined from an examination of the particular sample identifier. The letters at the beginning of the identifier represents the building at which the sample was taken. The number immediately following the building letter identifier is the perimeter location around the particular building. The corresponding location of each sample identifier is shown on the building figure located in Appendix C. The number following the first dash is the horizontal perpendicular distance from the foundation at which the sample was taken. The last number which follows the second dash is the depth at which the sample was taken. The information given in the sample identifier is graphically represented below.



If the building perimeter location is shown with two numbers separated by a "/" like: B12/13-8-2; this indicates that the sample was taken between Premier locations 12 and 13, 8 feet from the building and 2 feet in depth. This designation will be used if a sample is taken away from the foundation at a perimeter location were sample was not taken at the foundation. This type of sample will be used to determine how far from the foundation a particular excavation should be extended.

4.2 REMEDIATION CONFIRMATION SOIL SAMPLING

Compliance with the RAP and RSRs for contaminated soil at the former Fairfield Hills Mental-Health Hospital will be determined by the following sampling schemes and methods.

4.2.1 Building Foundation Lead and Pesticides Soil Contamination

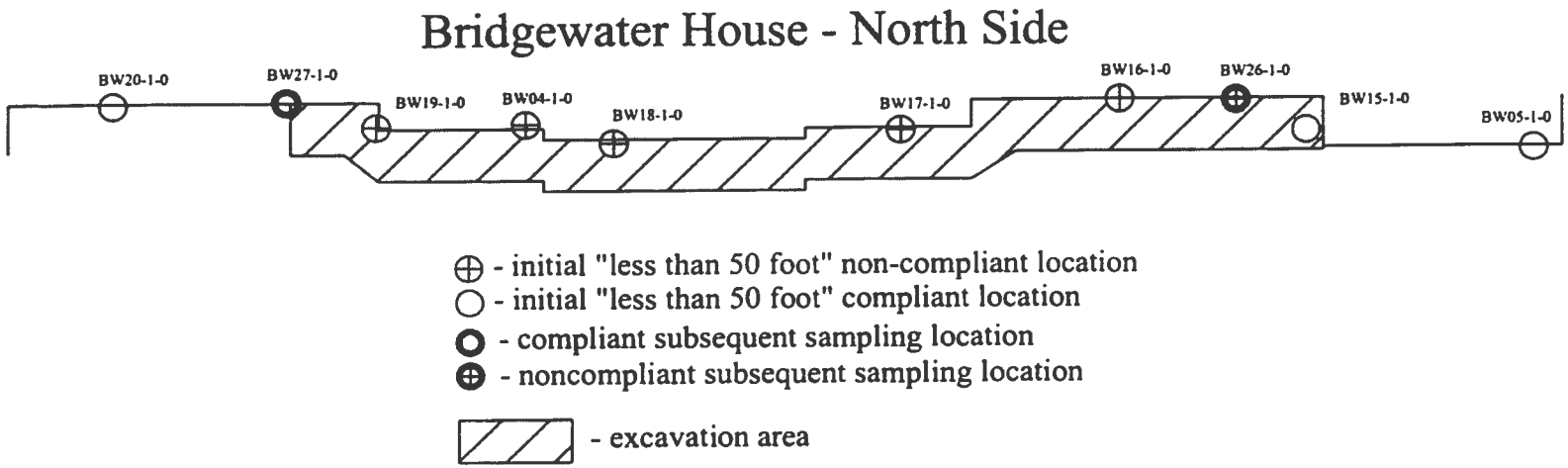
4.2.1.1 Determining Horizontal Limits

4.2.1.1.1 Determining Excavation Limits around Perimeter of Buildings

Surface soil sampling will determine the horizontal extent of remediation. The RAP states that a combination of surface and excavation sidewall sampling will determine compliance. This is proposed to be changed to all surface soil sampling. Surface soil sampling at a excavation sidewall is to be substituted for excavation sidewall sampling because given the nature of the contamination a sidewall sample at a particular location will be less contaminated than the surface soil sample at the same location. The concentrations of pesticides and lead are the highest at the surface because pesticides and lead were applied to the surface, and surface soils consisting of topsoil have the highest organic content of the soil depth profile. Pesticides and lead have a high organic partitioning coefficients meaning that they adhere to soils with higher organic content at greater concentrations than those with a lower organic content. Therefore, if sidewall sampling is used for compliance determination contaminant concentrations at the surface of the same location may still exceed RAP or RSRs criteria.

If the concentration of any pesticide or lead at an existing "less than 50 foot" building surface soil sampling location is greater than the respective RSRs cleanup criteria, as modified by the RAP (the RAP criteria given below), the soil at this location will be excavated along the foundation to the next sample location that shows all pesticides and lead to be below the RAP criteria. The next sample

location may be the next existing "less than 50 foot" location or another sampling location established by taking an additional sample between the two "less than 50 foot" locations. It is noted that the initial excavation figures in Appendix C show excavations along the perimeter stopping halfway between a location not meeting the RAP criteria (noncompliant) and a location meeting the RAP criteria (compliant) sampling location. These initial excavation limits on these figures anticipate an additional sampling between the noncompliant and compliant sample locations. If the additional sampling does not show compliance with the RAP criteria the excavation will extend along the building foundation to the next "less than 50 foot" compliant location. An example of a typical determination of the extent of required excavation along the foundation for the center portion of the Bridgewater building is shown below.

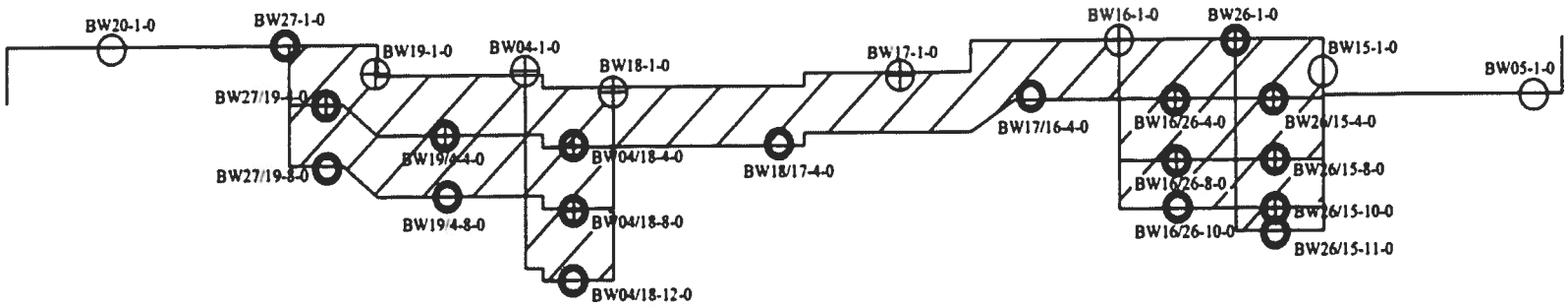


In this illustration samples BW05 and BW15 to BW20 are the initial "less than 50 foot" samples. This illustration assumes that samples BW26 and BW27 were taken prior to excavation to determine if the excavation should extend from BW16 to BW15 and from BW19 to BW20, respectively. Because the sample at BW 26 was noncompliant the excavation is extended to BW 15. Excavation is not

extended from the initial sample BW15 to the initial sample BW05 because both are in compliance. Excavation is not extended from BW 19 all the way to BW 20 because BW 27 is compliant, therefore the excavations extended from BW 19 only to the subsequent sampling location BW 27.

4.2.1.1.2 Determining Excavation Limits Extending Away from Building

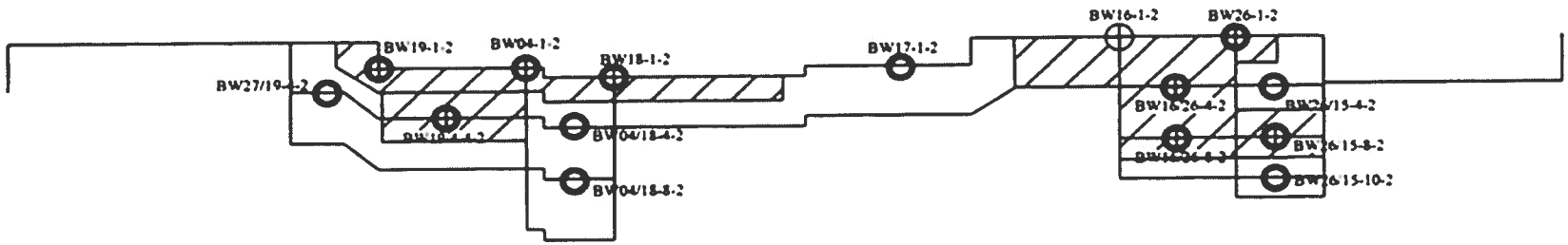
Between two perimeter foundation sampling locations where excavation was performed, the excavation shall extend out from the foundation horizontally until a surface soil sampling location taken away from the building midway between the two perimeter sampling locations shows all pesticide and lead concentrations to be below the RAP criteria. The designation for this type of sample will be the building identifier followed by identifiers for the two premier locations between which the sample is located separated by a "/" followed by a dash than a numeral representing the number of feet away from the building foundation the sample was taken from then a dash than a numeral representing the depth at which the sample was taken. An illustration of this for the north side of the Bridgewater House, previously shown, is given below.



In this illustration samples were first taken 4 feet out from the building foundation, one each between foundation samples where excavation has occurred. These are represented by the samples showing a four between the sample identifier and the depth identifier. It can be seen in this illustration that all samples were noncompliant except BW18/17 and BW17/16. At the two locations where a soils were compliant the excavation limit is established there. Where the samples 4 feet from the foundation were noncompliant another sample was taken at each location further away from the foundation, in this instance at 8 feet from the foundation. These samples are represented by the eight between the sample location identifier and the depth identifier. In the illustration BW19/4 and BW 27/19 were compliant; and BW 04/18, BW16/26, and BW26/15 were not. Therefore, at BW04/18 an additional sample was taken at a further distance, in this instance at 12 feet -- since it was compliant the lateral excavation at this location stopped here. At BW 16/26 an additional sample was taken at 10 feet and since it was compliant the excavation stopped there. At excavation BW26/15 the sample was noncompliant and additional sample was taken 11 feet from the foundation, sample BW26/15-11-0. Then since the sample was compliant, the excavation stops there.

4.2.1.2 Determining Excavation Depth

Each excavation will extend vertically until an excavation bottom sample directly below each surface soil sample that exceeded RAP criteria for pesticides or lead shows concentrations of pesticides and lead below the RAP criteria. If one excavation bottom sample that exceeds RAP criteria for lead or pesticides is next to a bottom sampling location that meets the RAP criteria for pesticides and lead the additional excavation limits at the noncompliant location shall extend to halfway between the noncompliant location and the location that meets the RAP criteria. An illustration is shown below that builds upon the previous examples to illustrate how the depths of the lateral excavation described above would be determined.



In the above illustration representing the north side of Bridgewater House it is assumed that the initial excavation was 2 feet in depth. During the remediation the initial excavation depth will be set at a depth where it is estimated that contamination at that depth may be in compliance based on the surface concentration.

To determine the depth of excavation, a sample will first be taken after the initial excavation at each location where a surface sample was noncompliant; in this example sequence, at the locations shown. These locations are identified with a "2" as a last digit in the sample identifier indicating that the sample was taken at a 2-foot depth. At each location at the 2 foot depth were the sample concentration is noncompliant the excavation depth will be extended deeper to the next depth where it is estimated that the concentrations of lead and pesticides will be below the RAP criteria. This process will be repeated until all bottom samples are compliant.

The lateral extent in each direction of each of these excavations will be halfway between the noncompliant location and adjacent locations. Therefore, if the adjacent location in any direction is noncompliant all the soil between the two locations will be excavated. If the adjacent location is compliant in any direction the excavation will extend halfway from the noncompliant location to the

compliant location. Where no sample was taken laterally from a noncompliant location, such as to the east of location BW 16/26-8-2 and to the west of sample BW 26/15-8-2 the additional depth excavation will extend to the limit of the initial excavation.

4.2.1.3 Determining Building Compliance

When the horizontal and vertical limits of required excavation to meet the applicable pesticide and lead applicable RSRs criteria (as modified by the RAP) is documented by this proposed sampling sequence the building will be considered in compliance with the RSRs criteria and RAP.

4.2.2 Yale Laboratory TPH Soil Contamination

The soil with TPH soil contamination located at the north side of Yale laboratory will be excavated. Soil will be excavated until excavation and sidewall soil sampling indicates compliance with applicable RSRs TPH and poly nuclear aromatic hydrocarbon (PAH) criteria. One sidewall sample and one bottom sample will be taken for every 100 ft.^{2} of surface area..

4.2.3 Laundry PCE Soil Contamination

The soil with PCE soil contamination located at the northeast side of the former laundry building will be excavated. Soil will be excavated until excavation and sidewall soil sampling indicates compliance with applicable RSRs PCE criteria. One sidewall sample and one bottom sample will be taken for every 100 ft.^{2} of surface area.

5 Remediation Compliance Documentation

The RSRs criteria compliance documentation to be provided was described in the Soil Confirmation Sampling Plan. This description is provided below in italics.

Remediation and compliance with the RAP criteria for soil be documented in figures and in tables. A set of figures will be generated for each building documenting the sample locations at each stage of excavation. The figures will be constructed in a manner similar to the examples given above for the north side of the Bridgewater Building. To examine the compliance of lead and pesticides at each soil sample location a table of all soil sample results in the same format as the tables in Appendix B will be maintained.

To document final compliance with the RSRs and RAP criteria a figure for each building will be prepared showing the location of the final confirmation samples. To go along with these figures a confirmation sampling results table will be created in a format similar to the tables included in Appendix B that will exclude all excavated sampling locations and only show the final confirmation sampling results.

The compliance documentation for each building is provided behind the respective building tab of this report. The one deviation from the description provided in the Soil Confirmation Sampling Plan is that only one table showing all results is provided. It was felt that the additional table only showing the final results was not needed since a figure is provided showing the final confirmation samples for each building the specific results of which can be determined by examining the specific final confirmation sample results in the complete sampling table.

For each building, a table is provided with all of the sampling results that shows the substances that are in compliance and not in compliance for each of the sampling results. Where a substance is not in compliance, an addition sample was taken either further out from the building foundation or at a greater depth until compliance was achieved both horizontally and vertically at each location for every substance. In addition, for each building, progressive figures are provided that show locations in compliance and not in compliance along with areas to be excavated at any

particular time. These figures were provided to the remediation contractor to direct the excavations at each building. Then, for each building, a final remediation sampling figure is provided that shows location and depth of all final compliance samples. The distance and depth location identifiers for each sample indicate the extent and depth of excavation of a particular area around the building foundation.

6 Laboratory Methods and Detection Limits

The laboratory methods utilized were as described in the Soil Confirmation Sampling Plan except that special laboratory procedures were utilized to lower the detection limits for 4,4'-DDD, 4,4'-DDE, 4,4'-DDT to 0.002 mg/kg so that an a SPLP test would not have to be performed to show compliance for these substances where there was 15 feet of groundwater over bedrock as long as the detection limit was 0.002 mg/kg and the analytical result did not detect the particular compound.

Laboratory methods were as prescribed in the RSRs. Pesticide soil samples were analyzed by EPA Method 8081. To achieve applicable detection limits for the pesticides, SPLP analysis extraction was by a modified Method 3520 using two liters rather than one for extraction. Lead was analyzed by EPA Method 6010/E200.7. SPLP extraction for lead was by EPA Method E1312/SW6010. Total Petroleum Hydrocarbon analysis was by the Connecticut Extractable Total Petroleum Hydrocarbon (ETPH) test method. Volatile organics were analyzed by EPA Method 8260.

Detection Limits versus Applicable Criteria

	Mass Analysis (mg/kg)		**SPLP Analysis (ug/l)**	
Analyte	**Lowest Applicable Criteria**	**Achievable Detection Limit**	**Lowest Applicable Criteria**	**Achievable Detection Limit**
Aldrin	0.007	0.007	na	na
Chlordane	0.066	0.066	0.3	0.3
4,4' -DDD	2.6	0.002	0.15	0.1
4,4' -DDE	1.8	0.002	0.1	0.1
4,4' -DDT	1.8	0.002	0.1	0.1
Dieldrin	0.007	0.007	na	na
Endrin	20	0.032	11	0.1
Heptachlor Epoxide	0.067	0.016	0.2	0.05
Lead	500	5	15	15

7 Quality Assurance/Quality Control

7.1 Laboratory

The quality assurance/quality control procedures utilized were those described in the Soil Confirmation Sampling Plan approved by the DEEP. The description of these procedures from the Soil Confirmation Sampling Plan are provided in italics below. Laboratory reports, chains of custody, laboratory quality assurance reports, and R. W. Bartley & Associates, Inc. quality assurance/quality control review check list sheets are provided in electronic files on the enclosed compact disc.

The chosen laboratory will follow the EPA analytical methods and procedures required by the RSRs. In addition, the laboratory quality assurance and quality control procedures being developed by the DEP will be followed as guidance. Adjustments to analytical procedures, sampling methods, and compliance considerations and decisions will be reviewed in light of the results of the quality assurance and quality control reviews. However, compliance with the RSRs criteria will be determined only on the requirements in effect at the time of the RAP approval and currently in effect. These quality assurance and quality control procedures being developed by the DEP that are applicable to the work at this site are attached in Appendix D.

A site specific matrix spike and matrix spike duplicate will be run for each 20 samples. A site duplicate sample will also be run for each 20 samples. A trip blank will be run for each set of volatile samples transported to the laboratory.

8 REMEDIATION SUMMARY

The remediation performed for lead and pesticides at the buildings, for the total petroleum hydrocarbon contamination at Yale laboratory, and for the tetrachloroethylene contamination at the Laundry Building is described in the sections below. Photographs showing representative remedial activities are provided behind the "8.4 Remediation Photographs" section of this report below.

8.1 BUILDINGS

Approximately 3,238 samples were taken to confirm that all soil contaminated above applicable criteria were removed. The distribution of samples by building is given in the table below. Approximately 22,000 tons, or approximately 1,100 tractor-trailer loads, of soil was removed from around the buildings and sent to appropriately-licensed disposal facilities. Less contaminated soil was sent to non-hazardous waste landfills. A portion of the soil was appropriately classified as hazardous waste and was sent to a Resource Conservation and Recovery Act (RCRA) hazardous waste landfill. The amount of soil removed at each building was generally in proportion to the number of samples taken at each building which are given in the table below.

Number of Samples Taken at Each Building

Building	Number Samples
Bridgeport Hall	440
Bridgewater House	83
Canaan House	201
Cochran House	146
Danbury Hall	57
Engineer Cottage	43
Fairfield House	172
Greenhouse	95
Greenwich House	207
Kent House	396
Laundry	72
Litchfield House	100
Newtown Hall	106
Norwalk Hall	146
Plymouth Hall	26
Shelton House	249
Single Family Homes	130
Staff Duplexes	204
Stamford Hall	143
Stratford House	60
Woodbury Hall	126
Yale Laboratory	36
Total	**3238**

Behind each building tab in this report is a table providing results for each sample at the particular building. After the table is a series of figures that shows the progression of soil removal and sampling. Each interim figure shows:

- the location of each sample taken as of that date;
- areas of further soil removal as instructions to the remedial contractor shown as areas filled with slanted lines with indicators as to the depth of additional soil removal at the particular area;
- the depth of each sample indicated by the last digit of the sample which shows the depth of the current excavation;

- whether or not a particular sample location is in compliance with the lead and pesticides remedial criteria shown as either green or red circles around the sample location;
- locations where an SPLP test must be performed to confirm compliance with the remedial criteria;
- areas that are characterized as hazardous waste, shown by areas filled with plus signs; and
- areas that meet criteria that can be backfilled, shown by areas filled with crosshatching.

The final figure for each building shows each sample that confirms compliance with the remedial criteria. The last digit of each sample shown indicates the depth to which soils removed at any particular area. For example, for the Bridgeport building no excavation was required at an area that had been continuously paved over the life of facility at location B44, whereas soil was excavated to a depth of 15 feet below grade at location B11. In total, approximately 2519 cubic yards of soil was removed from around the Bridgeport building. This represents approximately 175 tractor-trailer loads of contaminated soil removed from around the Bridgeport building.

At each building, if contaminated soil extended to the footing drain the footing drain pipe and surrounding footing drain, permeable material was removed and replaced with new materials. All soil used to fill the excavations were sampled to confirm it was contaminant free.

The extent of contamination at each building varied greatly as anticipated in the Remedial Action Plan. As stated before, the amount of soil removed at each building was proportional to the number of samples taken which is provided in the table above. The most contaminated buildings were those as anticipated in the Remedial Action Plan which were the core buildings that were initially constructed in the 1930s and used as a hospital or to house patients. These included the buildings Kent, Greenwich, Fairfield, Bridgeport, Canaan, and Shelton. At most buildings the contaminant that required the most excavation in order to reach remedial criteria was the pesticide dieldrin which has higher solubility/mobility compared to its remedial criteria than the other contaminants.

At certain buildings where there was not 15 feet of groundwater over bedrock, a very limited number of samples analyzed for SPLP leachable lead exceeded RSRs Groundwater Protection Criteria even though the total concentration of lead in the soil was extremely low. In addition, these locations were located at a distance from the building foundations such that they would not have been impacted by the leaching of lead from the white trim lead paint. In these instances compliance with the RSRs GA Pollutant Mobility Criteria was demonstrated by showing that the 95% upper confidence level of the mean of all lead SPLP final test results were less than the GA pollutant mobility criteria in accordance with RSRs 22a-133k-2(e)(2)(A)(i). This occurred at the buildings Newtown, Norwalk, and Woodbury. This situation was discussed with the then DEEP project manager Daniel White and explain by letter to the current DEEP project manager Sheila Gleason. This letter to Ms. Gleason is included behind the Woodbury building of this report. The 95% upper confidence level of the mean calculations for the Newtown, Norwalk, and Woodbury buildings are included behind the respective building tabs of this report.

In addition to remediation performed at each building for pesticides and lead, remediation for Total Petroleum Hydrocarbons was performed at the Yale Laboratory building at a location of a former leaking underground storage tank used to fire a medical incinerator located in the basement of the building. Also, remediation for tetrachloroethylene, a dry-cleaning solvent, was performed at one corner of the Laundry Building where a small dry-cleaning operation on the second floor of the building operated for a period of time to launder some of the guard uniforms. The specifics of the soil excavation at each of these buildings is provided in the sections below.

8.2 YALE LABORATORY

The former leaking underground storage tank was located next to the building at the northeast corner. This area was excavated to a depth of approximately 12 feet. The extent of excavation is shown in the figure "Yale UST Excavation Figure" which is the last figure behind the "Yale" tab of this report. The results of bottom and sidewall sampling of this excavation are shown in the table below. All laboratory reports with laboratory quality assurance/quality control laboratory reports, R. W. Bartley Associates Inc. completed quality assurance/quality control check lists, and chain of custody forms are included in the respective electronic files on the compact disc provided as part of this report.

Yale Laboratory UST Excavation Sampling Results

Location	TPHs (mg/kg) by SPLP	SVOC PAHs (mg/kg)
June 15, 2006		
SE	ND	All < 0.33
BS	ND	All < 0.33
BN	ND	All < 0.33
EN	ND	All < 0.33
ES	ND	All < 0.33
NW	ND	All < 0.33
NE	ND	All < 0.33
WN	ND	All < 0.33
WS	1600	Selected > criteria
June 21, 2006		
WS-2	ND	All < 0.33

8.3 LAUNDRY

Previous soil sampling at the area of the Laundry building dry cleaning operation identified two locations that had concentrations of tetrachloroethylene greater than the GA Pollutant Mobility Criteria. The sample from boring LF02 taken from 6 to 8 feet in depth contained 210 micrograms of tetrachloroethylene per kilogram of soil. The sample taken from boring LF03 taken from a depth of 16 to 17 feet contained 410 micrograms of tetrachloroethylene per kilogram of soil.

To define the extent of soil contamination, three additional borings were drilled as part of the remedial effort. The soil was screened for volatile organic contamination using an a portable organic vapor analyzing instrument (OVA) and samples were taken for laboratory analysis at the locations of the highest OVA readings. The locations of the borings are shown on the "Laundry 6-23-06 PCE Remediation Figure" located behind the "Laundry" tab of this report. The samples taken and results are shown in the table below.

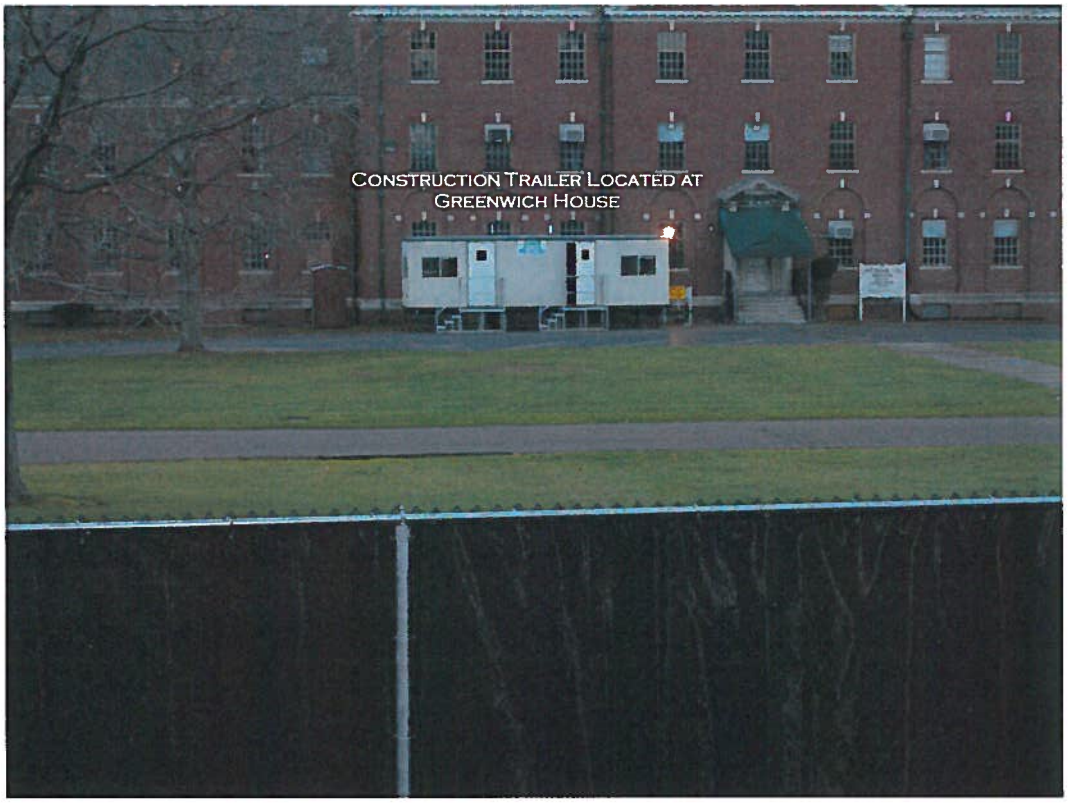
Laundry Building Soil Boring Sample Results

Location	Depth (feet)	Tetrachloroethylene Result (μg/kg)
L01-2	20 to 21	ND<10
L01-2	5 to 6	13
L02-2	4 to 6	ND<10
L02-2	17 to 19	ND<10
L03-2	17	ND<10
L03-2	2.5-5	9,000
L02-3	11	ND<10
L02-3	16	ND<10

For remediation of the contaminated soil at location L03, soils were excavated along the building foundation at the area of the L03 boring. A 12' x 6' pit was excavated to a seven-foot depth based upon OVA readings. Samples were taken at the bottom of the excavation and at the north, south, and east side walls of the excavation. The west side wall was the building foundation. The only concentrations of PCE detected at a detection limit of 10 micrograms of tetrachloroethylene per kilogram of soil was at the north side wall at concentration of 15 μg/kg and 20 μg/kg in the duplicate sample at this location. The GA Pollutant Mobility Criteria is 100 μg/kg and the residential direct exposure criteria is 12,000 μg/kg.

8.4 REMEDIATION PHOTOGRAPHS

See below.


CONSTRUCTION TRAILER LOCATED AT
GREENWICH HOUSE

SOIL EXCAVATION AT KENT BUILDING

EXCAVATION OF SOILS AT BRIDGEPORT
BUILDING

EXCAVATION OF SOIL AT BRIDGEPORT
BUILDING

Fairfield Hills Remediation
Bridgeport Building Soil Removal
2/9/06

Fairfield Hills Remediation
Bridgeport Building Excavation and
Replacement of Footing Drains
3/13/06

EXCAVATION OF SOIL AT BRIDGEPORT
BUILDING

Fairfield Hills Remediation
Bridgeport Soil Removal
2/9/06

Fairfield Hills Remediation
Cochran Building Spil Removal
1/9/06

Fairfield Hills Remediation
Cochran Building
2/1/06

EXCAVATION OF SOIL AT FAIRFIELD
BUILDING

EXCAVATION OF SOIL AT FAIRFIELD
BUILDING

EXCAVATION OF SOIL AT FAIRFIELD
BUILDING

EXCAVATION OF SOIL AT FAIRFIELD
BUILDING

Fairfield Hills Remediation
Greenwich Building Remediation
2/2/06

Fairfield Hills Remediation
Greenwich Building
2/2/06

SOIL EXCAVATION AT GREENWICH BUILDING

EXCAVATION OF SOILS AT GREENWICH BUILDING

SOIL EXCAVATION AT GREENWICH BUILDING

Fairfield Hills Remediation
Greenwich Building
2/2/06

Fairfield Hills Remediation
Kent Building
2/1/06

TOP OF PEDESTRIAN TUNNEL AT KENT BUILDING

SOIL EXCAVATION AT KENT BUILDING

SOIL EXCAVATION AT KENT BUILDING

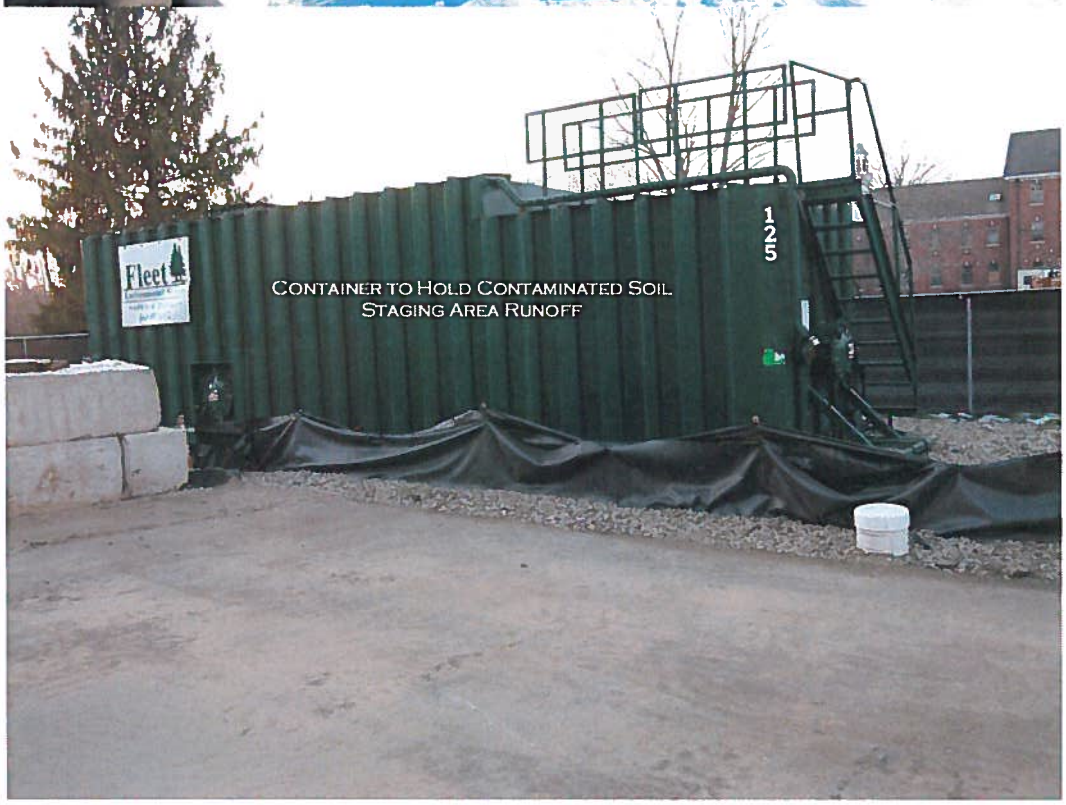
SOIL EXCAVATION AT KENT BUILDING

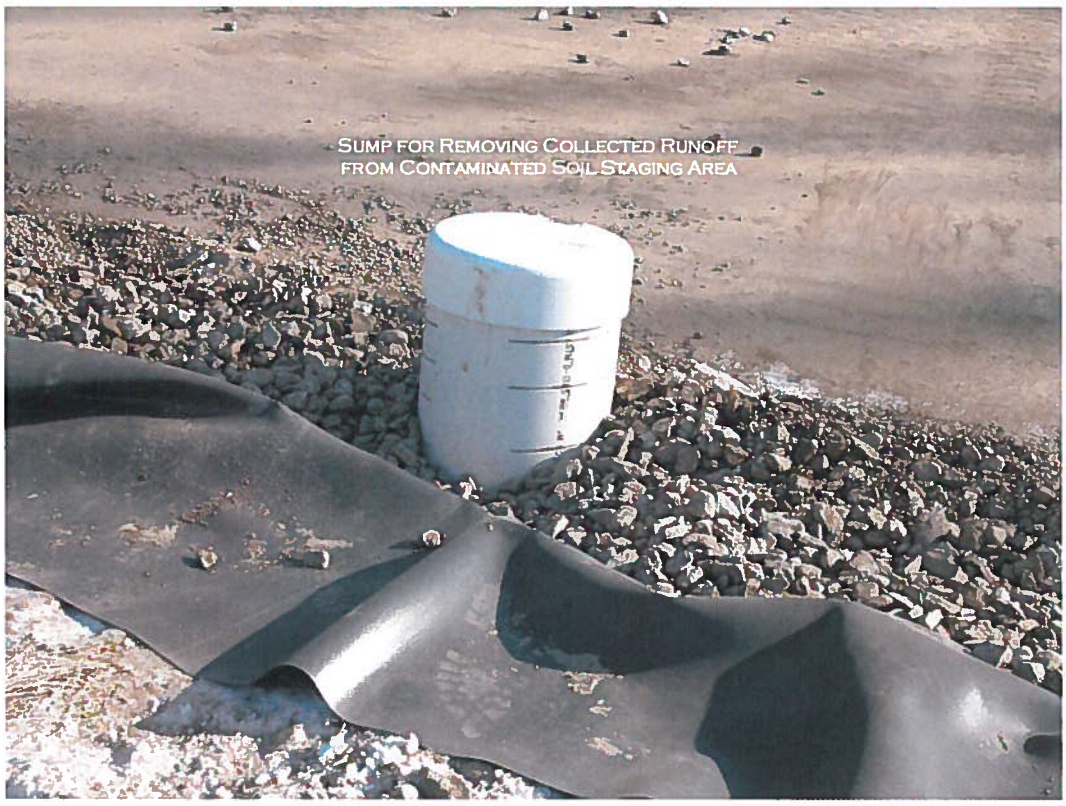
Fairfield Hills Remediation
Kent Building Removal and
Replacement of Footing Drains
2/1/06

Fairfield Hills Remediation
Cochran Building
2/1/08

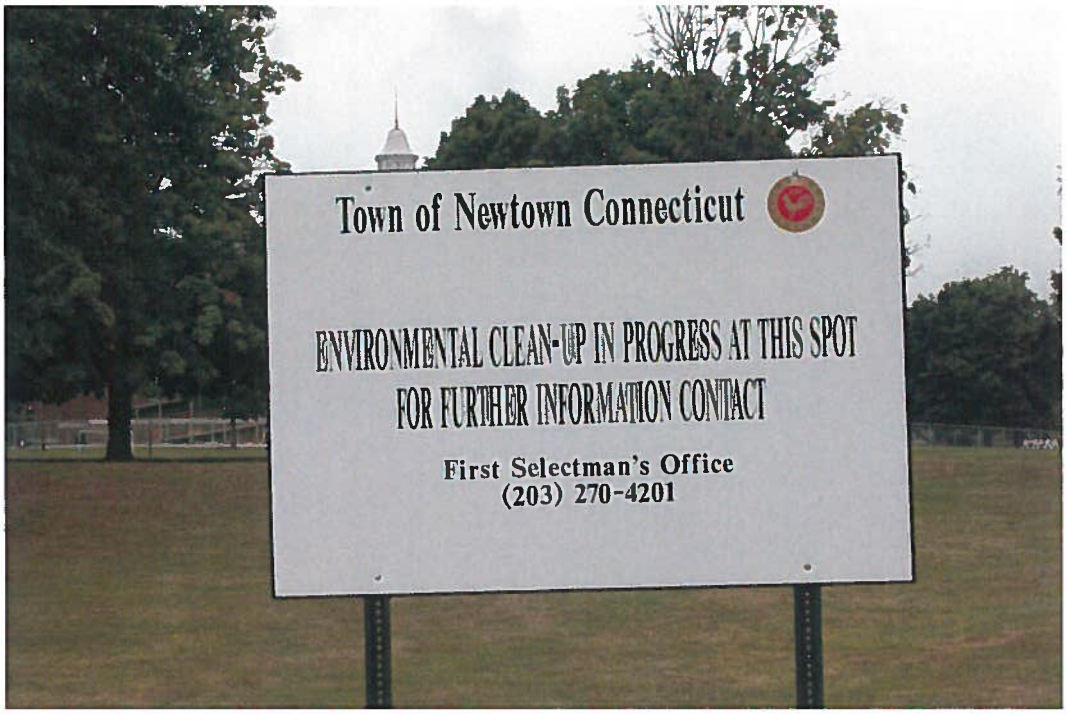
Installation of Runoff Collection
Trench at Contaminated Soil Staging
Area

Fairfield Hills Remediation
Soil Stockpile
12/13/05


Fleet
CONTAINER TO HOLD CONTAMINATED SOIL
STAGING AREA RUNOFF
125


SUMP FOR REMOVING COLLECTED RUNOFF
FROM CONTAMINATED SOIL STAGING AREA

TRACKPAD AT CONTAMINATED SOIL
STAGING AREA


Town of Newtown Connecticut
ENVIRONMENTAL CLEAN-UP IN PROGRESS AT THIS SPOT
FOR FURTHER INFORMATION CONTACT
First Selectman's Office
(203) 270-4201

9 OUTFLOW SAMPLING

The outfall has been sampled since November of 2003 prior to contaminated soil removal. Regular sampling of the outfall has occurred in accordance with the Remedial Action Plan since remediation began. There are two outfall pipes (see photograph below). Mixing of the outfall waters occurs in a junction box behind the Laundry Building and then the flow enters the twin pipes. Since the outflow is mixed prior to entering the twin pipes, the concentrations at each outfall pipe should be the same. This was confirmed by the sampling. Since both outfall pipes contain similar concentrations, sampling was limited to only the west outfall after March 2007.

Sampling has been performed for pesticides by EPA Method 8081, and for lead, total dissolved solids, and total suspended solids. Sampling for total dissolved solids and total suspended solids was performed to see that erosion during remediation did not carry soil to the outfalls. The sampling data is contained in the table below. The only pesticide detected in the outfall sampling has been dieldrin. The concentration of dieldrin should vary with the quantity of flow since the flow consists not only of building footing drains discharge but also of surface water runoff flows.

The building footing drains' discharge is diluted with surface water runoff flows during rainfall and snow melt. This relationship of concentration versus flow can be seen by observation of the dieldrin concentration versus flow graph below.

The discharge limitation for dieldrin set by the DEEP is three nanograms of dieldrin per liter of water (parts per trillion or ppt). The concentration of dieldrin in the outfall water decreased significantly after removal of contaminated soil and continues to decrease with time. This can be seen by observing the dieldrin concentration versus time graph shown below. Although the concentration of dieldrin continues to decrease, the concentration limit of three nanograms of dieldrin per liter of water has yet to be reached on a consistent basis. The average concentration over the past 12 months has been 11 nanograms of dieldrin per liter of water. To put in perspective how low the discharge limitation is, the total weight of dieldrin discharged per year in the outfall water assuming 11 nanograms of dieldrin per liter of water in the discharge is about $\frac{5}{1,000}$ of a gram of dieldrin.

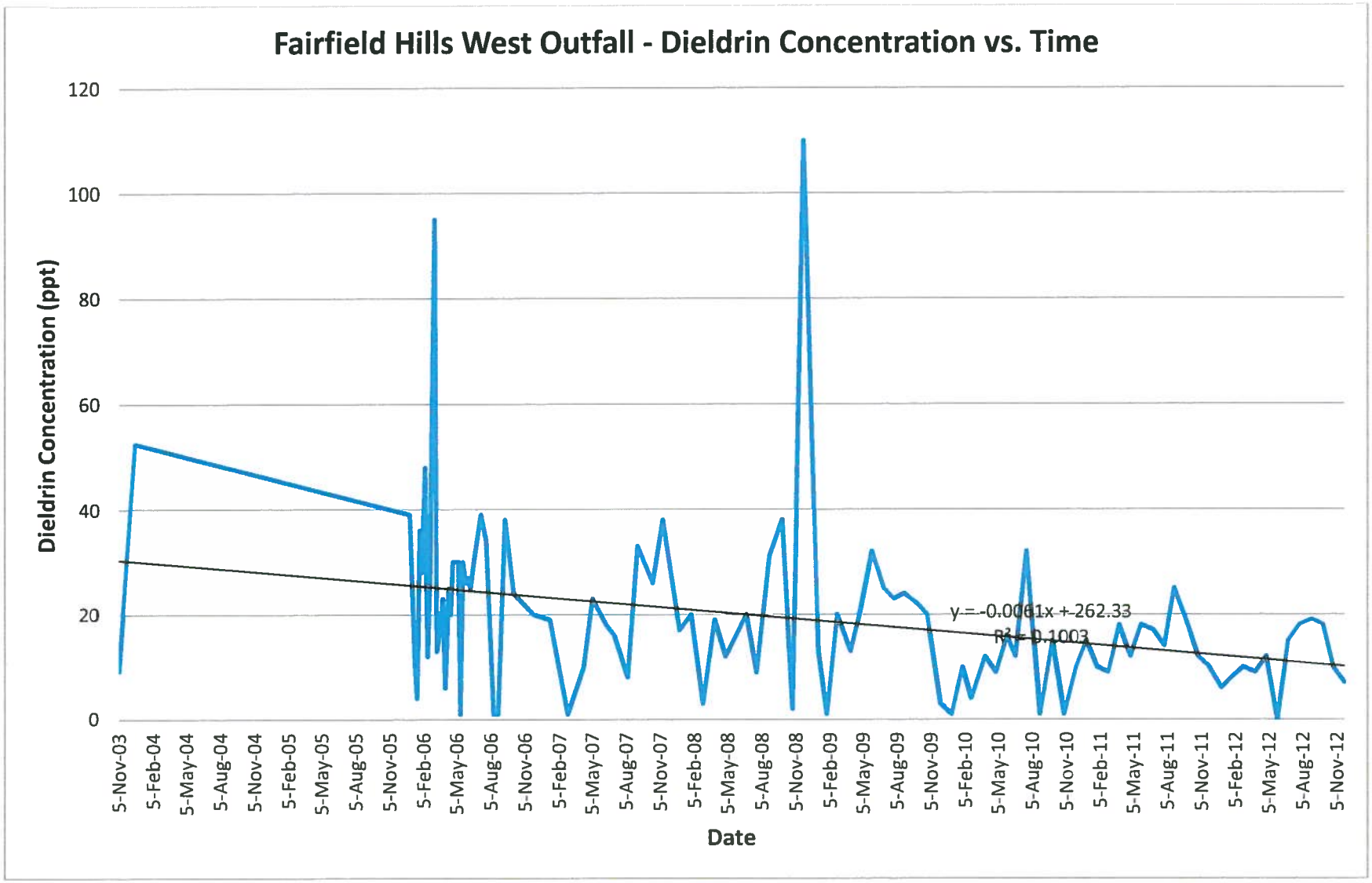
The concentrations of lead have been relatively insignificant with occasional results greater than the detection limit of 1 or 2 micrograms of lead per liter of water. The Connecticut lead acute water quality criteria for freshwater is 30 micrograms of lead per liter of water and the chronic criteria is 1.2 micrograms of lead per liter of water.

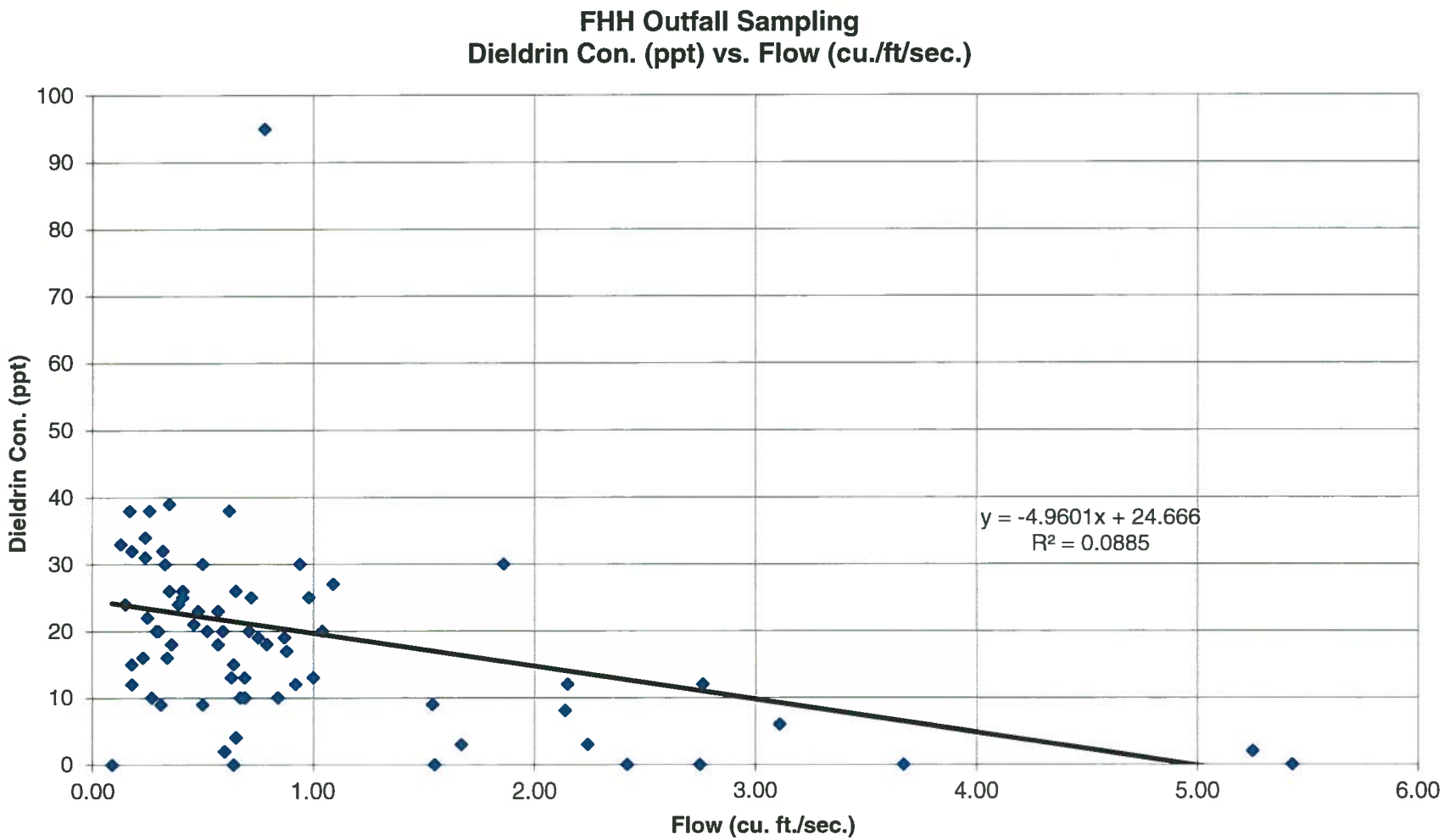
FHH Outfall Sampling										
	East				West					
Date	Lead (ug/l)	Dieldrin (pg/l)	TDS (mg/l)	TSS (mg/l)	Lead (ug/l)	Dieldrin (pg/l)	TDS (mg/l)	TSS (mg/l)	Est. cu. Ft./sec	Temp. F
11/5/2003	4	23			6	9.2				
12/19/2003	1	80/210				51/54				
12/30/2005		49				39				
1/12/2006		21				11				
1/18/2006	4	21	180	21	3	4	120	22		
1/26/2006	<1	31	260	<5	<1	36	200	6.5		
2/1/2006	<1	32	180	<5	<1	28	240	<5		
2/9/2006	<1	59	190	<5	<1	48	230	<5		
2/16/2006	10	32	130	23	7	12	230	21	2.15	
2/22/2006	<1	28	210	<5	<1	26	290	<5	0.65	
3/6/2006	2	94	240	8.5	2	95	300	9.5	0.78	43
3/13/2006	<2	14	170	<5	<2	13	340	<5	1.00	46

FHH Outfall Sampling										
	East				West					
Date	Lead (ug/l)	Dieldrin (pg/l)	TDS (mg/l)	TSS (mg/l)	Lead (ug/l)	Dieldrin (pg/l)	TDS (mg/l)	TSS (mg/l)	Est. cu. Ft./sec	Temp. F
3/22/2006	<1	20	230	<5	<1	18	250	<5	0.36	44
3/29/2006	<1	22	240	<5	<1	23	260	<5		
4/4/2006	<1	7	100	<5	<1	6	130	<5	3.11	44
4/14/2006	<1	26	210	<5	<1	25	260	<5	0.41	48
4/19/2006	<1	19	230	<5	<1	20	240	<5	0.29	49
4/25/2006	<1	40	140	7.5	<1	30	190	21	1.86	50
5/10/2006	<1	30	250	<5	<1	30	220	<5	0.50	50
5/15/2006	4	<2	110	34	4	<2	190	22	5.43	53
5/22/2006	<1	30	180	<5	<1	30	230	<5	0.94	51
5/30/2006	<1	25	250	<5	<1	26	280	<5	0.35	53
6/5/2006	<1	30	<10	<5	2	27	210	<5	1.09	56
6/12/2006	<1	31	200	<5	<1	25	240	<5	0.98	55
6/21/2006	<1	26	250	<5	<1	30	280	<5	0.33	56
7/10/2006	<1	41	250	<5	<1	39	280	<5	0.35	59
7/24/2006	<1	34	270	<5	<1	34	280	<5	0.24	59
8/13/2006	1	<2	290	<5	26	<2	290	<5	0.09	60
8/25/2006	10	<20	41	23	7	<2	58	15	2.42	60
9/13/2006	<1	38	290	<5	<1	38	290	<5	0.26	54
10/6/2006	<1	26	290	11	<1	24	280	<5	0.15	
11/29/2006	<1	26	200	<5	<1	20	200	<5	1.04	52
1/12/2007	<1	29	170	<5	<1	19	200	<5	0.75	43
3/1/2007	5	<2	140	15	5	<2	230	20	1.55	38
4/13/2007	Sampling discontinued				<1	10	discontinued		0.84	40.5
5/7/2007	Sampling discontinued				<1	23	discontinued		0.48	45
6/13/2007	Sampling discontinued				2	18	discontinued		0.57	54
7/5/2007	Sampling discontinued				3	16	discontinued		0.34	57
8/10/2007	Sampling discontinued				2	8	discontinued		2.14	61.4
9/5/2007	Sampling discontinued				<1	33	discontinued		0.13	56.2
10/16/2007	Sampling discontinued				<1	26	discontinued		0.41	54
11/12/2007	Sampling discontinued				<1	38	discontinued		0.17	48
12/28/2007	Sampling discontinued				<1	17	discontinued		0.88	42.1
1/28/2008	Sampling discontinued				<2	20	discontinued		0.59	43
29-Feb-08	Sampling discontinued				<1	3	discontinued		1.67	38.2
31-Mar-08	Sampling discontinued				<2	19	discontinued		0.87	42.2
30-Apr-08	Sampling discontinued				<1	12	discontinued		0.92	49.8
25-Jun-08	Sampling discontinued				<1	20	discontinued		0.3	55
23-Jul-08	Sampling discontinued				0.03	9	discontinued		0.31	65
26-Aug-08	Sampling discontinued				<1	31	discontinued		0.24	58.5
29-Sep-08	Sampling discontinued				<1	38	discontinued		0.62	62
28-Oct-08	Sampling discontinued				2	2	discontinued		5.25	49
26-Nov-08	Sampling discontinued				<2	110	170	24	1.5	45
5-Jan-09	Sampling discontinued				<2	13	300	<5	0.69	44

FHH Outfall Sampling										
	East				West					
Date	Lead (ug/l)	Dieldrin (pg/l)	TDS (mg/l)	TSS (mg/l)	Lead (ug/l)	Dieldrin (pg/l)	TDS (mg/l)	TSS (mg/l)	Est. cu. Ft./sec	Temp. F
28-Jan-09	Sampling discontinued				28	<2	670	690	3.67	35.4
25-Feb-09	Sampling discontinued				<1	20	260	<5	0.71	37.5
2-Apr-09	Sampling discontinued				0.01	13	230	7	0.63	45.5
29-Apr-09	Sampling discontinued				<1	21	300	<5	0.46	47.5
30-May-09	Sampling discontinued				<2	32	260	<5	0.32	52
1-Jul-09	Sampling discontinued				2	25	260	<5	0.72	59
28-Jul-09	Sampling discontinued				<1	23	290	<5	0.57	61.5
25-Aug-09	Sampling discontinued				<1	24	280	<5	0.39	63.5
30-Sep-09	Sampling discontinued				<1	22	230	<5	0.25	57.5
26-Oct-09	Sampling discontinued				<2	20	250	<5	0.52	53
1-Dec-09	Sampling discontinued				0	3	80	6.5	2.24	47.5
31-Dec-09	Sampling discontinued				<1	<2	570	<5	0.60	42
29-Jan-10	Sampling discontinued				<1	10	370	<5	0.67	38
22-Feb-10	Sampling discontinued				<2	4	290	<5	0.65	39.5
31-Mar-10	Sampling discontinued				<1	12	210	<5	2.76	45
30-Apr-10	Sampling discontinued				<2	9	270	<5	0.50	51
30-May-10	Sampling discontinued				<2	16	280	<5	0.23	56.5
22-Jun-10	Sampling discontinued				<2	12	280	<5	0.18	58
22-Jul-10	Sampling discontinued				<2	32	250	<5	0.18	61
27-Aug-10	Sampling discontinued				<2	<2	97	23	2.75	59
29-Sep-10	Sampling discontinued				<2	15	210	<5	0.18	63
31-Oct-10	Sampling discontinued				<1	<2	240	<5	0.64	56.4
2-Dec-10	Sampling discontinued				<2	10	180	<5	0.27	48.5
30-Dec-10	Sampling discontinued				<2	15	320	<5	0.64	43
28-Jan-11	Sampling discontinued				<2	10	500	<5	0.69	41
27-Feb-11	Sampling discontinued				<2	9	690	<5	1.54	40.5
30-Mar-11	Sampling discontinued				<2	18	350	<5	0.79	43
29-Apr-11	Sampling discontinued				<2	12	290	<5	0.73	53
28-May-11	Sampling discontinued				4	18	390	<5	0.33	62
30-Jun-11	Sampling discontinued				<2	17	320	<5	0.47	59
30-Jul-11	Sampling discontinued				4	14	310	<5	0.26	62
25-Aug-11	Sampling discontinued				<2	25	320	<5	0.60	63
26-Sep-11	Sampling discontinued				<2	19	300	<5	0.59	64.5
29-Oct-11	Sampling discontinued				<2	12	260	<5	0.71	53
28-Nov-11	Sampling discontinued				<2	10	300	<5	0.77	53.5
31-Dec-11	Sampling discontinued				<2	6	190	<5	1.72	44
28-Jan-12	Sampling discontinued				<2	8	230	40	1.00	41.5
28-Feb-12	Sampling discontinued				<2	10	240	<5	0.55	44
31-Mar-12	Sampling discontinued				<2	9	240	<5	0.38	48
30-Apr-12	Sampling discontinued				<2	12	290	<5	0.45	51
30-May-12	Sampling discontinued				<2	0	250	14	0.49	53
29-Jun-12	Sampling discontinued				7	15	310	<5	0.28	58.5

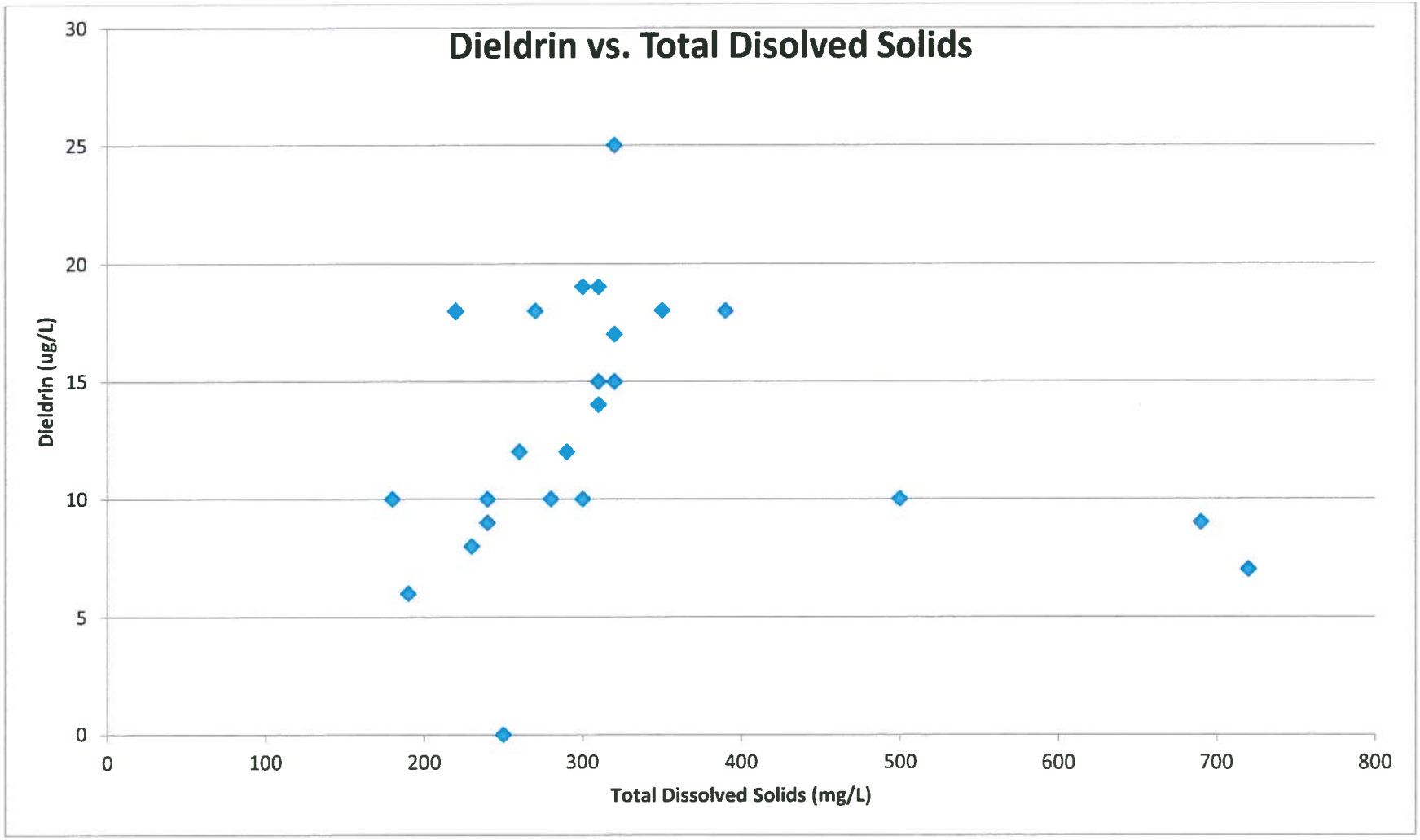
FHH Outfall Sampling										
	East				West					
Date	Lead (ug/l)	Dieldrin (pg/l)	TDS (mg/l)	TSS (mg/l)	Lead (ug/l)	Dieldrin (pg/l)	TDS (mg/l)	TSS (mg/l)	Est. cu. Ft./sec	Temp. F
29-Jul-12	Sampling discontinued				6	18	220	<5	0.44	61.5
31-Aug-12	Sampling discontinued				<2	19	310	<5	0.32	62
30-Sep-12	Sampling discontinued				<2	18	270	<5	0.35	60
28-Oct-12	Sampling discontinued				19	10	280	<5	0.44	58
27-Nov-12	Sampling discontinued				5	7	720	<5	1.07	56


Fairfield Hills West Outfall - Dieldrin Concentration vs. Time
Dieldrin Concentration (ppt)
120
100
80
60
40
20
0
y = -0.0061x + 262.33
R² = 0.1003
5-Nov-03
5-Feb-04
5-May-04
5-Aug-04
5-Nov-04
5-Feb-05
5-May-05
5-Aug-05
5-Nov-05
5-Feb-06
5-May-06
5-Aug-06
5-Nov-06
5-Feb-07
5-May-07
5-Aug-07
5-Nov-07
5-Feb-08
5-May-08
5-Aug-08
5-Nov-08
5-Feb-09
5-May-09
5-Aug-09
5-Nov-09
5-Feb-10
5-May-10
5-Aug-10
5-Nov-10
5-Feb-11
5-May-11
5-Aug-11
5-Nov-11
5-Feb-12
5-May-12
5-Aug-12
5-Nov-12
Date


FHH Outfall Sampling
Dieldrin Con. (ppt) vs. Flow (cu./ft/sec.)
Dieldrin Con. (ppt)
100
90
80
70
60
50
40
30
20
10
0
0.00
1.00
2.00
3.00
4.00
5.00
6.00
Flow (cu. ft./sec.)
y = -4.9601x + 24.666
R² = 0.0885

9.1 RECOMMENDATIONS FOR CONTINUING SAMPLING OF OUTFALL

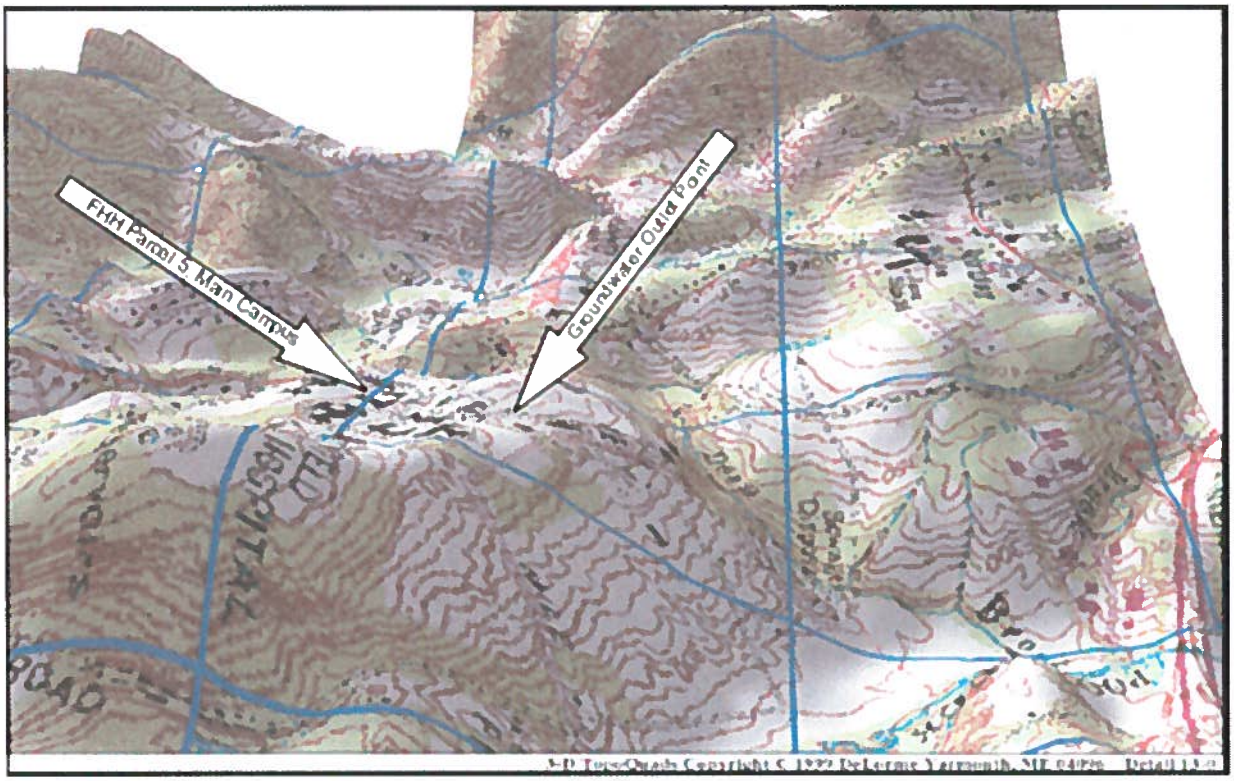
The outfall sampling results are reasonably consistent from month to month. Given this consistency there appears be no reason to continue sampling the outfall every month. We recommend changing the sampling to every other month. Further, we recommend discontinuing sampling for lead as results are consistently within criteria. Because the concentration of total suspended solids has been insignificant and because there are no significant construction activities at the subject property, we recommend discontinuing sampling for total suspended solids. We also recommend discontinuing sampling for total dissolved solids as there is no discernible relationship between the concentration of dissolved solids and the concentration of dieldrin. This can be seen in the plotting of the concentration of dieldrin against the concentration of total dissolved solids shown in the graph below.


Dieldrin vs. Total Disolved Solids
Dieldrin (ug/L)
30
25
20
15
10
5
0
0
100
200
300
400
500
600
700
800
Total Dissolved Solids (mg/L)

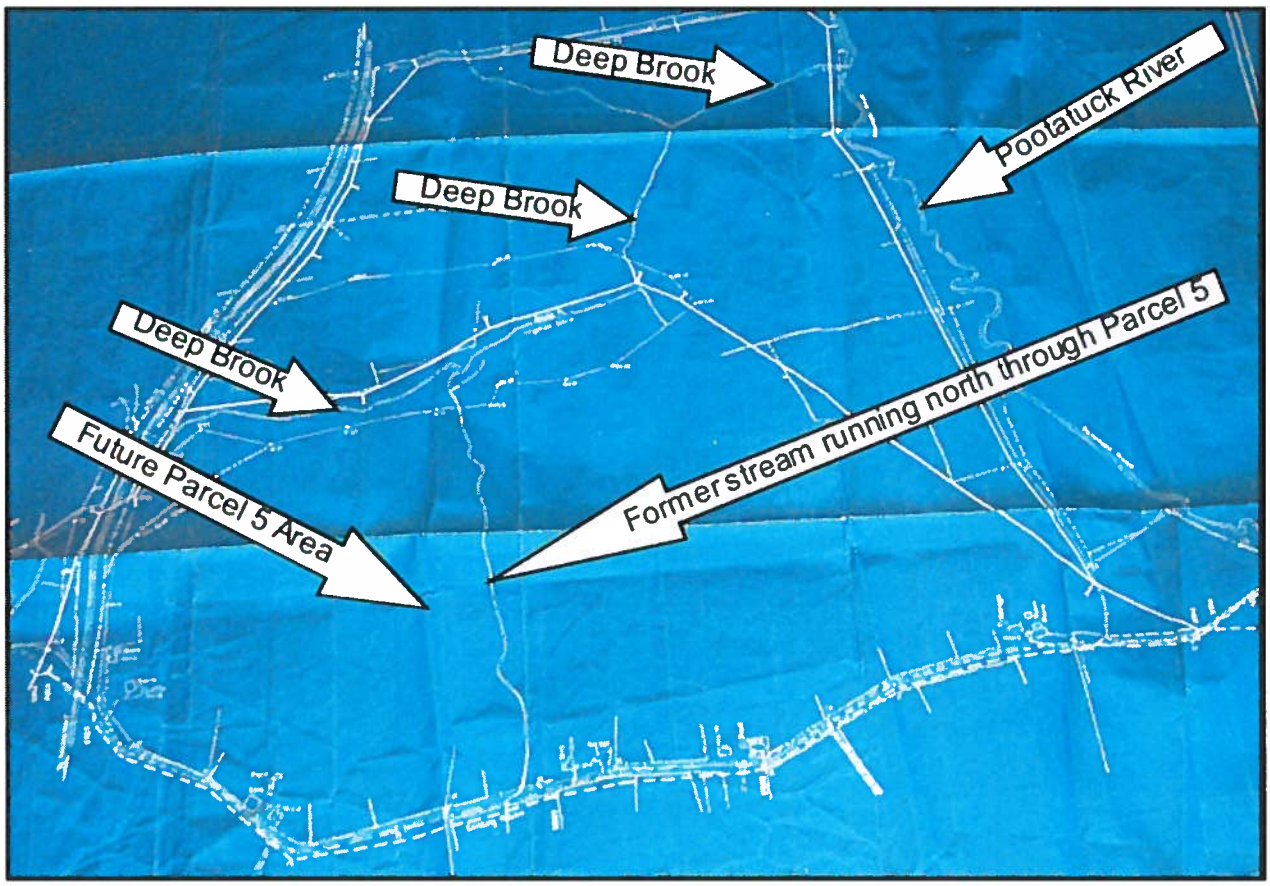
10 POST-REMEDIAL GROUNDWATER MONITORING

Groundwater flows follow the general topography of the subject property. The topography of the subject property is bowl shaped with a lower elevation outlet point which is the point at which groundwater exits the property. This topography is shown on the figure below, which is a vertically exaggerated three-dimensional topographic figure of the subject property and the surrounding area derived from a United States Geological Survey topographic map.

Subject Property Topography



The figure below shows a subject property FHH Pre-development Map. This map shows that a stream was present on the subject property prior to its development.



The existence of a pre-development surface stream in this bowl-shaped topography indicates that groundwater elevations at the subject property were likely near the surface prior to development.

When the Fairfield Hills Mental Health Hospital was constructed, a 36-inch drainage pipe was installed that runs south to north beneath the subject property. The 36-inch drain pipe is between 13 to 20 feet below ground surface. The location of the drainage pipe is shown on the subject property figures below. The pipe runs from a cistern south of the subject property which picks up the flow from the stream formerly running through the property, through subject property, to the back of the former laundry building across Mile Hill Road (now Wasserman Way) where it discharges into a junction box. A separate 30-inch drainage pipe also discharges into this junction box. This 30-inch drainage pipe accepts drainage from the west side of subject property. From the junction box twin 36-inch drainage pipes convey the groundwater and storm water to Deep Brook.

During construction of the subject property buildings, footing drains were installed around the buildings to lower groundwater to below basement slab elevations. This become apparent during the measurement of groundwater depths in that the groundwater depths near many of the buildings were at the level of the basement slabs. Construction drawings that were obtained and reviewed indicate that most of the footing drains for subject property central and east buildings discharge to this 36-inch main drainage pipe.

Therefore, it appears that building footing drains are draining and lowering the groundwater near buildings and conveying it to the outfall that ultimately leads to Deep Brook. Further evidence of this is that the twin 36-inch outfall pipes have significant flows during non-precipitation times.

Apart from the lowering of groundwater near buildings by the footing drains, site utilities appear to not have a significant effect on site-wide flow. As stated before, site-wide groundwater flows follow the site topography. Examination of the topography of the subject property area and groundwater contours (see Subject Property Topography figure above and the "Groundwater Elevations and Contours 10-31-03" figure below) shows that groundwater contours and flow follow the site topography to the north, which is natural.

Many of the site utilities are located within the site utility tunnels. Storm and sanitary drainage piping located outside of utility tunnels have fitted joints. The tunnel from Canaan House to Bridgeport House was excavated as part of the Canaan House oil spill, and the tunnel did not have footing drains along its length. Site building plans also have no indication that footing drains were constructed along the tunnels.

Evidence that contaminated groundwater from the main campus area is not preferentially moving along site utility or pedestrian tunnels is that the pedestrian tunnel terminates at the laundry building down gradient of the main campus area and the utility tunnel passes directly by the laundry building down gradient from the main campus. There are a number of wells at the laundry building that have not detected dieldrin or lead at significant concentrations at these wells. Also, groundwater at well locations MW-7 and MW-27 (see the "Groundwater Elevations and Contours 10-31-03" figure below) is also not impacted by the main campus contaminants of

concern, dieldrin and lead; and these wells are near the tunnels down gradient of the main campus.

Figure 47, "Groundwater Elevations and Contours 10-31-03" below taken from the Remedial Action Plan shows the site groundwater contours and flow directions. Figure 46, "Dieldrin Groundwater Results And Building General Dieldrin Concentrations" shows historical dieldrin concentrations prior to site remediation. Most of the wells installed as part of the subject property investigation were installed to determine worst-case groundwater contamination conditions by installing the wells at the building foundations in the contaminated soil. Most of these wells were destroyed during the subject property remediation as the contaminated soil around the buildings was excavated.

The figure below, "Proposed Post-Remedial Groundwater Monitoring Locations" shows the proposed locations of post-remedial groundwater monitoring wells, except those proposed for the Laundry building. There are eight proposed post-remedial groundwater monitoring wells at the main portion of the subject property, seven of which are proposed to monitor for pesticides, specifically dieldrin concentrations. The post-remedial groundwater monitoring wells at the main portion of the subject property are proposed to be located down gradient of the buildings which had the highest dieldrin concentrations and at the locations of pre-remedial dieldrin groundwater contamination.

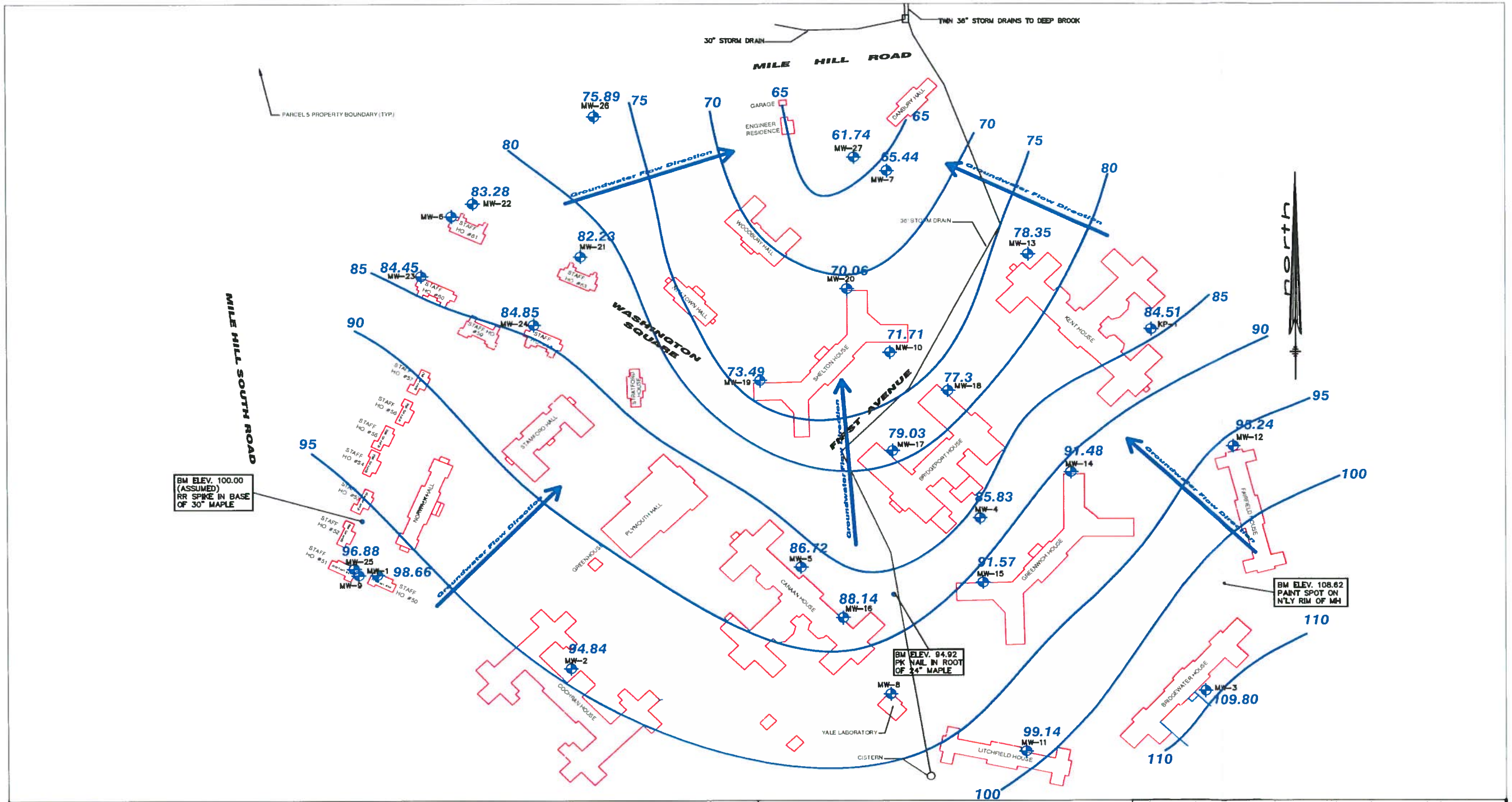
One of these wells is located down gradient from the Yale laboratory to monitor for total petroleum hydrocarbons related to the former heating oil underground storage tank remediation. These post-remedial wells are shown in green and numbered PRMWA through PRMWH on the "Proposed Post-Remedial Groundwater Monitoring Locations" figure provided below. The proposed post-remedial groundwater monitoring wells for the Laundry building are monitoring wells MW2, MW29, and MW30. These monitoring wells are down gradient from the location of the tetrachloroethylene contaminated soil excavation and are the wells that showed tetrachloroethylene contamination greater than criteria prior to the removal of the contaminated soils. Groundwater contours and groundwater flow direction and these well locations are shown

on the figure "Laundry Building 10-3-03 Well Sampling Results and GW Contours" provided below.

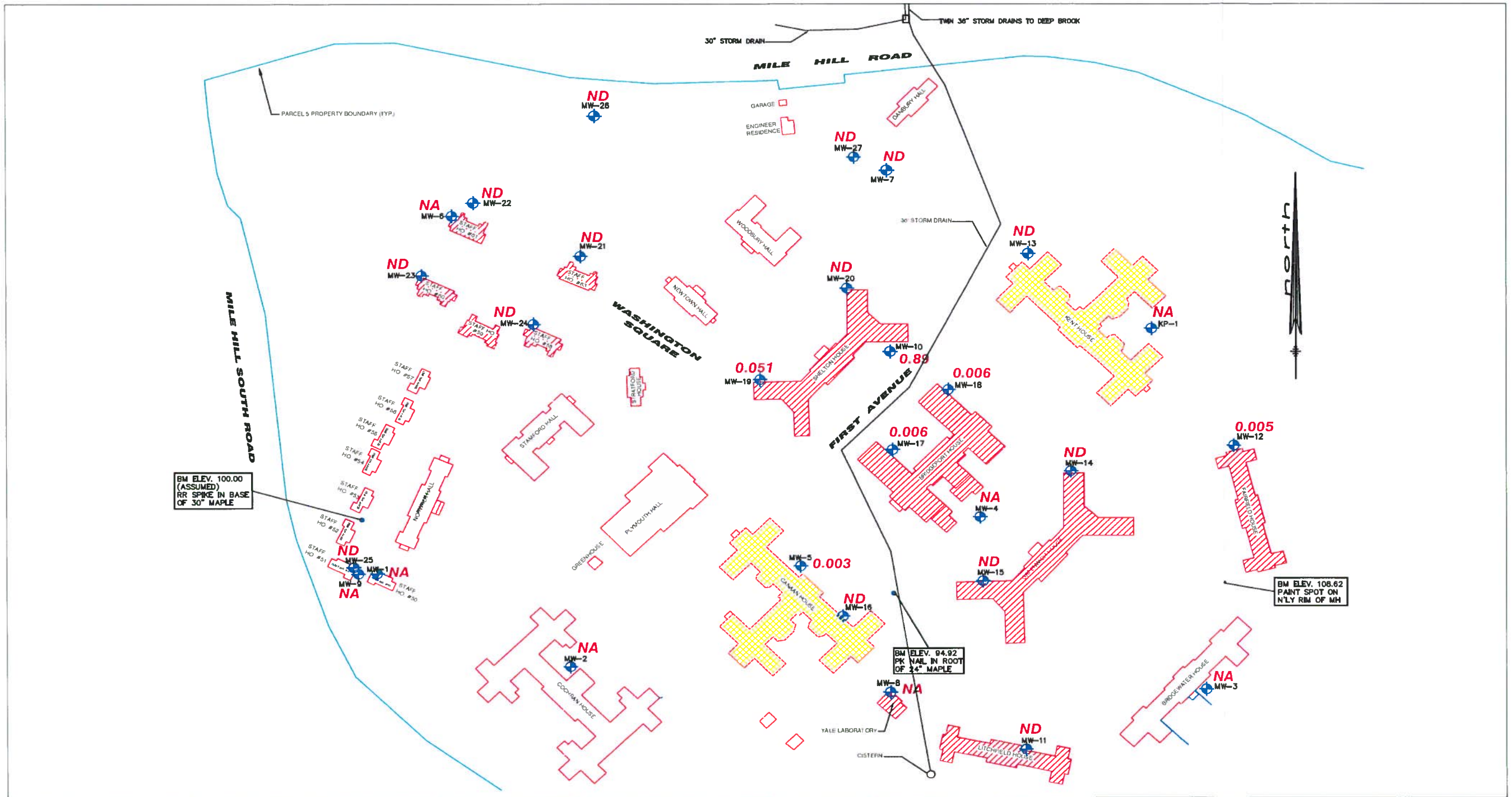
It is proposed that these wells will be installed and sampled quarterly upon approval of the post-remedial groundwater monitoring plan. Is it anticipated that these wells will be installed with pre-pack screens to minimize intrusion of fine-grain particles from the surrounding soils. Prior to sampling, a minimum of three well volumes of groundwater will be extracted.

Proposed Attenuation/Post-Remediation Monitoring Wells

Well Number	Location	Sampling Parameters
PRMWA	Down gradient of Shelton building	Pesticides
PRMWB	Down gradient of Shelton building	Pesticides
PRMWC	Down gradient of Bridgeport building	Pesticides
PRMWD	Down gradient of Bridgeport building	Pesticides
PRMWE	Down gradient of Yale building	TPHs
PRMWF	Down gradient of Greenwich building	Pesticides
PRMWG	Down gradient of Fairfield building	Pesticides
PRMWH	Down gradient of Kent building	Pesticides
MW2	Down gradient of Laundry building	Volatile Organics
MW29	Down gradient of Laundry building	Volatile Organics
MW30	Downgrading of Laundry building	Volatile Organics



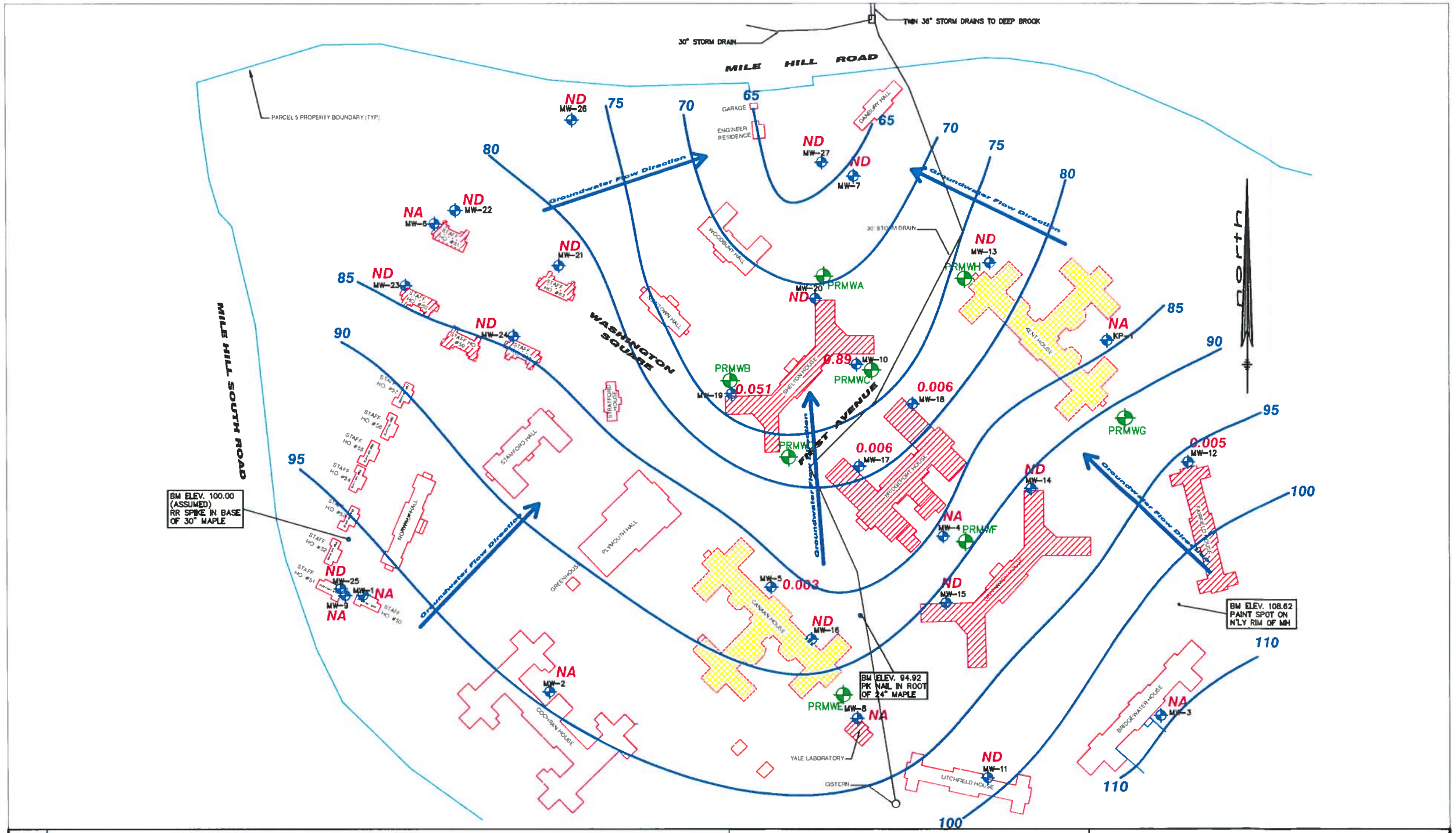
Legend	R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut	Figure 47 - Groundwater Elevations and Contours 10-31-03
Monitor Well Location 71.71 - Groundwater Elevation 75 - Groundwater Contour Elevation - Groundwater Contour	Approximate Scale: 1" = 200' / Date: October 24, 2003 Project Number: 1018.027 / File: Groundwater Elevations 10-31-03	Fairfield Hills Hospital - Parcel 5 Wasserman Way Newtown, Connecticut

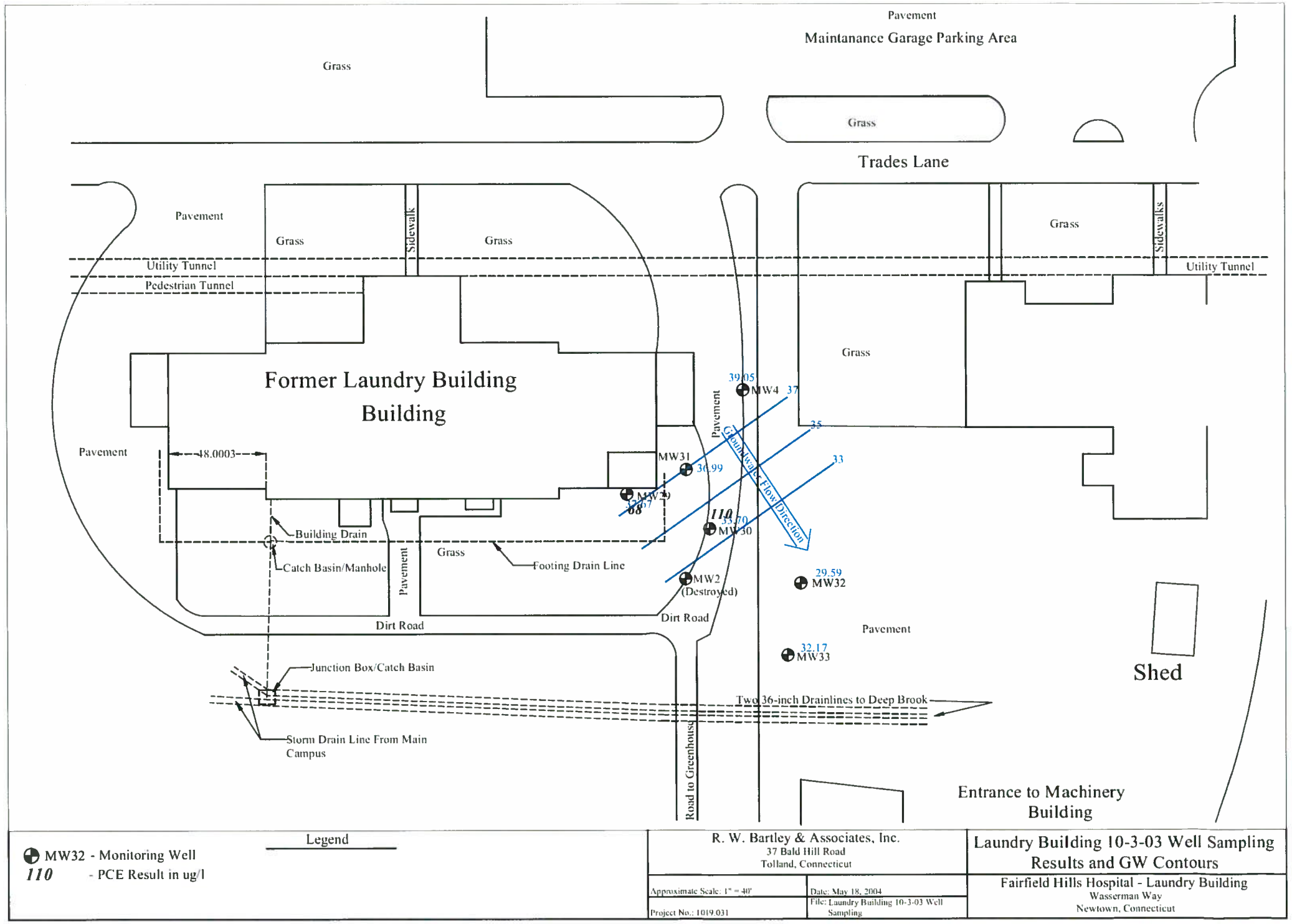


Legend			
Monitor Well Location	0.006 - Groundwater Concentration in ug/l	- Elevated Dieldrin Concentrations Building	R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut
ND -Not Detected at 0.002 ug/l		- Moderate Dieldrin Concentrations Building	Approximate Scale: 1" = 200' / Date: October 24, 2003
NA - Sample Not Taken or Analyzed		- Low Dieldrin Concentrations Building	Project Number: 1018.027 / File: Figure 46 - Dieldrin Groundwater Concentrations

Figure 46: Dieldrin Groundwater Results and Building General Dieldrin Concentrations

Fairfield Hills Hospital - Parcel 5
Wasserman Way
Newtown, Connecticut


MILE HILL ROAD
MILE HILL SOUTH ROAD
WASHINGTON SQUARE
FIRST AVENUE
Groundwater Flow Direction
North
30" STORM DRAIN
TWIN 36" STORM DRAINS TO DEEP BROOK
PARCEL 5 PROPERTY BOUNDARY (TYP)
BM ELEV. 100.00 (ASSUMED) RR SPIKE IN BASE OF 30" MAPLE
BM ELEV. 94.92 PK NAIL IN ROOT OF 24" MAPLE
BM ELEV. 108.62 PAINT SPOT ON N'LY RIM OF MH
ND MW-26
ND MW-27
ND MW-7
ND MW-22
NA MW-6
ND MW-21
ND MW-23
ND MW-24
ND MW-13
PRMWH
MW-20 PRMWA
ND
NA KP-1
PRMWB
MW-19
0.051
0.89 MW-10
PRMWC
0.006 MW-18
PRMWG
0.006 MW-17
0.005 MW-12
ND MW-14
NA MW-4 PRMWF
ND MW-15
MW-5 0.003
ND MW-16
ND MW-25
MW-1 NA
MW-9 NA
NA MW-2
PRMWE MW-8 NA
ND MW-11
NA MW-3
65
70
75
80
85
90
95
100
110
Legend
Monitor Well Location
Monitor Well Location
ND -Not Detected at 0.002 ug/l
NA - Sample Not Taken or Analyzed
75 - Groundwater Contour Elevation
- Groundwater Contour
0.006 - Groundwater Concentration in ug/l
- Elevated Dieldrin Concentrations Building
- Moderate Dieldrin Concentrations Building
- Low Dieldrin Concentrations Building
R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut
Approximate Scale: 1" = 200'
Date: October 24, 2003
Project Number: 1018.027
File: Figure 46 - Dieldrin Groundwater Concentrations
Proposed Post-Remedial Groundwater Monitoring Locations
Fairfield Hills Hospital - Parcel 5
Wasserman Way
Newtown, Connecticut


Pavement
Maintanance Garage Parking Area
Grass
Grass
Trades Lane
Pavement
Grass
Sidewalk
Grass
Grass
Sidewalks
Utility Tunnel
Pedestrian Tunnel
Utility Tunnel
Grass
Former Laundry Building
Building
39.05
MW4
37
35
33
Pavement
Pavement
48.0003
MW31
36.99
Chemical Flow Direction
110
33.70
MW30
Building Drain
Catch Basin/Manhole
Grass
Footing Drain Line
Pavement
MW2
(Destroyed)
29.59
MW32
Dirt Road
Dirt Road
Pavement
32.17
MW33
Shed
Junction Box/Catch Basin
Two 36-inch Drainlines to Deep Brook
Storm Drain Line From Main Campus
Road to Greenhouse
Entrance to Machinery Building
Legend
MW32 - Monitoring Well
110 - PCE Result in ug/l
R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut
Laundry Building 10-3-03 Well Sampling Results and GW Contours
Approximate Scale: 1" = 40'
Date: May 18, 2004
Project No.: 1019.031
File: Laundry Building 10-3-03 Well Sampling
Fairfield Hills Hospital - Laundry Building
Wasserman Way
Newtown, Connecticut

BRIDGEPORT BUILDING

Bridgeport Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
B1-1-0	936.00		0.410	4.100	0.510	0.510				0.170		0.270						
B1-1-4	6.08		2.700	2.900														
B1-1-7																		
B01/02-5-0	20.80			0.016						0.110		0.050						
B01/02-5-4																		
B01/02-8-0										0.047		0.021						
B01/02-8-0																		
B02-1-0	622.00		0.340	7.600	0.640	0.640				0.350		0.650						
B02-1-4	3.06		0.120	0.270														
B02-1-4.1	3.51		0.110	0.400														
B02-1-6				0.150														
B02-1-8																		
B02/31-5-0	68.80		0.008	0.015						0.067		0.036						
B02/31-5-4																		
B02/31-8-3																		
B02/31-9-1			0.280	0.700														
B02/31-9-5																		
B02/31-15-0			0.047	0.200						0.048		0.028						
B02/31-15-5																		
B02/31-18-0																		
B31-1-0	653.00		2.500	18.000	0.260			0.048		0.081		0.160		0.110				
B31-1-4	3.60			0.015														
B31-1-6																		
B31/03-5-0	57.60		0.021	0.130	0.270	0.270				0.260		0.290						
B31/03-5-1.5																		
B03/31-9-0	45.50				0.240	0.240				0.200		0.220						
B3-1-0	90.00																	
B03-1-1.5	2.59																	
B03-1-6				0.028														
B03-1-7																		
B03/32-5-0	57.30		0.007	0.011				0.043		0.059		0.450						
B03/32-5-1.5																		
B03/32-8-0				0.008						0.059		0.064						
B03/32-8-1.5																		
B03/32-15-0										0.040		0.024						
B03/32-15-0																		
B-32-1-0	181.00	0.107		0.032														
B-32-1-1.5																		
B32-1-6																		
B32/04-5-0	116.00	0.023	0.029	0.033	0.140	0.140				0.110		0.150						
B32/04-5-1.5																		
B32/04-8-0				0.007						0.110		0.075						
B32/04-15-0																		
B4-1-0				0.047														
B4-1-1.5	2.60																	
B4-1-1.5.1	8.34																	
B04/05-5-0	54.20			0.011						0.062		0.033						
B04/05-5-1																		
B04/05-8-1																		
B04/05-10-0				0.016						0.048		0.038						
B04/05-10-1										0.042								
B04/05-13-0				0.092														
B04/05-13-1.5																		

Bridgeport Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
B04/05-15-1.5																		
B04/05-16-0				0.031														
B04/05-16-1.5																		
B04/05-18-0			0.025	0.060						0.025								
B04/05-24-0																		
B5-1-0	1170.00		7.500	64.000	0.640	0.640		0.510		0.240		2.700		0.360				
B5-1-1			0.380	4.300														
B5-1-7			0.160	0.066														
B5-1-11	1.56																	
B5-10-0	30.30									0.031								
B5-10-0.1	34.10									0.024								
B05/43-5-0			0.015	0.058														
B05/43-5-2																		
B05/43-8-0										0.200		0.082						
B43-1-0	110.00	0.015	33.000	120.000				0.075		0.027		0.130		0.380				
B43-1-7			2.400	1.700														
B43-1-10																		
B05/06-5-0	60.20	0.019																
B6-1-0	1500.00		0.890	13.000						0.061		0.069						
B6-1-4	8.83		0.014	0.170														
B6-1-6				0.160														
B6-1-9																		
B6-15-0																		
B6-20-0																		
B06/07-5-0	146.00			0.013						0.031								
B06/07-5-3			2.600	0.800														
B06/07-5-6																		
B06/07-8-0				0.028						0.048								
B06/07-8-3			0.013															
B06/07-8-4																		
B06/07-10-0			0.011	0.190						0.061		0.029						
B06/07-10-3																		
B06/07-15-0										0.078		0.043						
B7-1-0	1100.00		1.400	17.000						0.054		0.180						
B7-1-4	4.76		0.360	0.120														
B7-1-6	4.76			0.065														
B7-1-11				0.008														
B7-1-12																		
B7/08-5-0	62.40		0.010	0.066						0.035		0.022						
B7/08-5-4																		
B7/08-8-0			0.013	0.057						0.032		0.022						
B7/08-8-4																		
B07/08-14-0																		
B07/08-15-0										0.036		0.022						
B8-1-0	1480.00		0.210	1.200						0.096		0.068						
B8-1-4	5.31		0.460	0.140														
B8-1-6.5				0.250														
B8-1-6.5.1				0.210														
B8-1-8				0.470														
B8-1-8.1				0.430														
B8-1-8				0.210														
B8-1-14				0.007														
B8-1-14.5																		

Bridgeport Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
B8-10-0	42.00																	
B08/09-5-0	64.90			0.008														
B08/09-5-3			0.100	0.140														
B08/09-5-6.5																		
B08/09-8-0																		
B9-1-0	767.00		0.170	1.600	0.210	0.210				0.100		0.210						
B9-1-4	4.66		0.130	1.500														
B9-1-6.5				0.200														
B9-1-8				0.180														
B9-1-12			0.086	0.460														
B9-1-14				0.027														
B9-1-15																		
B09/10-5-0	64.60			0.012	0.094	0.094				0.036		0.025						
B09/10-5-3																		
B09/10-8-0										0.054		0.035						
B10-1-0	822.00		0.190	2.500	0.790	0.790				0.048		0.110						
B10-1-4	3.49																	
B10/11-5-0	63.40																	
B10/11-5-3																		
B10/11-8-0			0.015	0.028														
B10/11-8-2																		
B10/11-10-0			0.011	0.013						0.049		0.036						
B10/11-10-1				0.019														
B10/11-10-2																		
B10/11-16-0										0.042		0.023						
B11-1-0	2770.00		3.500	7.400	0.900	0.900				0.300		0.470						
B11-1-4	5.92		0.081	0.300														
B11-1-6				0.025														
B11-1-8				0.066														
B11-1-12				0.200														
B11-1-15																		
B11/12-5-0	92.80		0.037	0.150	0.280	0.280				0.082		0.059						
B11/12-5-3			0.300	0.120														
B11/12-5-6																		
B11/12-10-0																		
B12-1-0	2050.00		0.340	2.700	0.850	0.850				0.380		0.460						
B12-1-4	4.81			1.500														
B12-1-6				0.610														
B12-1-8				0.098														
B12-1-13				0.017														
B12-1-14																		
B12/13-5-0	115.00		0.049	0.019	0.210	0.210				0.070		0.050						
B12/13-5-3			0.340	0.720														
B12/13-5-6																		
B12/13-10-0										0.062		0.030						
B12/13-10-0.1			0.014	0.007						0.074		0.038						
B12/13-10-2.5				0.080														
B12/13-10-6																		
B12/13-12-0																		
B13-1-0	328.00		6.800	11.000	0.210	0.210				0.054		0.130						
B13-1-1			0.040	1.800														
B13-1-2	9.26			0.180														
B13-1-5.5				0.076														

Bridgeport Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
B13-1-8			2.100	0.190														
B13-1-10																		
B13-10-0				0.045	0.230	0.230				0.220		0.130						
B13-10-1	8.52																	
B13/14-5-0	2030.00			0.023	0.240	0.240				0.120		0.140						
B13/14-5-2.5	5.38		0.010	0.069														
B13/14-5-6																		
B13/14-8-0	92.30	0.047		0.024	4.600	4.600				0.280		0.550						
B13/14-8-0.1					1.500	1.500				0.070		0.120						
B13/14-8-2																		
B13/14-15-0					0.250	0.250				0.160		0.130						
B14-1-0	803.00		0.030	0.100	6.800	6.800				0.310		0.340						
B14-1-1					0.780	0.780				0.033		0.046						
B14-1-2	4.05				0.300	0.300												
B14-1-2					2.000	2.000												
B14-1-4																		
B14-1-4.1																		
B14-10-0					0.380	0.380				0.230		0.110						
B14-10-1	4.18																	
B14/15-5-0	142.00				0.260	0.260				0.022		0.030						
B14/15-5-0.1	123.00				0.140	0.140												
B15-1-0	2960.00			0.055	8.900	8.900				0.093		0.170						
B15-1-1					0.360	0.360												
B15-1-2	11.50			0.007	4.400	4.400												
B15-1-2.1	16.70			0.017	7.700	7.700												
B15-1-5																		
B15-10-0					3.000	3.000				0.120		0.058						
B15-10-1.5	4.42																	
B15-15-0	63.60									0.086		0.045						
B15-15-0																		
B37-1-0	305.00	0.033			0.210	0.210						0.024						
B37-1-6																		
B37/16-5-0	59.60				0.590	0.590				0.026		0.064						
B37/16-5-3					3.600	3.600				0.037						0.025		
B37/16-5-6																		
B37/16-8-3																		
B37/16-8-6																		
B37/16-12-0																		
B16-1-0	3540.00			0.260	31.000	31.000						0.340						
B16-1-1					5.100	5.100				0.061		0.037						
B16-1-1	164.00				6.600	6.600												
B16-1-2	13.70				2.300	2.300												
B16-1-3					0.420	0.420												
B16-1-3	5.75			0.028	10.000	10.000												
B16-1-3.1	7.04				0.240	0.240												
B16-1-6																		
B16-6-0	111.00									0.098		0.080						
B16-10-0	74.00			0.048						0.120		0.150						
B16-10-3	8.86																	
B16-12-0	53.10	0.028								0.093		0.057						
B16/17-5-0	562.00				0.350	0.350				0.093		0.093						
B16/17-5-3	7.43																	
B16/17-8-0	234.00	0.047																

Bridgeport Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
B17-1-0	488.00				7.000	7.000				0.170		0.120						
B17-1-1					0.250	0.250												
B17-1-3	10.20			0.043	11.000	11.000												
B17-1-6					0.170	0.170	1.100											
B17-10-0					2.400	2.400				1.100		0.780						
B17-10-3				0.036	20.000	20.000												
B17-10-6																		
B17-12-0	69.90				0.320	0.320				0.350		0.150						
B17-12-0.1	71.00				0.540	0.540				0.450		0.150						
B17-12-3										0.021								
B17-14-0					0.250	0.250				0.280		0.180						
B17/18-5-0	145.00	0.02			0.470	0.470				0.130		0.140						
B18-1-0	314.00		0.100	0.310	3.300	3.300				0.130		0.290						
B18-1-3	7.00																	
B18-1-3				0.013	7.400	7.400												
B18-1-5					0.410	0.410												
B18/38-5-0	59.80		0.021	0.160								0.033						
B18/38-5-3																		
B18/38-5-3D			0.014	0.010														
B18/38-5-5																		
B18/38-8-0										0.150		0.090						
B38-1-0	58.20	0.016	0.038	0.290								0.110						
B38-1-3																		
B38-1-6																		
B38/45-5-0																		
B39-1-0	85.10	0.019	0.950	2.100								0.098						
B39-1-6																		
B39/19-5-0	37.80		0.012	0.045								0.030						
B39/19-5-0.1	35.40		0.007	0.023								0.038						
B39/19-5-4																		
B39/19-8-0																		
B39/45-5-0																		
B19-1-0	982.00		2.300	12.000	0.670	0.670				0.055		0.110						
B19-1-1	33.80		0.220	3.400														
B19-1-2	16.60			1.100														
B19-1-3				2.500														
B19-1-6	5.56																	
B19-1-6.1	4.14																	
B19-3-1	17.40		0.007	0.059						0.005		0.009						
B19-3-2																		
B19-3-3																		
B19-6-0	49.80			0.027														
B19-6-4																		
B19/20-5-0	180.00	0.017		0.028								0.030						
B19/20-5-4																		
B19/20-8-0																		
B20-1-0	121.00		1.300	14.000														
B20-1-6	7.05			0.190														
B20-1-8				0.260														
B20-1-10				0.140														
B20-1-12																		
B20/21-5-0	54.20			0.013								0.022						
B20/21-5-4																		

Bridgeport Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
B20/21-8-0																		
B21-1-0	2220.00		0.240	0.810														
B21-1-6	6.47			0.330														
B21-1-6.1	6.71			0.230														
B21-1-8				0.180														
B21-1-10																		
B21/22-5-0	128.00	0.017	0.010	0.009								0.041						
B21/22-5-4																		
B21/22-8-0																		
B22-1-0	432.00		5.600	8.600								0.240						
B22-1-6	6.06			0.400														
B22-1-7.5																		
B22/23-5-0	38.20		0.011	0.018						0.030		0.032						
B22/23-5-3			0.220	0.380														
B22/23-5-4																		
B22/23-8-0			0.050	0.045								0.022						
B22/23-8-3				0.008														
B22/23-8-4																		
B22/23-12-0			0.014	0.015						0.096		0.046						
B22/23-12-2																		
B22/23-15-0										0.071		0.053						
B23-1-0	113.00		15.000	48.000						0.160		0.250						
B23-1-1			0.130	2.300														
B23-1-4	8.78			0.160														
B23-1-7.5																		
B23-10-0				0.130	0.480	0.480				0.180		0.230						
B23-10-2.5	8.03																	
B23-15-0	25.10									0.084		0.072						
B23/40-8-0	33.30			0.018	0.680	0.680		0.064		0.140		0.092						
B23/40-8-3																		
B23/40-20-0										0.120		0.064						
B40-1-0	61.60		0.630	2.200						0.120		0.120						
B40-1-4																		
B40/41-8-0			0.150	0.430								0.120						
B40/41-8-3			0.013	0.015														
B40/41-8-4.5			0.012	0.022														
B40/41-8-5																		
B40/41-27-0			0.170	6.600						0.066		0.110						
B40/41-27-3.5			0.640	0.210														
B40/41-27-3.5A																		
B40/41-27-6																		
B23/24-5-0	218.00	0.034	0.230	0.570						0.068		0.180						
B23/24-5-4																		
B23/24-10-0			0.086	0.360						0.150		0.180						
B23/24-10-3																		
B23/24-15-0				0.032						0.140		0.099						
B23/24-15-2.5																		
B23/24-18-0				0.053						0.098		0.110						
B23/24-18-2.5				0.014						0.021		0.023						
B23/24-18-3.5																		
B23/24-21-2.5				0.011														
B23/24-21-3.5																		
B23/24-27-0			0.021	0.430						0.067		0.031						

Bridgeport Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
B23/24-27-3.5																		
B41-1-0	337.00	0.153	0.250	0.510						0.082		0.200						
B41-1-0.1	292.00		0.240	0.480						0.080		0.190						
B41-1-4	26.60		0.016	0.092														
B41-1-6																		
B41/42-8-0			0.057	0.120						0.079		0.083						
B41/42-8-3																		
B41/42-27-0										0.047		0.055						
B41/42-27-0.1										0.044		0.086						
B24/42-8-0			0.033	0.012						0.040		0.026						
B24/42-8-2																		
B24/42-18-0										0.022		0.026						
B42-1-0	50.70		0.490	2.800						0.140		0.140						
B42-1-2				0.012						0.056		0.083						
B42-1-6																		
B24-1-0	60.50		0.069	0.560						0.038		0.048						
B24-1-2	6.41		0.180	1.500														
B24-1-6																		
B24/33-5-0	34.40			0.015						0.053		0.037						
B24/33-5-2																		
B24/33-11-0												0.022						
B33-1-0	50.20		0.013	0.020														
B33-1-2			0.059	0.600														
B33-1-6				0.022														
B33-1-7																		
B33/25-5-0	65.10			0.026	0.520	0.520						0.024						
B33/25-5-2																		
B33/25-8-0																		
B25-1-0	458.00		0.028	0.220														
B25-1-2	5.56																	
B25-1-8.5																		
B25/34-5-0	127.00	0.016	0.026	0.019														
B25/34-5-2																		
B25/34-8-2																		
B25/34-12-0												0.032						
B34-1-0	303.00	0.057	0.110	0.390														
B34-1-2	9.64		1.300	4.600														
B34-1-4			0.059	4.600														
B34-1-8				0.030														
B34-1-9																		
B34-10-0	74.10		0.051	0.061														
B34-10-2																		
B34-12-0				0.034														
B34-12-2.5																		
B34/26-5-0	84.70	0.018	0.031	0.044														
B26/34-5-2																		
B34/26-8-0			0.033	0.046														
B34/26-8-2																		
B34/26-12-0				0.010														
B34/26-12-2																		
B34/26-14-0				0.010														
B34/26-14-2.5																		
B34/26-16-0			0.008	0.008						0.038		0.029						

Bridgeport Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
B34/26-16-1																		
B34/26-18-0										0.059		0.033						
B26-1-0	793.00			0.055	1.400	1.400						0.038						
B26-1-2	307.00	0.09	0.240	0.250														
B26-1-4			0.110	0.490														
B26-1-8				0.008														
B26-1-9																		
B26/27-5-0	22.00																	
B27-1-0	29.40			0.042														
B27-1-2	21.80		0.032	0.940														
B27-1-6				0.054														
B27-1-8				0.009														
B27-1-9.5																		
B27/35-5-0	49.40		0.026	0.240														
B27/35-5-2			0.059	0.860														
B27/35-5-6																		
B27/35-10-0				0.009						0.067		0.032						
B27/35-10-2																		
B27/35-10-3				0.016														
B27/35-10-4			0.023	0.094														
B27/35-10-6																		
B27/35-10-6.1																		
B27/35-12-0			0.010	0.015						0.067		0.032						
B27/35-12-1.5			0.027	0.400														
B27/35-12-4			0.048	0.360														
B27/35-12-4.1			0.032	0.300														
B27/35-12-6																		
B27/35-14-0			0.008	0.087														
B27/35-14-1.5																		
B27/35-14-																		
B27/35-16-0				0.009						0.110		0.039						
B27/35-16-1.5																		
B27/35-18-0										0.045								
B35-1-0	215.00			0.032														
B35-1-2			0.029	0.420														
B35-1-6				0.031														
B35-1-8																		
B35/30-5-0	16.90																	
B30-1-0																		
B30-1-2	65.10	0.035																
B30-1-6				0.096														
B30-1-7				0.046														
B30-1-8																		
B30/28-5-0	21.00			0.015														
B30/28-5-2			0.042	0.390														
B30/28-5-6																		
B30/28-8-0																		
B28/30-10-0	34.70																	
B28-1-0	226.00																	
B28-1-2	23.70		0.036	0.320														
B28-1-6				0.310														
B28-1-8				0.018														
B28-1-9																		

Bridgeport Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
B28/36-5-0	24.60																	
B36-1-0			**0.330**	**2.500**														
B36-1-3	3.18		**0.027**	**2.500**														
B36-1-6				**0.200**														
B36-1-8																		
B36/29-5-0	67.80																	
B37-1-0	305.00	0.033			0.210	**0.210**						0.024						
B29-1-0	2.81		**0.270**	**3.200**														
B29-1-3	2.81			**0.340**														
B29-1-6				**0.008**														
B29-1-8																		
B29/01-5-0	92.20																	
B44-1-0	93.10	0.145																
B45-1-0	8.34	0.017		**0.012**														
B45-1-0.5				**0.013**										0.071				
B45-1-1																		

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimiter sampling location-- xx/xx indicates that the sample was taken between two premier locations at some distance from the foundation.

Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken

Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken

A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

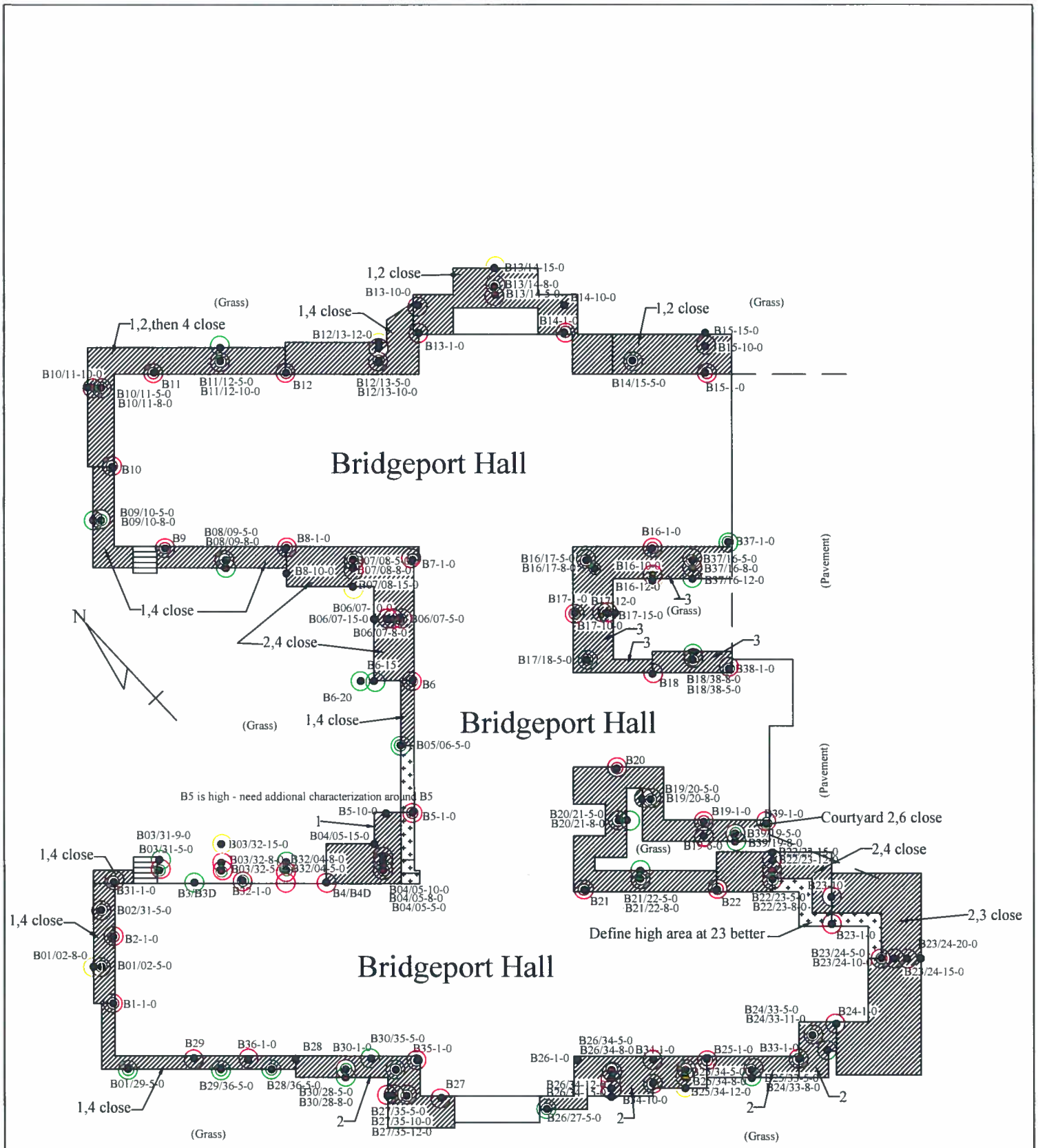
- SPLP test was not performed for sample because location was not in compliance based on total contentrations; **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC

- blank cell indicates that the particular chemical was not analyzed for in that particular sample because a previous result closer to the foundation or shallower in depth was in compliance

- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.

- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems



Legend

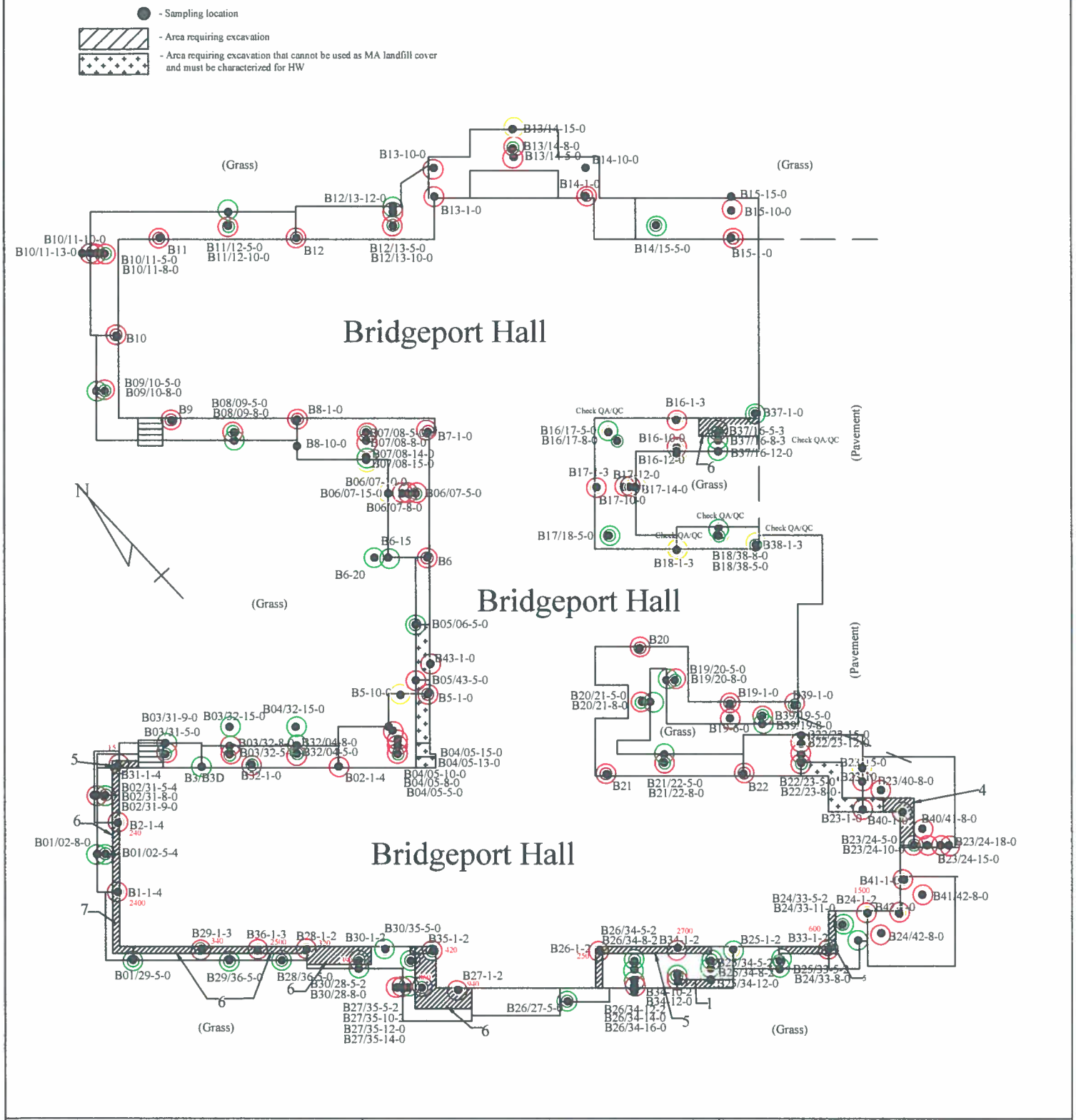
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: February 1, 2006
Project No.: 1018.WA3	File: Bridgeport Pre-Excavation Figure dwg

Bridgeport Pre-Excavation Figure

Fairfield Hills Hospital - Bridgeport Hall
Wasserman Way
Newtown, Connecticut



Legend

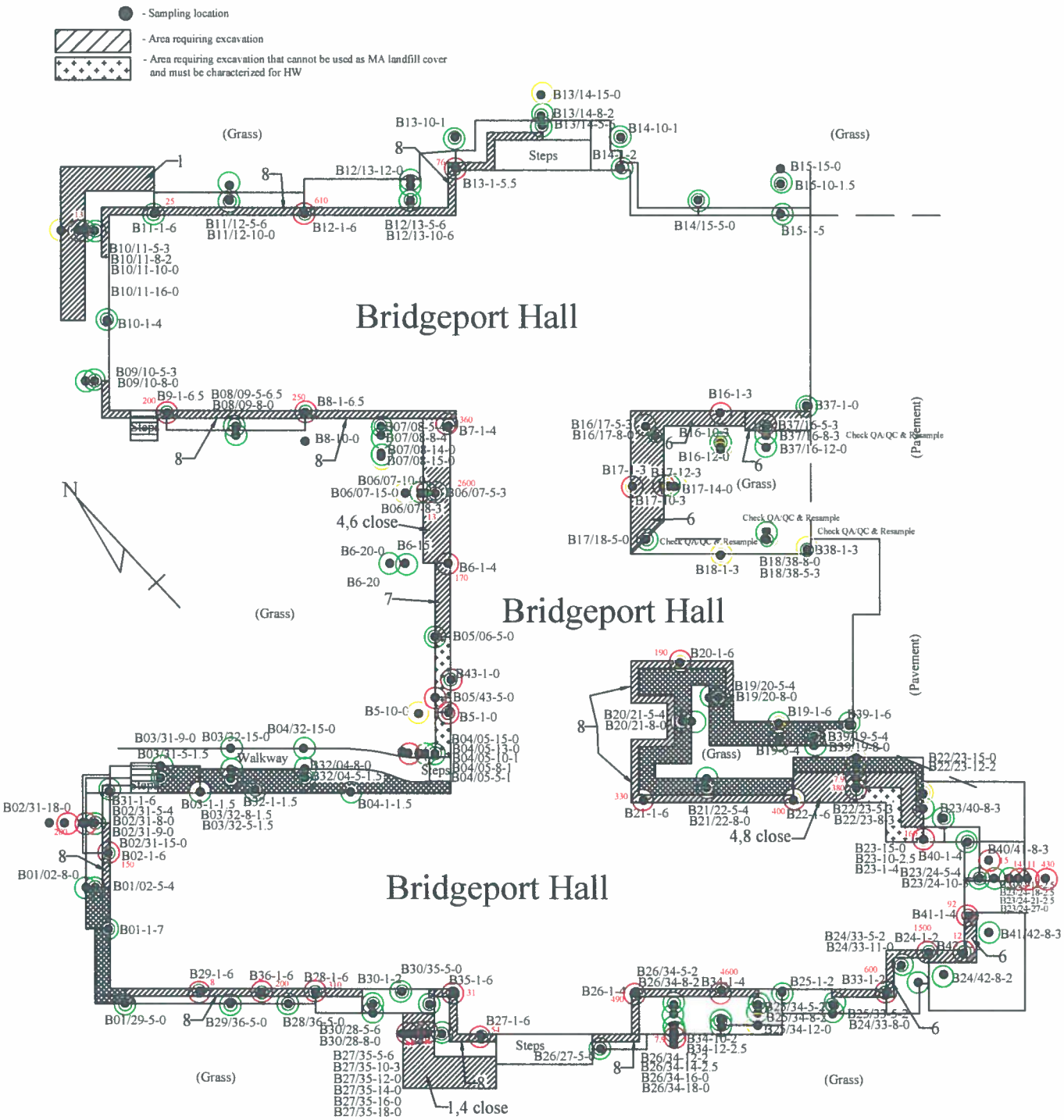
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: February 9, 2006
Project No.: 1018.WA8	File: Bridgeport 2-9-06 Remediation Figure

Bridgeport 2-9-06 Remediation Figure

Fairfield Hills Hospital - Bridgeport Hall
Wasserman Way
Newtown, Connecticut



Legend

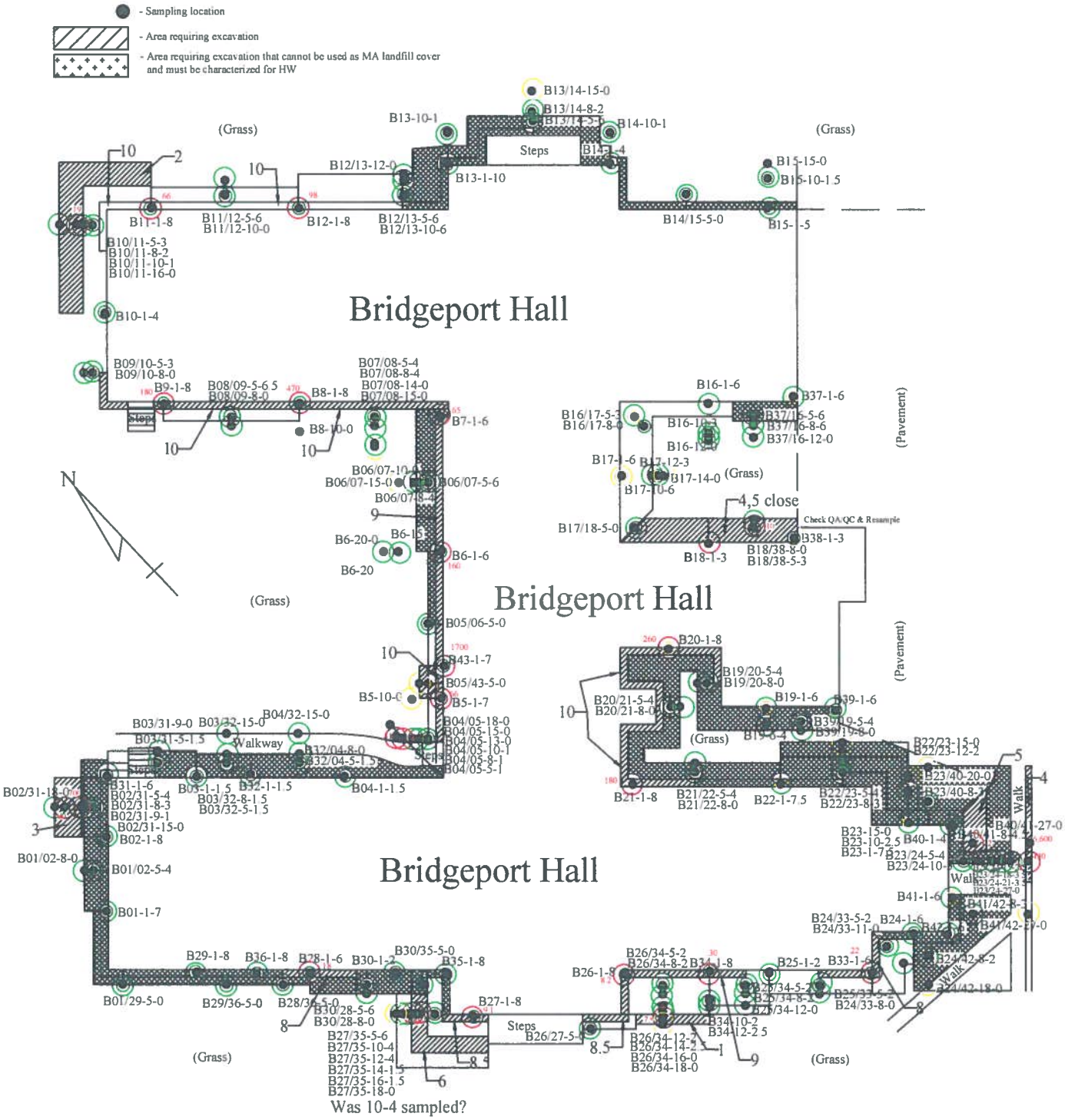
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: February 16, 2006
Project No.: 1018.WA8	File: Bridgeport 2-16-06 Remediation Figure

Bridgeport 2-16-06 Remediation Figure

Fairfield Hills Hospital - Bridgeport Hall
Wasserman Way
Newtown, Connecticut



Legend

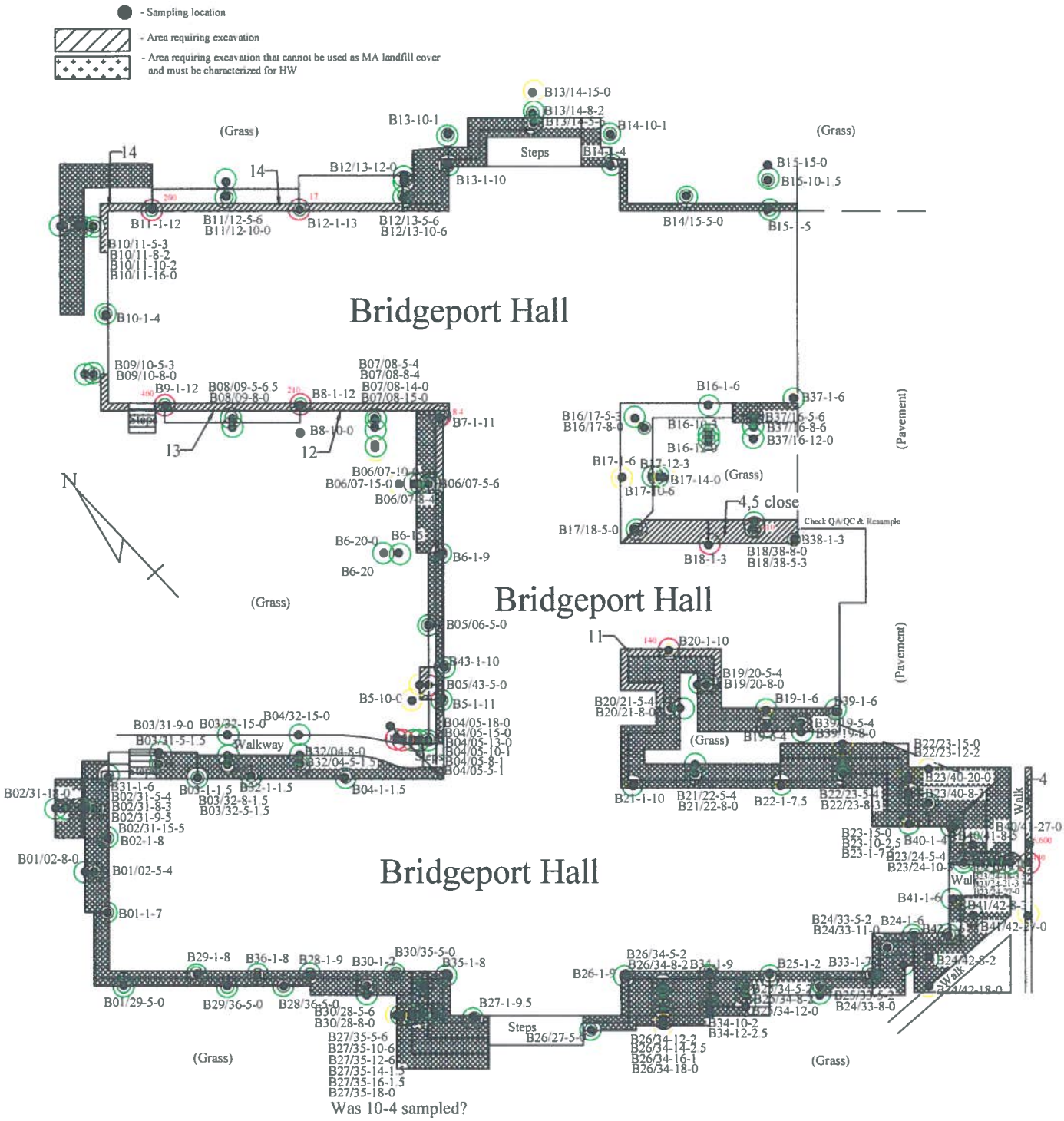
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: February 28, 2006
Project No.: 1018 WA8	File: Bridgeport 2-28-06 Remediation Figure

Bridgeport 2-28-06 Remediation Figure

Fairfield Hills Hospital - Bridgeport Hall
Wasserman Way
Newtown, Connecticut



Legend

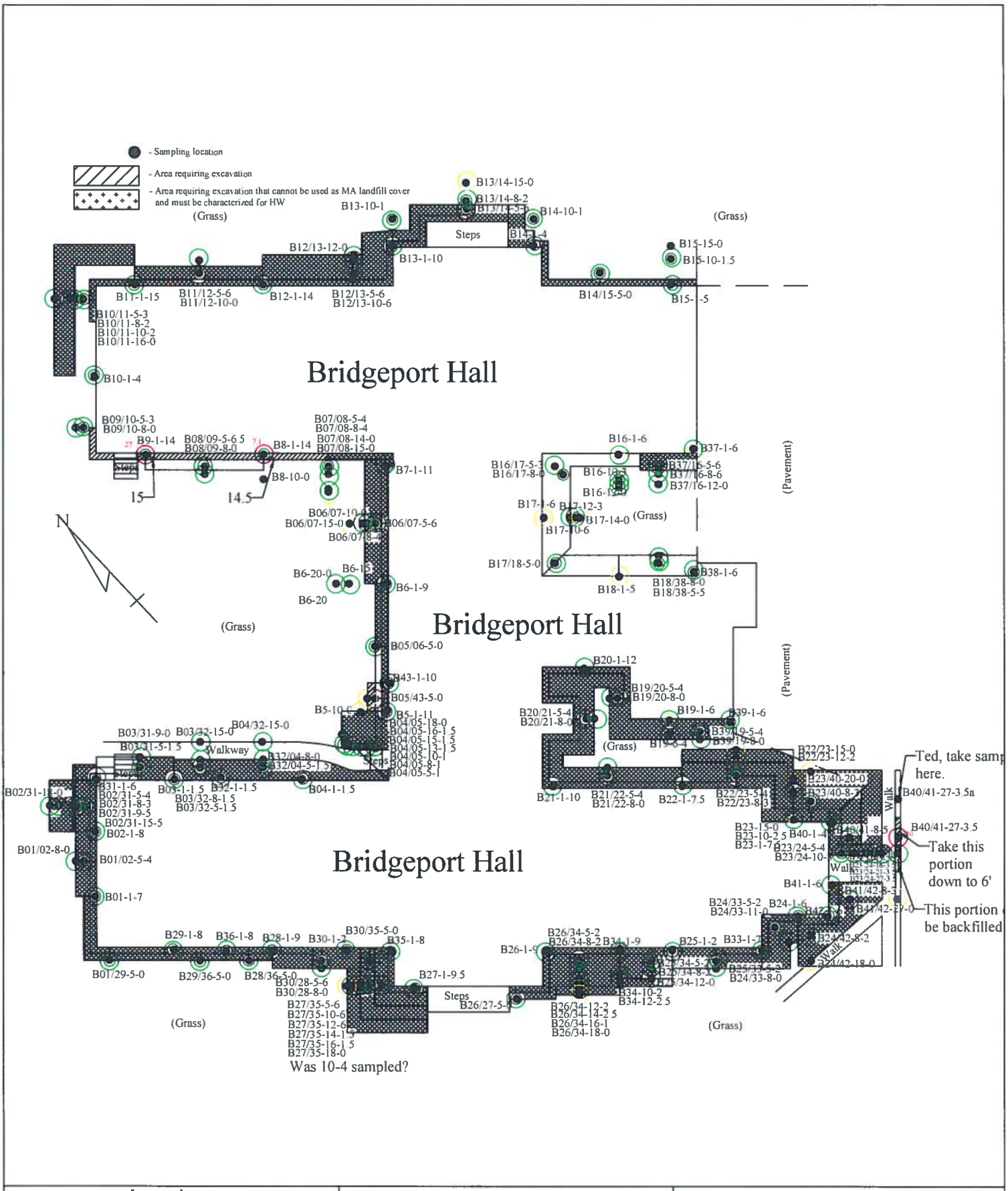
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: March 6, 2006
Project No.: 1018 WA8	File: Bridgeport 3-6-06 Remediation Figure

Bridgeport 3-6-06 Remediation Figure

Fairfield Hills Hospital - Bridgeport Hall
Wasserman Way
Newtown, Connecticut



Legend

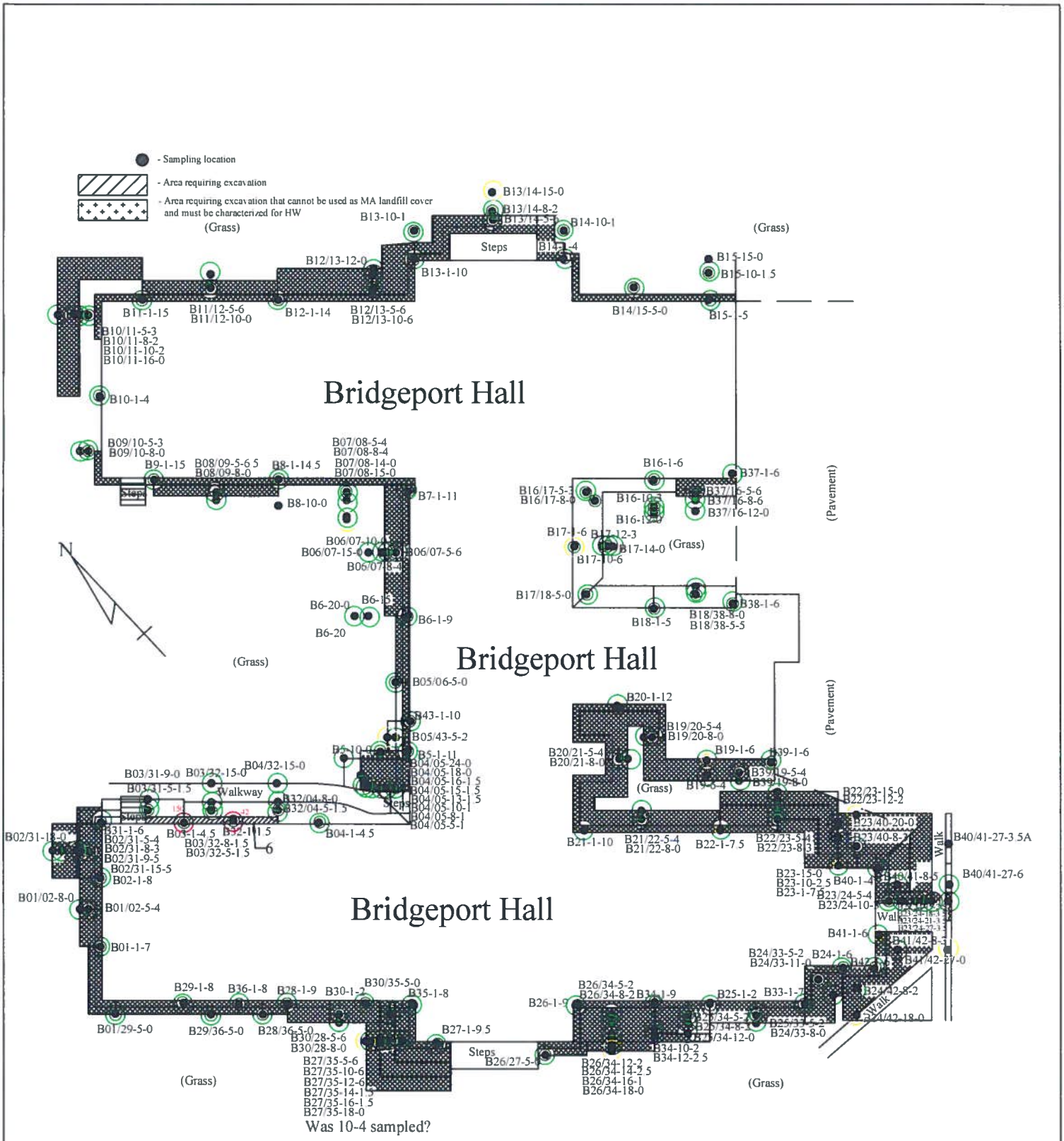
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: April 1, 2006
Project No.: 1018.WA8	File: Bridgeport 4-1-06 Remediation Figure

Bridgeport 4-1-06 Remediation Figure

Fairfield Hills Hospital - Bridgeport Hall
Wasserman Way
Newtown, Connecticut



Legend

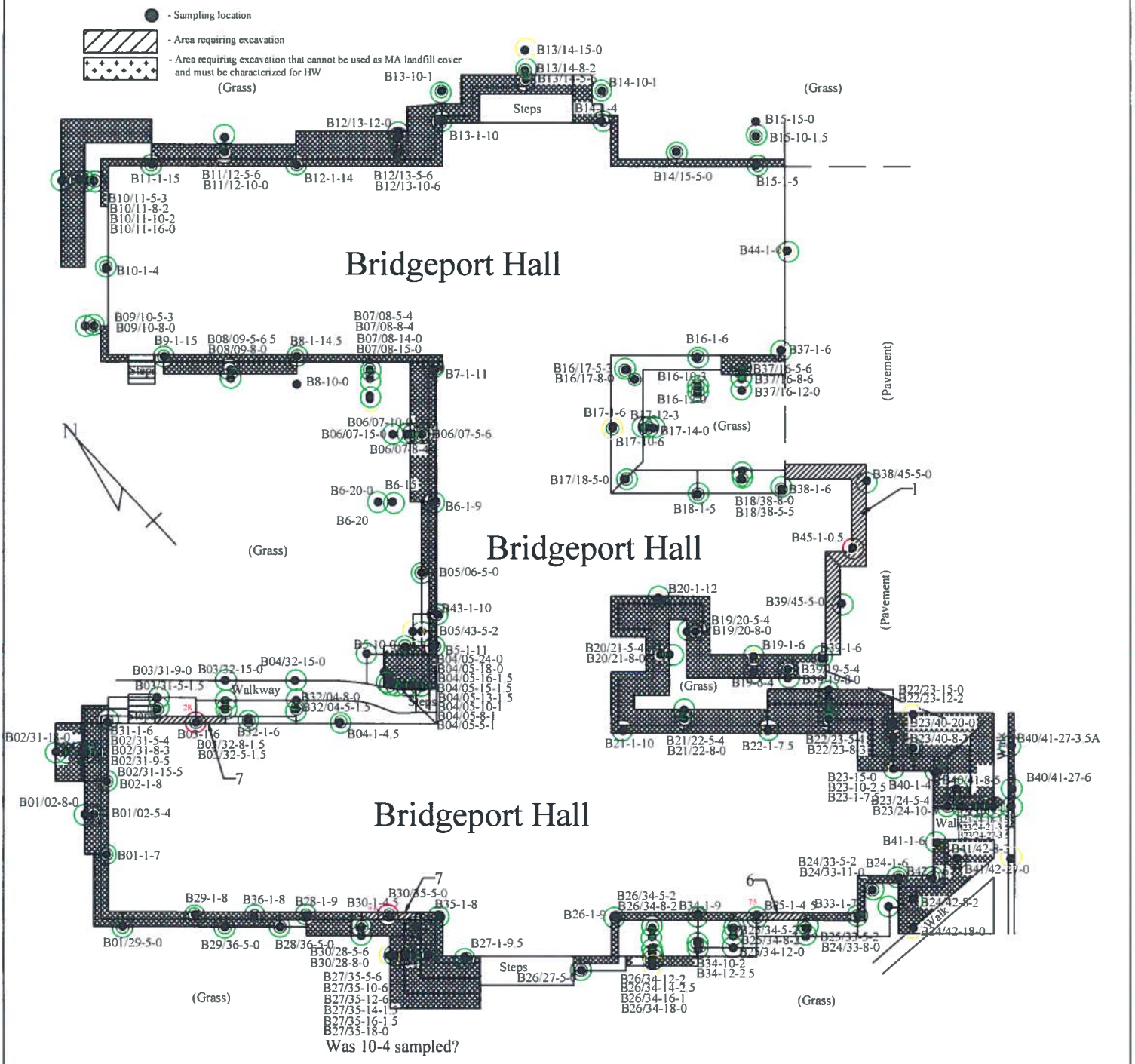
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: April 24, 2006
Project No.: 1018.WA8	File: Bridgeport 4-24-06 Remediation Figure

Bridgeport 4-24-06 Remediation Figure

Fairfield Hills Hospital - Bridgeport Hall
Wasserman Way
Newtown, Connecticut



Legend

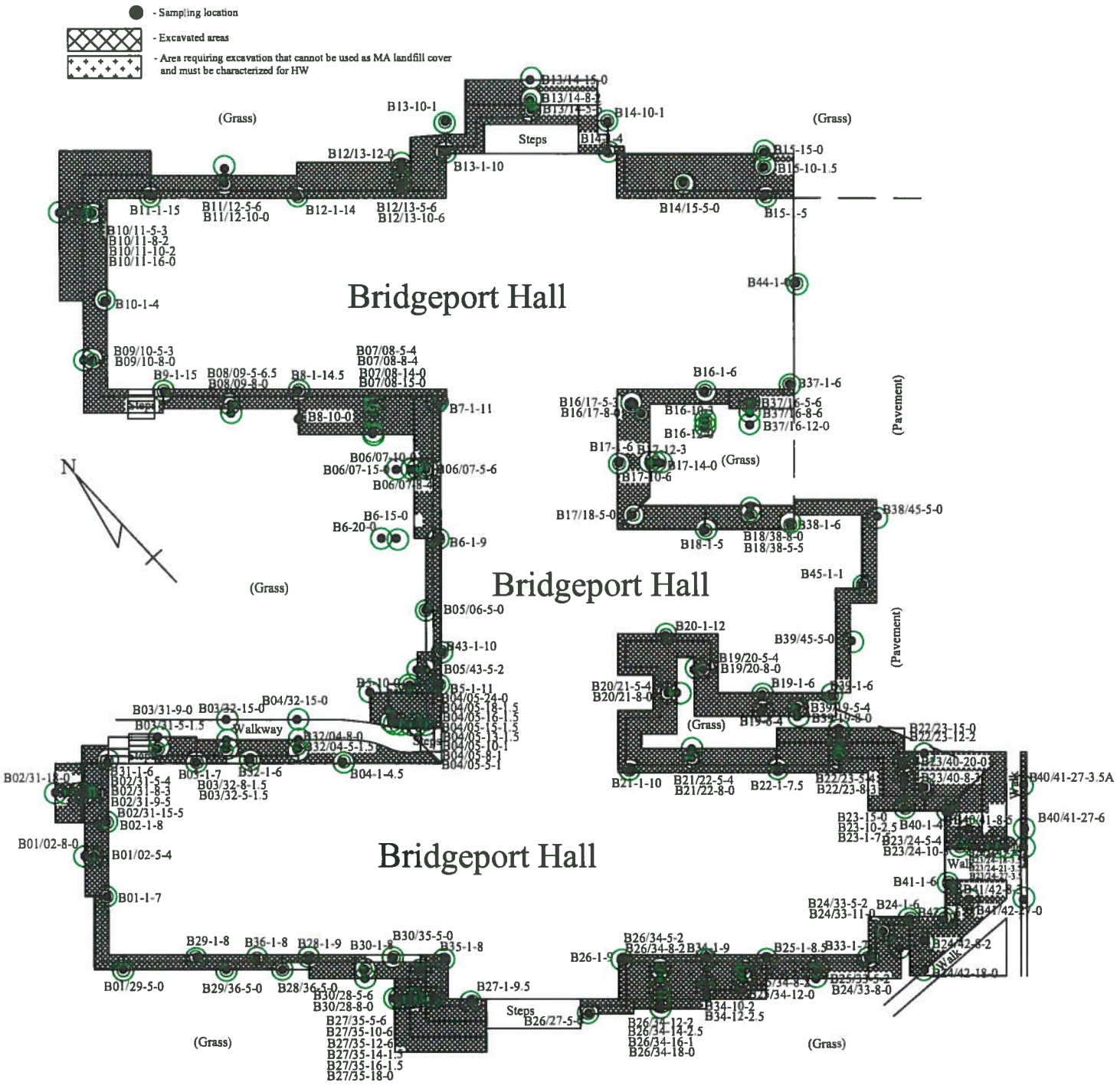
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: June 16, 2006
Project No.: 1018.WA8	File: Bridgeport 6-16-06 Remediation Figure

Bridgeport 6-16-06 Remediation Figure

Fairfield Hills Hospital - Bridgeport Hall
Wasserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: August 24, 2006
Project No.: 1018.WA8	File: Bridgeport 8-24-06 Remediation Figure

Bridgeport Final Remediation Figure

Fairfield Hills Hospital
Wasserman Way
Newtown, Connecticut

BRIDGEWATER BUILDING

Bridgewater Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
BW01-1-0	**410.00**																	
BW01-1-1	31.70																	
BW01-1-1.1	42.70																	
BW02-1-0	163.00																	
BW02/26-5-0	19.20																	
0.1	19.70																	
BW03-1-0	234.00	0.063			0.120	**0.120**				0.005		0.020						
BW04-1-0	**1740.00**			**0.009**								0.0051						
BW04-1-1	3.48																	
BW04-10-0	77.60				0.130	**0.130**												
BW04/18-5-0	77.30				0.130	**0.130**												
BW04/19-5-0	176.00				**0.510**	**0.510**												
BW04-19-5-1																		
BW04-19-8-0																		
BW05-1-0	223.00																	
BW06-1-0	**1920.00**	0.111			0.170	**0.170**												
BW06-1-1	2.81																	
BW06/07-5-0	48.60																	
BW07-1-0	233.00	0.027																
BW08-1-0	360.00	0.047																
BW08/27-5-0	64.50																	
BW09-1-0	**2680.00**	0.071																
BW09-1-1.5	6.57																	
BW09/27-5-0	**1790.00**																	
BW09/27-5-1	6.00																	
BW09/27-8-0	13.00																	
BW09/10-7-0	237.00																	
BW10-1-0	**1270.00**	0.144			0.430	**0.430**												
BW10-1-2.5	90.60																	
BW10/28-7-0	246.00																	
BW11-1-0	**438.00**	0.041																
BW11-1-1	9.38																	
BW11/28-5-0	181.00																	
BW11/29-5-0	**555.00**																	
BW11/29-5-1	6.19																	
BW11/29-8-0	38.90																	
BW12-1-0	**6930.00**	0.022																
BW12-1-2.5	8.92																	
BW12/29-5-0	109.00																	
BW12/30-5-0	83.40																	
BW13-1-0	156.00																	
BW14-1-0	174.00				0.35	**0.350**												
BW15-1-0	224.00	0.021			0.190	**0.190**										0.033	**0.033**	
BW16-1-0	**542.00**	0.127			**2.200**	**2.200**				**0.022**		0.039						
BW16-1-1	4.04																	
BW16/31-5-0	38.30																	
BW16/17-5-0	210.00																	
BW17-1-0	**998.00**	**0.231**			0.260	**0.260**				0.020		0.020						
BW17-1-1	38.40																	
BW17/18-5-0	104.00																	
BW18-1-0	**690.00**	**0.161**			0.094	**0.094**												
BW18-1-1	5.54																	
BW19-1-0	**1540.00**	0.103			0.42	**0.420**						0.03						
BW19-1-1	10.50																	

Bridgewater Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
BW19/32-5-0	261.00	0.02																
BW20-1-0	267.00	0.059										0.024						
BW20/32-5-0	38.20																	
BW21-1-0	273.00	0.058										0.025						
BW22-1-0	**464.00**	0.054			**0.660**	**0.660**												
BW22-1-1	4.92																	
BW22/33-5-0	103.00																	
BW22/03-5-0	108.00																	
BW23-1-0	158.00				0.120	**0.120**												
BW24-1-0	292.00	0.047																
BW25-1-0	257.00	0.141																
BW26-1-0	**463.00**	0.02																
BW26-1-1	9.89																	
BW27-1-0	**2630.00**				0.180	**0.180**												
BW27-1-1.5	7.84																	
BW28-1-0	21.20																	
BW28-1-1	103.00																	
BW29-1-0	**437.00**																	
BW29-1-1	33.30																	
BW30-1-0	256.00	0.019																
BW30-1-0																		
BW31-1-0	115.00				0.200	**200.000**												
BW32-1-0	**687.00**				0.078	**0.078**												
BW17-1-1	2.88																	
BW33-1-0	148.00	0.068			0.250	**0.250**												
BW33-1-0D	4.38																	
BW34-1-0	12.70																	
BW34-1-0.1	10.10																	
BW35-1-0	3.22																	

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation

Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken

Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken

A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i e , another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

- SPLP test was not performed for sample because location was not in compliance based on total contentrations, **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC

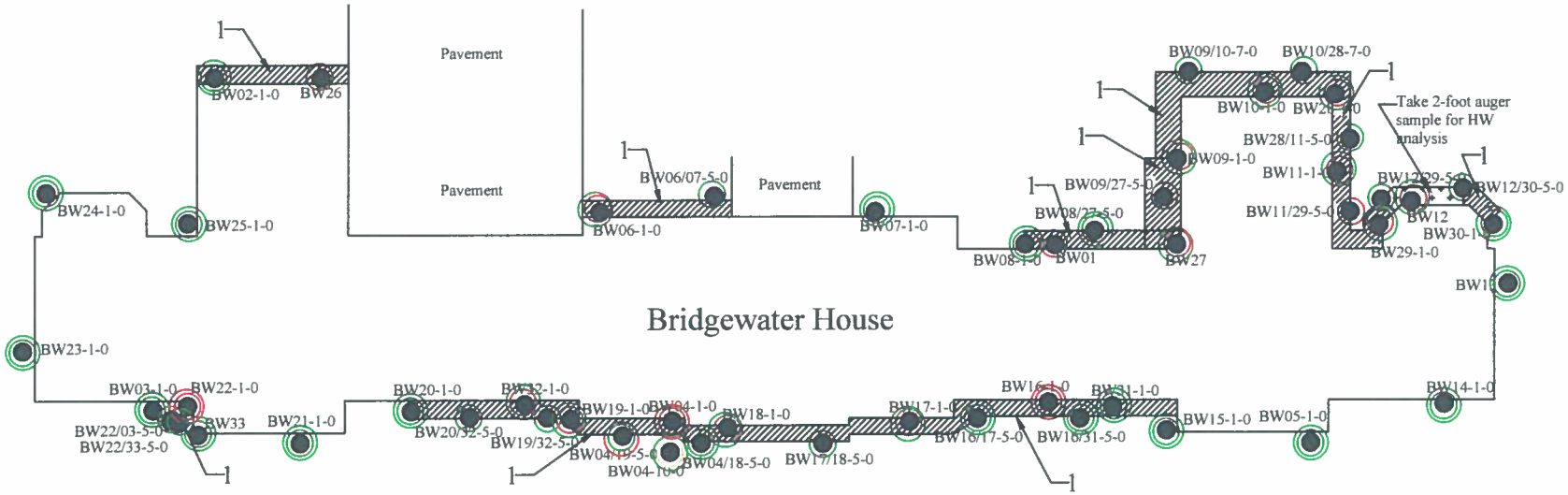
- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance

- de ermined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion

- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resamp ing due to quality assurance problems

The detection limits for DDD, DDT, DDE, Endrin, and Heptachlor mass analyses are less than or equal to 20 times the SPLP criteria, therefore, if a mass analysis is non-detect for these compounds the PMC criteria is met



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

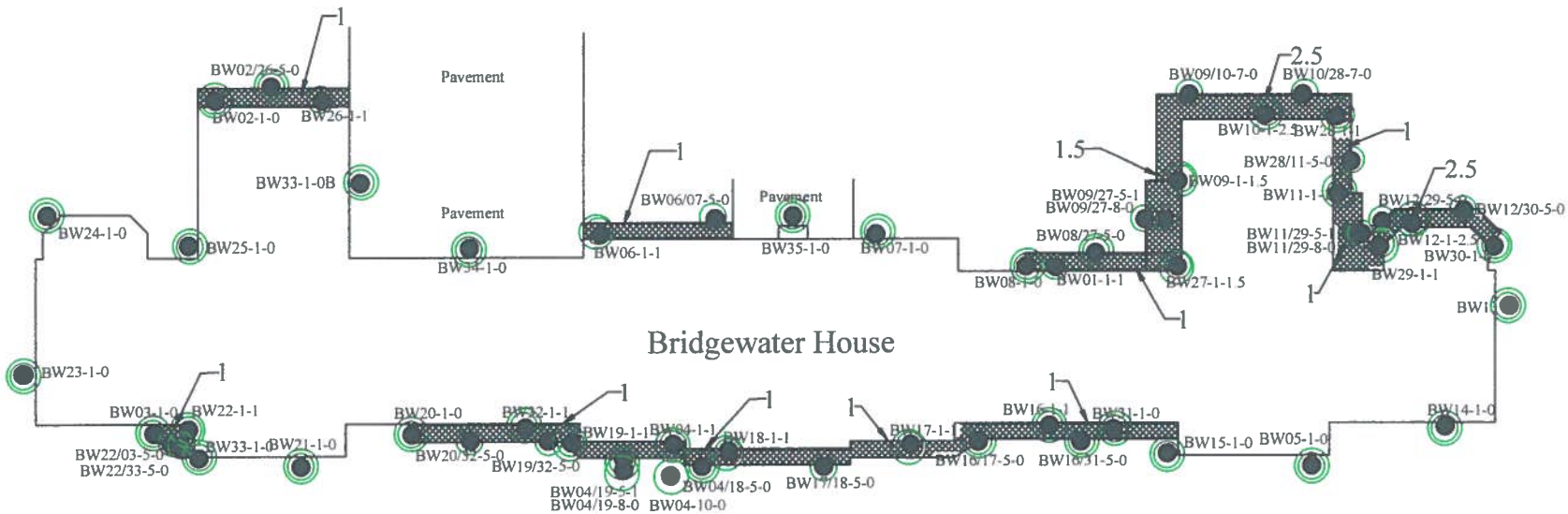
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: March 2, 2006
Project No.: 1018.WA3	File: Bridgewater Initial Excavation.dwg

Bridgewater Initial Excavations

Fairfield Hills Hospital - Bridgewater House
Wasserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

- Sampling location
- Excavated and backfilled area
- 2 -Final Excavation Depths (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: August 18, 2006
Project No.: 1018.WA3	File: Bridgewater 8-18-06 Remediation Figure.dwg

Bridgewater Final Remediation Figure

Fairfield Hills Hospital - Bridgewater House
Wasserman Way
Newtown, Connecticut

CANAAN BUILDING

Canaan Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
C01-1-0	119									0.130		0.061						
C02-1-0	171	0.027								0.052		0.028				0.016	0.016	
C43-1-0	**430**	0.102	**2.000**	**26.000**						0.071		0.068		0.180				
C43-1-5.5				**0.037**														
C43-1-6.5																		
C03/43-5-0	**603**									0.057								
C03/43-5-3	6																	
C03/43-10-0	32			**0.011**														
C03/43-10-3																		
C03/43-15-0				**0.057**						0.083		0.033						
C03/43-15-3																		
C03/43-20-0				**0.022**								0.026						
C03/43-20-2																		
C03/43-25-0																		
C03/43-5-3	6																	
C03-1-0			**0.069**	**2.000**						0.210		0.093						
C03-1-4	3			**0.010**														
C03-1-6																		
C03/04-4.5-0	185	0.017		**0.045**														
C03/04-4.5-3			**0.140**	**0.930**						0.023								
C03/04.4.5-5.5																		
C03/04-10-0	17			**0.13**														
C03/04-10-0			**0.250**	**0.440**														
C03/04-10-5.5																		
C03/04-15-0																		
C04-1-0			**0.870**	**6.900**						0.160		0.250						
C04-1-3	4																	
C05-1-0				**0.210**						0.190		0.300						
C05-1-2	46			**0.023**														
C05-1-4																		
C05/06-5-0	169	0.039	**24.000**	**77.000**	0.25	**0.25**		0.068		0.034		0.086		0.500				
C05/06-5-7																		
C05/06-5-7.1																		
C05/06-10-0				**0.031**						0.091		0.300						
C05/06-10-4.5																		
C05/06-15-0										0.210		0.240						
C06-1-0			**4.200**	**65.000**						0.370		0.350		0.340				
C06-1-7																		
C06-10-0	71																	
C06/07-4.5-0	200		**0.021**	**0.43**				0.024		0.450		0.300						
C06/07-4.5-4			**0.027**	**0.350**														
C06/07-4.5-5.5				**0.019**														

Canaan Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
5.5.1																		
C06/07-4.5-7.5																		
C06/07-10-0				**0.01**						0.021								
C06/07-10-2				**0.008**														
C06/07-10-5.5																		
C06/07-12-0										0.023								
C06/07-15-0																		
C07-1-0			**1.700**	**15.000**						0.071		0.036		0.087				
C07-1-4	8			**0.390**														
C07-1-6				**0.088**														
C07-1-7.5																		
C07/08-5-0	265	0.024		**0.071**						0.210		0.130						
C07/08-5-3				**0.160**														
C07/08-5-6				**0.010**														
C07/08-5-7.5																		
C07/08-10-0																		
C08-1-0			**0.043**	**1.200**	0.160	**0.160**				0.047		0.037						
C08-1-3	3			**0.023**														
C08-1-3.1	3			**0.026**														
C08-1-6																		
C08/09-4.5-0	78																	
C09-1-0				**0.010**														
C09-1-1	1																	
C09/44-6.5-0	22																	
C44-1-0	220	0.144		**0.012**														
C44-1-1			**0.016**	**0.026**														
C44-1-2				**0.010**														
C44-1-4.5				**0.013**														
C44-1-8			**0.023**	**0.015**														
C44-1-10																		
C10/44-5-0			**0.02**	**0.02**						0.031		0.027						
C10/44-5-1																		
C10/44-10-0										0.048		0.023						
C10-1-0	368									0.320		0.220						
C11-1-0	201	0.016																
C12-1-0	198	0.058								0.310	0.180	0.170						
C13-1-0	189	0.025																
C13/45-5-0	39																	
C45-1-0	279	**0.447**																
C45-1-1	6																	
C14/45-5-0	78																	
C14-1-0				**0.021**														

Canaan Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
C14-1-1	10																	
C14-1-1.1	8																	
C14-1-4.5				**0.013**														
C14/62-5-0																		
C62-1-0																		
C14/15-5-0	44																	
C15-1-0	221	0.120																
C15/16-5-0	54																	
C16-1-0	228	**0.196**								0.029		0.023						
C16 1-1	6																	
C16/17-4.5-0	86																	
C17-1-0	**630**	**0.285**																
C17-1-1	4																	
C17/18-5-0	106																	
C18-1-0	345	**0.222**																
C18-1-1	76																	
C18/46-4.5-0	119	0.018																
C46-1-0	**1770**	**0.350**																
C46-1-1	7																	
C19/46-5-0	13																	
C19-1-0	115	0.035																
C20-1-0	186	0.098																
C20/21-5-0	206	0.030																
C47-1-0	**2620**	**1.590**																
C47-1-1	234	0.028																
C21/47-4.5-0	**846**	0.056																
C21/47-4.5-1	38																	
C21/47-10-0	245	0.021																
C21-1-0	**493**	**0.224**																
C21-1-1	29																	
C21/22-5-0	173	0.020																
C22-1-0	316	**0.291**																
C22-1-1	5																	
C22/23-5-0	62																	
C23-1-0	**1900**	0.087																
C23-1-1	7																	
C23-10-0	56																	
C23/61-4.5-0	61																	
C23/61-4.5-0.1																		
C61-1-0	72																	
C24/61-5-0	166	0.019																
C24-1-0	370	**0.353**																
C24-1-1	69	0.040																

Canaan Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
C24/25-5-0	61																	
C25-1-0	195	0.127																
C25/26-5-0	57									0.026								
C25/26-5-0.1	62									0.041		0.022						
C26-1-0			**0.025**	**0.220**	0.270	**0.270**				0.064		0.110						
C26-1-1	35			**0.020**														
C26-1-1.1	47			**0.013**														
C26-1-3																		
C26/27-5-0	34		**0.018**							0.048								
C26/27-5-1	6																	
C26/27-7-0																		
C27-1-0	291	**0.44**																
C27-1-1	5																	
C27/28-4.5-0	83																	
C28-1-0	266	**0.188**																
C28-1-1	12																	
C28/48-5-0	131	0.024																
C48-1-0	148	0.028																
C29-1-0	164	0.118														**0.076**	0.076	
C30-1-0	198	0.049																
C31-1-0	268	0.101																
C49-1-0	203	0.090																
C32/49-5-0	61																	
C32-1-0	320	**0.178**														0.019	0.019	
C32-1-1	18																	
C32/50-4.5-0	59																	
C32/50-4.5-0.1	58																	
C50-1-0	227	**0.181**																
C50-1-1	7																	
C33/50-5-0	29																	
C33-1-0	377	0.133																
C33/51-5-0	107																	
C51-1-0	**600**	0.072																
C51-1-1	8																	
C34/51-5-0	132																	
C34-1-0	**651**	0.149														0.019	0.019	
C34-1-1	18																	
C34/52-4.5-0	344	0.020																
C52-1-0	**767**	**0.340**																
C52-1-1	6																	
C35/52-5-0	83																	
C35-1-0	247	0.147																

Canaan Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
C53-1-0	261	0.045																
C36/53-5-0	188																	
C36-1-0	**550**	**0.278**														0.021	0.021	
C36-1-1	70																	
C36/37-4.5-0	369	0.027																
C37-1-0	**645**	**0.489**																
C37-1-1	52																	
C37/54-4.5-0	**423**	0.036																
C37/54-4.5-1	10																	
C37/54-10-0	132																	
C54-1-0	**1830**	**0.623**																
C54-1-1	**878**																	
C54-1-2																		
C38/54-5-0	104																	
C38-1-0	128	0.028																
C55-1-0	72	0.046																
C39/55-5-0	53																	
C39-1-0	272	**0.151**																
C39-1-1	26																	
C39/56-5-0	59																	
C56-1-0	319	**0.560**																
C56-1-1	39																	
C40/56-5-0	53																	
C40/56-5-0.1	45																	
C40-1-0	63	0.097																
C41-1-0	110	0.056																
C42-1-0	45	0.017																
C57-1-0	21	0.033																
C58-1-0	17																	
C59-1-0	15	0.027																
C60-1-0	22	0.017																
C63-1-0	77	0.028						0.028		0.065		0.088						

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.
Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken
Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken
A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

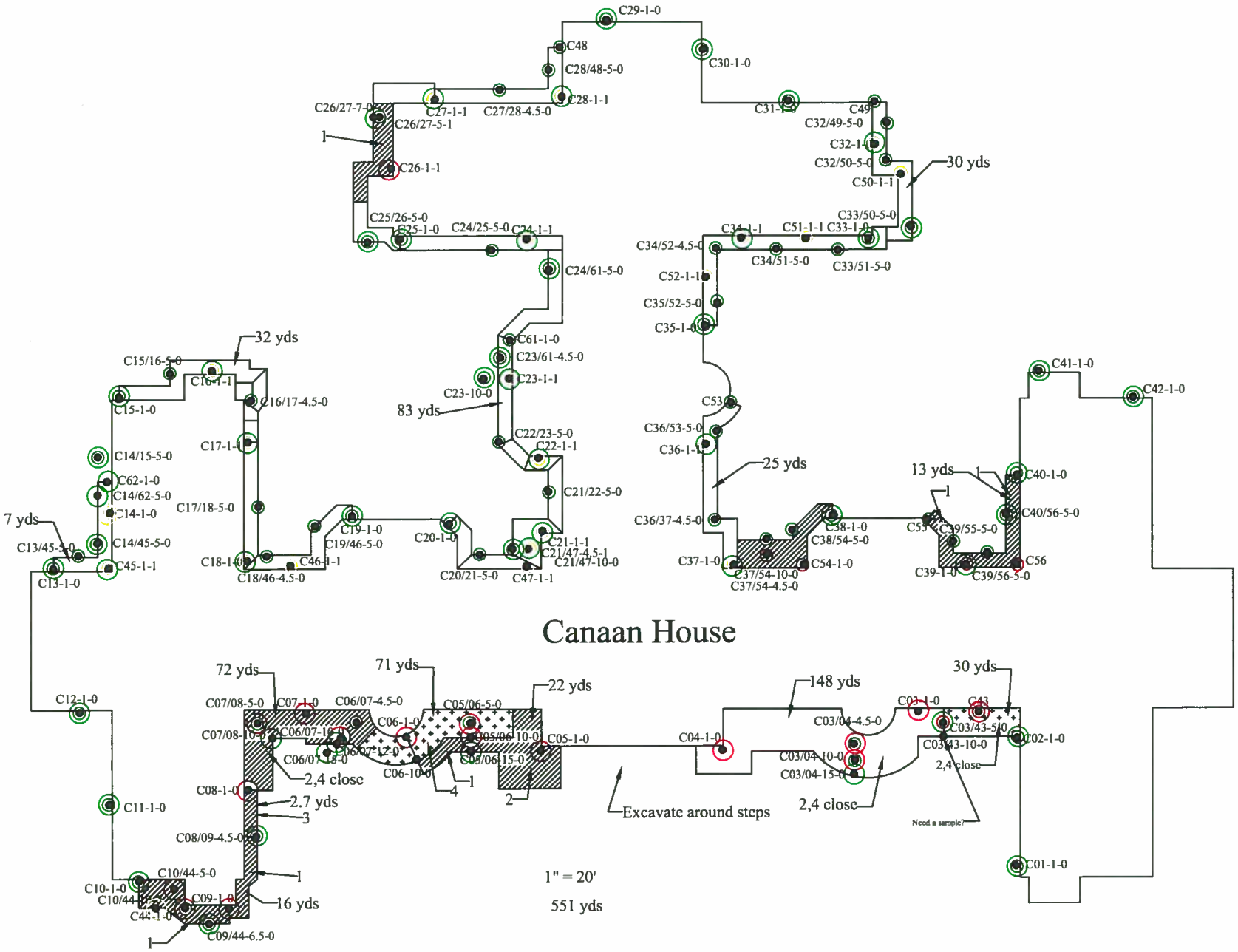
0.31	- not bold number - sample result of indicated chemical that is less than applicable criterion
0.68	- bold number - sample result of indicated chemical that is greater than applicable criterion
	- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion
0.260	- sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

Canaan Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000

- SPLP test was not performed for sample because location was not in compliance based on total contentrations; **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC
- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance
- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.
- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems



Legend

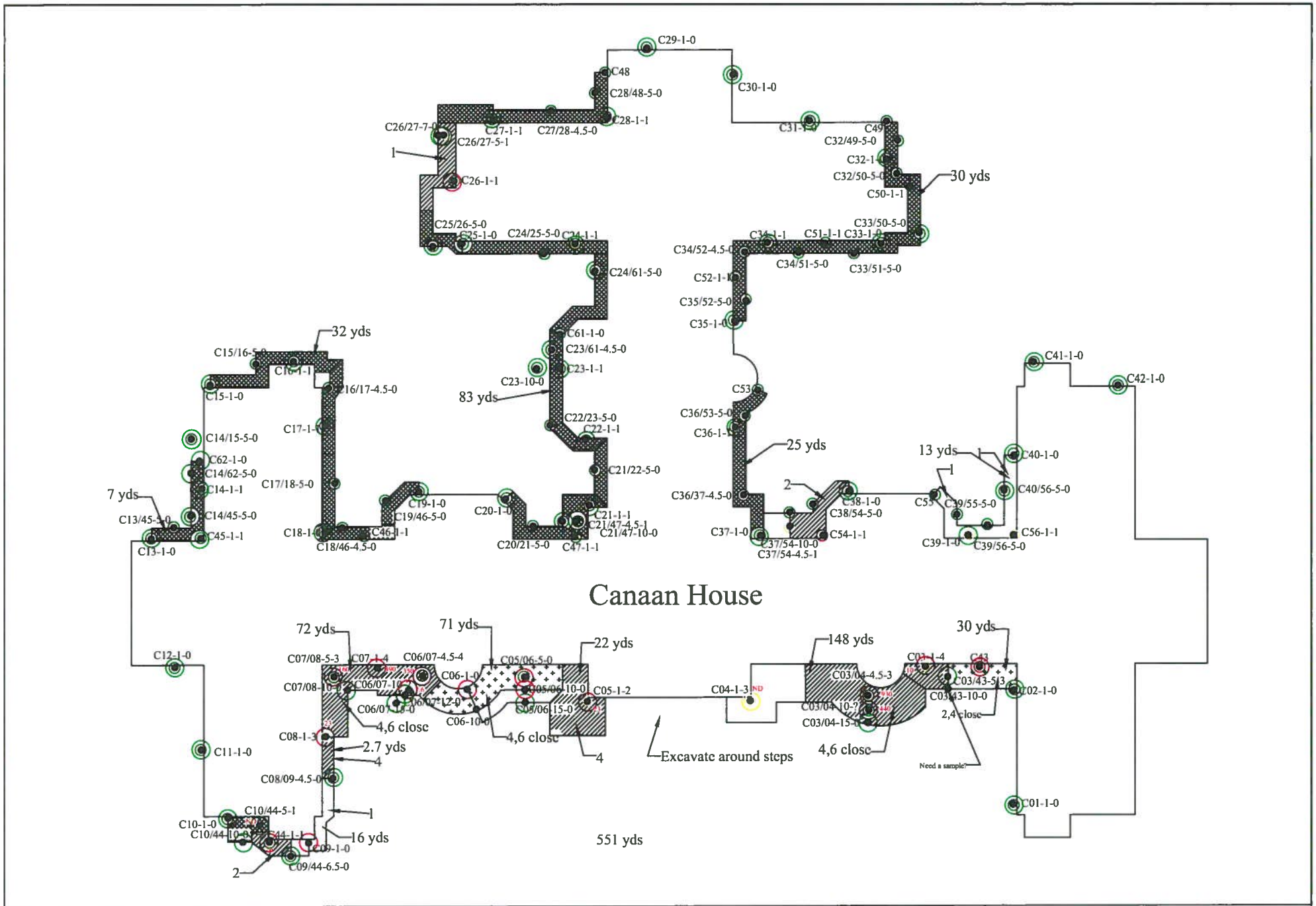
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: December 3, 2005
Project No.: 1018.WA8	File: Canaan Remediation Figure.dwg

Canaan Building Remediation 12/3/05

Fairfield Hills Hospital - Canaan Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required

Legend

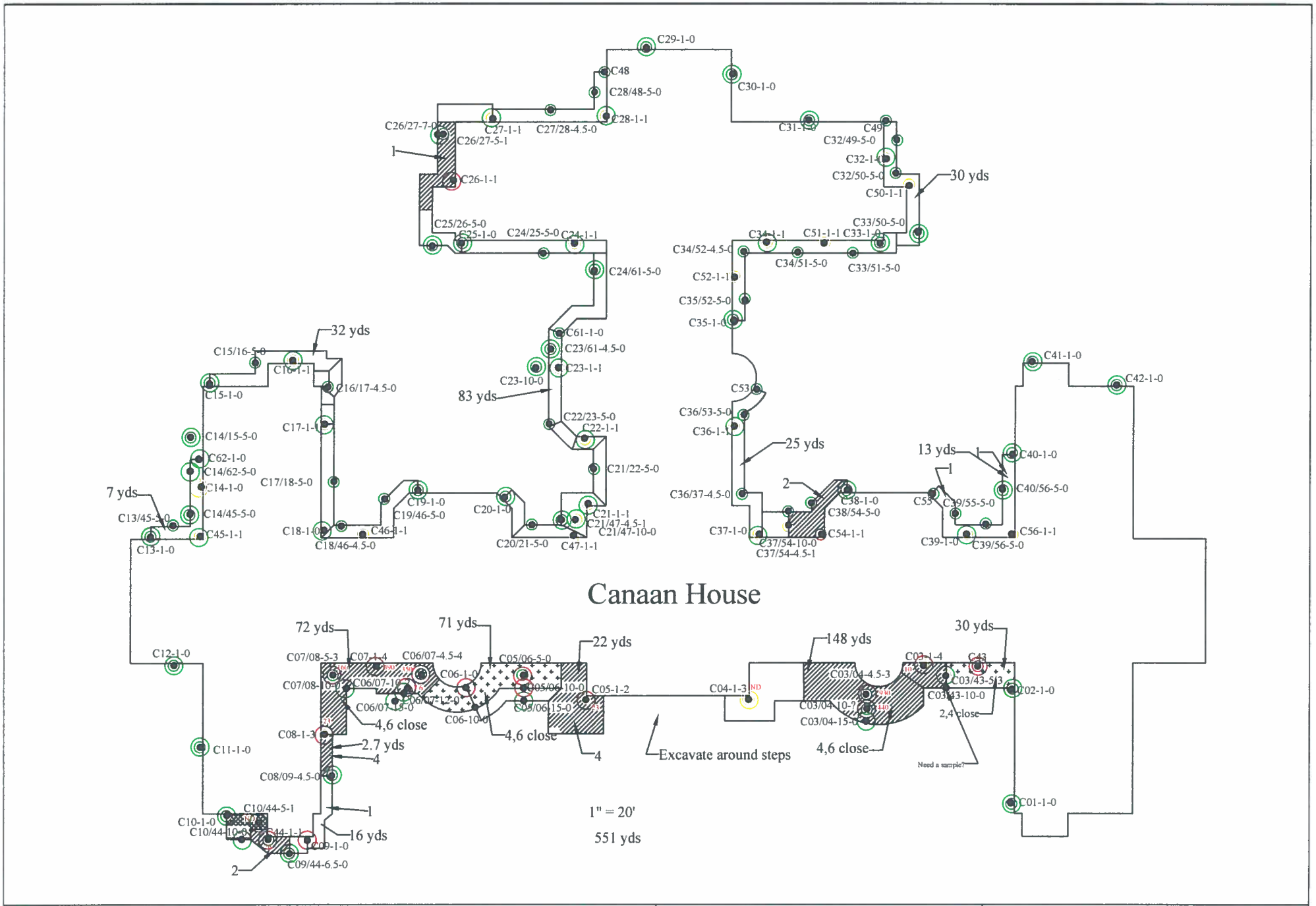
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: December 17, 2005
Project No.: 1018.WA8	File: Canaan Remediation Figure 1-10-05.dwg

Canaan Building Remediation 12/17/05

Fairfield Hills Hospital - Canaan Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required

Legend

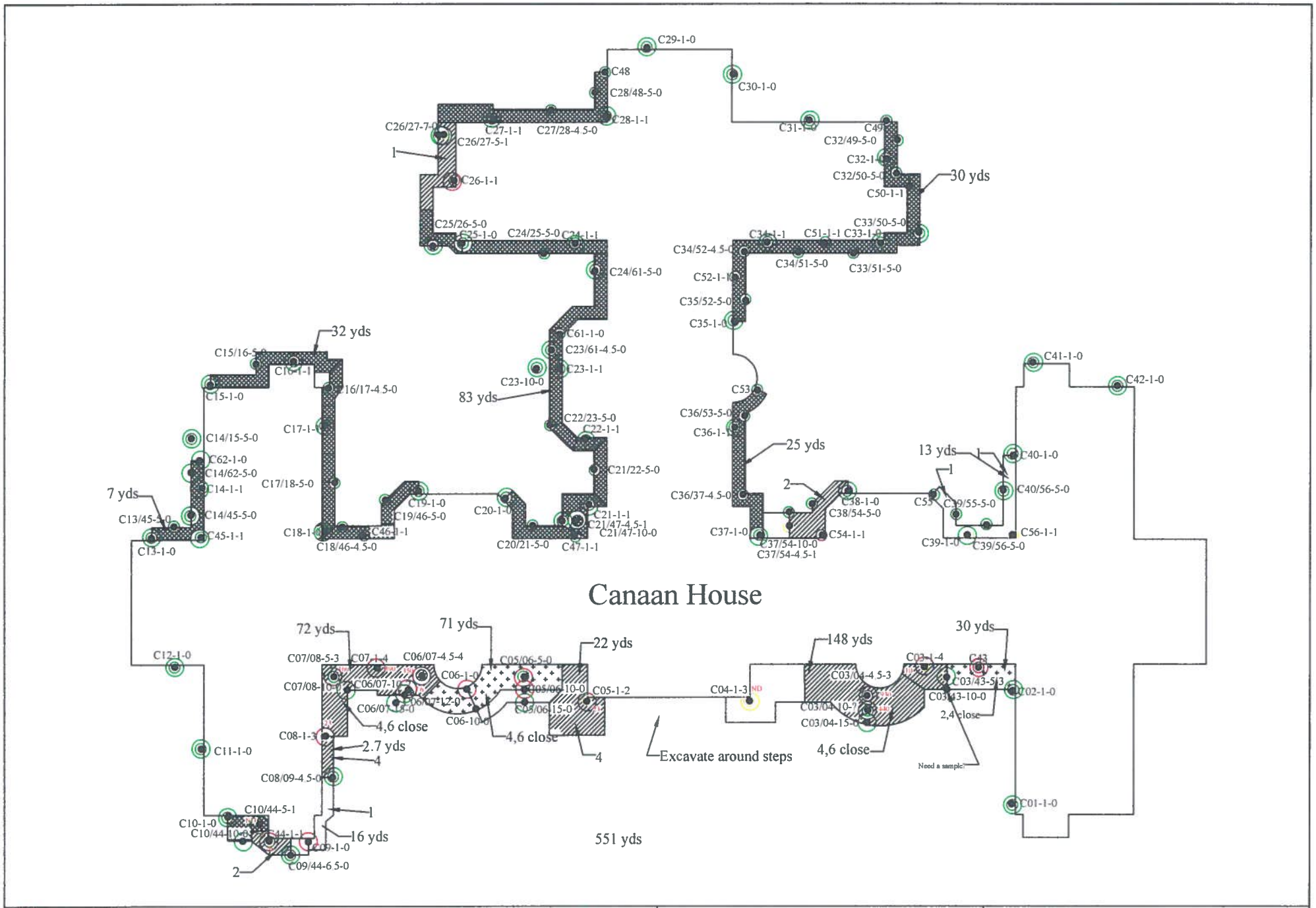
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: December 30, 2005
Project No.: 1018.WA8	File: Canaan Remediation Figure.dwg

Canaan Building Remediation 12/30/05

Fairfield Hills Hospital - Canaan Building
Wesserman Way
Newtown, Connecticut



Legend

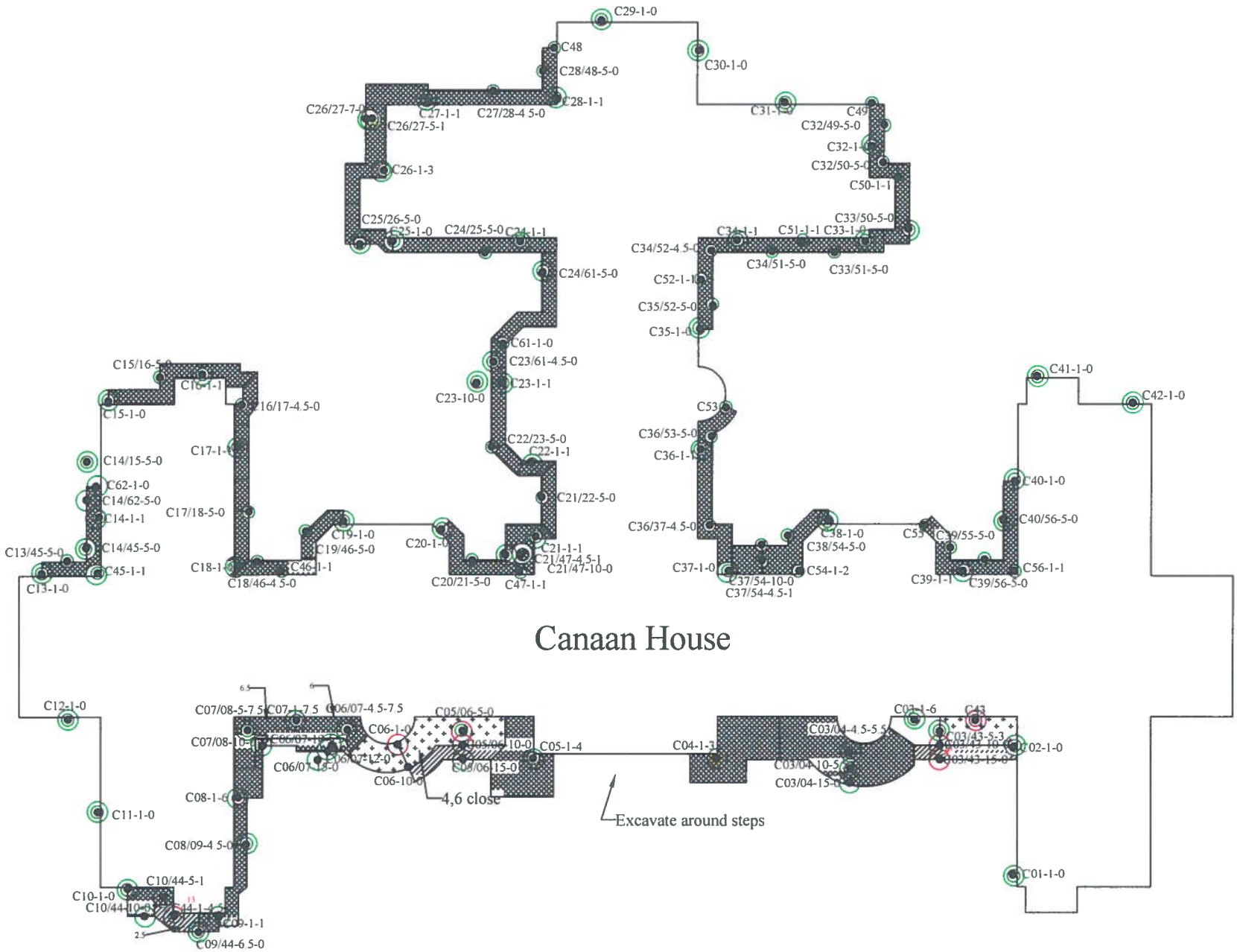
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: January 10, 2006
Project No.: 1018.WA8	File: Canaan Remediation Figure 1-10-05.dwg

Canaan Building Remediation 1-10-06

Fairfield Hills Hospital - Canaan Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required

Legend

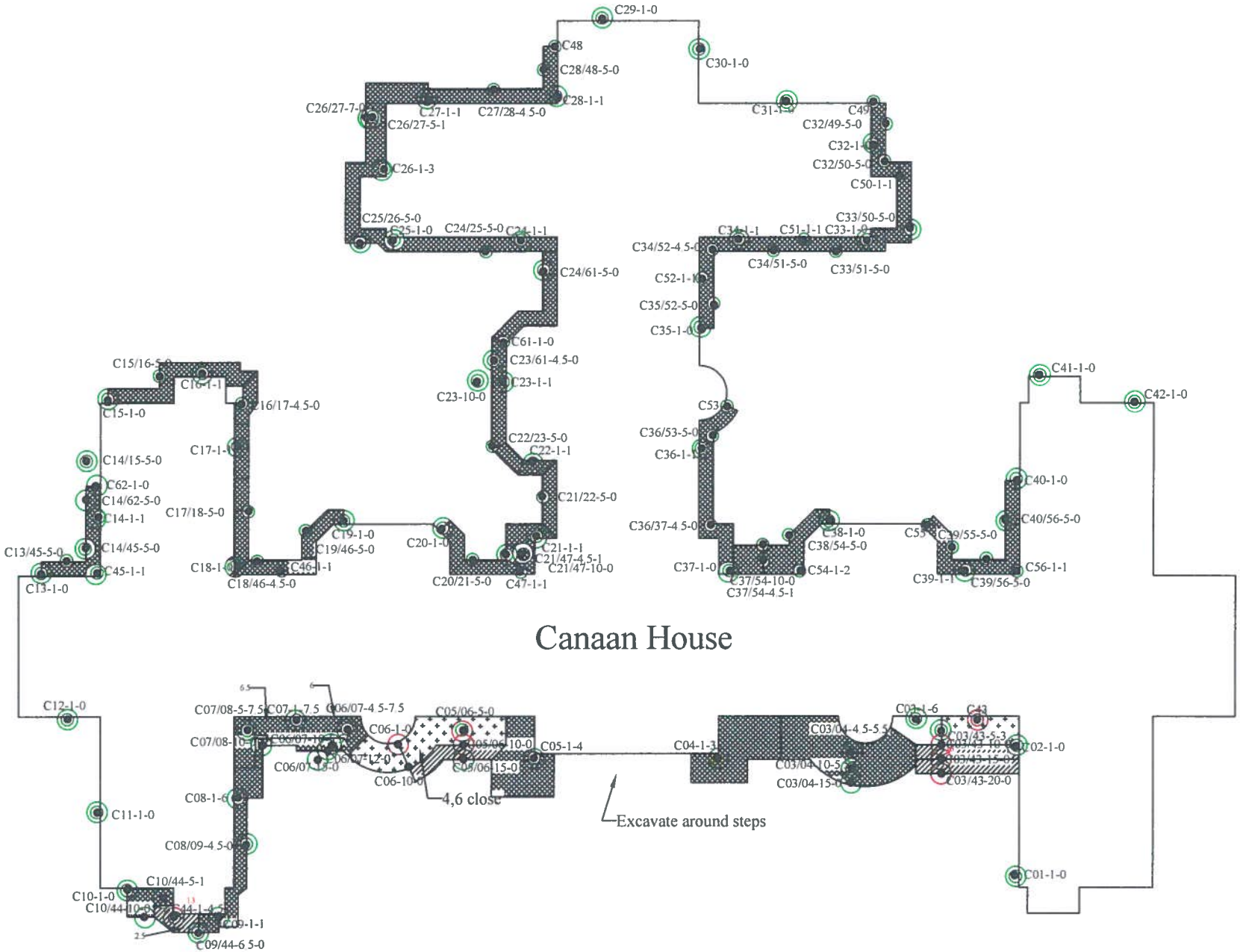
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: January 19, 2006
Project No.: 1018.WA8	File: Canaan Remediation Figure 1-10-05.dwg

Canaan Building Remediation 1-19-06

Fairfield Hills Hospital - Canaan Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required

Legend

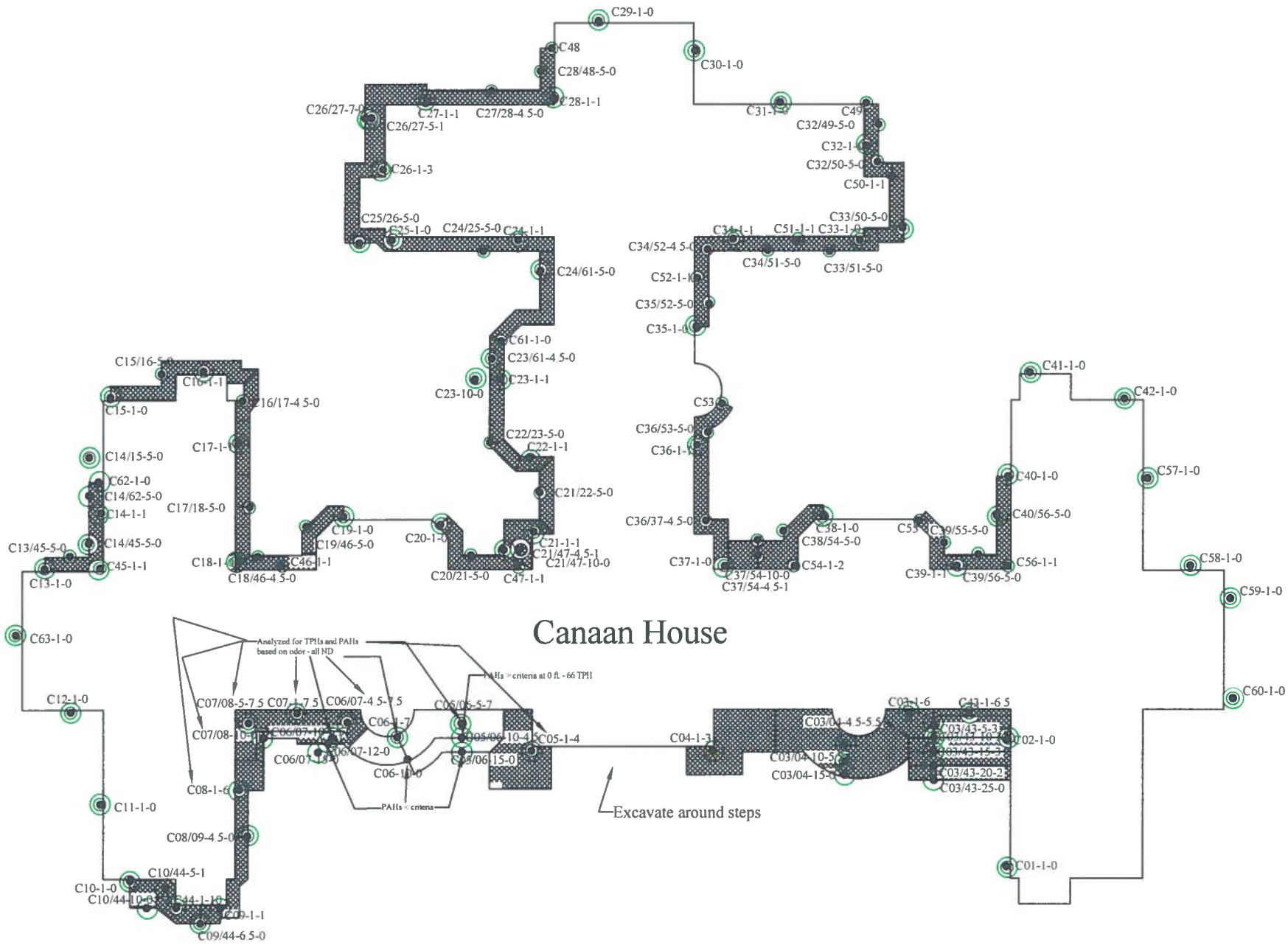
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: January 31, 2006
Project No.: 1018.WA8	File: Canaan Remediation Figure 1-10-05.dwg

Canaan Building Remediation 1-31-06

Fairfield Hills Hospital - Canaan Building
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: February 6, 2006
Project No.: 1018.WA8	File: Canaan Remediation Figure 2-6-06.dwg

Canaan Building Remediation Final

Fairfield Hills Hospital - Canaan Building
Wesserman Way
Newtown, Connecticut

COCHRAN BUILDING

Cochran Building Sampling Results

	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
CO01-1-0	25.2									0.010								
CO01-1-0	20.4																	
CO09-1-0	29.8									0.0083		0.0068						
CO10-1-0	38.6									0.0041								
CO11-1-0	20.6									0.0084		0.0062						
CO04-1-0	10.6									0.016								
CO04-1-0																		
CO12-1-0	18.3									0.0046		0.0046						
CO13-1-0	21																	
CO14-1-0	25.8											0.0057						
CO15-1-0	21.8									0.0061		0.0046						
CO16-1-0	32																	
CO17-1-0	38.2	**0.023**								0.0044		0.0058						
CO17-1-2	3.76																	
CO17/47-5-0	62.5																	
CO47-1-0	50.9																	
CO47-1-0																		
CO05-1-0																		
CO18-1-0	35.4																	
CO19-1-0	31.5							0.0083		0.27		0.12						
CO19/48-5-0										0.12		0.032						
CO48-1-0	64.2																	
CO48-1-0					**0.600**	**0.600**				0.37		0.26						
CO48-1-1										0.06								
CO20/48-5-0	43.1			**0.015**	**0.510**	**0.510**		0.028		0.56		0.38						
CO20/48-5-1.5										0.12		0.054						
CO20/48-10-0										0.064		0.21				0.022	**0.022**	
CO20-1-0	40.2	**0.027**								0.067		0.029						
CO20-1-1	3.1																	
CO20/21-5-0	26.9																	
CO21-1-0	42.1	**0.018**								0.092		0.034						
CO21-1-1	3.7																	
CO21/22-5-0	45.7			**0.200**				0.031		0.58		0.30				0.048	**0.048**	
CO21/22-5-2																		
CO21/22-10-0					0.320	**0.32**				0.089		0.056						
CO22-1-0			**0.32**	**3.2**	0.22	**0.22**				0.071		0.092						
CO22-1-2	3.6		**0.086**	**0.054**														
CO22-1-4				0.0014														
CO22-1-6			**0.068**	**0.076**														
CO22-1-7			**0.021**	**0.013**														
CO22-1-8																		
CO06/22-5-0	43.9			**0.027**	0.270	**0.270**				0.32		0.18						
CO06/22-5-2																		
CO06/22-10-0				**0.072**	**0.750**	**0.750**				1.1		0.48				0.022	0.022	

Cochran Building Sampling Results

	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
CO06/22-10-2																		
CO06/22-15-0										0.055								
CO06-1-0	49.5		**0.037**	**1.200**						0.500		0.270						
CO06-1-2	27.9		**0.017**	**0.470**						0.16		0.043						
CO06-1-4																		
CO06-1-6																		
CO06/23-5-0	49.9			**0.019**						0.15		0.05						
CO06/23-5-2																		
CO06/23-10-0	41.4									0.13		0.052						
CO06/23-10-0					0.430	**0.43**				0.54		0.15						
CO23-1-0			**0.016**	**0.24**				0.0078		0.18		0.052						
CO23-1-2	7.9		**0.013**	**0.270**														
CO23-1-4				0.00015														
CO23-1-6			**0.820**	**1.600**														
CO23-1-7				**0.021**														
CO23-1-8																		
CO23/24-5-0	35.7			**0.023**						0.071		0.034						
CO23/24-5-2																		
CO23/24-10-0					0.210	**0.21**				0.10		0.048						
CO24-1-0				**0.14**	0.31	**0.31**		0.009		0.38		0.16						
CO24-1-2	10.6		**0.190**	**0.430**						0.14		0.021						
CO24-1-4																		
CO24-1-6			**0.053**	**0.039**														
CO24-1-7			**0.035**	**0.022**														
CO24-1-8																		
CO24/25-5-0	28.9									0.038		0.023						
CO25-1-0	18.8	**0.016**								0.089		0.036						
CO25-1-1	2.8																	
CO07/25-5-0	15.5																	
CO07-1-0	30.7									0.940		0.650						
CO26-1-0	16.5	**0.017**						0.012		0.30	0.10	0.20						
CO26-1-1	3.0																	
CO26/27-5-0	12.2									0.02								
CO27-1-0	19.2							0.006		0.11		0.066						
CO27/28-5-0										0.2		0.14						
CO28-1-0	36.1				**0.88**	**0.88**		0.026		0.6		0.62						
CO28-1-2										0.1		0.17						
CO28-1-2										0.1		0.17						
CO29-1-0	35.9				0.14	**0.14**												
CO30-1-0	28.5				0.22	**0.22**				0.0099		0.011						
CO31-1-0	23																	
CO08-1-0	28.8																	
CO32-1-0	26.6				0.076	**0.076**												
CO32/33-5-0	35.2																	

Cochran Building Sampling Results

	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
CO32/33-6-0	18.8																	
CO32/33-5-1	2.0																	
CO33-1-0	19.9	**0.019**			0.14	**0.14**												
CO33-1-1	6.2																	
CO33/34-5-0	16.0																	
CO34-1-0	65.4	**0.021**								0.0089		0.011						
CO34-1-1	2.6																	
CO35-1-0	24.5		0.005															
CO35/36-5-0	14.4																	
CO36-1-0			**0.053**	**0.093**						0.064		0.075						
CO36-1-1	2.9																	
CO36/49-5-0	23.4																	
CO49-1-0	27.3																	
CO37-1-0	32.3									0.029		0.027						
CO52-1-0	16.5									0.034		0.026						
CO52-1-0.1	17.9									0.037		0.033						
CO38-1-0	23.9									0.0076								
CO03-1-0	23.6									0.012		0.011						
CO39-1-0	22.6									0.0091		0.0058						
CO50-1-0	13.8																	
CO50-1-0.1	14.0																	
CO40/50-5-0	17.9																	
CO40-1-0				**0.014**						0.05		0.043						
CO40-1-1	4.6																	
CO40-1-1.1	4.9																	
CO40/41-5-0	17.0									0.054		0.042						
CO41-1-0	31.3	**0.02**								0.011		0.023						
CO41-1-1	3.1																	
CO02/41-5-0	13.7																	
CO02-1-0	26.9																	
CO02-1-1	3.0																	
CO42-1-0	24.7									0.021		0.016						
CO42/43-5-0	21.7																	
CO43-1-0			**0.018**	**0.045**						0.035		0.016						
CO43-1-1	3.4																	
CO43/51-5-0	48.2		**0.053**	**0.110**						0.036		0.068						
CO43/51-12-0																		
CO43/51-5-2	2.1																	
CO43/51-10-0			**0.018**	**0.027**														
CO43/51-10-2																		
CO44-1-0	41.5									0.0055		0.0077						
CO45-1-0	18.1																	
CO46-1-0	21.7																	
CO51-1-0	66.8									0.11		0.15						

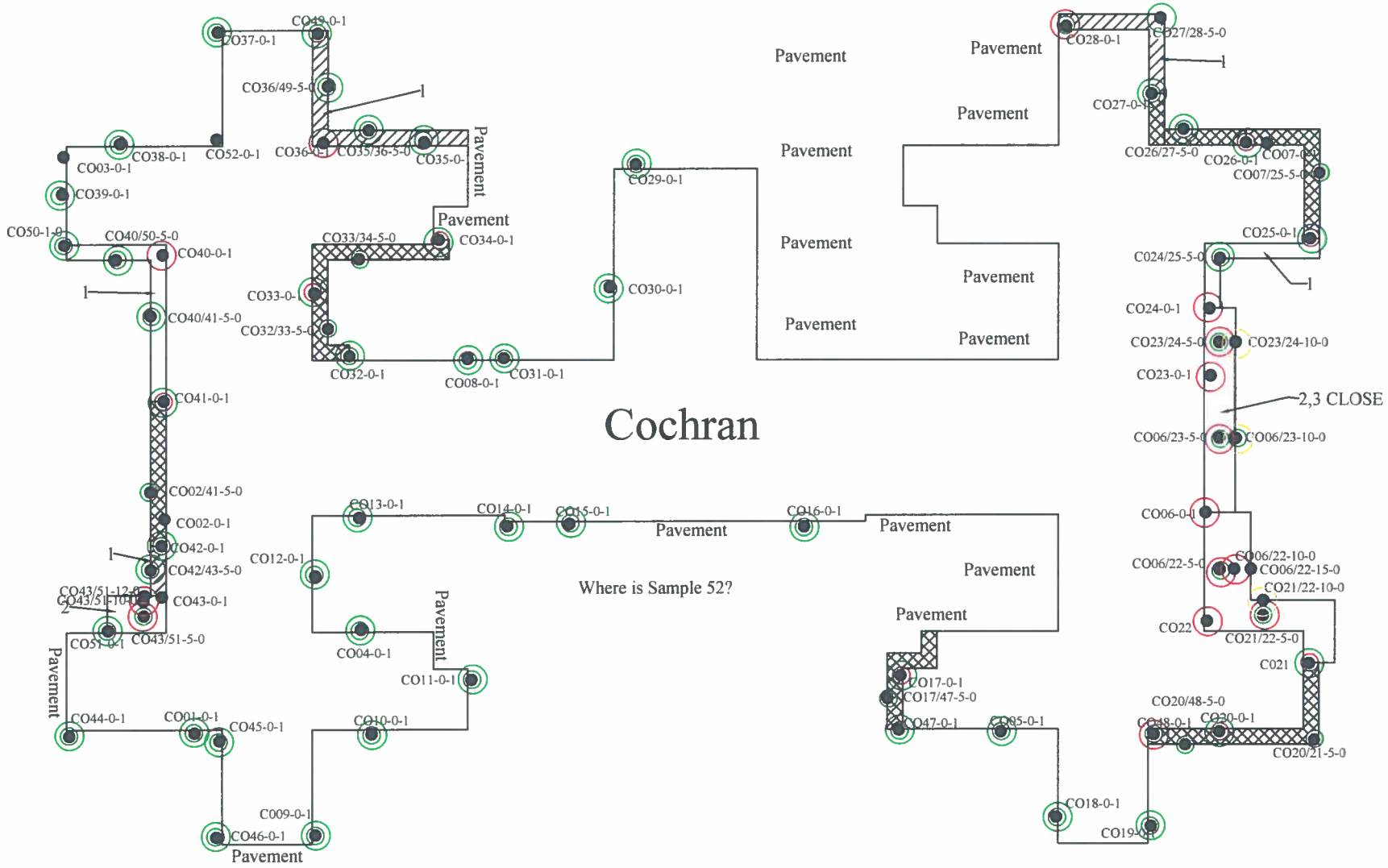
Cochran Building Sampling Results

	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
CO53-1-0	6.8																	
CO54-1-0	2.1																	
CO55-1-0	3.0																	
CO56-1-0	4.3																	
CO57-1-0	3.2																	
CO58-1-0	3.5																	
CO59-1-0	3.9																	
CO60-1-0	4.7																	
CO61-1-0	13.8																	
CO62-1-0	20.9	**0.02**																
CO63-1-0	8.8																	
CO64-1-0	6.0																	
CO65-1-0	9.6																	
CO66-1-0	4.0																	

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.
Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken
Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken
A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion
0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion
- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion
0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion
- SPLP test was not performed for sample because location was not in compliance based on total contentrations; **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC
- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance
- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.
- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed
R-resampling due to quality assurance problems



Legend

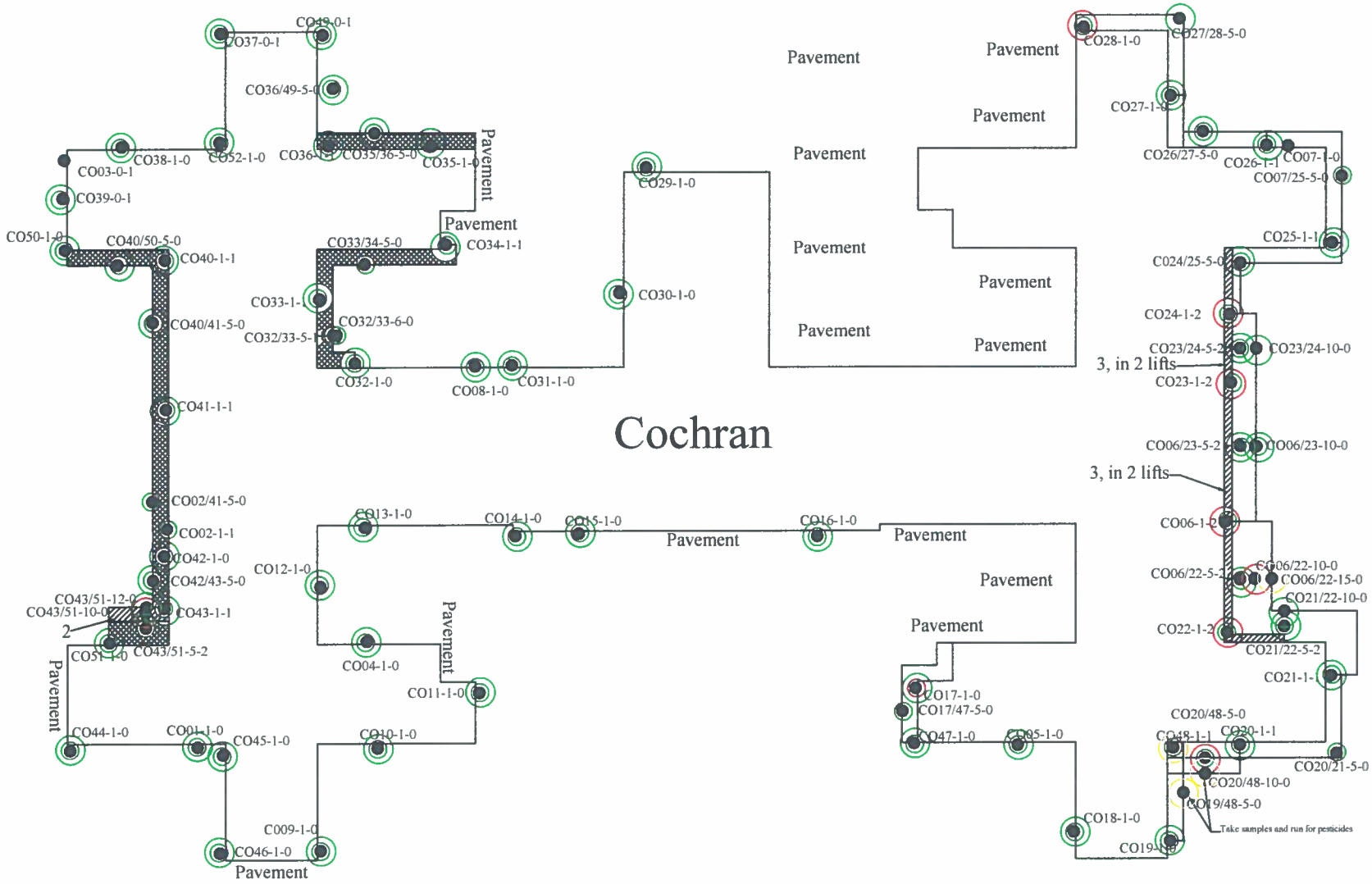
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: December 13, 2005
Project No.: 1018.WA8	File: Cochran Excavation Figure.dwg

Cochran Excavation Plan Figure 12-13-05

Fairfield Hills Hospital - Cochran Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

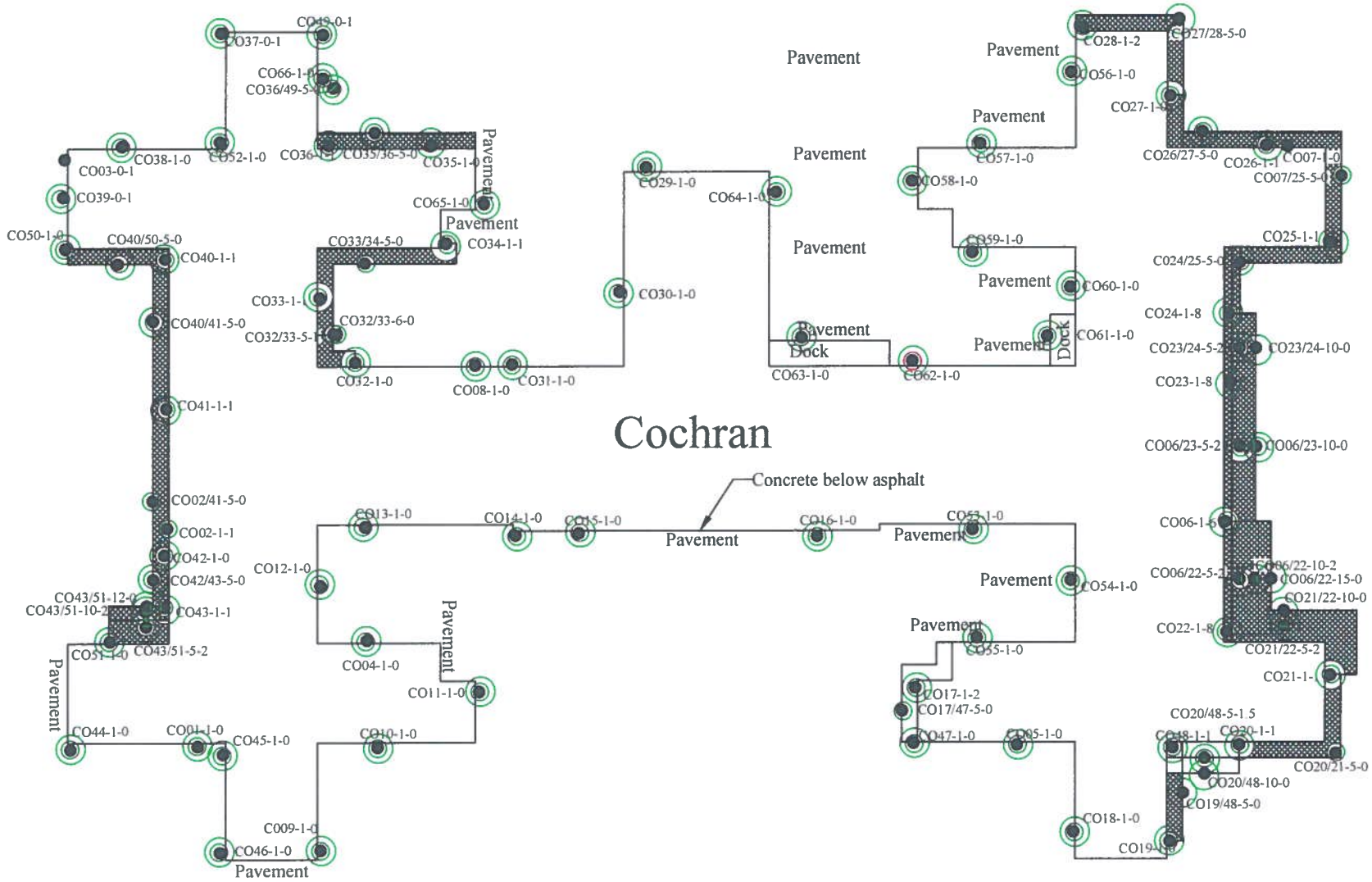
- Sampling location
- Area requiring excavation
- Backfill

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: December 21, 2005
Project No.: 1018.WA8	File: Cochran 12-21-05 Excavation Figure.dwg

Cochran 12/21/05 Remediation Figure

Fairfield Hills Hospital - Cochran Building
Wesserman Way
Newtown, Connecticut



Legend

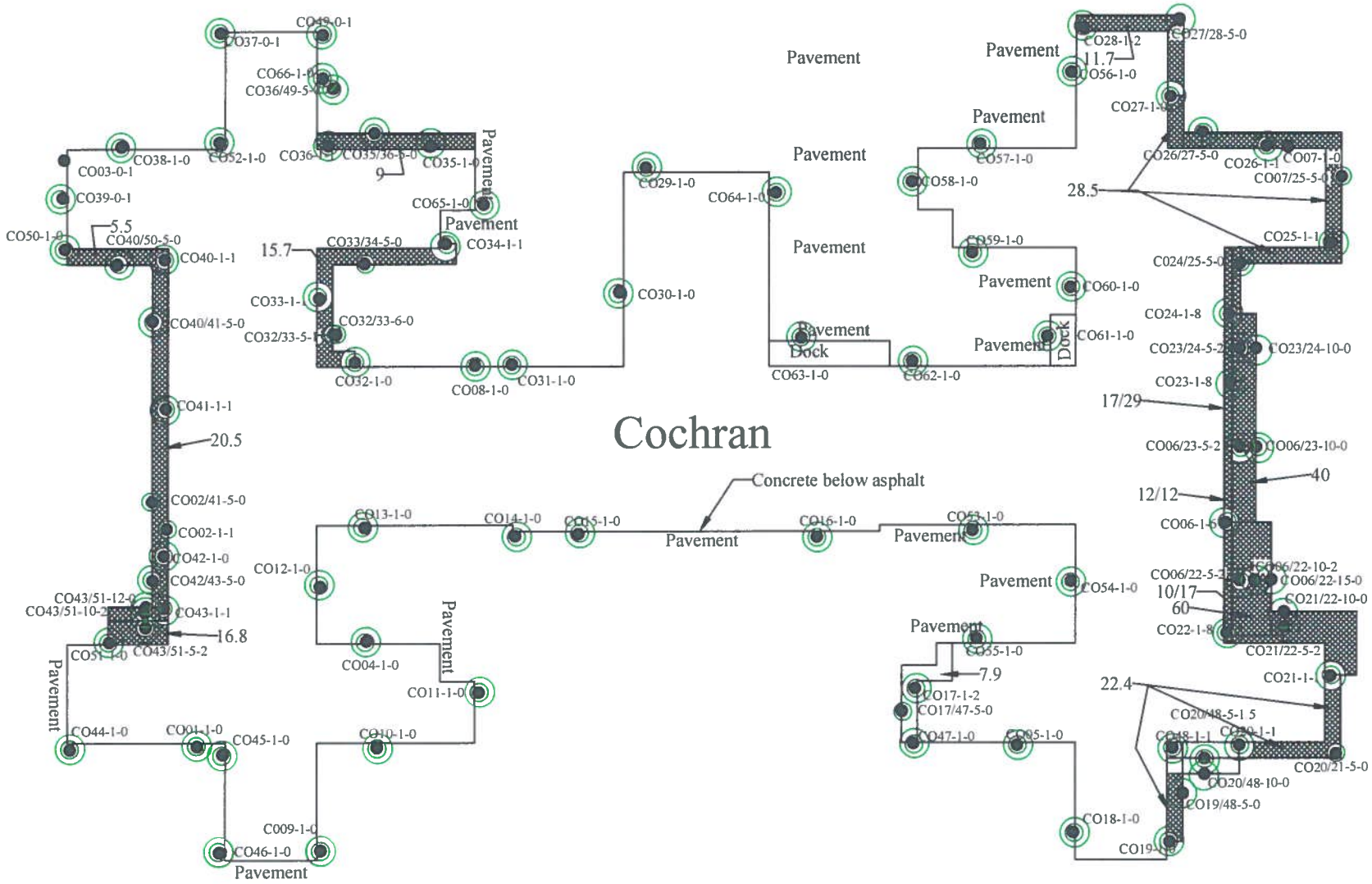
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: June 15, 2006
Project No.: 1018 WA8	File: Cochran 6-15-06 Remediation Figure dwg

Cochran June 15, 2006 Remediation Figure

Fairfield Hills Hospital - Cochran Building
Wesserman Way
Newtown, Connecticut



Legend

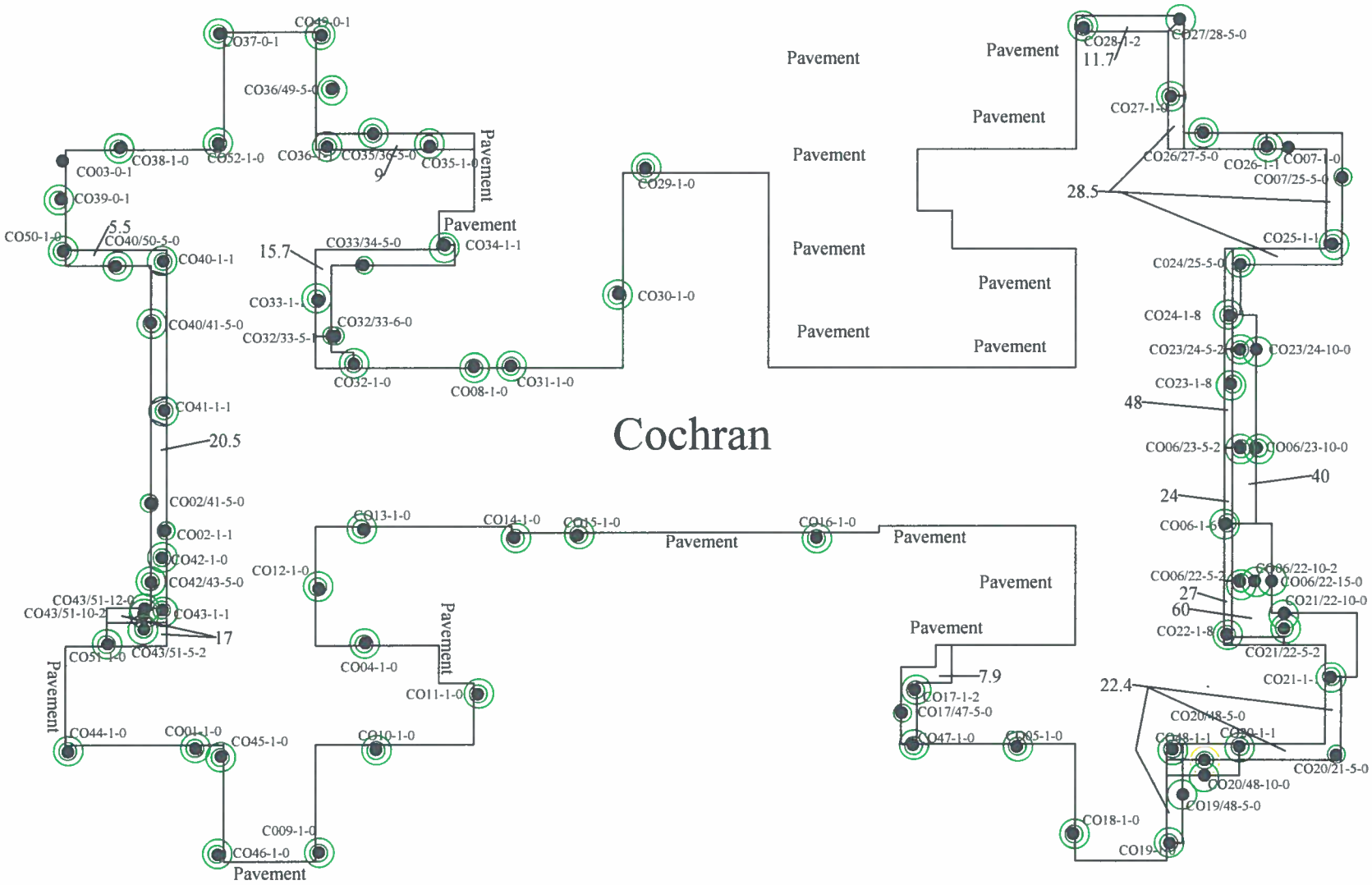
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Backfill
- 25 - Cu. yds. in area

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: August 3, 2006
Project No.: 1018.WA8	File: Cochran Excavation Figure.dwg

Cochran Final Remediation Figure 8-3-06

Fairfield Hills Hospital - Cochran Building
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Backfill
- 25 - Cu. yds. in area

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: February 27, 2006
Project No.: 1018.WA8	File: Cochran Excavation Final Quantities.dwg

Cochran Final Excavation Quantities

Fairfield Hills Hospital - Cochran Building
Wesserman Way
Newtown, Connecticut

DANBURY BUILDING

Danbury Building Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	**0.015**	**0.007**	**0.007**	**0.490**	**0.066**	**0.300**	**2.600**	**0.150**	**1.800**	**0.100**	**1.800**	**0.100**	**20.000**	**42.000**	**0.067**	**0.020**	**0.200**
D01-1-0	243.0	**0.066**								0.023		0.030						
D01-1-1	42.6																	
D01/02-5-0	70.3	**0.021**																
D01/02-5-0.5	28.1																	
D01/02-5-0.5.1	25.8																	
D01/02-8-0	25.2																	
D01/10-5-0	19.1																	
D02-1-0	**4,520.0**	**0.367**								0.250		0.180						
D02-1-3	8.8																	
D02-1-3.1	6.9																	
D02/03-5-0	268.0	**0.076**																
D02/03-5-0.1	322.0	**0.187**																
D02/03-5-0.5	46.0	**0.020**																
D02/03-5-1	17.9	**0.023**																
D02/03-5-3	3.8																	
D02/03-8-0	58.2																	
D03-1-0	**1,590.0**	**2.780**								0.059		0.040						
D03-1-1	34.6																	
D03/04-5-0	133.0	**0.027**																
D03/04-5-0.5	19.5																	
D03/04-8-0	79.8																	
D04-1-0	**1,010.0**	**0.363**			0.100	~~0.100~~				0.350		0.170						
D04-1-1	5.8																	
D04/05-5-0	**797.0**																	
D04/05-5-1	11.4																	
D04/05-7-0	105.0	**0.220**																
D04/05-7-1.5	1.5																	
D04/05-9-0	162.0	**0.025**																
D04/05-9-0.5	12.9																	
D04/05-12-0	116.0																	
D05-1-0	**2,750.0**	**0.683**			0.330	~~0.330~~				0.150		0.073						
D05-1-1	11.8	0.015																
D05/06-5-0	301.0	**0.045**																
D05/06-5-0.5	15.6																	
D05/06-8-0	127.0																	
D06-1-0	**765.0**	**0.219**			0.250	~~0.250~~				0.012		0.012						
D06-1-1	40.3	**0.042**																
D06-1-1.5	0.8																	
D06-1-1.5.1	0.6																	
D06/07-5-0	68.0	**0.016**																
D06/07-5-0.5	11.6	**0.063**																
D06/07-5-1.5	1.2																	
D06/07-8-0	35.5																	
D07-1-0	**821.0**	**0.383**			0.190	~~0.190~~						0.008						
D07-1-1	21.9																	

Danbury Building Sampling Results

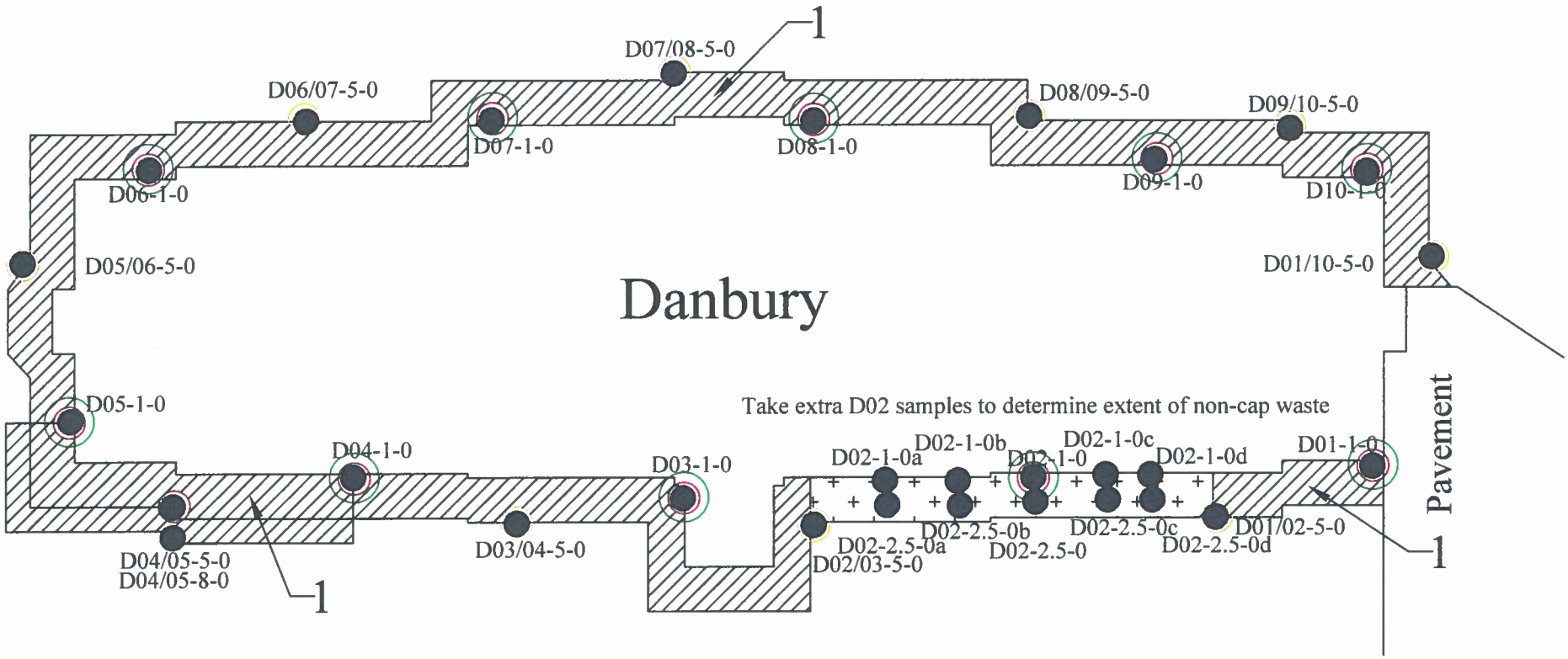
Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	**0.015**	**0.007**	**0.007**	**0.490**	**0.066**	**0.300**	**2.600**	**0.150**	**1.800**	**0.100**	**1.800**	**0.100**	**20.000**	**42.000**	**0.067**	**0.020**	**0.200**
D07/08-5-0	117.0	**0.021**																
D07/08-5-0.5	10.5																	
D07/08-8-0	28.4																	
D08-1-0	262.0	**0.140**								0.010								
D08-1-1	7.9																	
D08/09-5-0	59.3																	
D09-1-0	**520.0**	**0.287**								0.005								
D09-1-1	16.5																	
D09/10-5-0	81.5																	
D10-1-0	**885.0**	**0.555**			0.190	0.190				0.031		0.094						
D10-1-1	5.9																	
D11-1-0	2.4																	

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.
Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken
Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken
A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion
0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion
- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion
0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion
- SPLP test was not performed for sample because location was not in compliance based on total contentrations; **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC
- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance
- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.
- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

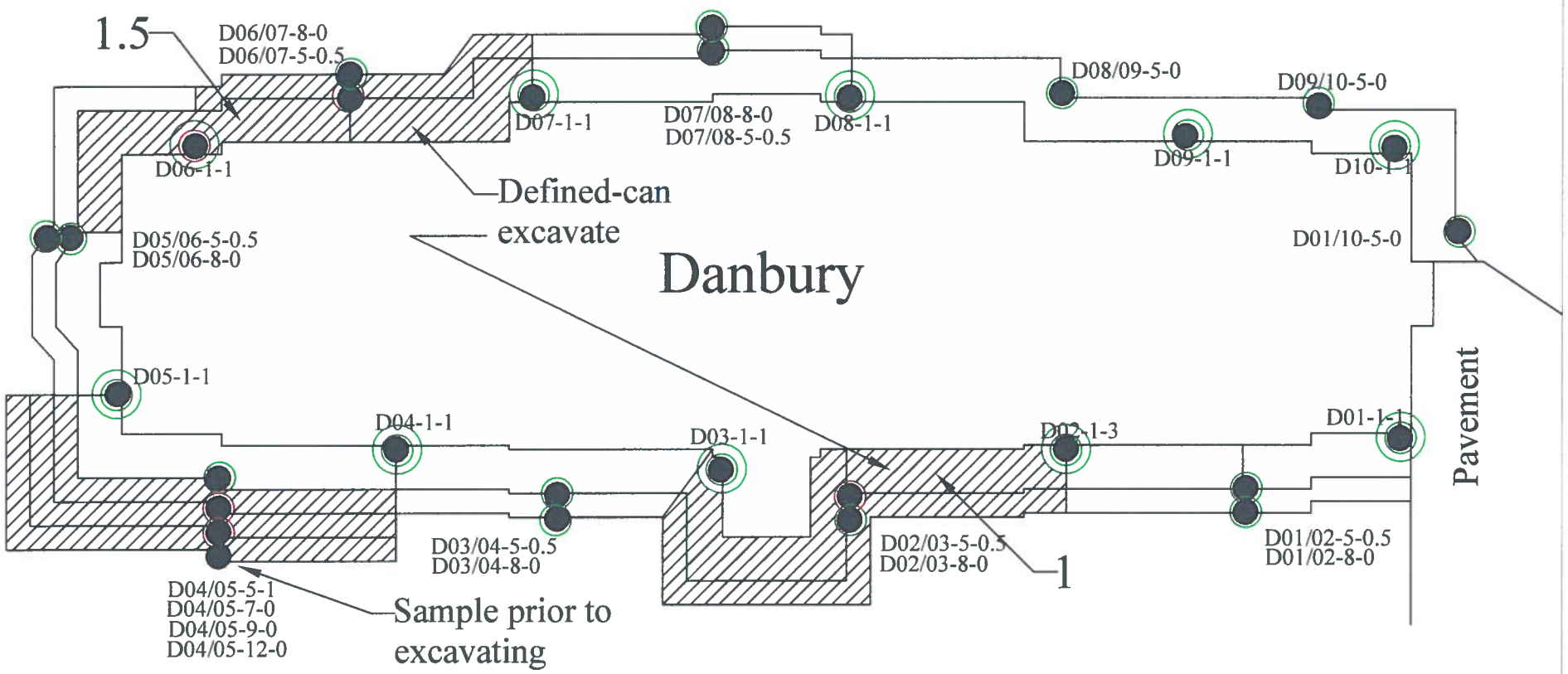
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: March 24, 2006
Project No.: 1018.WA8	File: Danbury Remediation Figure 3-24-06.dwg

Danbury 3-24-06 Remediation Figure

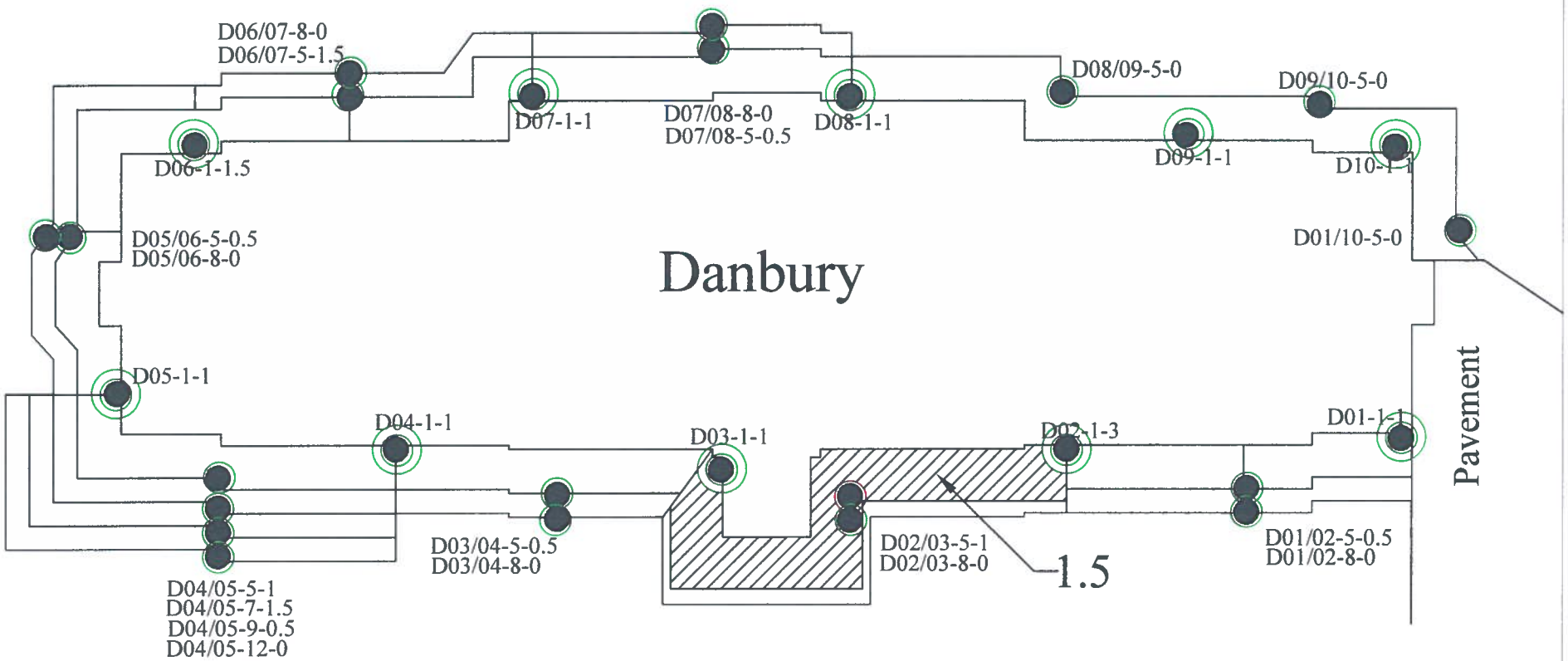
Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Danbury 4-12-06 Remediation Figure
Approximate Scale: 1 Inch = 20 Feet	Date: April 12, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018 WA8	File: Danbury Remediation Figure 4-12-06.dwg	

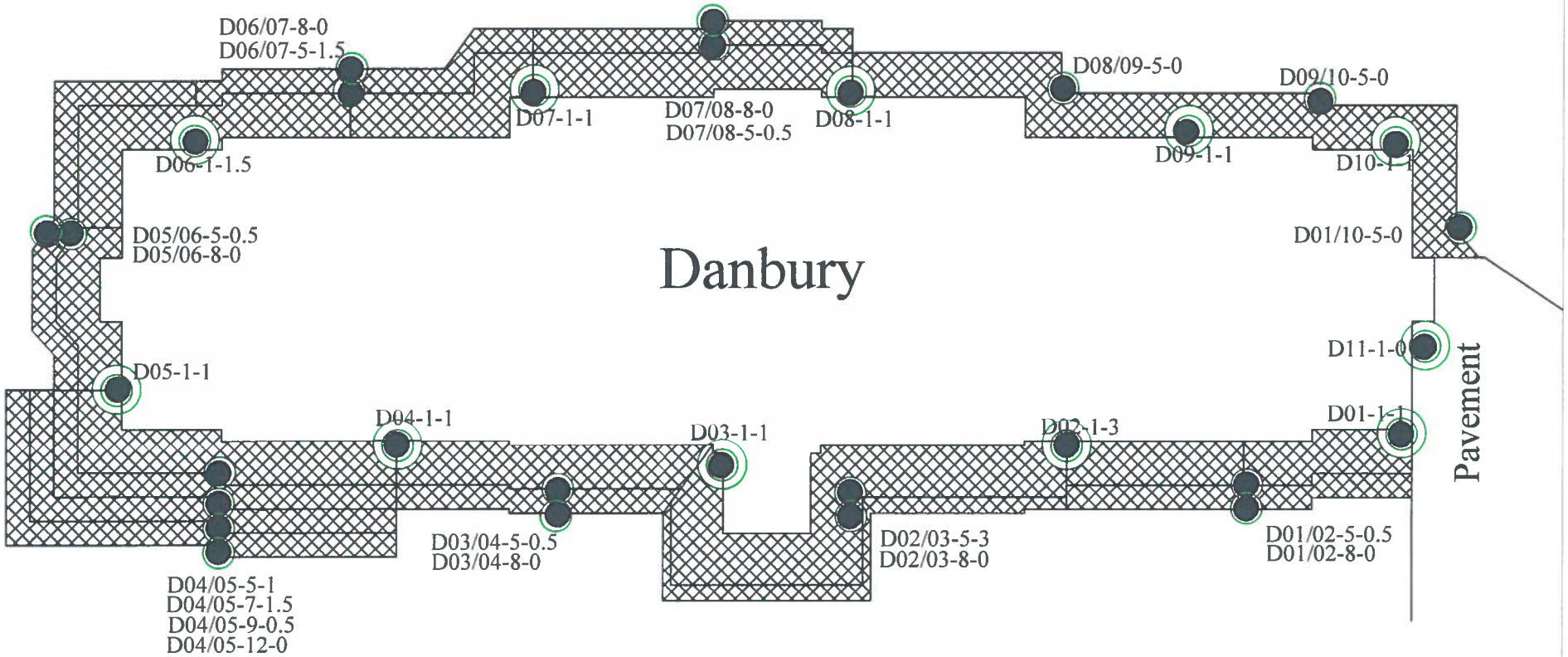


- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Danbury 4-21-06 Remediation Figure
Approximate Scale: 1 Inch = 20 Feet	Date: April 21, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Shelton Remediation Figure 4-21-06.dwg	



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: August 6, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure 8-6-06.dwg

Danbury 8-6-06 Final Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut

DUPLEXES BUILDING

Duplexes Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
Duplex 58																		
01-1-0	**666.0**	**0.167**						0.016		0.430	0.110	0.670	0.120					
01-1-0.5	101.0	0.048																
01/02-5-0	110.0																	
01/07-5-0	308.0	0.021								0.210		0.170						
02-1-0	**1980.0**	**0.304**			0.070	[illegible]				0.063		0.058						
02-1-0.5	**538.0**	**0.754**																
02-1-0.5.1	**477.0**	**0.718**																
02-1-1	349.0	**0.473**																
02-1-2	2.5																	
02/03-5-0	224.0																	
03-1-0	213.0	0.026						0.006		0.280		0.270						
03/04-5-0	334.0	0.031																
04-1-0	1030.0	**0.165**						0.007		0.200		0.410						
04/06-5-0	286.0	0.05																
04-1-0.5	348.0	0.031																
04-1-1	14.4																	
03/04-5-0	334.0	0.031																
05-1-0	**1160.0**	**0.236**								0.130		0.100						
05-1-0.5	356.0	**0.198**																
05-1-1	36.7	0.044																
05/06-5-0	119.0																	
05/07-5-0	274.0	0.016								0.400		0.350						
06-1-0	293.0	0.038								0.077		0.098						
07-1-0	**1270.0**	**0.300**						0.220		**2.600**	0.270	**2.600**	0.260					
07-1-0.5	125.0	0.131								0.540		0.550						
Duplex 59																		
01-1/T	349.0			**6.600**	**19.00**	**19.00**												
01-1-0.5				**8.500**	**19.00**	**19.00**												
01-1-4				**0.011**														
01-1-5				**0.021**														
01-1-6																		
01/02-5-0	68.9																	
01/05-1-0.5				**0.170**	0.30	**0.30**				0.160		0.120						
01/05-5-0	125.0				**3.20**	**3.20**												
01/05-5-3																		
01/05-8-0				**0.270**	**0.66**	**0.66**				0.044		0.072						
01/05-8-2																		
01/05-15-0										0.021								
01/05-15-0																		
02-1/T	**1310.0**			**0.300**	**3.50**	**3.50**				1.400		**3.900**						
02/06-5-0	**671.0**	0.069		**0.087**						0.860		0.260						
02/06-5-1	17.2			**0.170**	**0.60**	**0.60**												
02/06-5-1																		
02/06-5-2.5				**0.018**														

Duplexes Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
02/06-5-2.5.1																		
02/06-5-3																		
02/06-8-0	134.0			0.029	0.13	1.30				0.190		0.083						
02/06-8-0		0.028																
02/06-8-2																		
02/06-15-0										0.160		0.047						
02/06-15-0																		
02-1-1	15.3	0.134		77.000	260.00	260.00						2.100						
02-1-3.5	13.0			3.900	17.00	17.00						0.130						
02-1-5	10.1			0.200	0.76	0.76												
02-1-7				1.900	2.80	2.80												
02-1-8				0.030														
02-1-9																		
02-6/T	347.0																	
02-1/1	24.2			35.000	120.00	120.00		2.700				0.600						
02-1/2	10.4			0.160	2.00	2.00												
02-1/3				0.190	2.10	2.10												
03-1/T	1410.0			1.900	23.00	23.00				0.130		0.280						
03/04-5-0	195.0	0.017		0.500	2.40	2.40				0.560		0.360						
03/04-5-0.1	210.0			0.500	2.40	2.40				0.560		0.510						
03/04-5-1				1.200	7.90	7.90				0.097		0.410						
03/04-5-3																		
03/04-10-0				6.200	1.30	1.30				0.110		0.220						
03/04-10-2																		
03/04-15-0				0.095	0.46	0.46				0.044		0.045						
03/04-15-1																		
03/04-18-0				0.031	0.10	0.10												
03/04-18-1																		
03/04-21-0																		
03-1-0.5	154.0	0.086		2.000	5.50	5.50				0.066		0.130						
03-1-0.5.1	205.0	0.018		2.200	5.80	5.80				0.041		0.100						
03-1-4				0.690	0.16	0.16												
03-1-4 .1				0.400														
03-1-6				0.100	0.18	0.18												
03-1-8				0.120	0.22	0.22												
03-1-9																		
03/07-5-0	126.0			0.170	0.74	0.74				0.090		0.100						
03/07-5-0.5				0.050	0.18	0.18												
03/07-5-3																		
03/07-10-2																		
03/07-10-0				0.011														
03/07-15-0																		
04-1/T	104.0			21.000	60.00	60.00												
04-1-0.5	35.0	0.038		5.800	16.00	0.18												
04-1-3.5				0.043														

Duplexes Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
04-1-5	17.3	0.023		**0.011**														
04-1-6																		
04/05-5-0	71.1									0.041		0.020						
04/05-5-0																		
05-1-0				**1.600**	**2.90**	**2.90**				0.062		**2.000**				**0.160**	**0.160**	
05-1-0.5	63.2	0.039		**3.600**	**15.00**	**15.00**						1.800						
05-1-4				**0.031**														
05-1-5	10.8	0.015		**1.300**														
05-1-7																		
06-1-0				**1.600**	**9.50**	**9.50**				0.220		0.400				**0.077**	**0.077**	
06-1-0.5	**1820.0**	**0.923**		**3.900**	**14.00**	**14.00**				0.210		0.280						
06-1-3.5	4.1			**0.960**	**1.90**	**1.90**												
06-1-5				**0.014**														
06-1-6																		
06/07-5-0	11.1			**0.009**														
06/07-5-0.5				**0.200**	0.43	**0.43**				0.220		0.150						
06/07-5-2.5																		
06/07-8-0				**0.180**	0.38	**0.38**				0.069		0.055						
06/07-8-2				**0.008**						0.069								
06/07-8-2.5																		
06/07-15-0				**0.051**	0.16	**0.16**				0.460		0.230						
06/07-15-1																		
06/07-18-0																		
07-1-0				**0.550**	**3.40**	**3.40**				0.440		0.840				0.030	**0.030**	
07-1-3																		
07-1-0.5	55.4	0.087		**80.000**	**200.00**	**200.00**						1.500						
07/08-5-0	5.8																	
08-1-0	0.8	0.023		**0.090**	**1.00**	**1.00**												
08-1-2																		
05/09-5-0	21.7																	
09-1-2	9.4			**0.046**	0.09	**0.09**												
09-1-4	9.4			**0.007**														
09-1-5																		
Duplex 60																		
01-1-0	**879.0**	**0.164**						0.019		0.130		0.094						
01-1-0.5	400.0	**0.290**																
01-1-1	63.4	0.021																
01/02-5-0	13.2																	
01/07-5-0	143.0	0.046								0.270		0.160						
02-1-0	**1970.0**	**0.355**						0.008		0.053		0.042						
02-1-0.5	227.0	**0.644**																
02-1-1	17.6																	
02/03-5-0	192.0	0.023																
03-1-0	216.0	0.048						0.016		0.087		0.045						
03/04-5-0	194.0	0.041																

Duplexes Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
04-1-0	398.0	**0.173**						0.004		0.051		0.027						
04-1-0.5	348.0	**0.185**																
04-1-1	8.8																	
04/05-5-0	194.0																	
05-1-0	180.0	0.031			0.160	0.160		0.027		0.093		0.098						
05/06-5-0	244.0									0.380		0.190						
06-1-0	**4750.0**	**0.637**			**4.100**	4.100	0.450			0.076		0.220				0.048	0.048	
06-1-1	59.8	0.087																
06/07-5-0	196.0									0.420		0.370						
07-1-0	**1270.0**	0.121			**3.500**	3.500	0.400	0.490		0.560		0.900				0.057	0.057	
07-1-0.5	132.0	0.104			0.097	0.097				0.086		0.450						
07-1-0.5.1	46.8	0.051																
Duplex 61																		
01-1-0	331.0	0.053			**0.590**	0.590		0.039		0.210		0.170				0.030	0.030	0.070
01-1-0.5					0.320	0.320				0.350		0.170						
01/02-5-0	230.0	0.021								0.540		0.220						
01/07-5-0	113.0									0.180		0.130						
01/07-5-0.1	111.0									0.140		0.081						
02-1-0	**526.0**	**0.170**						0.200		0.590	0.110	0.630	0.100					
02-1-0.5	**489.0**	**0.375**																
02-1-1	9.8																	
02/03-5-0	310.0	0.019																
03-1-0	**7660.0**	**1.040**			0.110	0.110		0.110		0.036		0.054						
03-1-0.5	87.9	**0.234**																
03-1-1	43.9	0.048																
03/04-5-0	193.0	0.016																
04-1-0	139.0	0.045								0.017		0.011						
04/05-5-0										0.270		0.170						
05-1-0	181.0	0.024			**0.680**	0.680		0.006		0.019		0.013						
05-1-0.5										0.310		0.340						
05/06-5-0					0.160	0.160				0.160		0.130						
06-1-0	267.0	0.054						0.120		0.670	0.170	0.390						
06/07-5-0	56.0									0.041		0.053						
07-1-0	**1130.0**	**0.219**			**1.000**	1.000		0.130		0.580		0.600				**0.081**	0.081	0.080
07-1-0.5	**655.0**	**0.237**								0.410		1.200						
07-1-1	35.5	0.033																
07-1-1.1	30.0	0.019																
Duplex 63																		
01/07-5-0	144.0				0.230	0.230				0.063		0.041						
01-1/T	**494.0**									0.066		0.068						
01-1-0.5	307.0	**0.19**			0.230	**0.230**				0.077		0.098						
01-1-1	5.6																	
01-1-1																		
01/02-5-0	67.6	0.08								0.037		0.044						

Duplexes Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
02-1-0.5	**412.0**	**1.28**			0.081	**0.081**				0.100		0.086						
02-1/T	**3410.0**				**3.900**	**3.900**		0.066		1.300		**3.600**						
02-1-1	14.8																	
02-1-1																		
02-1/1	232.0				0.069	**0.069**				0.028		0.069						
02-1/2	13.4																	
02-1/3																		
02/03-5-0	131.0									0.480		0.240						
03-1/T	**3510.0**			**0.140**	**6.800**	**6.800**		0.750		1.300		0.950						
03-1-0.5	**501.0**	**0.69**			0.400	**0.400**				0.037		0.044						
03-1-1	8.2																	
03/04-5-0	105.0									0.040		0.023						
04-1-1	133.0	**0.40**								0.070		0.038						
04-1-1.1	35.0	**0.40**								0.070		0.036						
04-1/T	**3770.0**				**1.100**	**1.100**				0.150		0.140						
04-1-1.5	40.1	0.03								0.040		0.023						
04/05-5-0	**916.0**	0.08								0.330		0.170						
04/05-5-0.5	224.0	0.08																
04/05-8-0	155.0	0.04																
05-1-0	**3100.0**	**0.31**								0.230		0.320						
05-1-1	**1240.0**	**0.47**																
05-1-1.5	9.3																	
05-1-1.5.1	68.3	0.04																
05/06-5-0	158.0																	
06-1-0	**839.0**	0.05																
06-1-0.5 QA	268.0	0.03																
06-1-0.5	301.0	0.03																
07-1-0	**410.0**	0.09			0.130	0.130				0.037		0.044						
07-1-0.5	31.0	0.06																
06/07-5-0	148.0	0.03																

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.

Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken

Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken

A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

- SPLP test was not performed for sample because location was not in compliance based on total contentrations; <u>or</u> total concentration was less than total PMC <u>or</u> total concentration was less than or equal to 20 times SPLP PMC

- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance

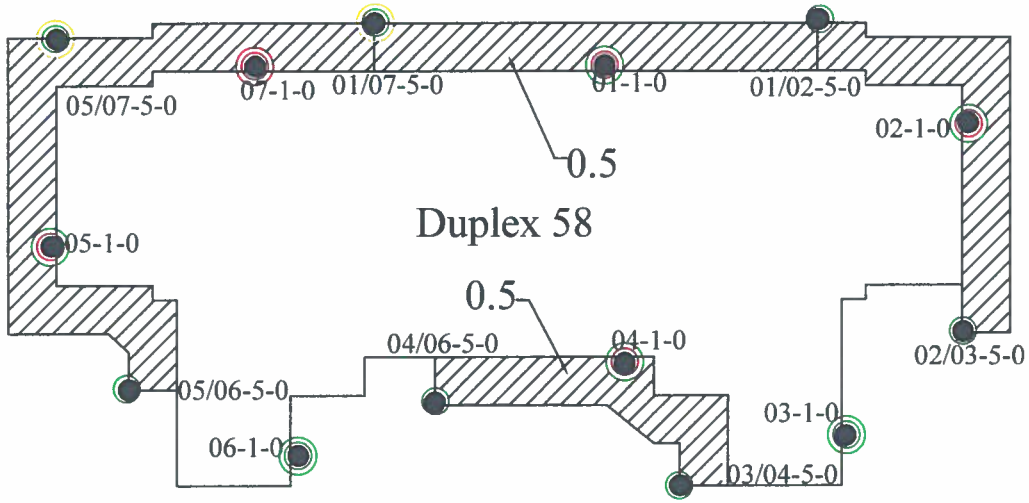
- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.

- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems

Duplexes Sampling Results																		
Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000

The detection limits for DDD, DDT, DDE, Endrin, and Heptachlor mass analyses are less than or equal to 20 times the SPLP criteria, therefore, if a mass analysis is non-detect for these compounds the PMC criteria is met.



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

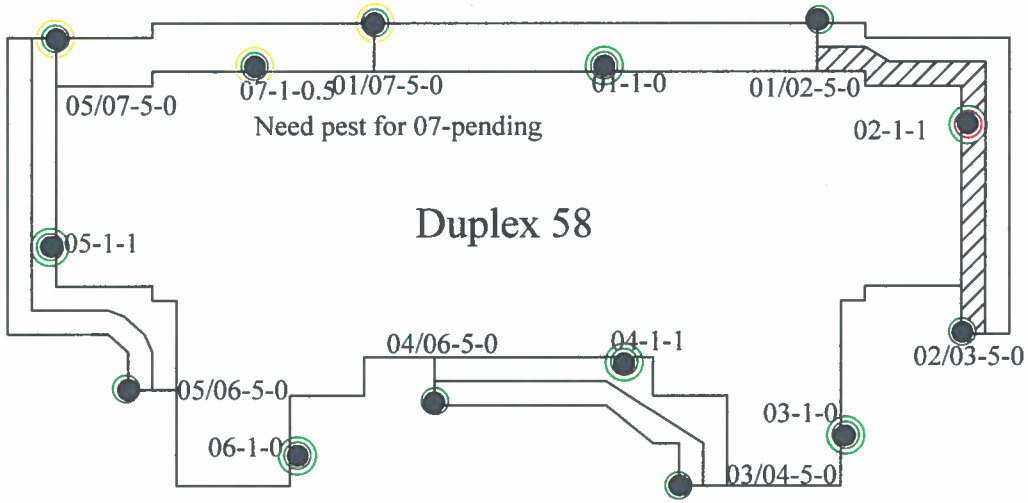
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: April 25, 2006
Project No.: 1018.WA8	File: Duplex 58 4-25-06 Remediation Figure.dwg

Duplex 58 4-25-06 Remediation Figure

Fairfield Hills Hospital - Staff House 28
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

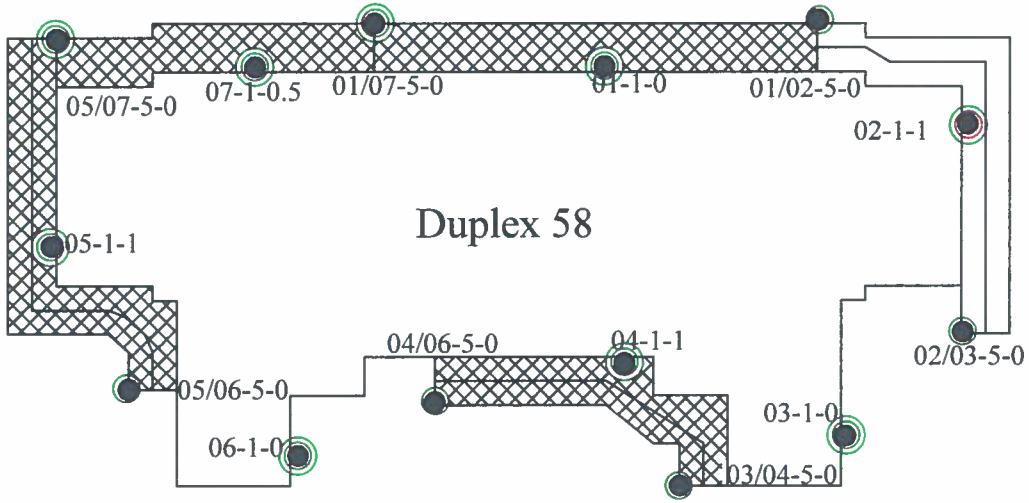
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: May 25, 2006
Project No.: 1018.WA8	File: Duplex 58 5-25-06 Remediation Figure.dwg

Duplex 58 5-25-06 Remediation Figure

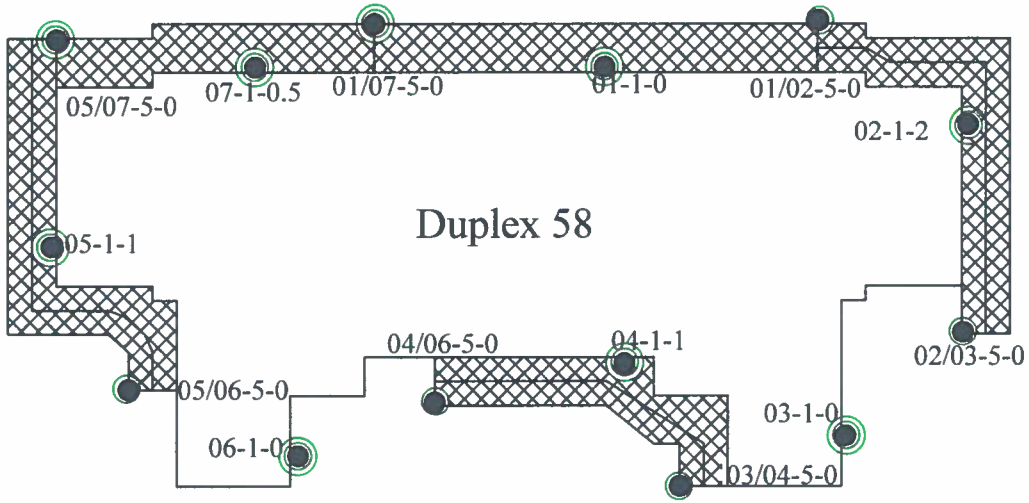
Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Duplex 58 Remediation Figure 6-5-06
Approximate Scale: 1 Inch = 20 Feet	Date: June 6, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Duplex 58 6-5-06 Remediation Figure.dwg	



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

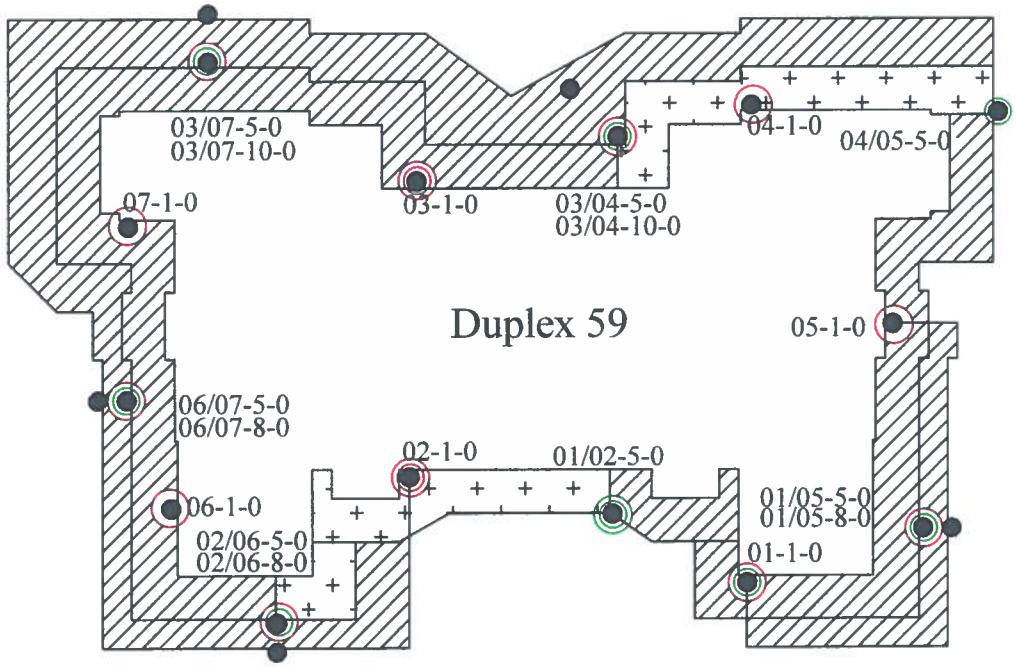
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: June 13, 2006
Project No.: 1018.WA8	File: Duplex 58 6-13-06 Remediation Figure.dwg

Duplex 58 Final Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

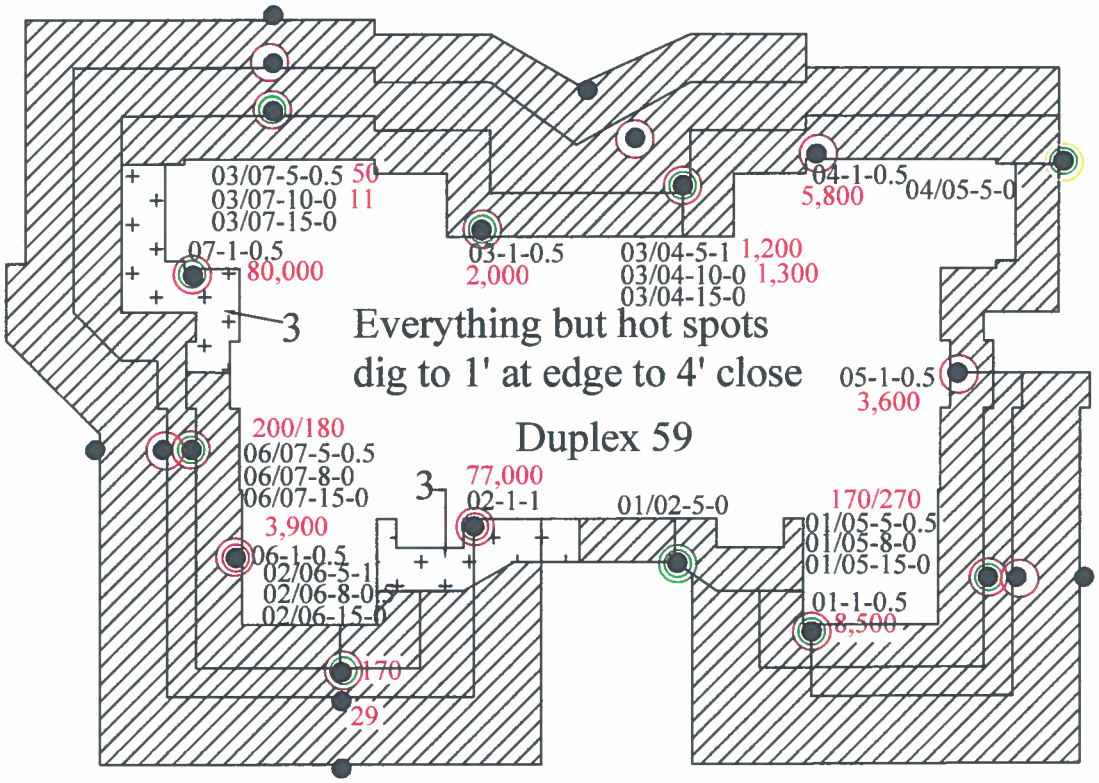
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: May 1, 2006
Project No.: 1018.WA8	File: Duplex 59 5-1-06 Remediation Figure.dwg

Duplex 5-1-09 59 Remediation Figure

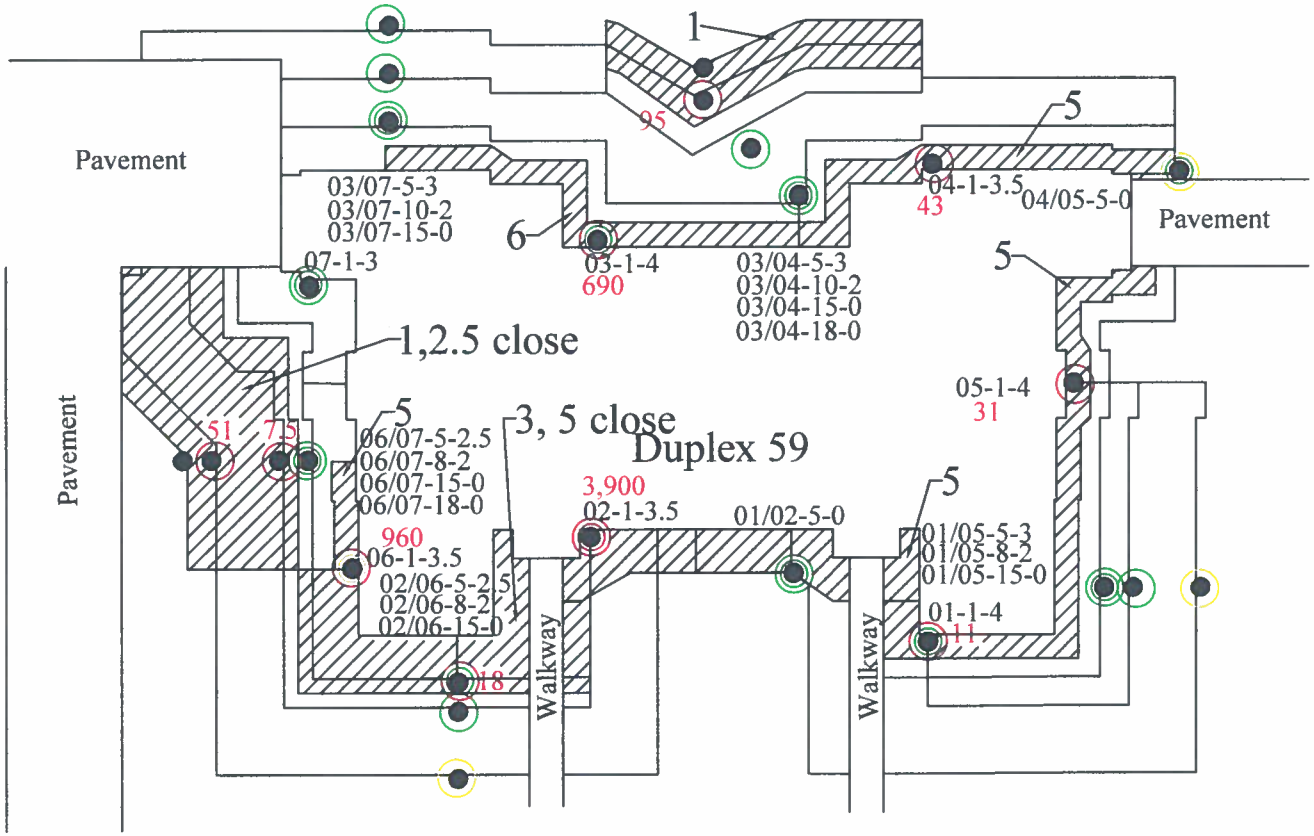
Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Duplex 59 5-9-06 Remediation Figure
Approximate Scale: 1 Inch = 20 Feet	Date: May 9, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Duplex 59 5-9-06 Remediation Figure.dwg	

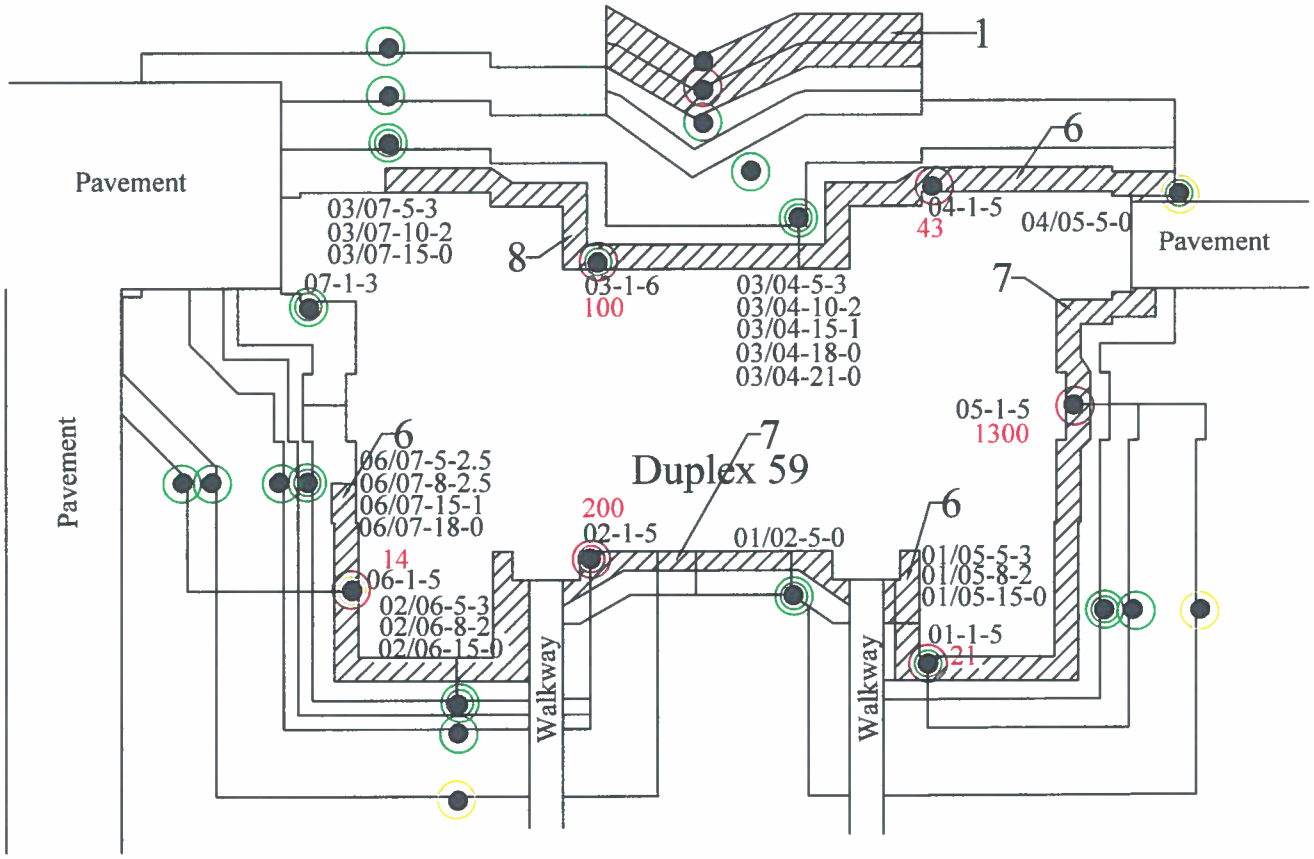


- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Duplex 59 5-31-06 Remediation Figure
Approximate Scale: 1 Inch = 20 Feet	Date: May 31, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Duplex 59 5-31-06 Remediation Figure.dwg	

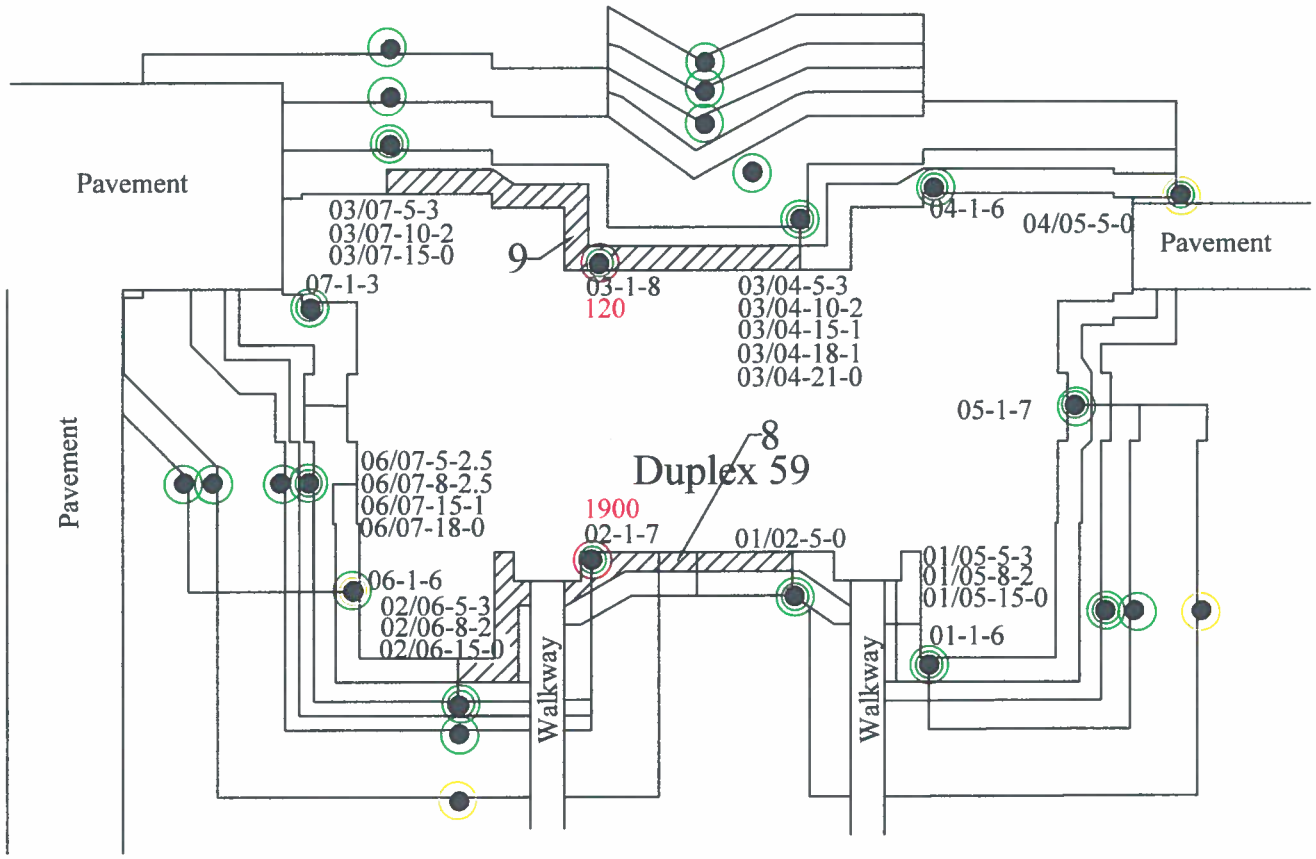


- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

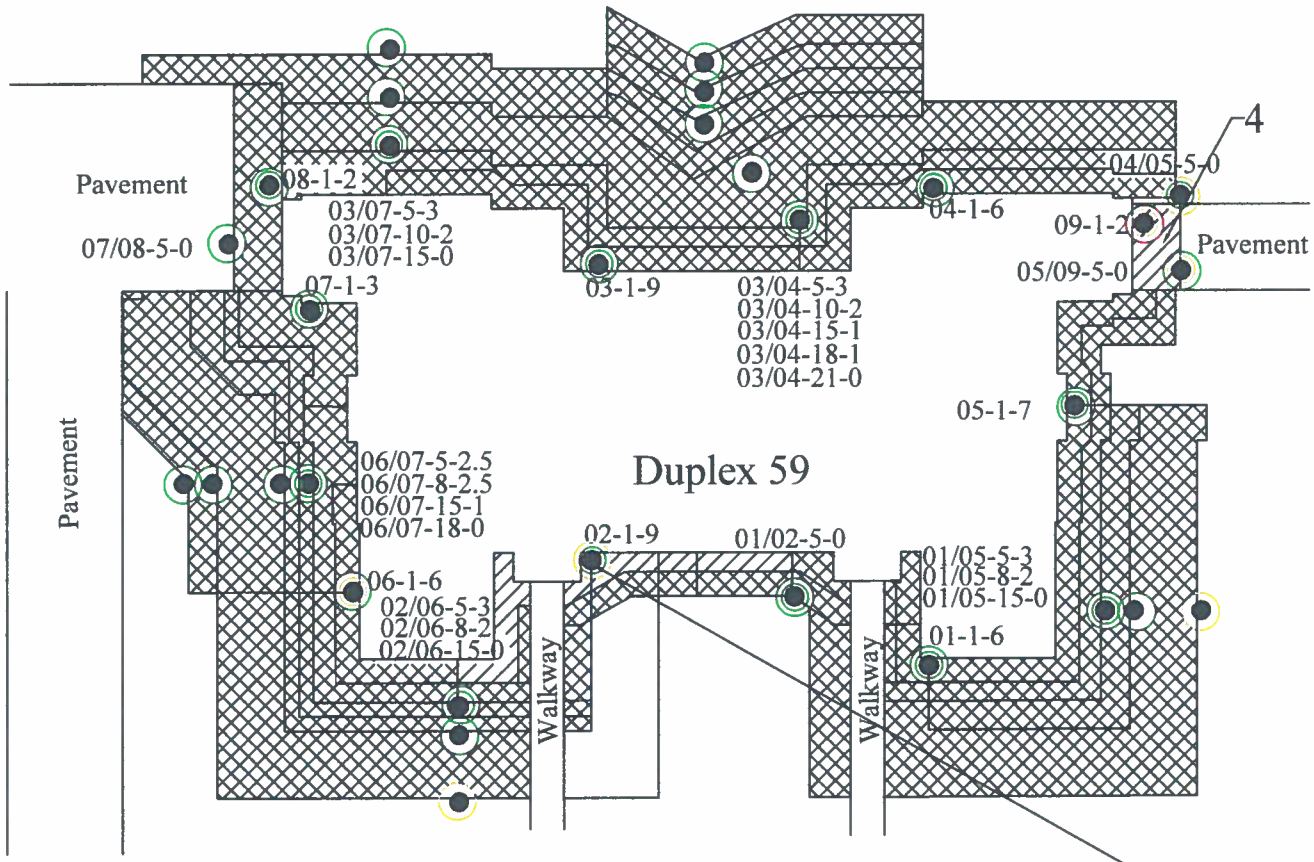
R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Duplex 59 6-12-06 Remediation Figure
Approximate Scale: 1 Inch = 20 Feet	Date: June 12, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Duplex 59 6-12-06 Remediation Figure.dwg	



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Duplex 59 6-15-06 Remediatiion
Approximate Scale: 1 Inch = 20 Feet	Date: June 15, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Duplex 59 6-15-06 Remediation Figure.dwg	



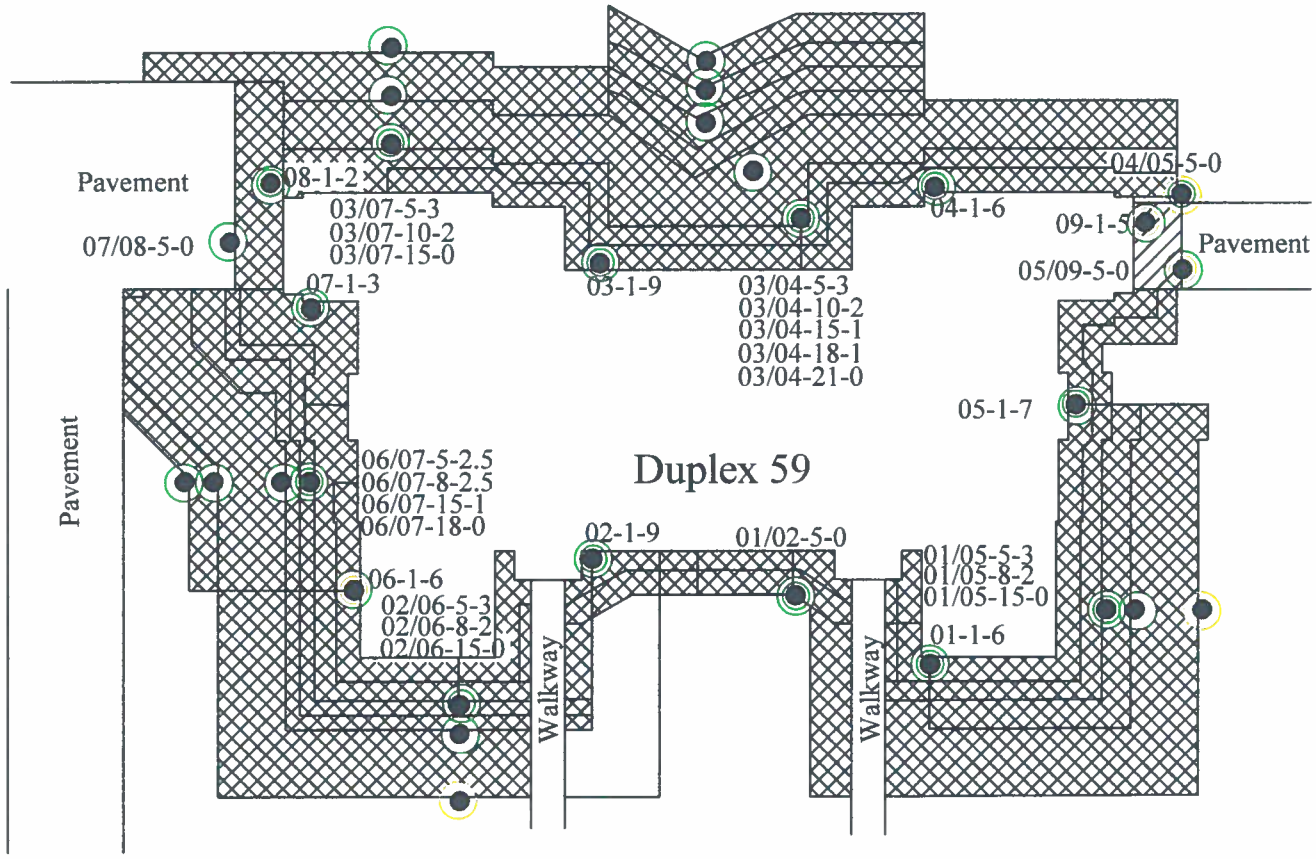
Mike, we were going to dig down at sample point then excavate the rest if passed -- all of the area should be taken down to 9' prior to backfill

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Duplex 59 6-22-06 Remediation Figure
Approximate Scale: 1 Inch = 20 Feet	Date: June 22, 2006 B	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Duplex 59 6-2-06 Remediation Figure.dwg	

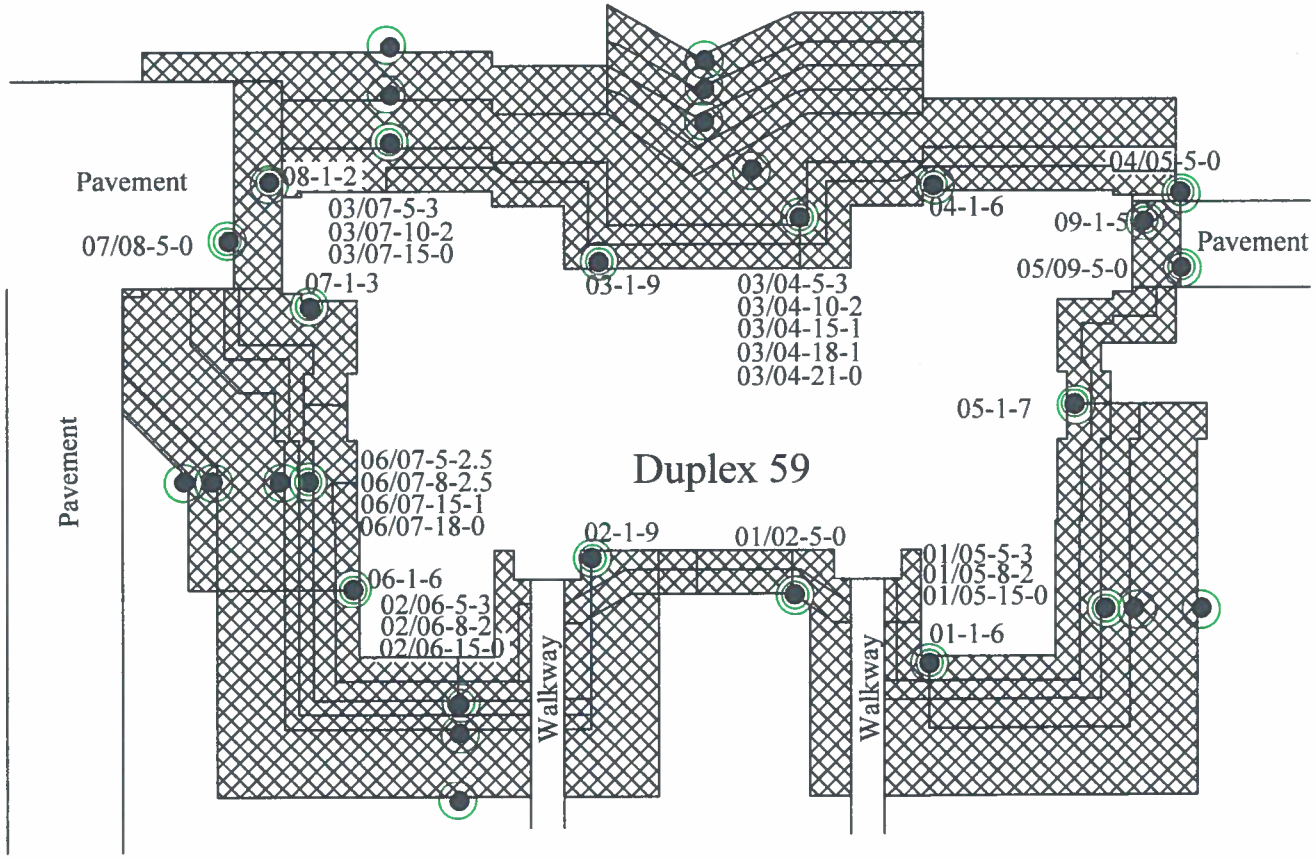


- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Duplex 59 6-27-06 Remediation Figure
Approximate Scale: 1 Inch = 20 Feet	Date: June 27, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Duplex 59 5-31-06 Remediation Figure.dwg	

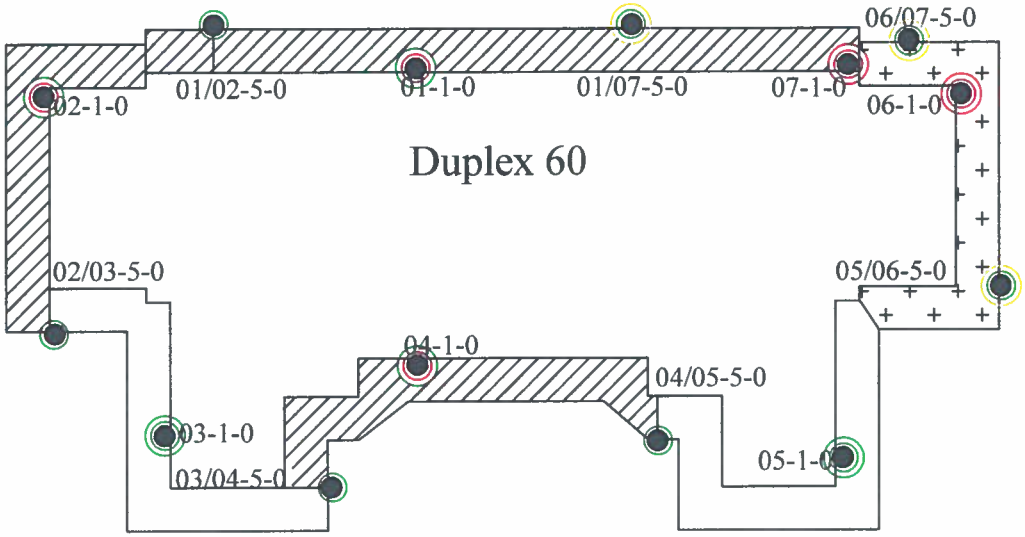


- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Duplex 59 8-2-06 Final Remediation Figure
Approximate Scale: 1 Inch = 20 Feet	Date: August 2, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Duplex 59 5-31-06 Remediation Figure.dwg	



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

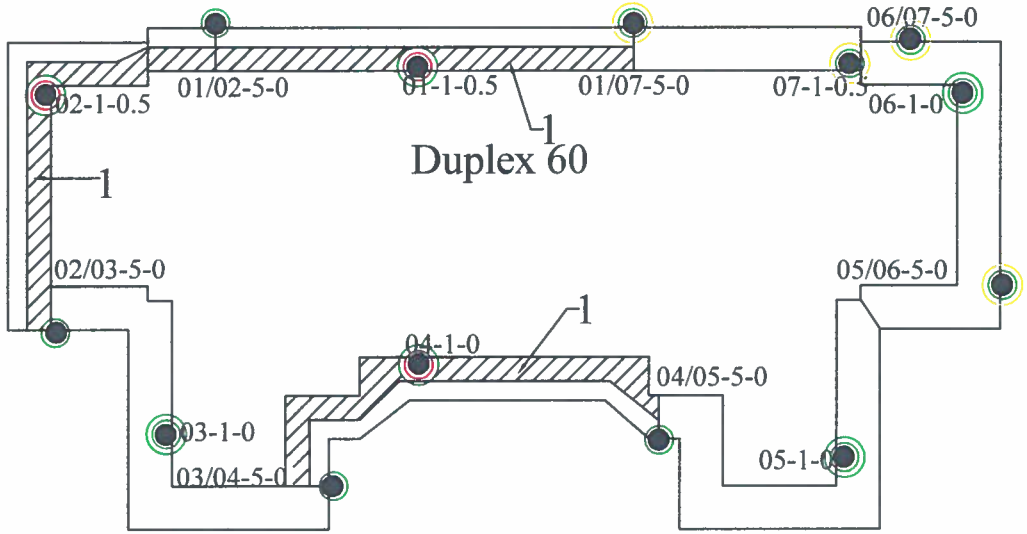
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: April 25, 2006
Project No.: 1018.WA8	File: Duplex 60 4-25-06 Remediation Figure.dwg

Duplex 60 4-25-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

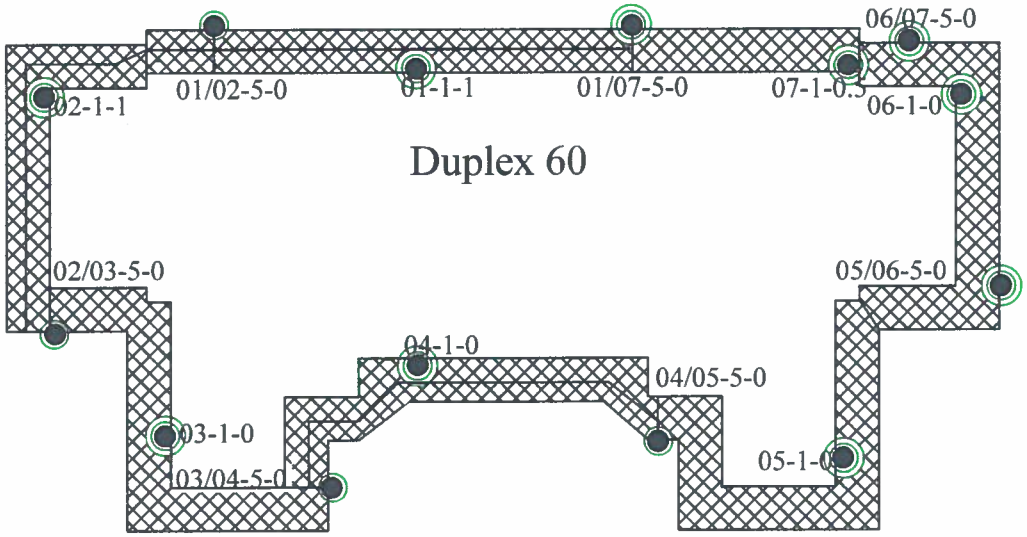
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: May 9, 2006
Project No.: 1018.WA8	File: Duplex 60 5-9-06 Remediation Figure.dwg

Duplex 60 5-9-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

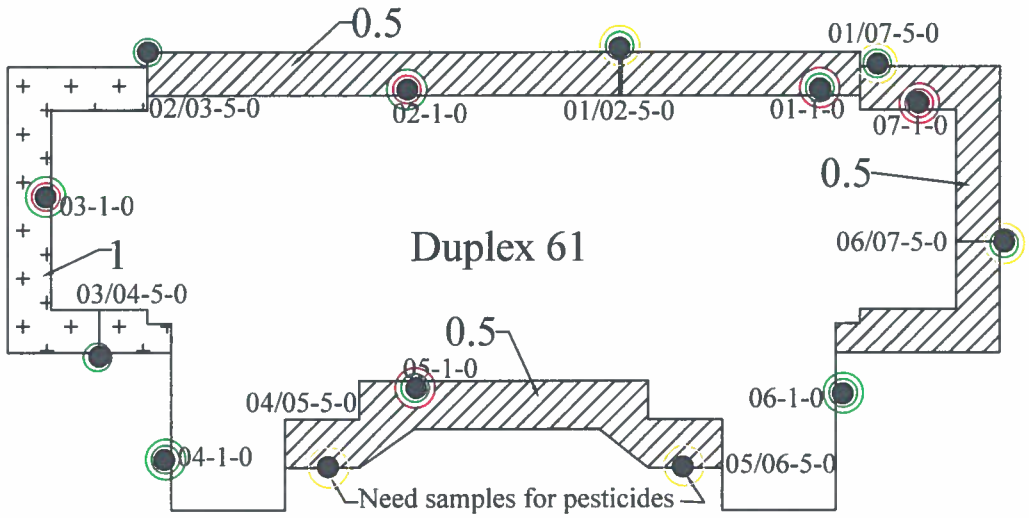
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: June 6, 2006
Project No.: 1018.WA8	File: Duplex 60 6-6-06 Remediation Figure.dwg

Duplex 60 6-6-06 Final Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

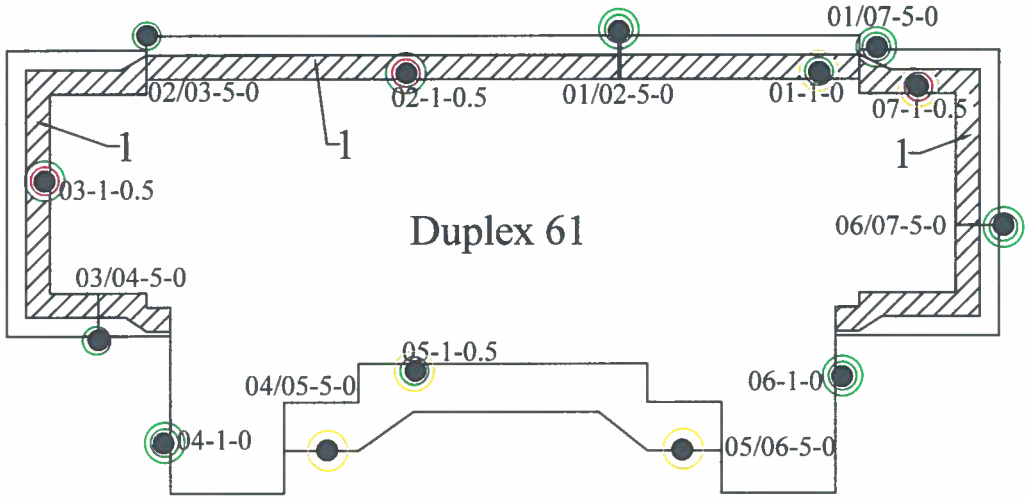
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: April 25, 2006
Project No.: 1018.WA8	File: Duplex 61 4-25-06 Remediation Figure.dwg

Duplex 61 4-25-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

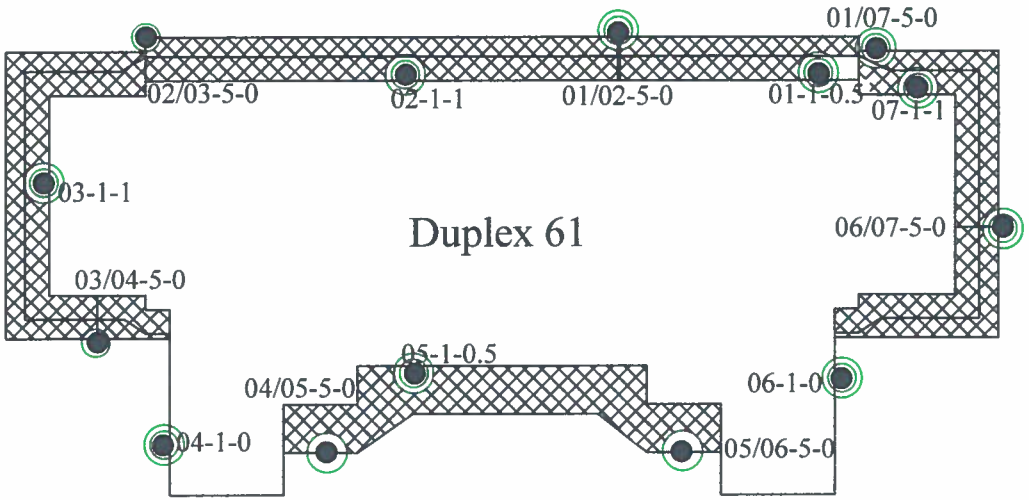
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: May 9, 2006
Project No.: 1018.WA8	File: Duplex 61 5-9-06 Remediation Figure.dwg

Duplex 61 5-9-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut

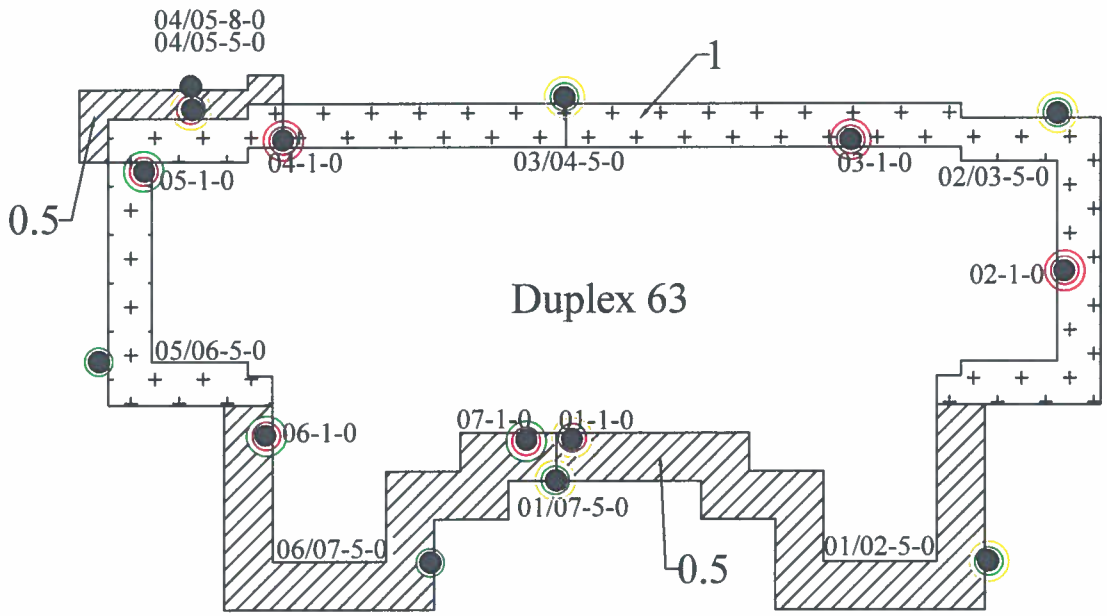


- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Duplex 61 6-6-06 Final Remediation Figure
Approximate Scale: 1 Inch = 20 Feet	Date: June 6, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File:Duplex 61 6-6-06 Final Remediation Figure.dwg	



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

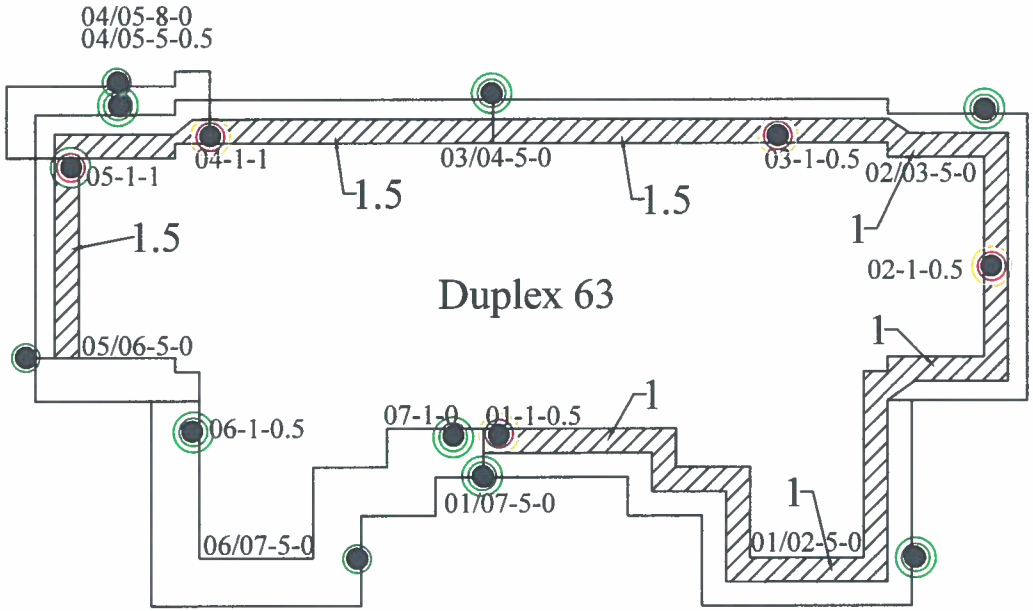
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: April 25, 2006
Project No.: 1018.WA8	File: Duplex 63 4-25-06 Remediation Figure.dwg

Duplex 63 4-25-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

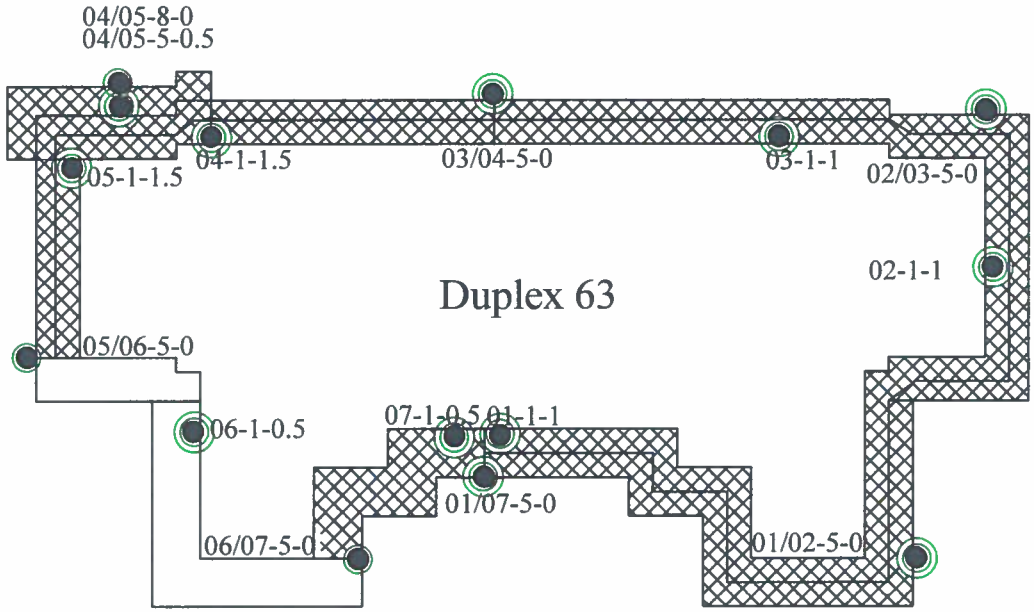
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: May 9, 2006
Project No.: 1018.WA8	File: Duplex 63 5-9-06 Remediation Figure.dwg

Duplex 63 5-9-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: June 15, 2006
Project No.: 1018.WA8	File: Duplex 63 6-15-06 Remediation Figure.dwg

Duplex 63 6-15-06 Final Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut

ENGINEERS COTTAGE

SFH28 (Engineer's Cottage) Sampling Results

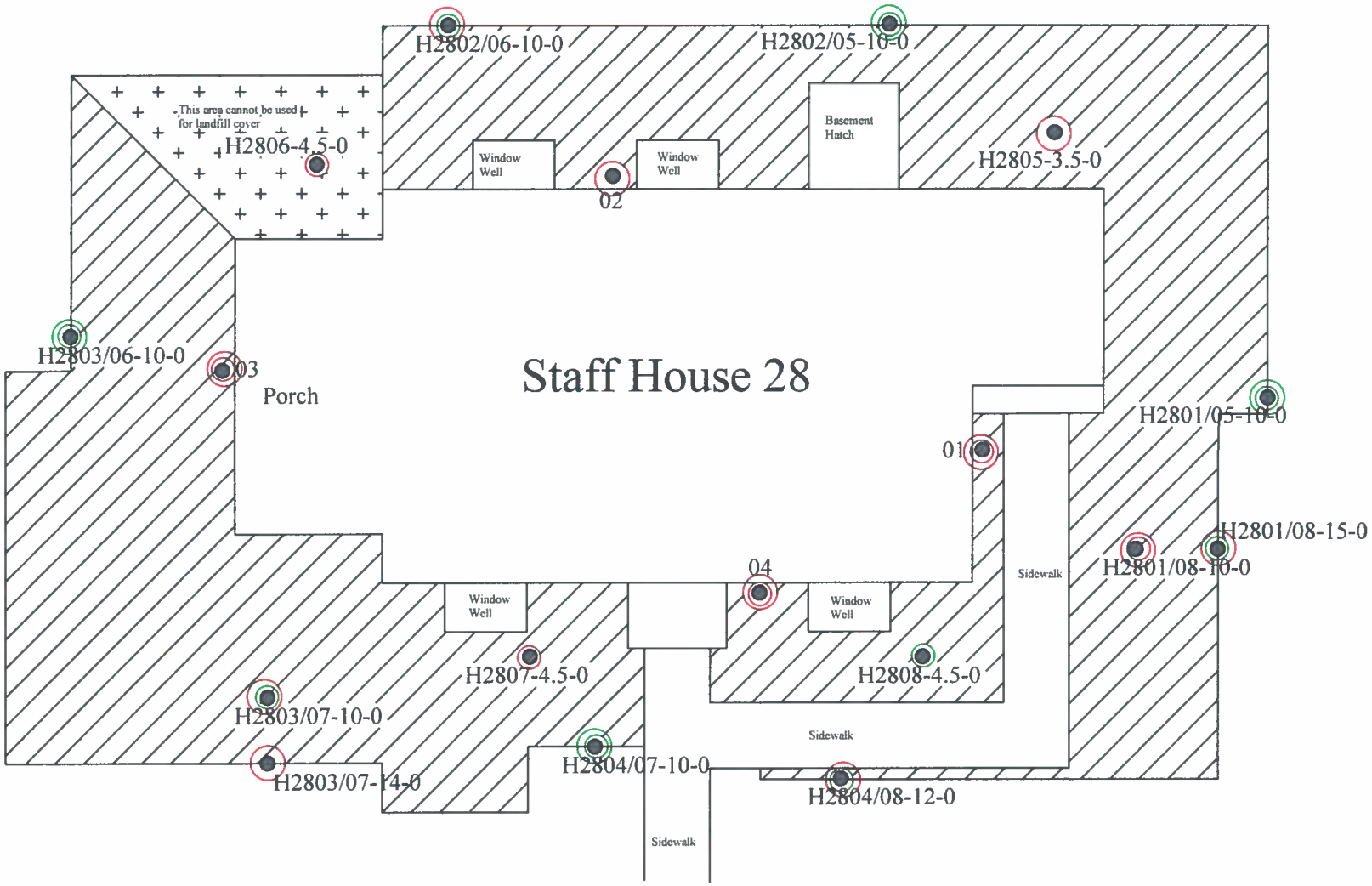
Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
H28 01-1-0	1020	0.228			8.400	8.400	0.730									0.071	0.071	
H28 01-1-1.5	7																	
H28 01/05-10-0	71									0.310		0.180						
H28 05-3.5-0	228			0.039				0.058		1.300		1.900						
H28 05-3.5-2	9											0.022						
H28 05-3.5-2.1	8																	
H28 02/05-10-0	83									0.470		0.170						
H28 02/05-10-0R																		
H28 02-1-0				0.015	2.500	2.500		0.083		0.067		0.037						
H28 02-1-2	7																	
H28 02/06-10-0	78									0.890	0.100	0.650						
H28 02/06-10-0.1	112									1.000	0.320	0.700	0.200					
H28 02/06-10-1										0.027								
H28 02/06-12-0										0.730		0.450						
H28 06-4.5-0	3400	0.041			0.280	0.280				0.660		0.270						
H28 06-4.5-2	2																	
H28 03/06-10-0	52									0.440		0.150						
H28 03-1-0	1270	0.248			1.800	1.800		0.043		0.560		0.480						
H28 03-1-2	4																	
H28 03/07-10-0	99				0.810	0.810		0.066		3.200		4.600				0.035	0.035	
H28 03/07-10-1																		
H28 03/07-14-0					0.420	0.420				1.600	0.200	2.600	0.240					
H28 03/07-14-1																		
H28 03/07-16-0										1.000		1.500						
H28 07-4.5-0	478																	
H28 07-4.5-1	9																	
H28 04/07-10-0	115				0.450	0.450		0.039		1.700		1.800						
H28 04-1-0	1040	0.283			0.500	0.500		0.017		0.440		0.350						
H28 04-1-2	6																	
H28 04/08-12-0	111				0.370	0.370				1.900	0.580	0.900	0.190			0.027	0.027	
H28 04/08-12-1																		
H28 04/08-14-0										1.500	0.390	0.730	0.240					
H28 04/08-14-1																		
H28 04/08-16-0					0.180					0.560		0.360						
H28 08-4.5-0	193	0.015			0.120	0.120				0.290		0.220						
H28 08-4.5-2																		
H28 01/08-10-0	165	0.035			1.300	1.300				1.800		2.100				0.062	0.062	
H28 01/08-10-1	7																	
H28 01/08-15-0	47				1.300	1.300	0.360			1.400	0.180	1.500	1.120			0.084	0.084	
H28 01/08-15-1										0.046		0.042						
H28 01/08-17-0										1.700	0.160	1.100	0.110			0.084	0.084	
H28 04/08-17-1																		
H28 01/08-19-0										0.300		0.270						

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.
Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken
Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken
A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31	- not bold number - sample result of indicated chemical that is less than applicable criterion
0.68	- bold number - sample result of indicated chemical that is greater than applicable criterion
	- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion
0.250	- sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion
	- SPLP test was not performed for sample because location was not in compliance based on total contentrations; **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC
	- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance
	- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.
	- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required

Legend

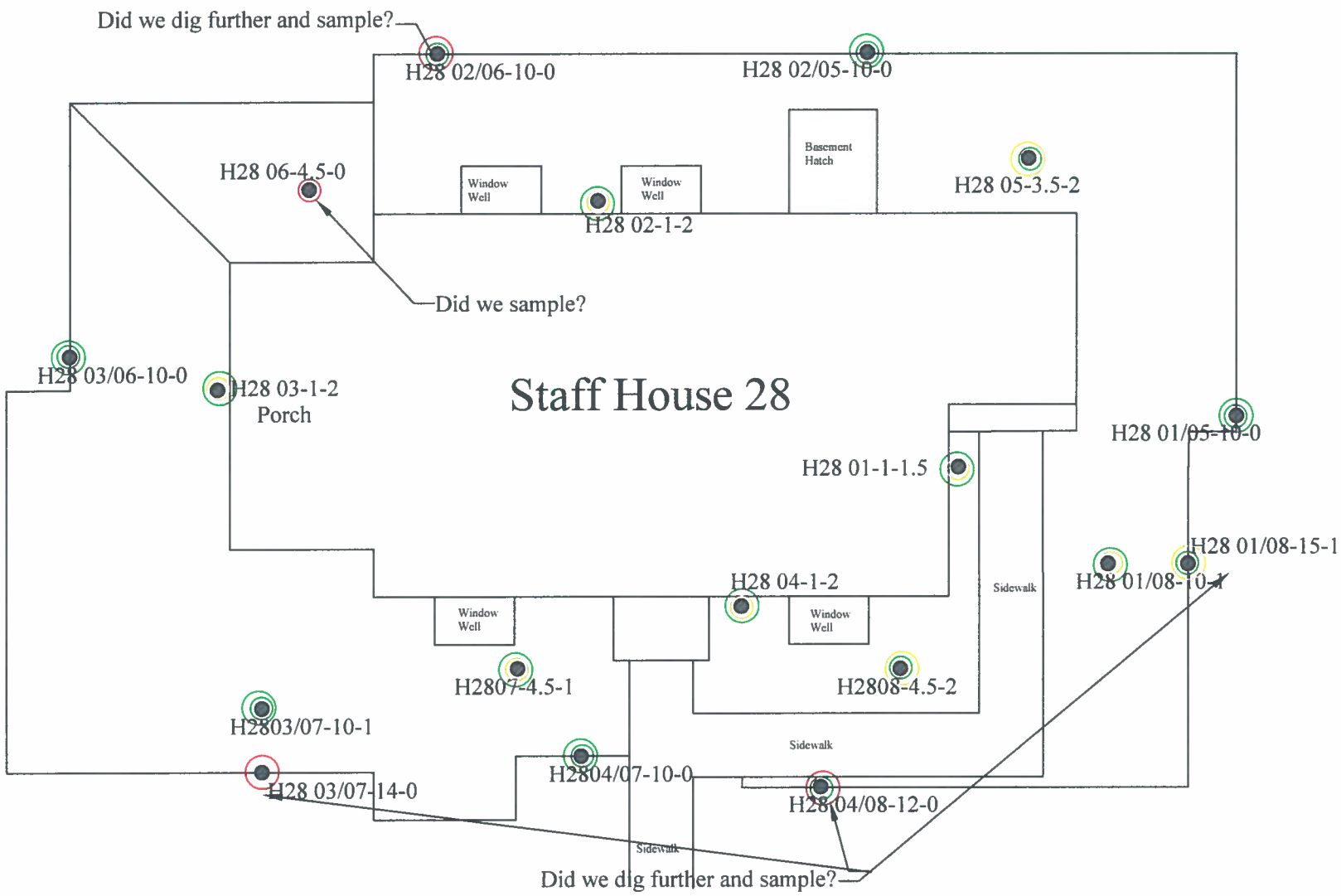
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: December 2005
Project No.: 1018.WA8	File: Staff House 28 Remediation.dwg

Staff House 28 Remediation-12-2005

Fairfield Hills Hospital - Staff House 28
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required

Legend

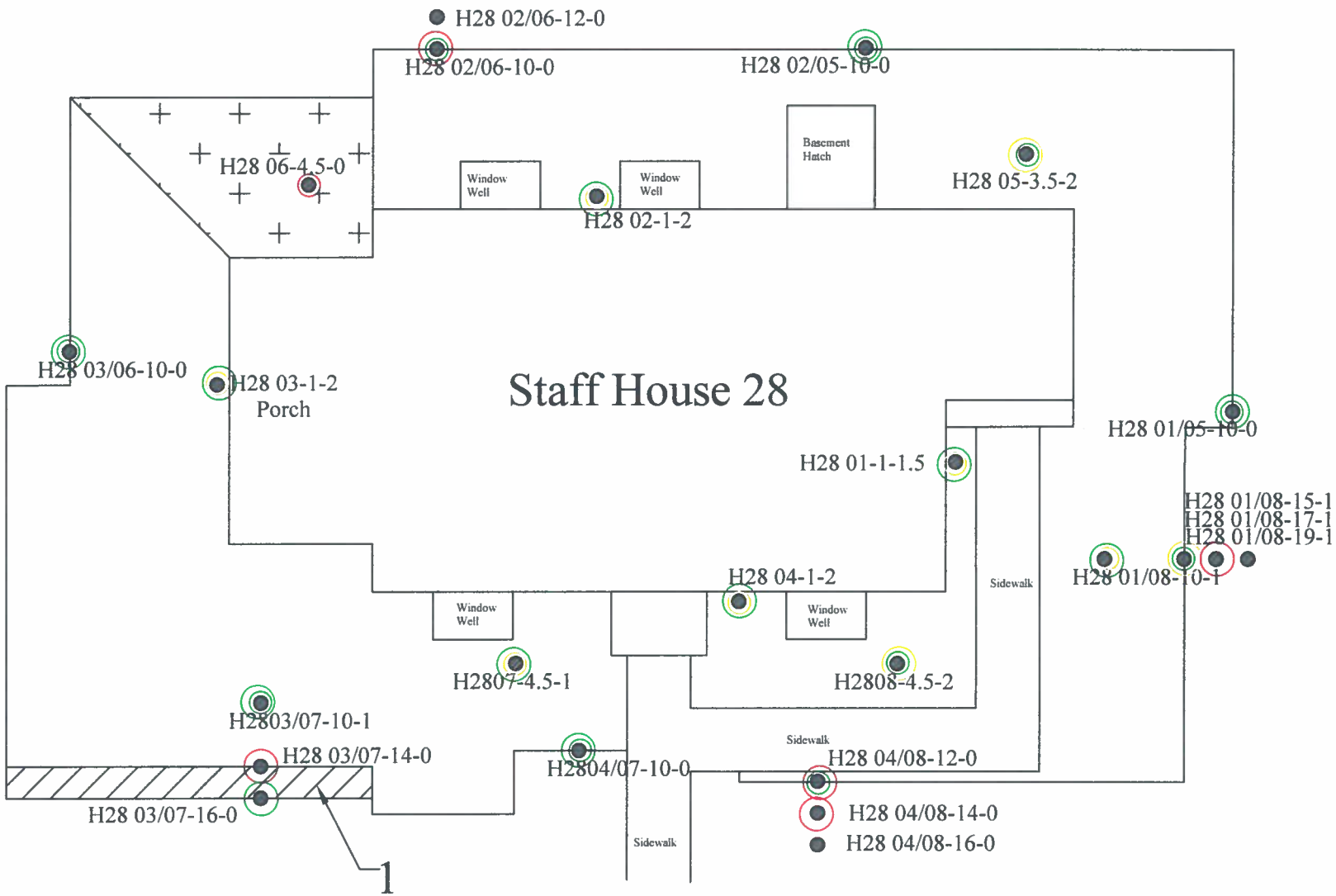
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: April 4, 2006
Project No.: 1018.WA8	File: Staff House 28 4-4-06 Remediation Figure.dwg

Staff House 28 4-4-06 Remediation

Fairfield Hills Hospital - Staff House 28
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required

Legend

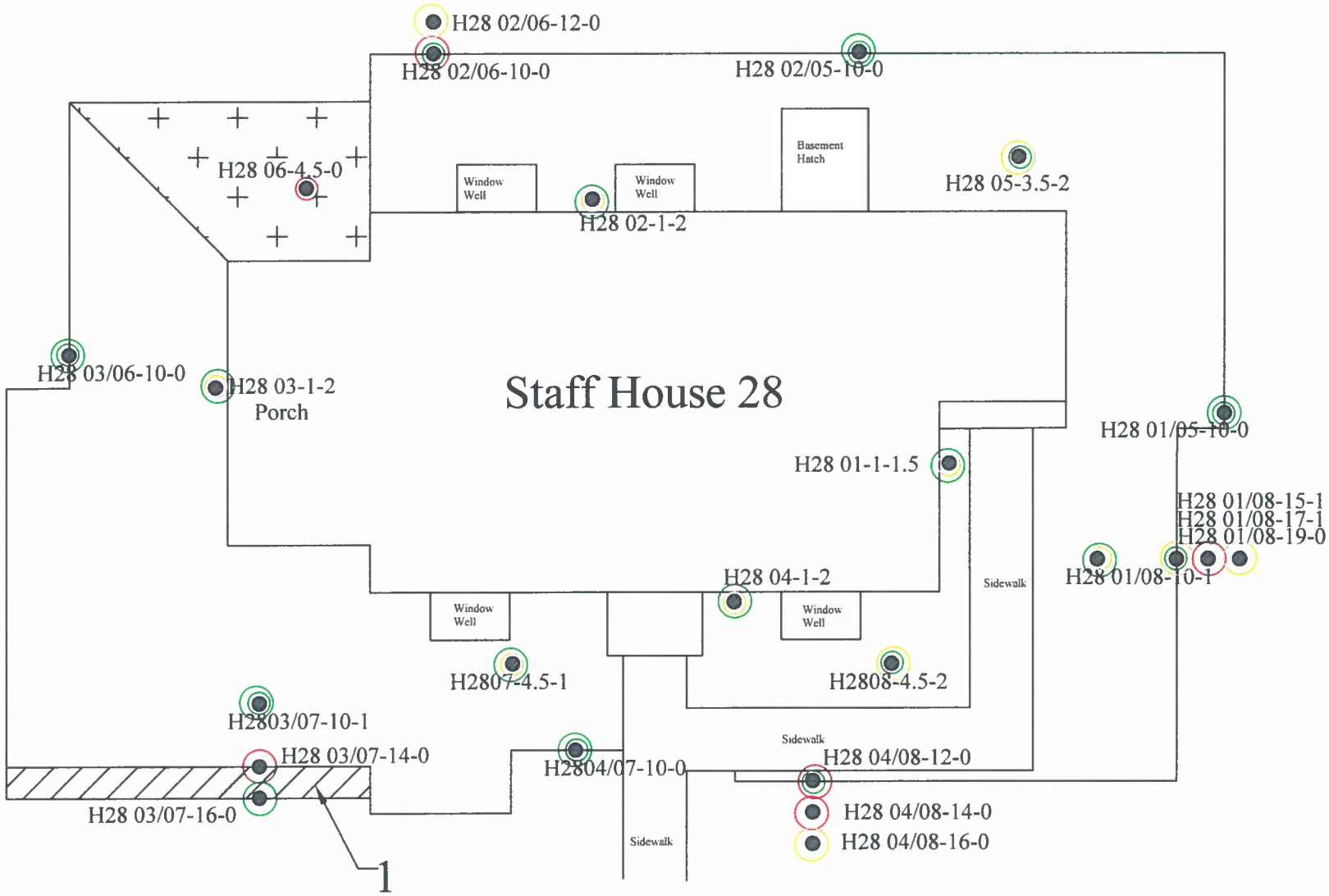
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: April 4, 2006
Project No.: 1018.WA8	File: Staff House 28 4-4-06 Remediation Figure.dwg

Staff House 28 4-5-06 Remediation

Fairfield Hills Hospital - Staff House 28
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required

Legend

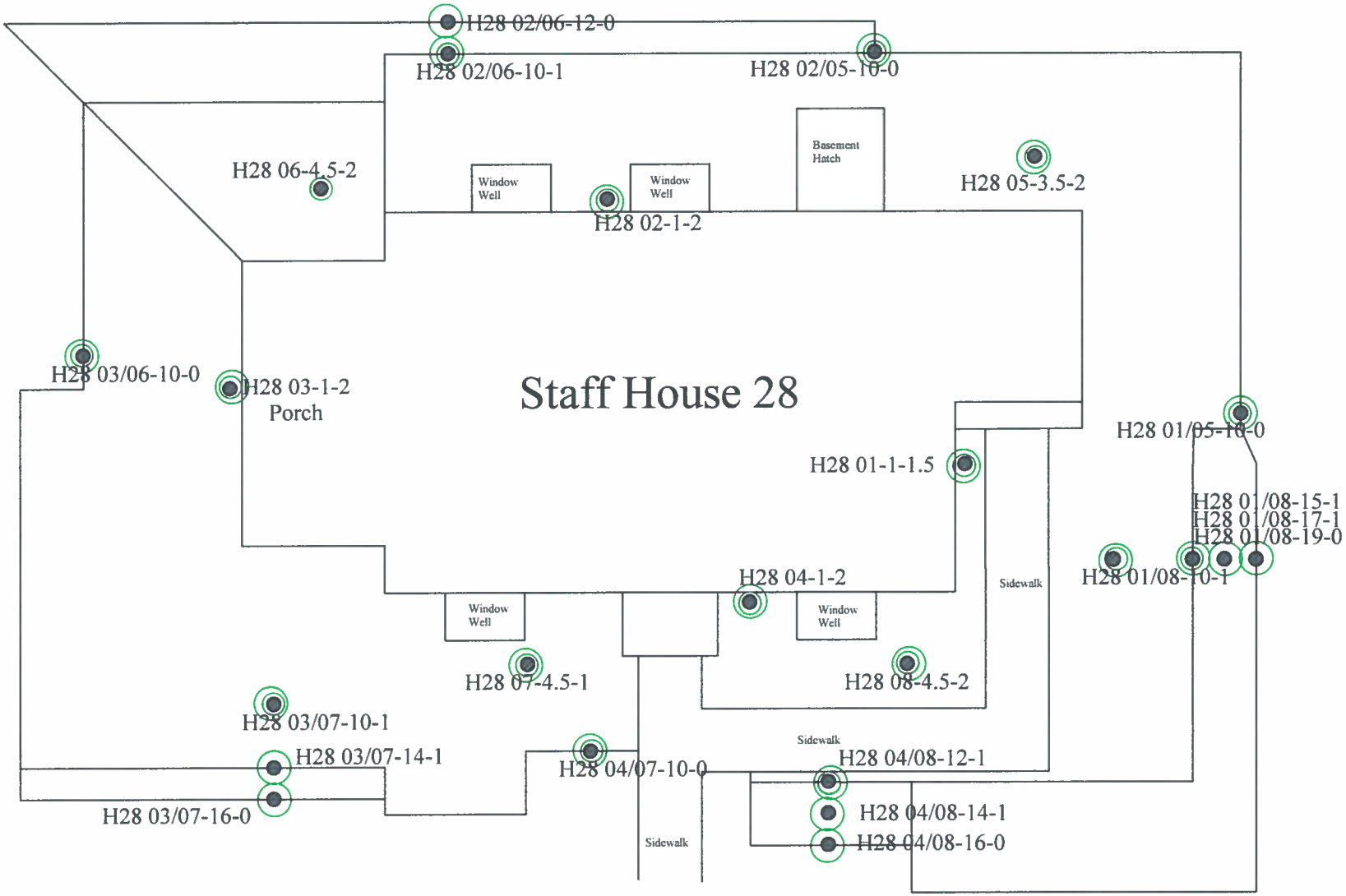
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: April 6, 2006
Project No.: 1018.WA8	File: Staff House 28 4-4-06 Remediation Figure.dwg

Staff House 28 4-6-06 Remediation

Fairfield Hills Hospital - Staff House 28
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required

Legend

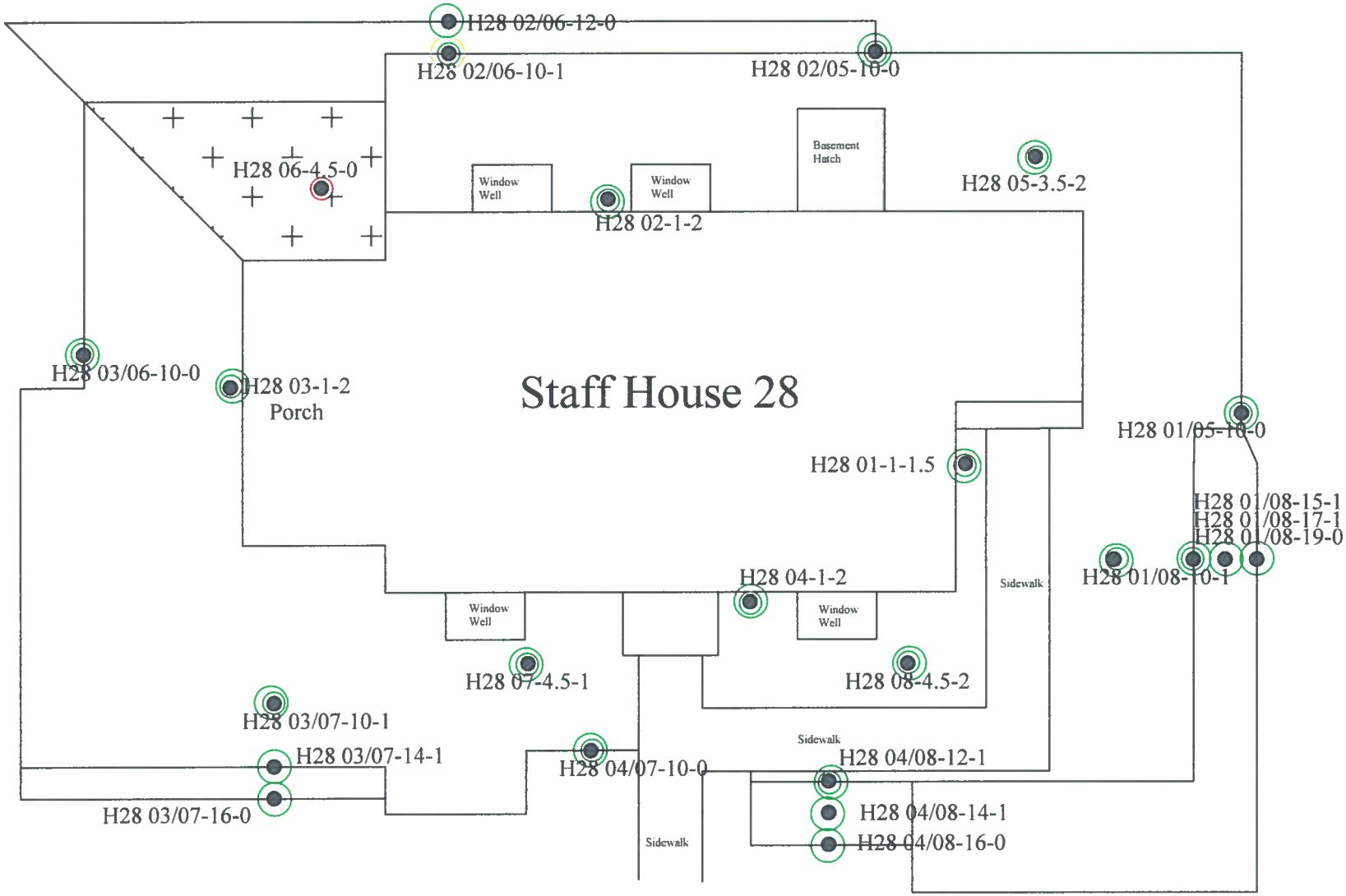
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: April 12, 2006
Project No.: 1018.WA8	File: Staff House 28 4-4-06 Remediation Figure.dwg

Staff House 28 Remediation 4-12-06

Fairfield Hills Hospital - Staff House 28
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required

Legend

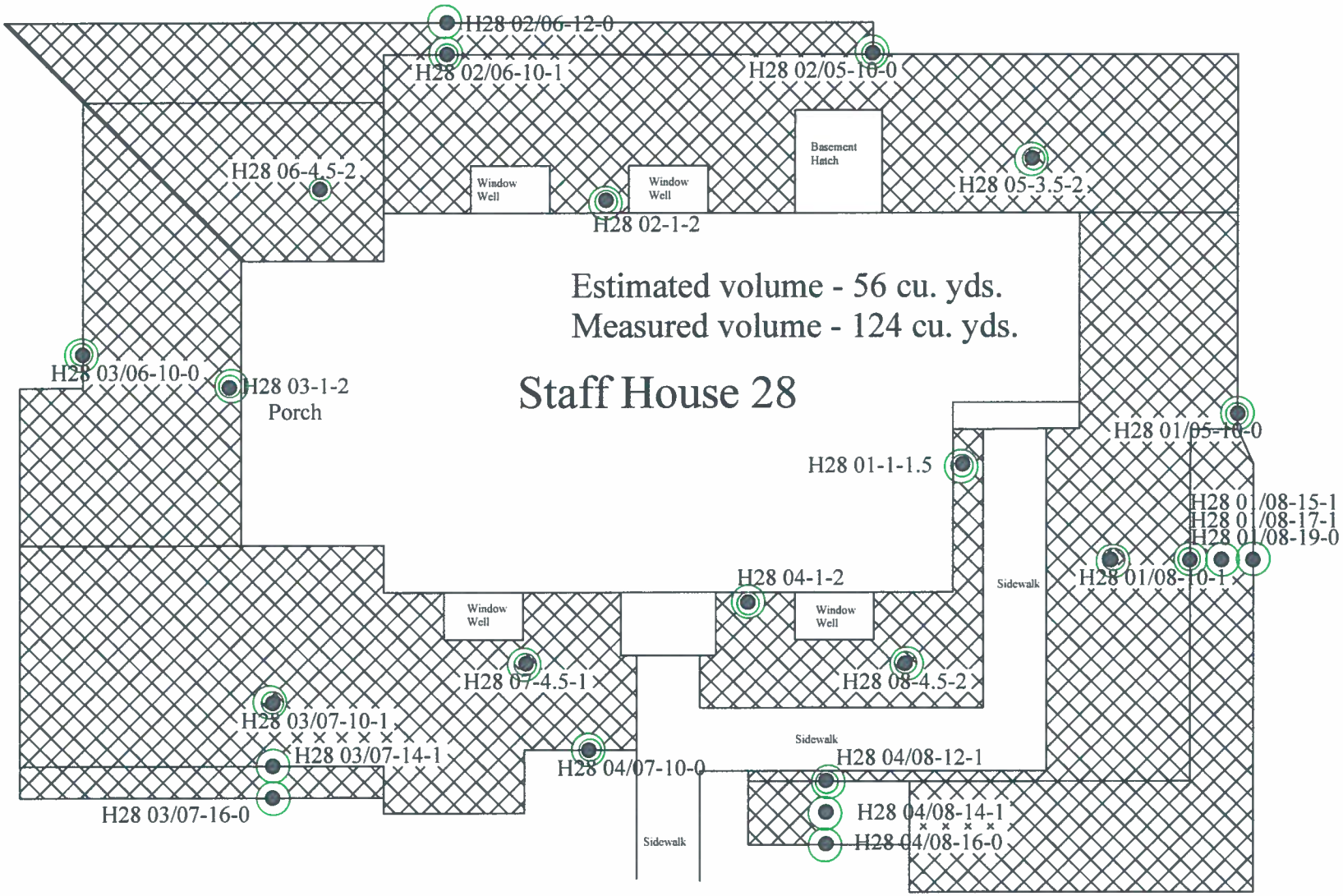
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: April 17, 2006
Project No.: 1018.WA8	File: Staff House 28 4-4-06 Remediation Figure.dwg

Staff House 28 4-17-06 Remediation

Fairfield Hills Hospital - Staff House 28
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

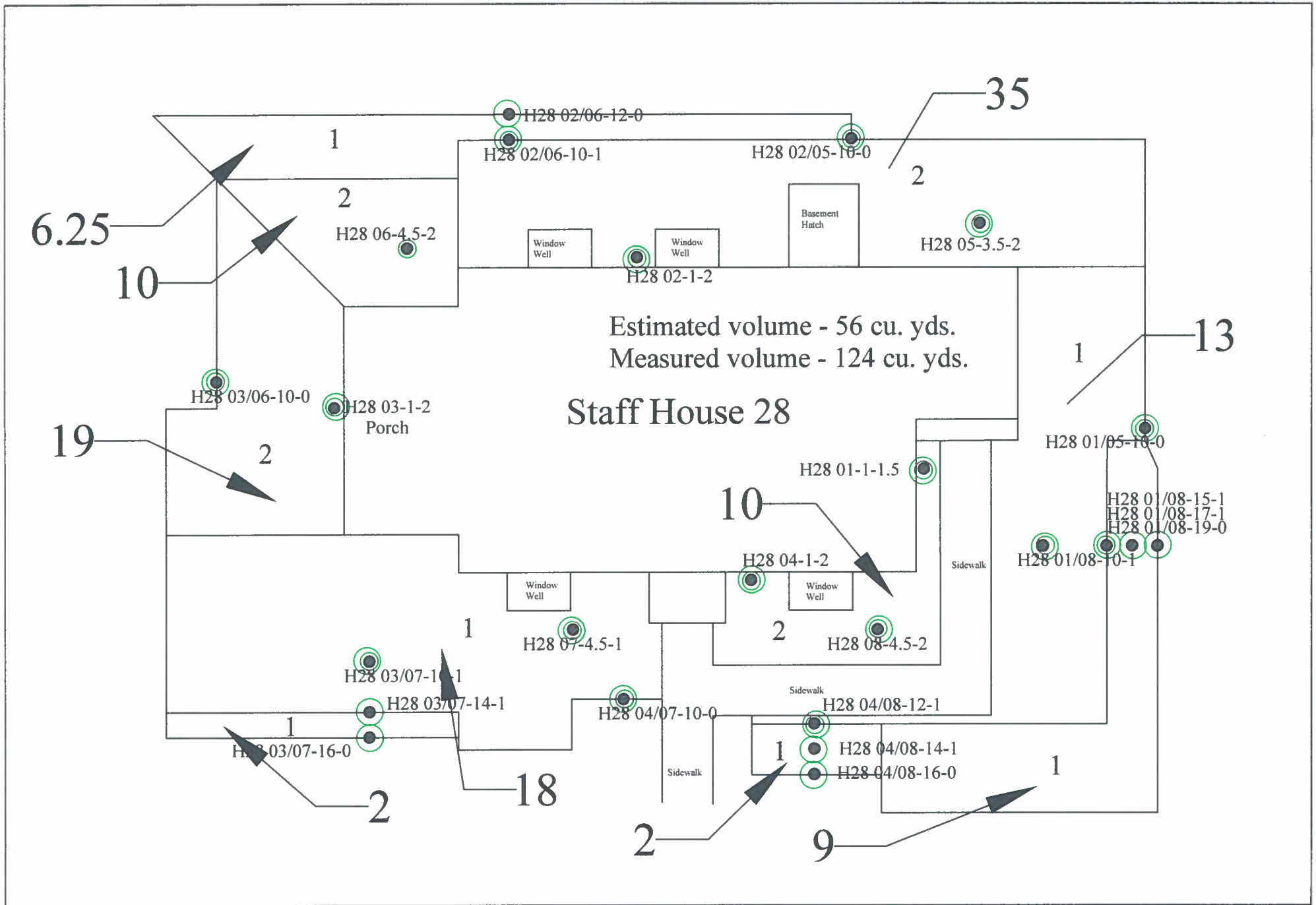
- Sampling location
- Final excavation area

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: April 26, 2006
Project No.: 1018.WA8	File: Staff House 28 Excavation Volumes.dwg

Engineers Cottage Remediation

Fairfield Hills Hospital - Staff House 28
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

- Sampling location
- 13 - Volume for specified area in cubic yards
- 13 - depth

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: April 26, 2006
Project No.: 1018.WA8	File: Staff House 28 Excavation Volumes.dwg

Staff House 28 Excavation Depths/Volumes

Fairfield Hills Hospital - Staff House 28
Wesserman Way
Newtown, Connecticut

FAIRFIELD BUILDING

Fairfield Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
F1-1-0	**1940.0**		**5.500**	**53.000**						0.200		0.490						
F1-1-1			**3.100**	**31.000**						0.033				0.150				
F1-1-4	6.5		**0.025**	**1.900**														
F01-1-6				**0.016**														
F01-1-6.1				**0.025**														
F01-1-8																		
F1-10-0	47.0																	
F01/02-5-0	133.0	0.018		**0.040**						0.048		0.022						
F01/02-5-4				**0.008**														
F01/02-5-6																		
F01/02-10-0	109.0																	
F2-1-0	**536.0**		**0.076**	**0.670**						0.160		0.100						
F2-1-4																		
F02/18-5-0	62.3	0.118	**0.017**	**0.360**						0.046		0.020						
F02/18-5-4																		
F02/18-10-0				**0.016**						0.023								
F02/18-10-2																		
F02/18-13-0																		
F18-1-0	202.0	0.082	**3.300**	**70.000**				0.023		0.081		0.120		0.320				
F18-1-4	16.4			**0.033**														
F18-1-5																		
F03/18-5-0	68.5			**0.037**						0.044		0.180						
F03/18-5-4			**0.071**	**0.026**														
F03/18-5-6																		
F03/18-10-0										0.058		0.069						
F03/18-10-1																		
F03/18-13-0																		
F3-1-0	**635.0**		**3.500**	**2.200**						0.340		0.320						
F3-1-4	4.9		**0.015**	**0.033**														
F3-1-6																		
F04/22-5-0	114.0	0.021	**0.030**	**0.760**														
F04/22-5-4																		
F04/22-8-0	7.2	0.019																
F04/22-8-0.1	9.9	0.025		**0.017**														
F04/22-8-0.5																		
F04/22-8-0.5.1																		
F04/22-12-0			**0.020**	**0.340**						0.270								
F04/22-12-1																		
F04/22-12-0.5				**0.067**														
F04/22-17-0				**0.120**														
F04/22-17-1																		
F04/22-22-0				**0.029**														
F04/22-22-1																		
F04/22-27-0			**0.012**	**0.370**														
F04/22-27-1																		
F04/22-32-0				**0.008**														
F04/22-32-1				**0.028**														
F04/22-32-1.5																		
F04/22-37-0																		
F4-1-0	**512.0**		**2.700**	**19.000**						0.067		0.140						
F4-1-1			**2.500**	**4.500**										0.057				
F04-1-4	7.8			**0.015**														
F04-1-6																		
F04/21-5-0	286.0	0.024	**0.011**	**0.340**														

Fairfield Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
F04/21-5-4																		
F04/21-8-0	8.3																	
F5-1-0	393.0		0.019	0.520														
F05-1-5	3.9																	
F05/16-5-0	114.0			0.011														
F05/16-5-5																		
F05/16-12-0																		
F16-1-0				0.064														
F16-1-5	2.8			0.015														
F16-1-7				0.039														
F16-1-9																		
F16-10-0	97.4																	
F14/16-10-0	32.3																	
F14-1-0										0.120		0.037						
F14-1-0			0.030	0.540						0.022								
F14-1-4	4.1			0.760														
F14-1-12																		
F06/14-5-0	22.2																	
F6-1-0	486.0	0.047																
F6-1-0	111.0	0.069																
F15-1-0	142.0	0.030																
F07/15-5-0	35.0																	
F7-1-0	348.0		0.160	4.000								0.039						
F7-1-4																		
F07/20-5-0	50.1	0.018	0.017	0.350														
F07/20-5-4																		
F07/20-10-2																		
F07/20-12-0			0.029	0.430														
F07/20-12-2																		
F07/20-15-0				0.074														
F07/20-15-1																		
F07/20-17-0				0.015														
F07/20-17-2																		
F07/20-19-0				0.009														
F07/20-19-1																		
F07/20-20-0																		
F20-1-0	435.0		1.200	22.000										0.120				
F20-1-2	4.5		0.024	0.220														
F20-1-6																		
F12/20-5-0	129.0			0.047														
F12/20-5-3																		
F12/20-10-0	41.9																	
F12/20-10-0.1	29.6																	
F12/20-15-0																		
F12-1-0	2190.0		0.470	8.600						0.081		0.140						
F12-1-4	4.5		0.039	0.021														
F12-1-6				0.290														
F12-1-6.1				0.340														
F12-1-9																		
F12-10-0	54.0																	
F12-10-2																		
F12-15-0				0.021														
F12-15-2																		
F12-15-4	1.7																	

Fairfield Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
F12-17-0	29.7			**0.015**														
F12-17-1																		
F12-22-0																		
F12-15-1.5																		
F11/12-5-0	38.5			**0.010**														
F11/12-5-0.1	38.8			**0.010**														
F11/12-5-4			**0.073**	**0.030**														
F11/12-5-6																		
F11/12-10-0																		
F11-10-0	30.0																	
F11-1-4	3.2		**0.530**	**0.310**														
F11-1-6				**0.120**														
F11-1-9																		
F10-1-4	6.0			**0.092**														
F10-1-6																		
F10/11-5-0	59.0			**0.013**														
F10/11-5-4																		
F10/11-10-0																		
F09/10-5-0	213.0	0.023	**0.014**	**0.072**														
F09/10-5-4																		
F09/10-10-0																		
F9-1-0	**553.0**		**0.081**	**0.890**								0.048						
F9-1-4	3.0		**6.200**	**2.600**														
F9-1-6			**0.037**	**0.760**														
F9-1-8			**0.011**	**0.089**														
F9-1-10				**0.034**														
F9-1-12																		
F08/09-5-0	74.2			**0.019**														
F08/09-5-2			**0.043**	**0.042**														
F08/09-5-5			**0.480**	**0.200**														
F08/09-5-6			**0.280**	**0.270**														
F08/09-5-7																		
F08/09-10-0	23.7																	
F8-1-0	**1710.0**		**2.200**	**31.000**						0.130		0.320						
F8-1-1			**0.240**	**5.000**														
F8-1-3	5.7			**0.520**														
F8-1-5				**0.078**														
F8-1-7																		
F8-10-0	72.0			**0.036**						0.063		0.056						
F08-10-2	6.7																	
F08-12-0																		
F08/19-5-0	159.0	0.028								0.037								
F19-1-0	220.0			**0.011**						0.077		0.068						
F19-1-2.5	4.3																	
F17/19-5-0	221.0	0.043																
F17-1-0	**521.0**									0.064		0.049						
F17-1-3	5.7																	
F13/17-5-0	172.0	0.044								0.021								
F13-1-0				**0.110**	0.150	**0.150**												
F13-1-2	13.7			**0.008**														
F13-1-2.1	17.9			**0.017**														
F13-1-3				**0.018**														
F13-1-4																		
F13-10-0																		

Fairfield Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
F01/13-5-0	43.3																	
F21-1-4	**894.0**			**0.066**														
F21-1-6	3.6																	
F22-1-4	82.0			**0.017**														
F22-1-6																		
F23-1-0	10.1	0.020																
F24-1-0	8.6																	
F25-1-0	6.4	0.023																
F26-1-0	1.7																	
F27-1-0	10.9	0.075																

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.

Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken

Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken

A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

- SPLP test was not performed for sample because location was not in compliance based on total contentrations; <u>or</u> total concentration was less than total PMC <u>or</u> total concentration was less than or equal to 20 times SPLP PMC

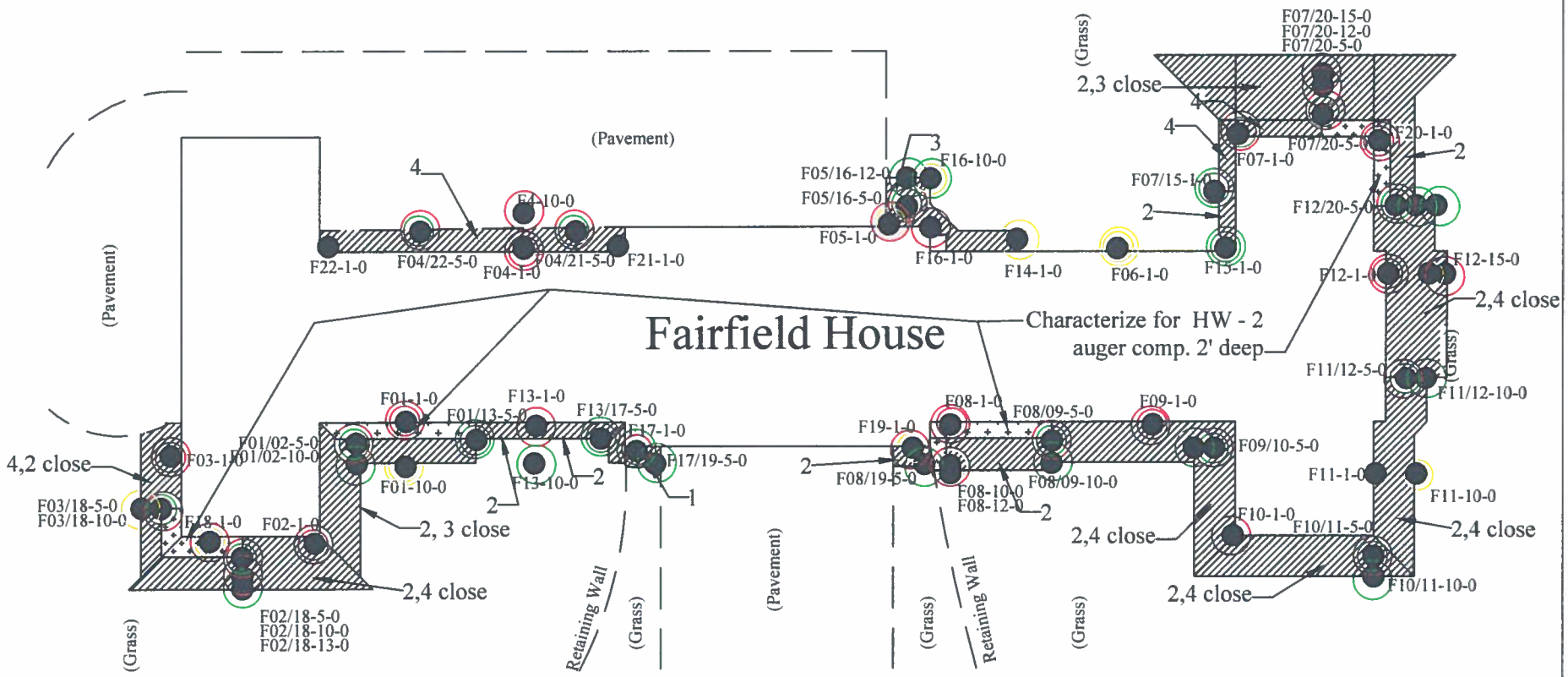
- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance

- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.

- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems

The detection limits for DDD, DDT, DDE, Endrin, and Heptachlor mass analyses are less than or equal to 20 times the SPLP criteria, therefore, if a mass analysis is non-detect for these compounds the PMC criteria is met.



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

- Sampling location
- Area requiring excavation
- Area ready for backfill

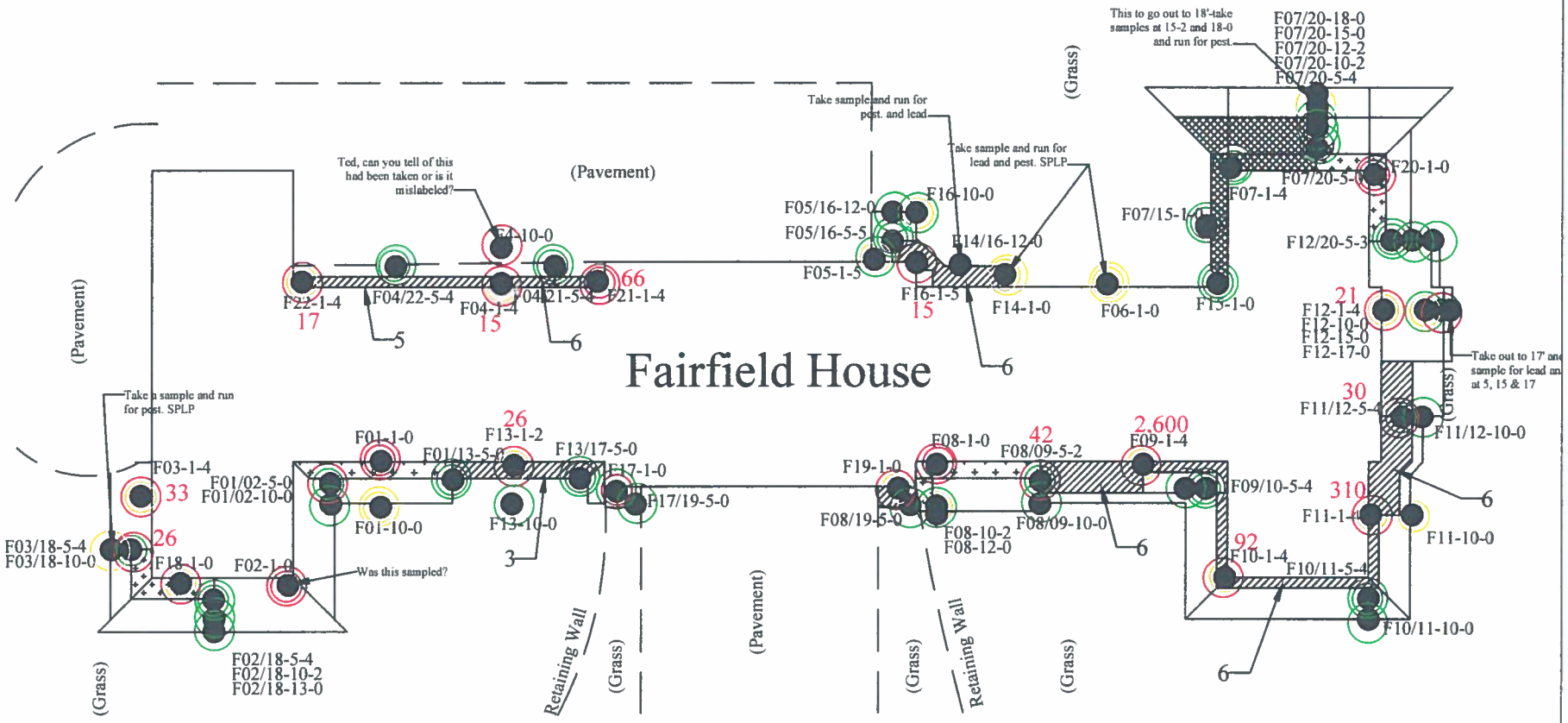
2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: March 6, 2006
Project No.: 1018.WA3	File: Fairfield 3-6-06 Remediation Figure.dwg

Fairfield 3-6-06 Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut



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- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

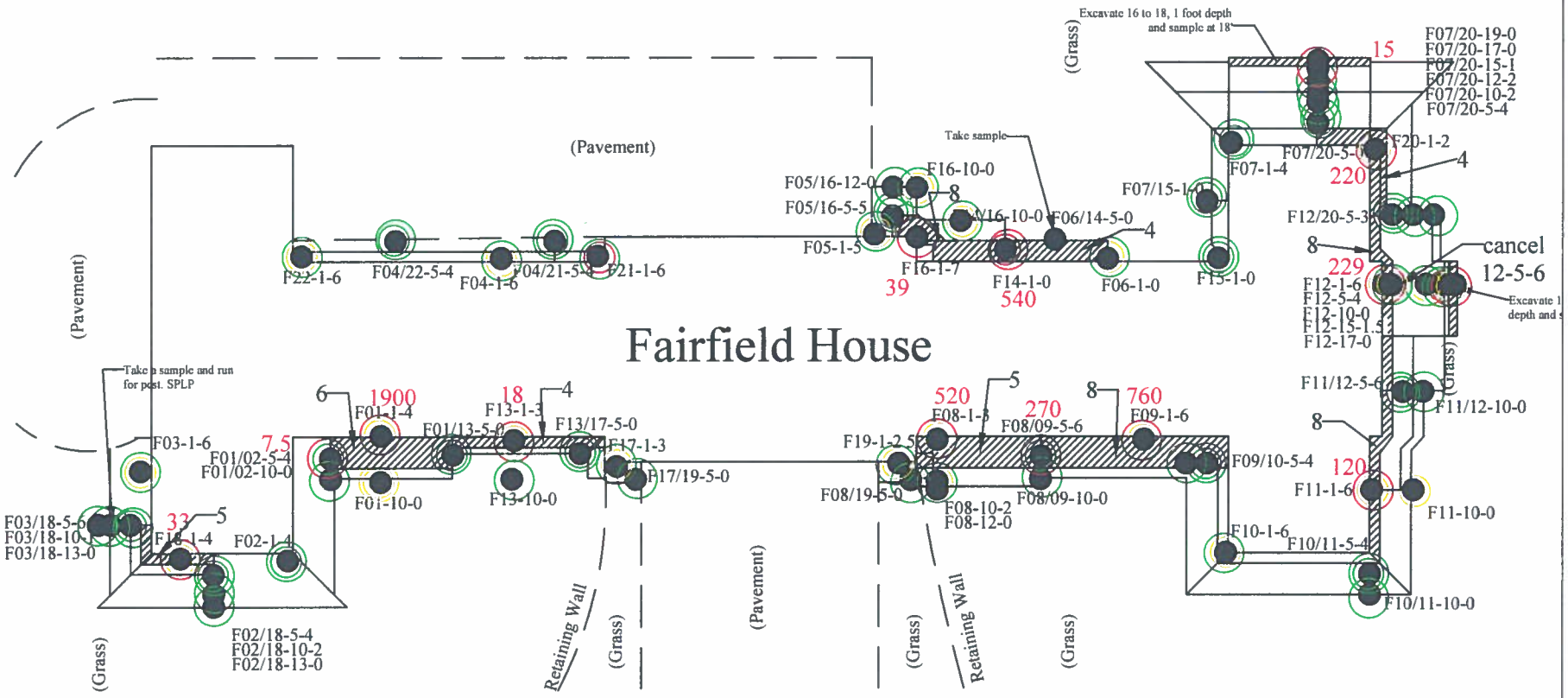
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: March 15, 2006
Project No.: 1018.WA3	File: Fairfield 3-15-06 Remediation Figure.dwg

Fairfield 3-15-06 Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

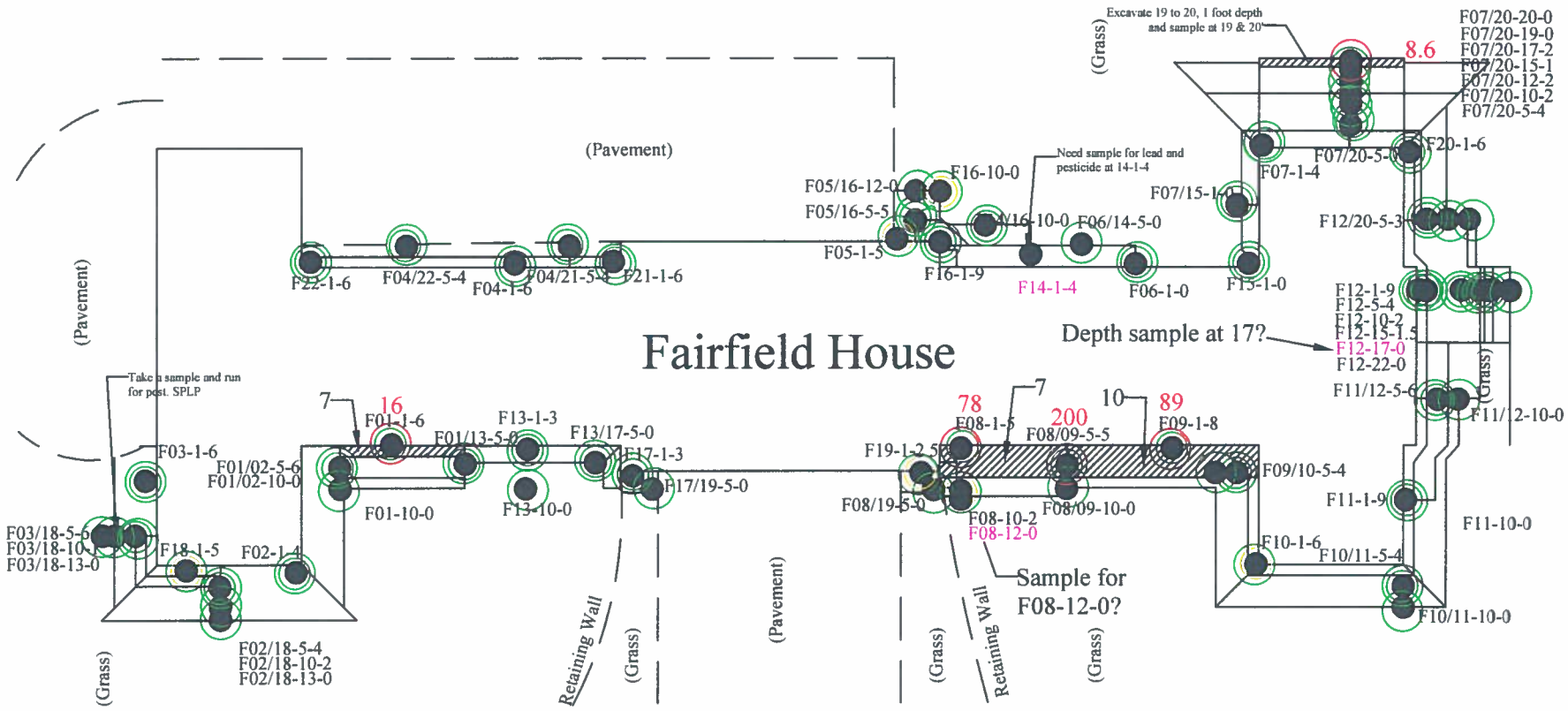
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: March 28, 2006
Project No.: 1018.WA3	File: Fairfield 3-28-06 Remediation Figure.dwg

Fairfield 3-28-06 Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

- Sampling location
- Area requiring excavation
- Area ready for backfill

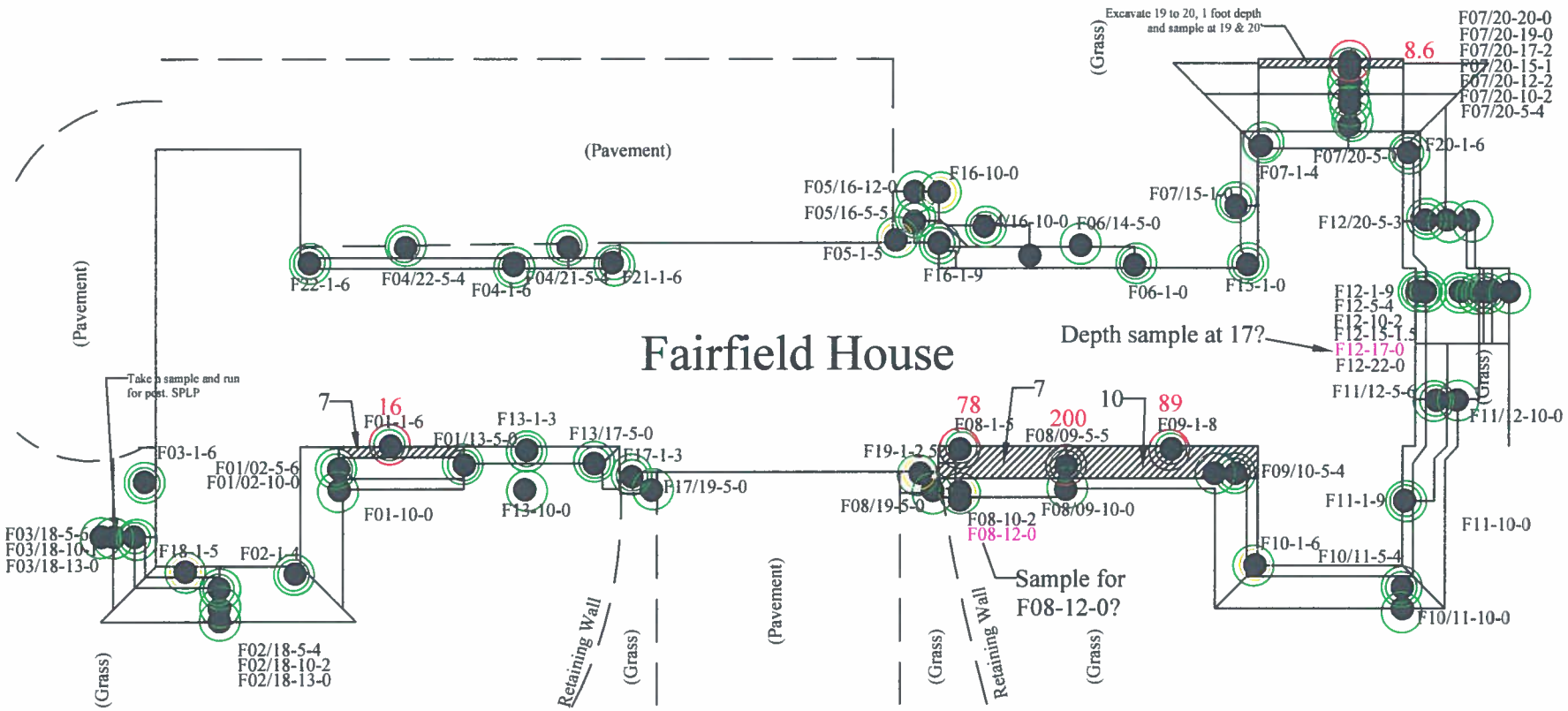
2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: April 8, 2006
Project No.: 1018.WA3	File: Fairfield 4-8-06 Remediation Figure.dwg

Fairfield 4-8-06 Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

- Sampling location
- Area requiring excavation
- Area ready for backfill

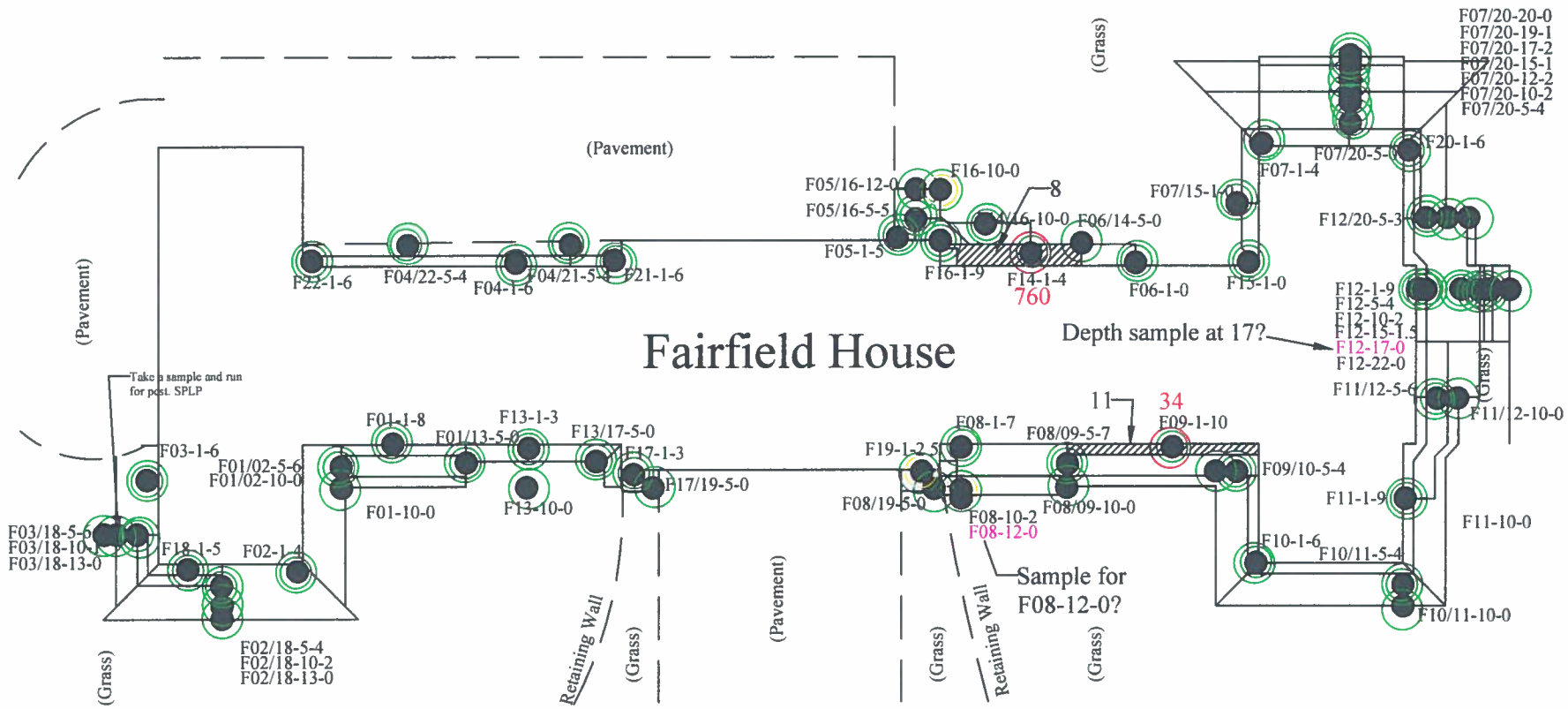
2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: April 17, 2006
Project No.: 1018.WA3	File: Fairfield 4-17-06 Remediation Figure.dwg

Fairfield 4-17-06 Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

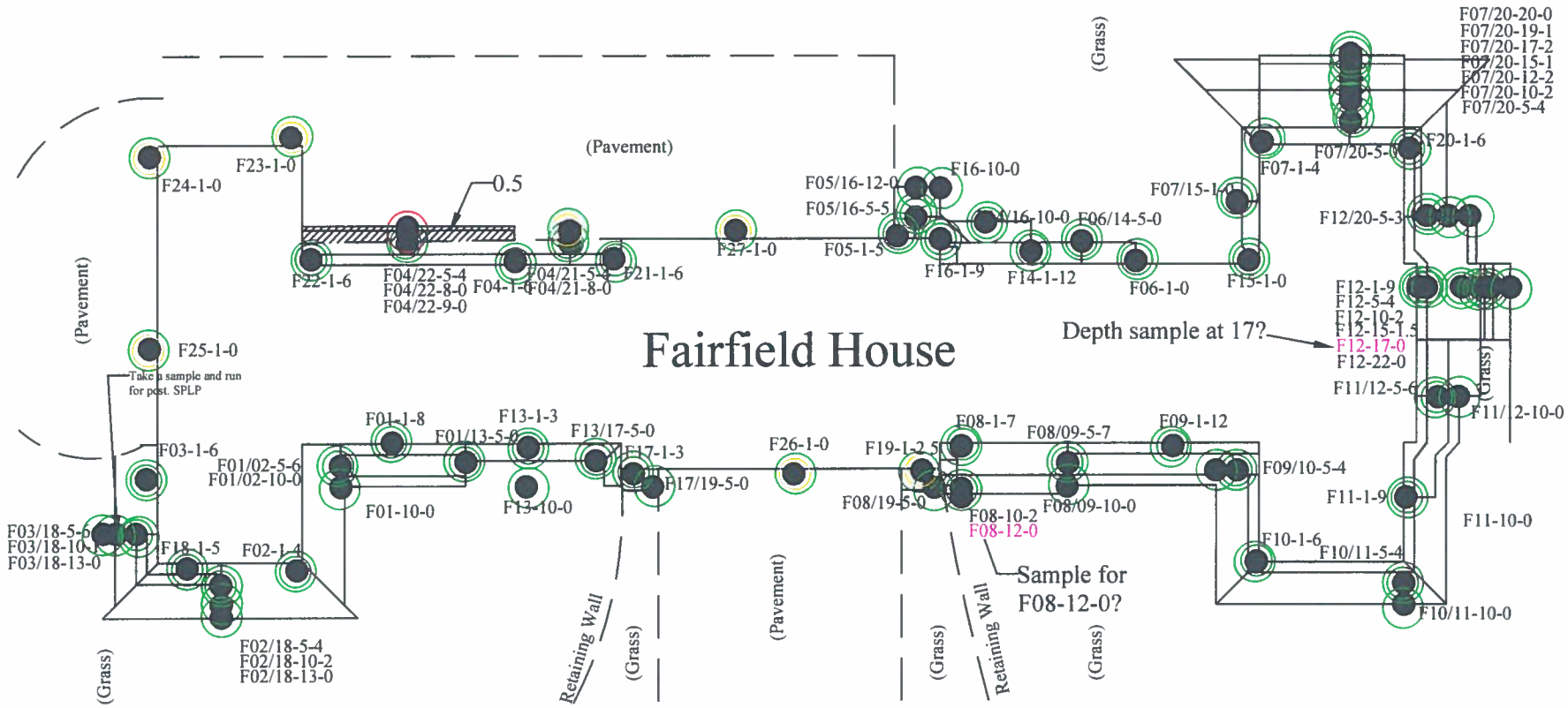
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: April 19, 2004
Project No.: 1018.WA3	File: Fairfield 4-19-06 Remediation Figure.dwg

Fairfield 4-19-06 Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

- Sampling location
- Area requiring excavation
- Area ready for backfill

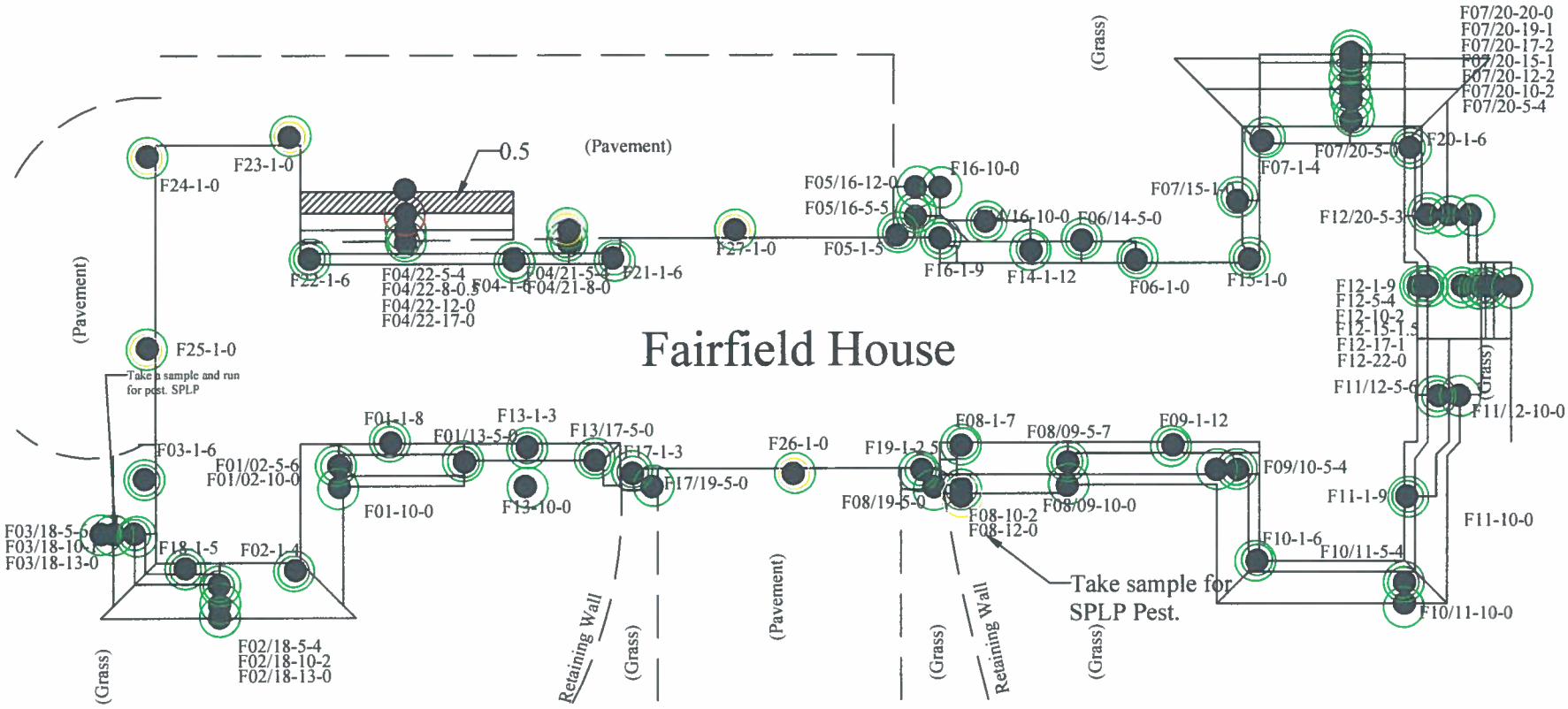
2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: June 16, 2004
Project No.: 1018.WA3	File: Fairfield 6-16-06 Remediation Figure.dwg

Fairfield 6-16-06 Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

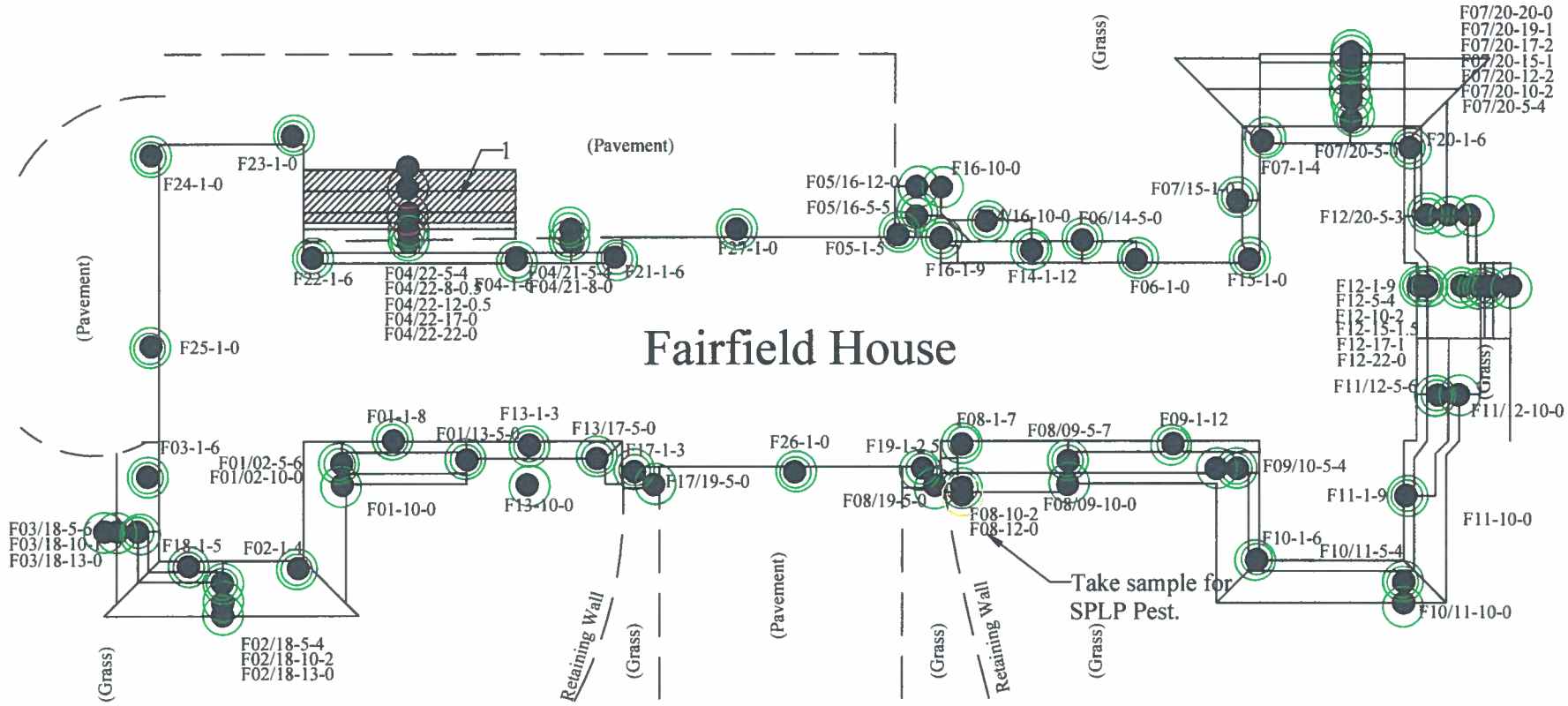
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: June 22, 2004
Project No.: 1018.WA3	File: Fairfield 6-22-06 Remediation Figure.dwg

Fairfield 6-22-06 Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

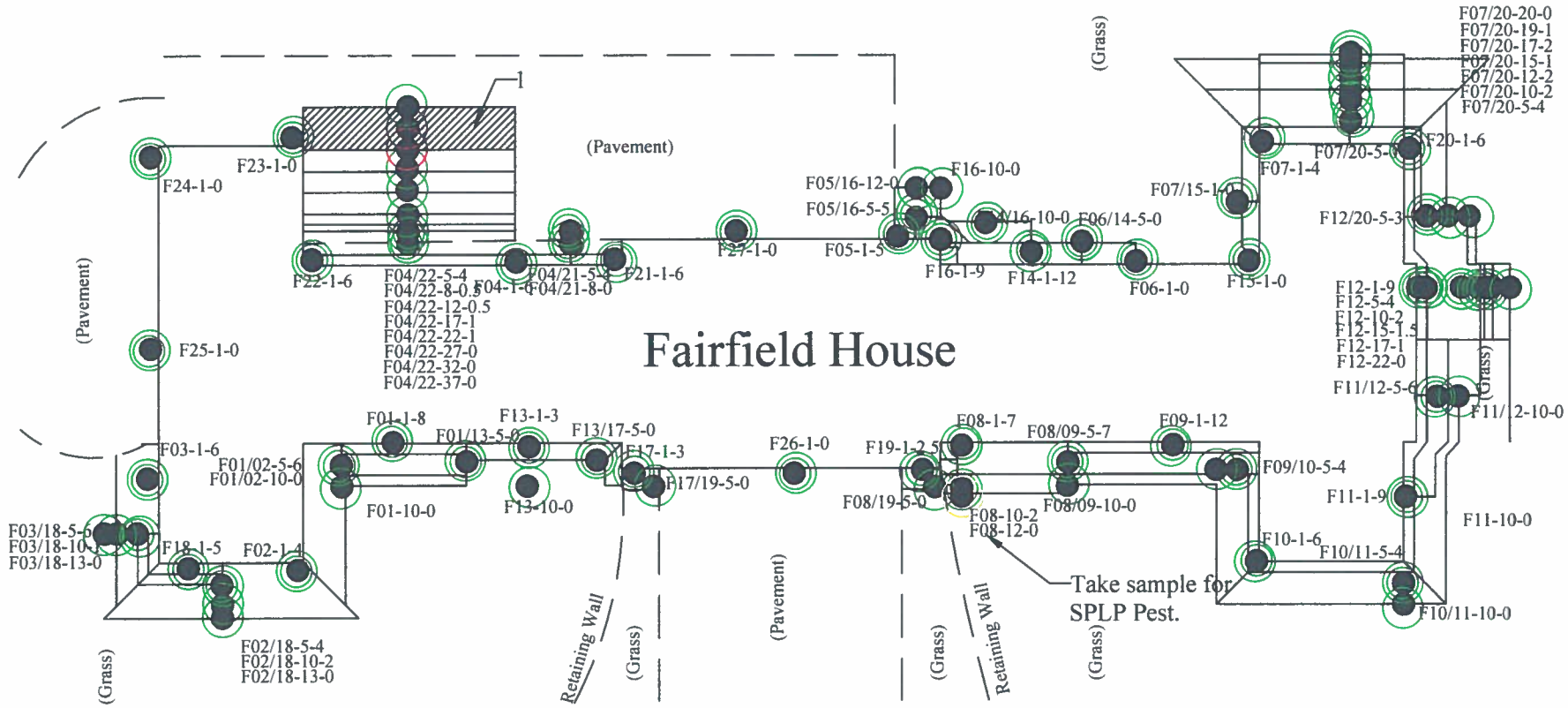
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: June 28, 2004
Project No.: 1018.WA3	File: Fairfield 6-28-06 Remediation Figure.dwg

Fairfield 6-28-06 Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

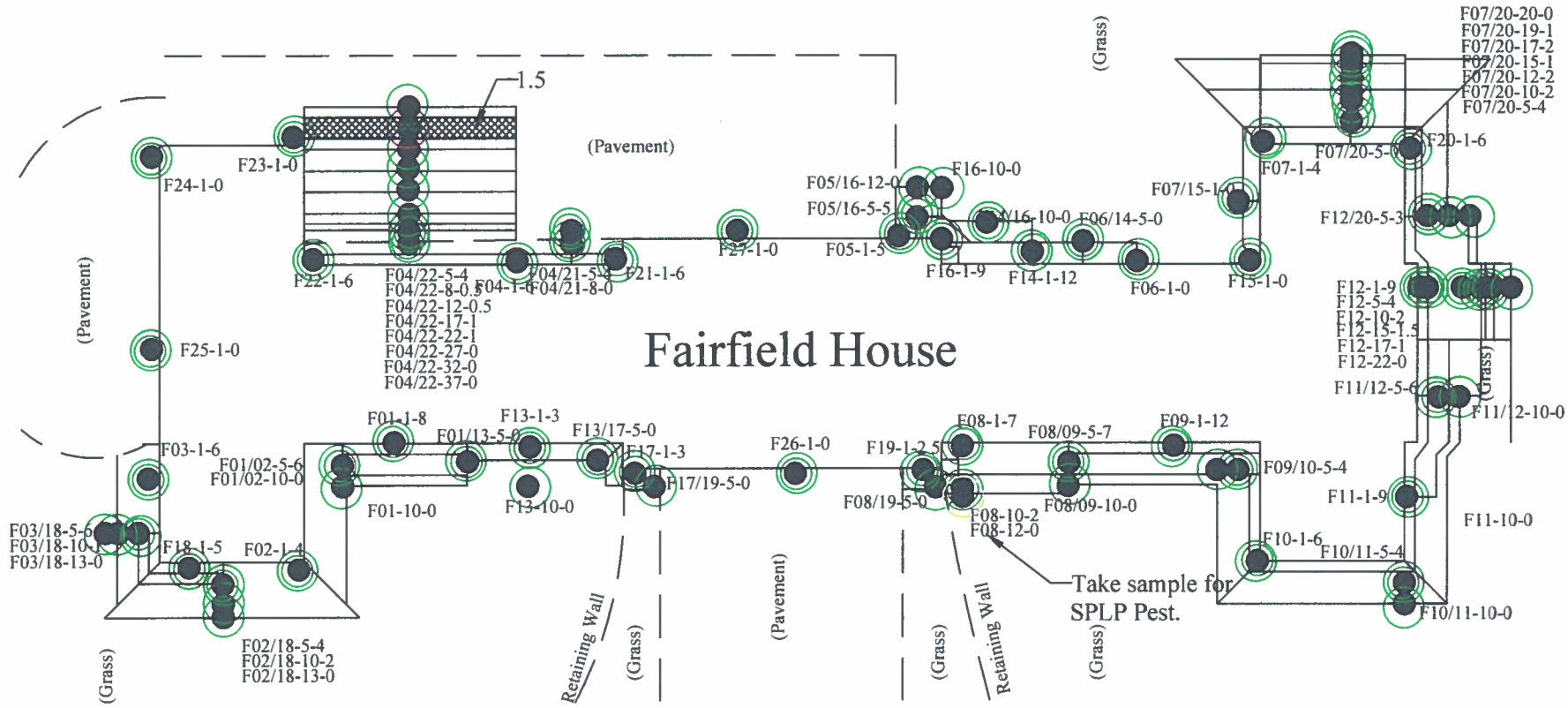
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: July 30, 2004
Project No.: 1018.WA3	File: Fairfield 7-30-06 Remediation Figure.dwg

Fairfield 7-30-06 Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

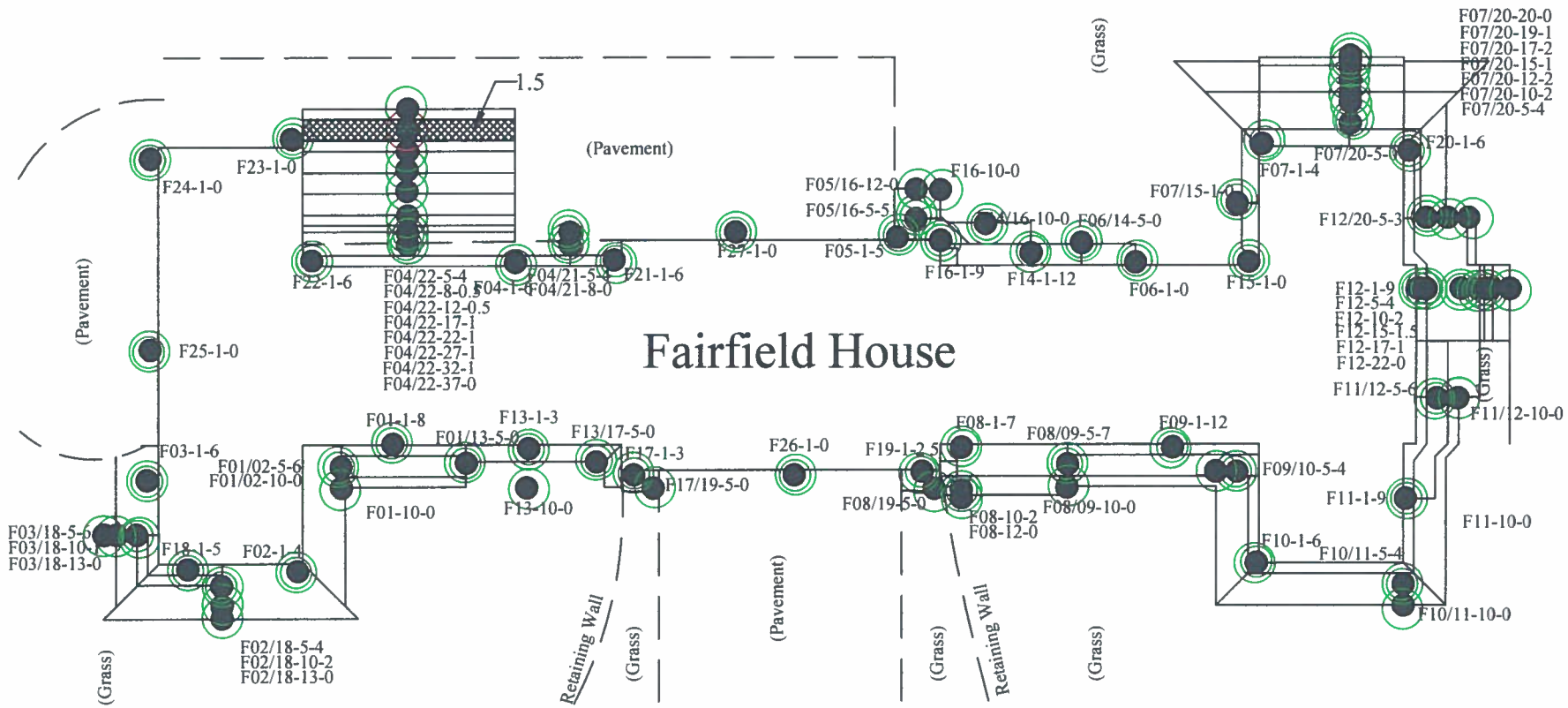
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: August 15, 2006
Project No.: 1018.WA3	File: Fairfield 8-15-06 Remediation Figure.dwg

Fairfield 8-15-06 Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut



Legend

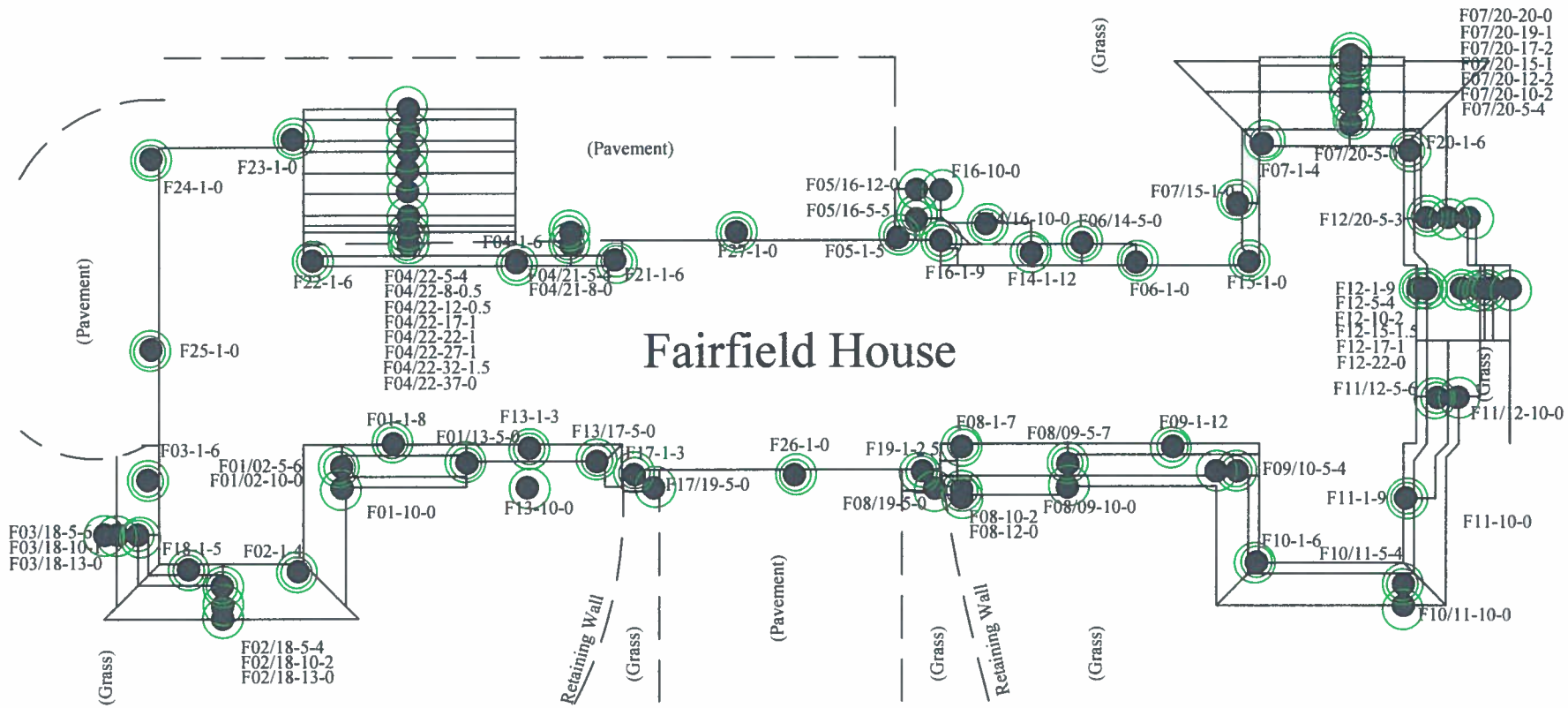
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: August 24, 2006
Project No.: 1018.WA3	File: Fairfield 8-24-06 Remediation Figure.dwg

Fairfield 8-24-06 Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: September 8, 2006
Project No.: 1018.WA3	File: Fairfield 9-8-06 final Remediation Figure.dwg

Fairfield 9-8-06 Final Remediation Figure

Fairfield Hills Hospital - Fairfield House
Wasserman Way
Newtown, Connecticut

GREENWICH BUILDING

Greenwich Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.000	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
G01-1-0	**1890**	**0.546**			0.110	**0.110**												
G01-1-2.5	13																	
G01/02-4.5-0	**656**																	
G01/02-4.5-1.5																		
G01/02-10-0	244	0.019																
G02-1-0	257	**0.475**			0.110	**0.110**												
G02-1-1.5	10	0.027																
G02/34-5-0	197	0.041																
G34-1-0	297	0.096			0.28	**0.280**												
G03/34-5-0	284	0.038																
G03-1-0	**522**	0.075			0.120	**0.120**												
G03-1-1	12	0.046																
G03/35-5-0	226	0.028																
G35-1-0	**598**				0.200	**0.200**	0.3											
G35-1-1	101	0.120																
G04/35-5-0	**493**																	
G04/35-5-1	12																	
G04/35-8-0	175	0.029																
G																		
G04-1-0	**888**	**0.213**			0.220	**0.220**												
G04-1-1	10																	
G04/36-5-0	**602**																	
G04/36-5-0.1	**565**																	
G04/36-5-1	27																	
G04/36-8-0	239	0.031																
G36-1-0	**564**			**0.022**	0.390	**0.390**												
G36-1-1	32																	
G36-1-3.5	26																	
G05/36-5-0	118	0.030																
G05-1-0	391	0.084																
G05/37-5-0	266	0.056																
G37-1-0	**402**																	
G37-1-1.5	11																	
G06/37-5-0	305	0.067																
G06-1-0			**0.250**	**0.500**														
G06-1-2	6																	
G06/07-4.5-0	293	0.038	**0.130**	**0.190**														
G06/07-4.5-2																		
G06/07-8-2																		
G06/07-12-0																		
G																		
G07-1-0			**0.360**	**0.840**														
G07-1-2	5			**0.016**														
G07-1-4				**0.210**														

Greenwich Sampling Results
Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.000	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
G07-1-5				**0.220**														
G07-1-7																		
G07/08-5-0	179	0.036	**0.140**	**0.310**														
G07/08-5-2																		
G07/08-10-0			**0.019**	**0.024**														
G07/08-10-2																		
G07/08-8-2																		
G07/08-15-0					0.300	~~0.300~~												
G08-1-0				**0.016**	**1.500**	**1.500**										0.040	**0.040**	
G08-1-2.5					**0.500**	**0.500**												
G08-1-4					**1.100**	**1.100**												
G08-1-5					**1.100**	**1.100**												
G08-1-7					0.088	~~0.088~~	0.62											
G08-1-7.1					0.160	~~0.16~~	0.7											
G08/09-4.5-0	219	0.032			**1.5**	**1.500**												
G08/09-4.5-2																		
G08/09-10-0					0.480	~~0.480~~												
G09-1-0					**9.800**	**9.800**										**0.130**	**0.130**	
G09-1-2	1				0.280	~~0.280~~	1.900											
G09/10-5-0	**447**				**2.600**	**2.600**												
G09/10-5-2	2																	
G09/10-10-0	107	0.049																
G																		
G10-1-0					**3.400**	**3.400**										0.060	**0.060**	
G10-1-3	1				0.240	~~0.240~~	1.600											
G10-10-0	74																	
G10-15-0	40																	
G10/11-4.5-0	**761**				0.27	~~0.270~~												
G10/11-4.5-1	10																	
G10/11-10-0	113	0.016			0.190	~~0.190~~												
G11-1-0				**0.050**	**9.000**	**9.000**										**0.200**	**0.200**	
G11-1-3																		
G11-10-0	**543**	0.021																
G11-10-1	4																	
G11-15-0	39									0.040		0.028						
G11/12-5-0	132	0.024			0.290	~~0.290~~				0.280		0.250						
G12-1-0	**5480**	**0.522**			**2.100**	~~2.100~~	0.500									0.049	~~0.049~~	0.080
G12-1-2.5	10																	
G12-10-0	76																	
G12-15-0	16																	
G12/13-4.5-0	186																	
G13-1-0	**852**	**0.154**			0.340	~~0.340~~												
G13-1-2																		
G13/38-5-0	28																	

Greenwich Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.000	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
G38-1-0	**1810**				**3.700**	**3.700**										**0.110**	**0.110**	
G38-1-2	1				0.330	~~0.330~~	1.900											
G38-1-2.1	2				0.170	~~0.170~~	2.2											
G14/38-5-0	91									0.029		0.031						
G14-1-0	**504**	0.104			0.230	~~0.230~~						0.020						
G14-1-1	3																	
G14/15-5-0	**402**																	
G14/15-5-1	7	0.070																
G14/15-8-0	37																	
G15/39-5-0	89																	
G15-1-1	16																	
G39-1-0	**556**																	
G39-1-2.3	1																	
G16/39-4.5-0	209																	
G16-1-0	361	**0.714**																
G16-1-2																		
G16/17-5-0	106																	
G17-1-0	**509**	**0.218**			0.290	~~0.290~~				0.021		0.041				0.019	0.019	
G17-1-1	3																	
G17/18-4.5-0	151																	
G18-1-0	96	**0.170**										0.023						
G18-1-0.5	15	0.033																
G18/19-5-0	97									0.240		0.130						
G19-1-0			**0.110**	**0.270**						0.065		0.100				0.021	**0.021**	
G19-1-1	22																	
G19-1-1.1	17																	
G19/20-5-0	114	0.029	**0.065**	**0.066**						0.086		0.079						
G19/20-5-0.1	127		**0.040**	**0.038**						0.076		0.063						
G19/20-5-1	2																	
G19/20-10-0										0.110		0.092						
G																		
G20-1-0			**0.130**	**0.790**	0.130	**0.130**						0.039				0.026	**0.026**	
G20-1-3	3			**0.025**														
G20-1-3.1	3			**0.013**														
G20-1-5																		
G20/21-4.5-0	**748**		**0.15**	**0.11**	0.42	**0.420**				0.022		0.099						
G20/21-5-4	3																	
G20/21-10-0	224	0.042	**0.150**	**0.420**	**0.920**	**0.920**						0.110						
G20/21-10-0.1	271	0.038	**0.290**	**0.660**	0.400	**0.400**				0.025		0.150						
G20/21-10-4	4																	
G20/21-15-0			**0.019**	**0.097**	**0.780**	**0.780**						0.046						
G20/21-15-4																		
G20/21-20-0			**0.007**	**0.009**								0.046						
G20/21-20-3.5																		

Greenwich Sampling Results
Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.000	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
G20/21-22-0		0.112																
G21-1-0			**0.300**	**1.000**	0.370	**0.370**						0.049				0.041	**0.041**	
G21-1-3.5	3																	
G21/22-5-0	**748**		**0.056**	**0.045**						0.032		0.065						
G21/22-5-3	18																	
G21/22-10-0	265	0.042	**0.200**	**0.360**	0.380	**0.380**				0.130		0.097						
G21/22-10-0.1	265	0.038	**0.290**	**0.660**	0.400	**0.400**				0.250		0.150						
G21/22-10-3	13																	
G21/22-11-0	21	0.062																
G22-1-0			**0.350**	**0.480**	0.094	**0.094**												
G22-1-3	6			**0.013**														
G22-1-4																		
G22/33-5-0	**451**		**0.510**	**0.660**								0.220						
G22/33-11-0	20	0.035																
G22/33-5-3																		
G33-1-0			**1.000**	**1.000**								0.056				0.034	**0.034**	
G33-1-2	7	0.023		**0.008**														
G33-1-4																		
G23/33-5-2	2																	
G23-1-0	**497**	**0.446**										0.048						
G23-1-1	44	0.048																
G23/24-4.5-0	257	0.016																
G24-1-0	362	**0.324**																
G24-1-1	5	0.020																
G24/40-5-0	**411**		**0.049**	**0.097**								0.030						
G24/40-5-1	3																	
G24/40-10-0	53			**0.013**						0.066		0.094						
G24/40-10-0.1	62	0.022		**0.010**						0.057		0.060						
G24/40-10-1																		
G24/40-12-0										0.054		0.030						
G40-1-0	**549**											0.035						
G40-1-0.5	16																	
G25/40-5-0	187	0.043																
G25-1-0	176	0.053																
G25/26-5-0	386	0.039																
G26-1-0	**613**	0.076								0.043		0.051						
G26-1-0.5	6																	
G26/41-5-0	31																	
G41-1-0	355	0.036								0.19	0.38	0.24	0.45					
G27/41-5-0	66																	
G27-1-0	**2700**	0.081																
G27-1-0.5	69	**0.175**																
G27-1-2	15																	
G27/28-4.5-0	105																	

Greenwich Sampling Results
Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.000	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
G28-1-0	**522**	**1.200**			0.110	0.110				0.020								
G28-1-0.5	23																	
G28/42-5-0	166	0.025																
G42-1-0	**1860**																	
G42-1-0.5	53																	
G29/42-5-0	37																	
G29-1-0	**591**	0.106			0.099	0.099												
G29-1-0.5	3																	
G29/30-5-0	138																	
G30-1-0	**959**	0.088			0.130	0.130												
G30-1-0.5	134	0.122																
G30/43-5-0	101																	
G43-1-0	**875**																	
G43-1-0.5	88	**0.282**																
G43-1-2.5	21																	
G31/43-5-0	**1810**																	
G31/43-5-1	21																	
G31/43-10-0	60																	
G31/43-15-0	42																	
G31-1-0	**3110**	0.099																
G31-1-2.5	54																	
G31/32-4.5-0	**1050**																	
G31/32-4.5-1.5	47																	
G31/32-10-0	235	0.017																
G31/32-15-0	78																	
G32-1-0	**13200**	**0.203**			0.180	0.180				0.028		0.024						
G32-1-2.5																		
G01/32-5-0	**828**																	
G01/32-5-1	7																	
G01/32-10-0	242	0.023																
G01/32-15-0	61																	

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimiter sampling location-- xx/xx indicates that the sample was taken between two premier locations at some distance from the foundation.
Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken
Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken
A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

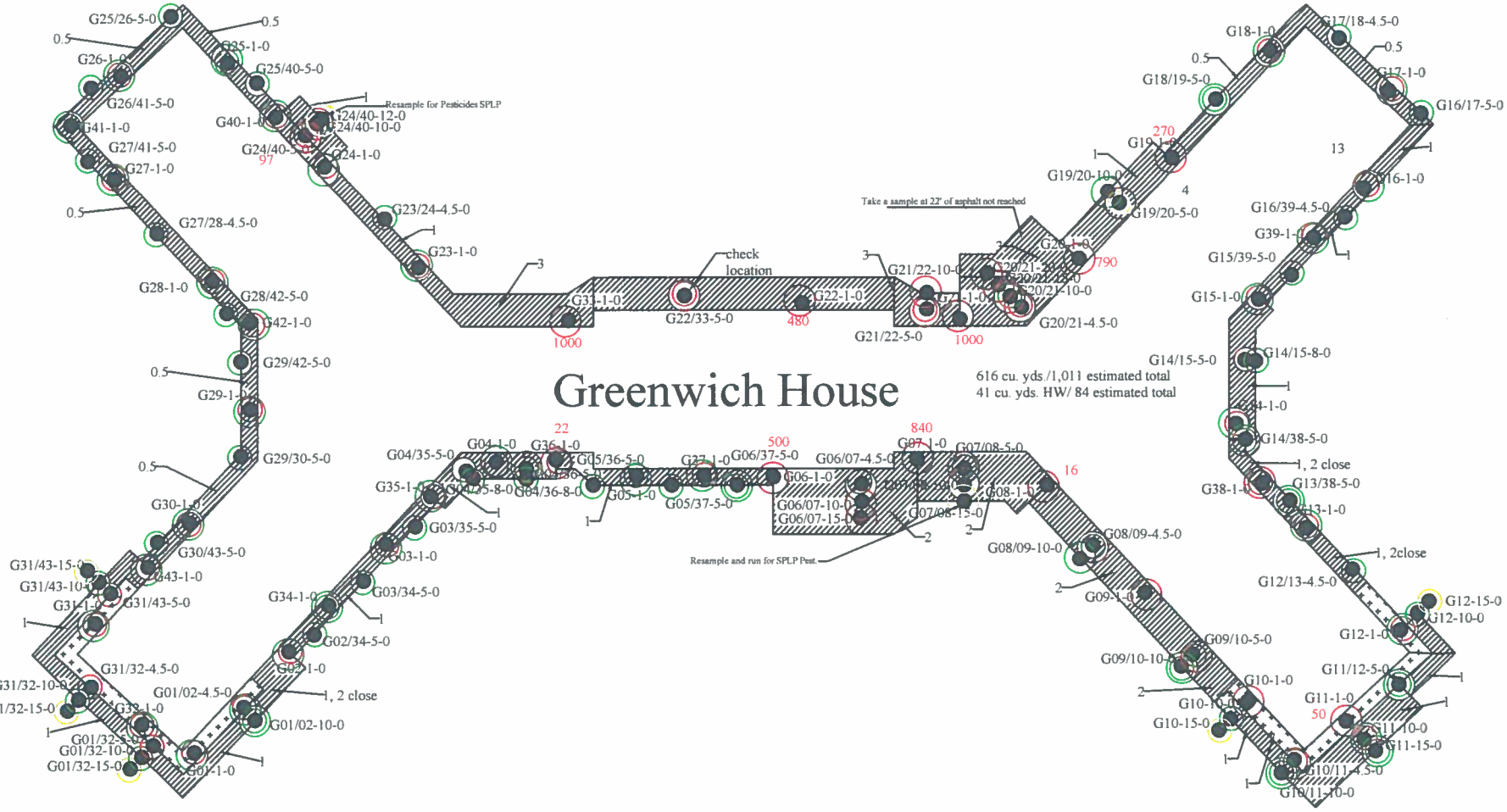
0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion
0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion
- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion
0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion
- SPLP test was not performed for sample and chemical because total concentration was less than Pollutant Mobility criteria
- blank cell indicates that the particular chemical was not analyzed for in that particular sample because a previous result closer to the foundation or shallower in depth was in compliance
- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(c)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.

Greenwich Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.000	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000

R-resampling due to quality assurance problems



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

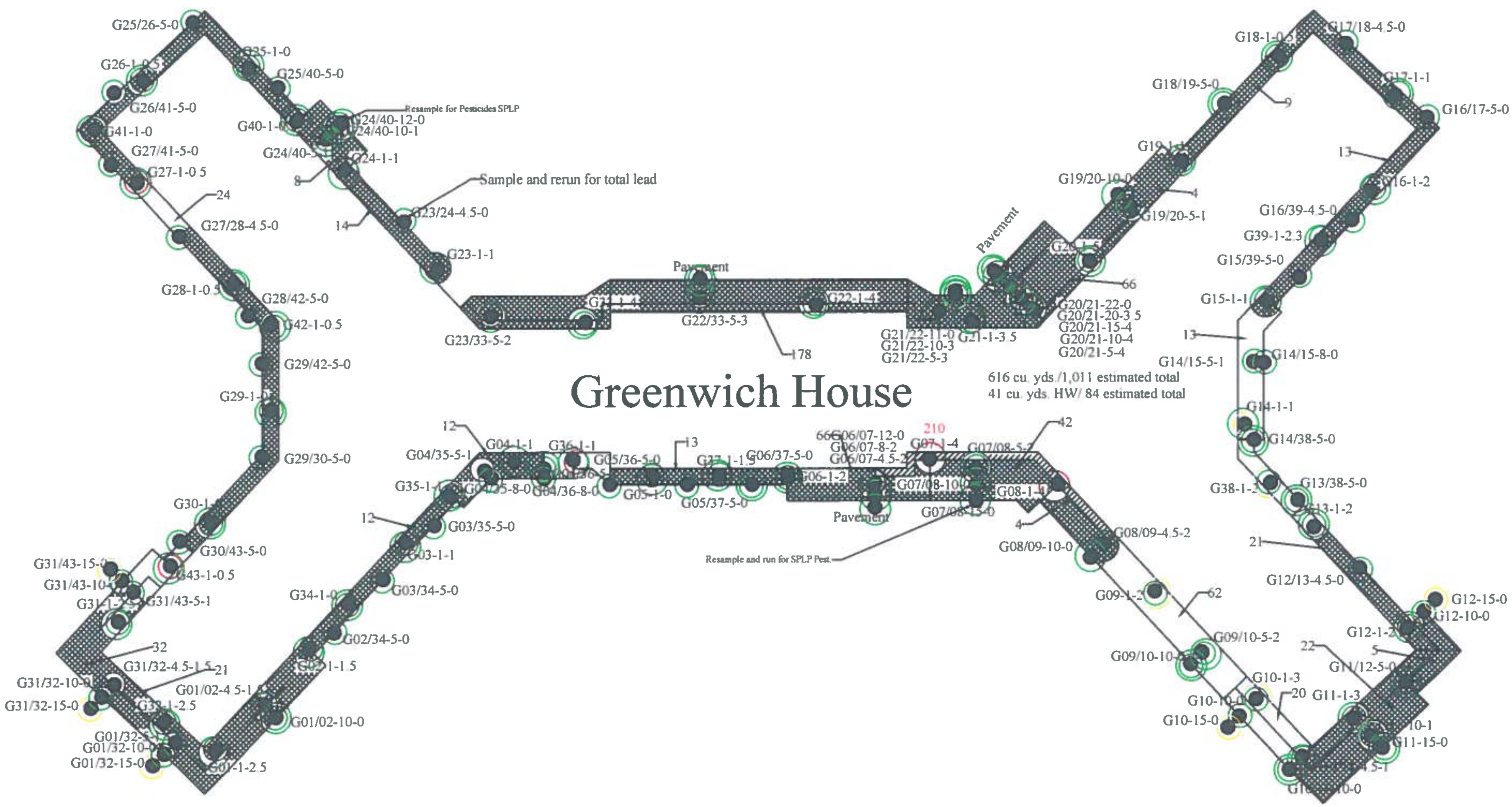
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: January 24, 2006
Project No.: 1018.WA3	File: Greenwich 1-24-06 Remediation Figure.dwg

Greenwich 1-24-06 Remediation Figure

Fairfield Hills Hospital - Greenwich House
Wesserman Way
Newtown, Connecticut



Legend

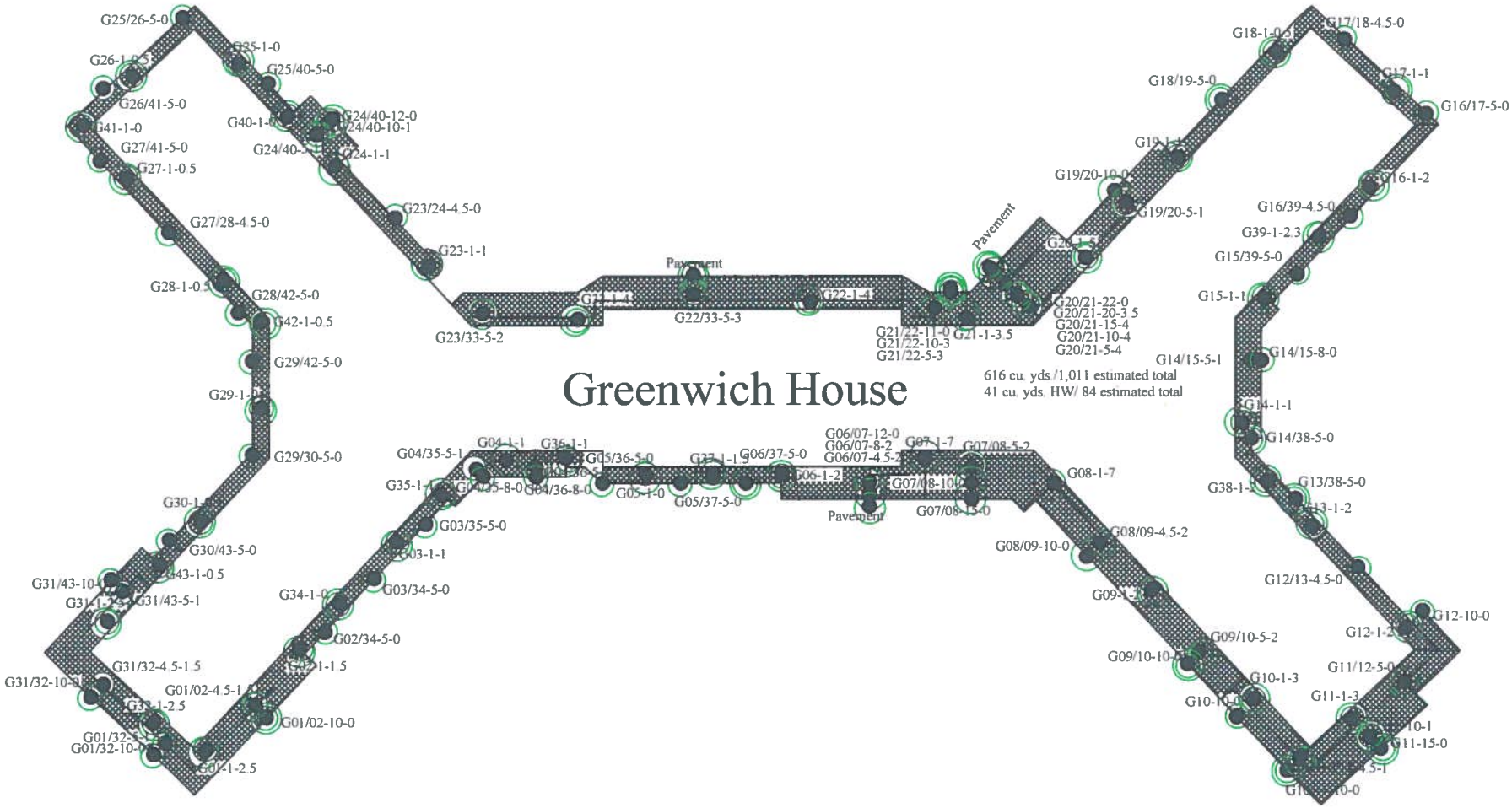
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination
- Sampling location
- Area requiring excavation
- Area ready for backfill

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: July 10, 2006
Project No.: 1018 WA3	File: Greenwich 7-10-06 Remediation Figure.dwg

Greenwich 7-10-06 Remediation Figure

Fairfield Hills Hospital - Greenwich House
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area ready for backfill

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: June 16, 2006
Project No.: 1018 WA3	File: Greenwich Remediation Figure.dwg

Greenwich Final Remediation Figure

Fairfield Hills Hospital - Greenwich House
Wesserman Way
Newtown, Connecticut

SINGLE FAMILY HOMES

Single Family Homes Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
H50 01-1-0	76.0	**0.022**						0.039		0.029		0.056						
H50 01-1-0.5	13.9																	
H50 01/05-5-0	13.3																	
H50 01/06-5-0	19.1																	
H50 02-1-0	39.7				0.170	0.170				0.020		0.020						
H50 03-1-0	57.7				0.160	0.160				0.110		0.120						
H50 04-1-0	24.4									0.010		0.025						
H50 05-1-0	48.4																	
H50 06-1-0	18.6																	
SH 51-1-0	172.0																	
H51 01-1-0	25.7																	
SH 51-2	103.0											0.055						
H51 02-1-0	38.6				0.085	0.085				0.066		0.067						
SH 51-3	89.8																	
H51 03-1-0	72.0									0.024		0.036						
H51 03/04-5-0	18.2									0.048		0.047						
SH 51-4	**455.0**				0.240	**0.240**				0.100		0.150						
H51 04-1-0	92.3											0.048						
H51 04-1-0.5	59.5	**0.046**																
H51 04-1-1	2.2																	
H51 04/08-5-0	36.5									0.021		0.033						
H51 05-1-0	63.3									0.054		0.064						
H51 06-1-0	83.2																	
H51 07-1-0	58.1																	
H51 08-1-0	102.0																	
H52 01-1-0	109.0	**0.037**								0.009		0.012						
H52 01-1-0.5	390.0	**0.142**																
H52 01-1-1	23.5																	
H52 01/04-5-0	24.1																	
H52 01/05-5-0	39.9																	
H52 02-1-0	41.0									0.023		0.025						
H52 03-1-0	47.0									0.056		0.053						
H52 03/06-5-0	13.1																	
H52 04-1-0	60.4	**0.024**								0.011		0.016						
H52 04-1-0.5	233.0	**0.037**																
H52 04-1-1	21.6																	
H52 05-1-0	190.0																	
H52 04/06-5-0	88.4																	
H52 06-1-0	358.0	**0.042**																
H52 06-1-0.5	30.9																	
H53 01-1-0	**430.0**							0.012		0.064		0.062						
H53 01-1-0										0.069		0.110						

Single Family Homes Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
H53 01-1-0.5	13.3																	
H53 01/03-5-0	59.7									0.033		0.040						
H53 01/04-5-0	31.5																	
H5302-1-0	163.0							0.007		0.046		0.071						
H53 02-1-0	102.0									0.053		0.055						
H53 02/04-5-0	32.9									0.048		0.050						
H53 02/03-5-0	19.0																	
H5303-1-0	120.0	**0.031**			**1.400**	**1.400**				0.031		0.084						
H53 03-1-0.5	46.8																	
H53 03-1-0.5.1	48.2																	
H5304-1-0				**0.011**	**0.590**	**0.590**				0.092		0.260						
H53 04-1-0.5	71.0									0.043		0.027						
H54 01-1-0	42.3									0.055		0.062						
H54 01-1-0	38.3									0.041		0.038						
H54 02-1-0	129.0							0.004		0.027		0.052						
H54 02-1-0	151.0	**0.024**								0.024		0.057						
H54 02-1-0.5	143.0	**0.020**																
H54 02-1-0.1	195.0	**0.071**										0.025						
H54 02-1-1	3.4																	
H54 02/04-5-0	60.0																	
H54 02/06-5-0	27.6																	
H54 03-1-0	55.0				0.120	0.120				0.120		0.150						
H53 03/06-5-0	35.5																	
H54 04-1-0	34.3									0.041		0.056						
H54 05-1-0	76.5									0.077		0.068						
H54 06-1-0	223.0	**0.098**			**1.300**	**1.300**				0.052		0.160						
H54 06-1-0.5	48.2											0.041						
H55 01-1-0	176.0							0.012		0.064		0.062						
H55 01-1-0																		
H55 01-1-0.1																		
H55 01/06-5-0	37.5																	
H55 01/07-5-0	37.0																	
H55 02-1-0	44.0							0.007		0.029		0.040						
H55 02-1-0																		
H55 02/08-5-0	20.6																	
H55 03-1-0	311.0	**0.019**								0.058		0.054						
H55 03-1-0.5	15.2																	
H55 03/07-5-0	39.1																	
H55 03/08-5-0	46.7																	
H55 04-1-0	288.0	**0.060**								0.012		0.110						
H55 04/05-5-0	24.6																	
H55 04-1-0.5	65.1																	
H55 04/06-5-0	35.2																	

Single Family Homes Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
H55 05-1-0	164.0																	
H55 06-1-0	272.0	**0.019**																
H55 06-1-0.5	83.7	**0.024**																
H51 06-1-1	25.2																	
H55 07-1-0	60.5	**0.016**																
H55 07-1-0.5	2.2																	
H55 08-1-0	216.0	**0.181**																
H55 08-1-0.5	18.3																	
H56 01-1-0	85.2	**0.017**								0.100		0.074						
H56 01-1-0.5	32.4																	
H56 01-1-0.5.1	37.7																	
H56 01/04-5-0	160.0																	
H56 01/02-5-0	50.8																	
H56 02-1-0	93.6	**0.030**								0.120		0.100						
H56 02-1-0.5	25.8																	
H56 02/03-5-0	47.7																	
H56 03-1-0	77.6	**0.020**						0.012		0.640		0.350						
H56 03-1-0.5	22.8																	
H56 03/04-5-0	47.3																	
H56 04-1-0	110.0	**0.047**						0.012		0.270		0.540						
H56 04-1-0.5	43.6																	
H57 01-1-0	43.0				**2.200**	**2.200**		0.140		0.170		0.440						
H57 01-1-2					0.100	~~0.100~~												
H57 01/03-5-0	32.2									0.034		0.034						
H57 01/03-5-1																		
H57 01/03-8-0																		
H57 01/04-5-0	25.7																	
H5702-1-0	72.7				**2.700**	**2.700**		0.160		0.076		0.120						
H57 02-1-1					**0.710**	~~0.710~~						0.070						
H57 02-1-2	10.7				**2.100**	**2.100**												
H57 02-1-4					0.310	**0.310**	**2.500**											
H57 02-1-6					0.070	~~0.070~~												
H57 02/03-5-0	33.4									0.430		0.330						
H57 02/04-5-0	37.9																	
H5703-1-0	93.2	**0.024**			**27.000**	**27.000**	**5.000**			0.055		0.170				**0.120**	~~0.120~~	0.180
H57 03-1-3	35.1				0.320	~~0.320~~												
H5704-1-0				**0.011**	**1.500**	**1.500**				0.016		0.110						
H57 04-1-1					0.150	~~0.150~~												

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.
Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken
Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken

Single Family Homes Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	**0.015**	**0.007**	**0.007**	**0.490**	**0.066**	**0.300**	**2.600**	**0.150**	**1.800**	**0.100**	**1.800**	**0.100**	**20.000**	**42.000**	**0.067**	**0.020**	**0.200**

A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

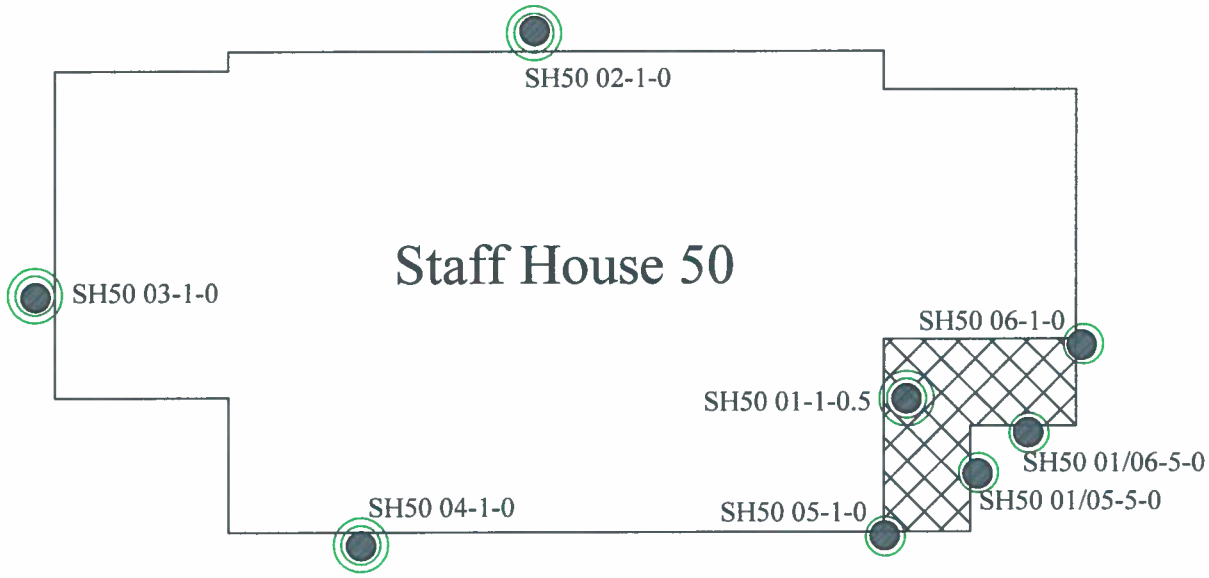
- SPLP test was not performed for sample because location was not in compliance based on total contentrations; **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC

- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance

- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.

- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems



Legend

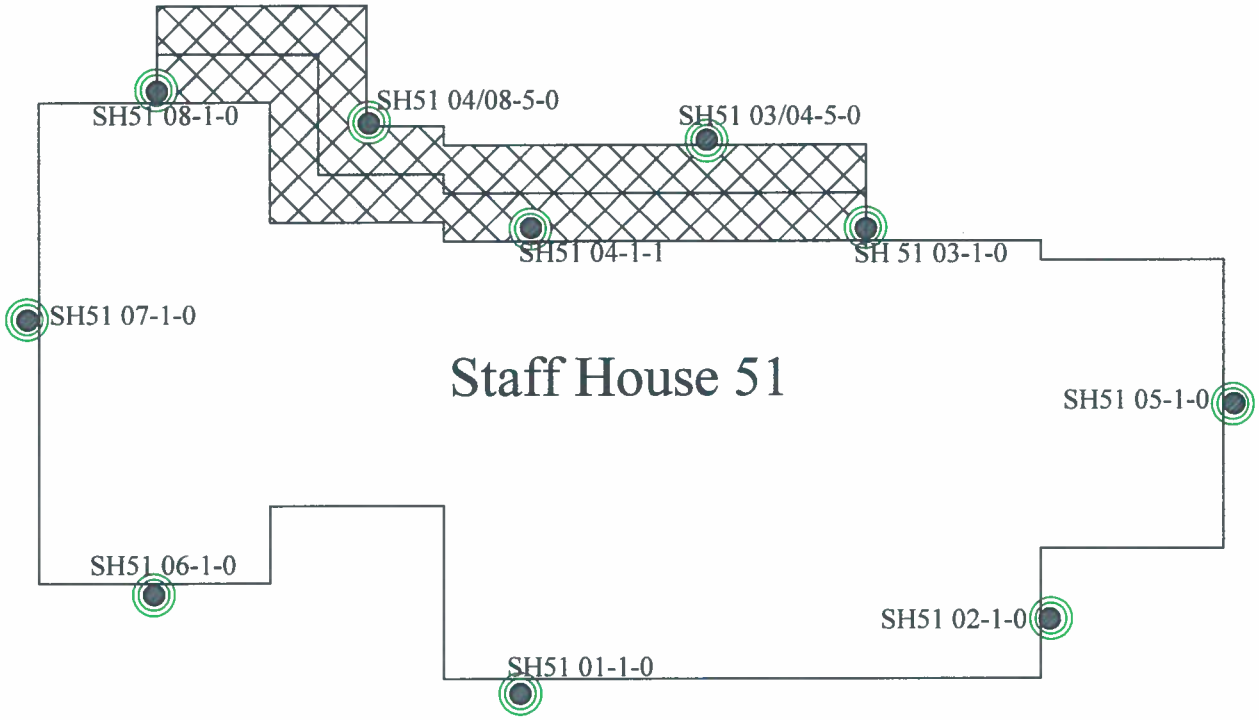
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Final excavation area

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: May 22, 2006
Project No.: 1018.WA8	File: SFH 50 Final Remediation Figure.dwg

Single Family Home 50 Remediatiion

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut

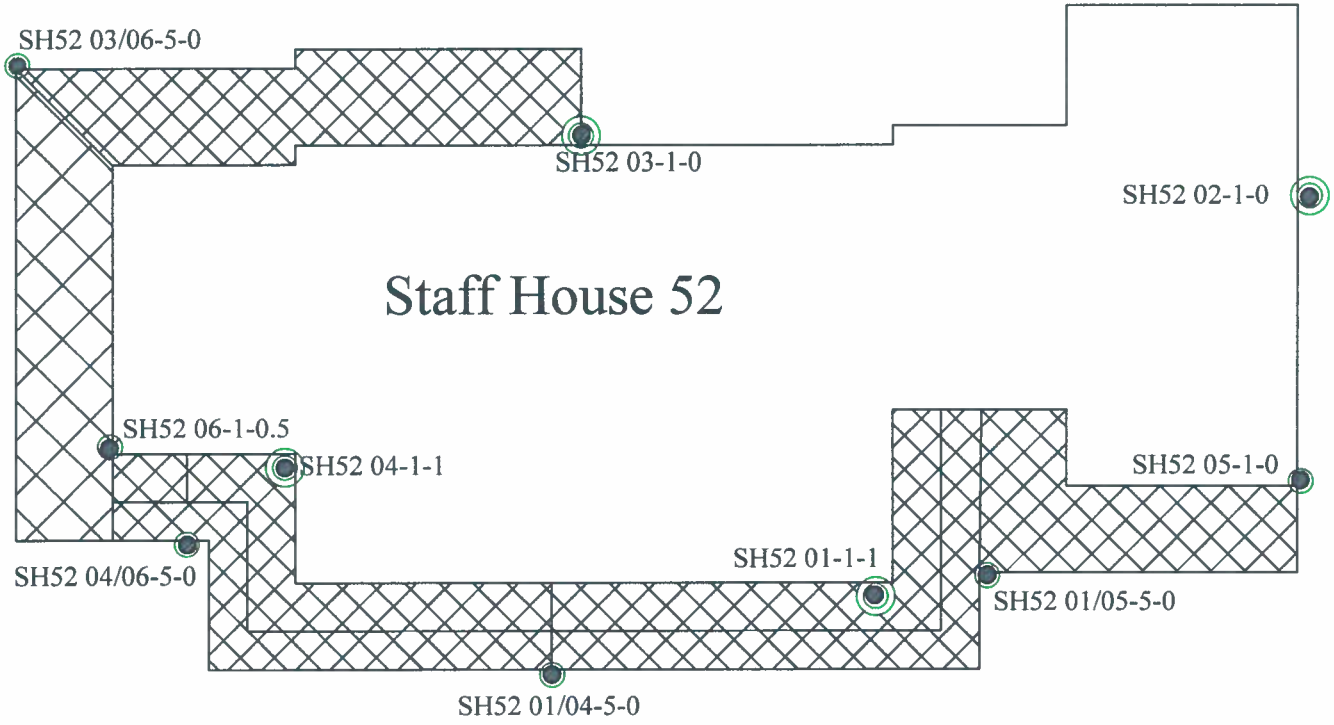


- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

- Sampling location
- Area requiring excavation
- Final excavation area

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Single Family Home 51 Remediatiion
Approximate Scale: 1 Inch = 10 Feet	Date: June 13, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: SFH 51Final Remediation Figure.dwg	



Legend

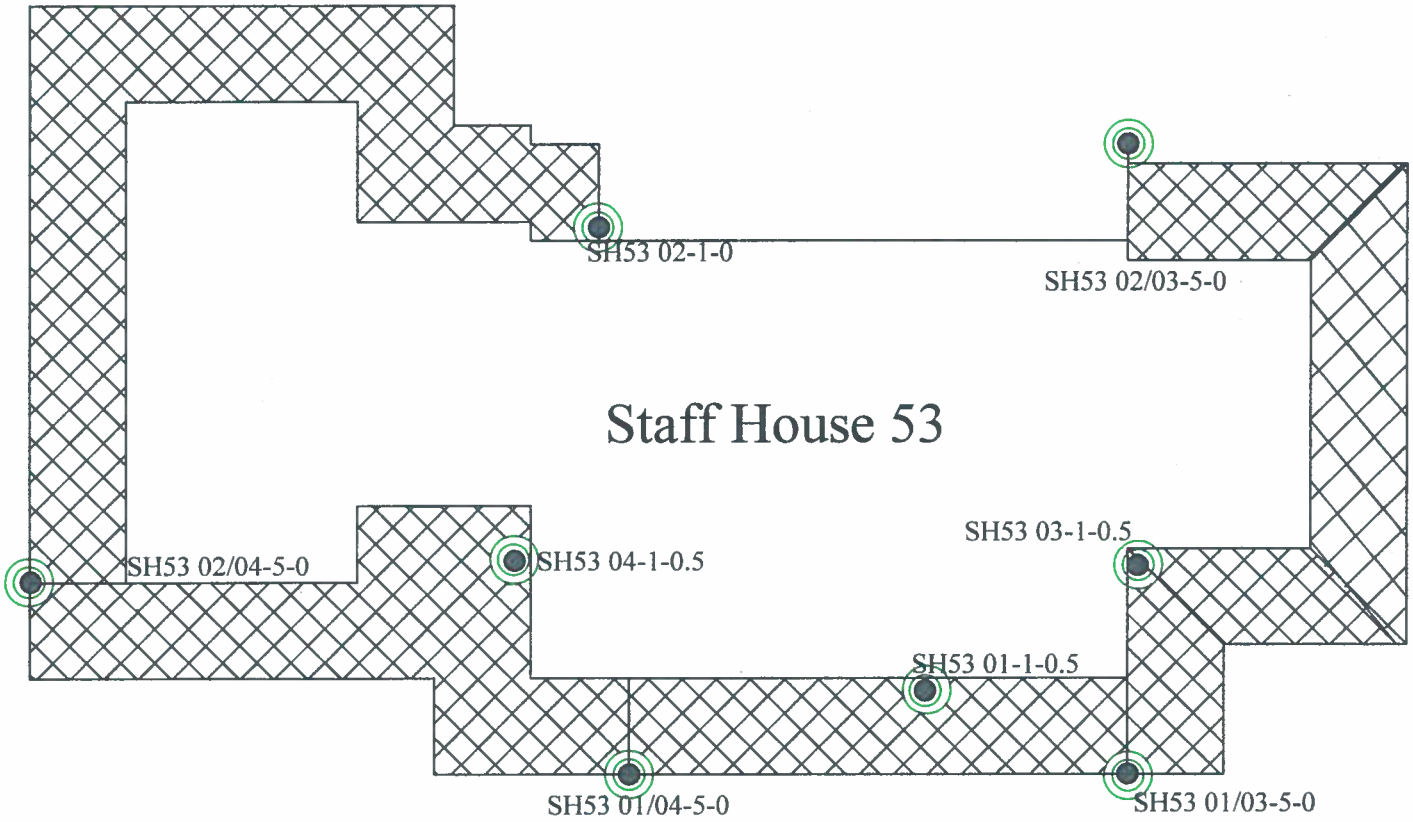
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Final remediation area

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: June 6, 2006
Project No.: 1018.WA8	File: SFH 52 5-2-06 Remediation Figure.dwg

Single Family Home 52 Remediation

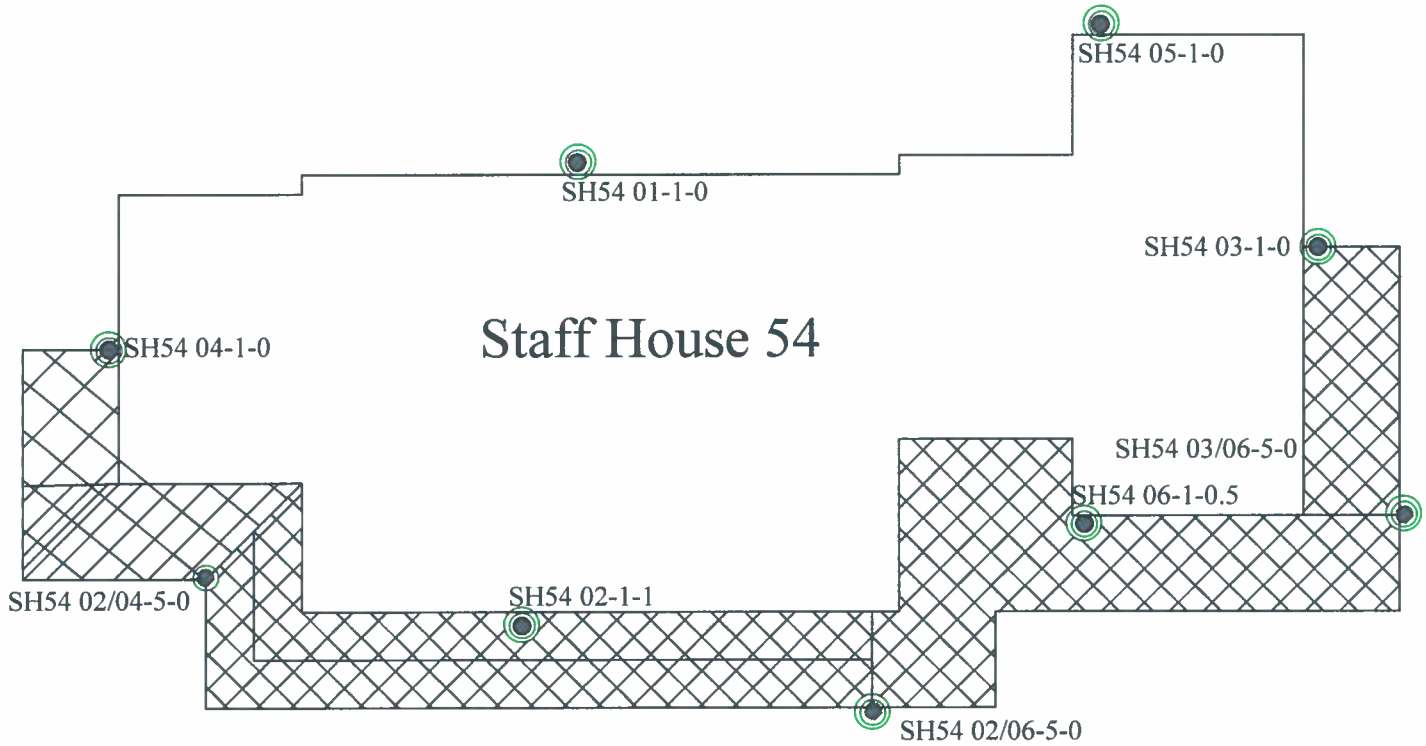
Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Final excavation area

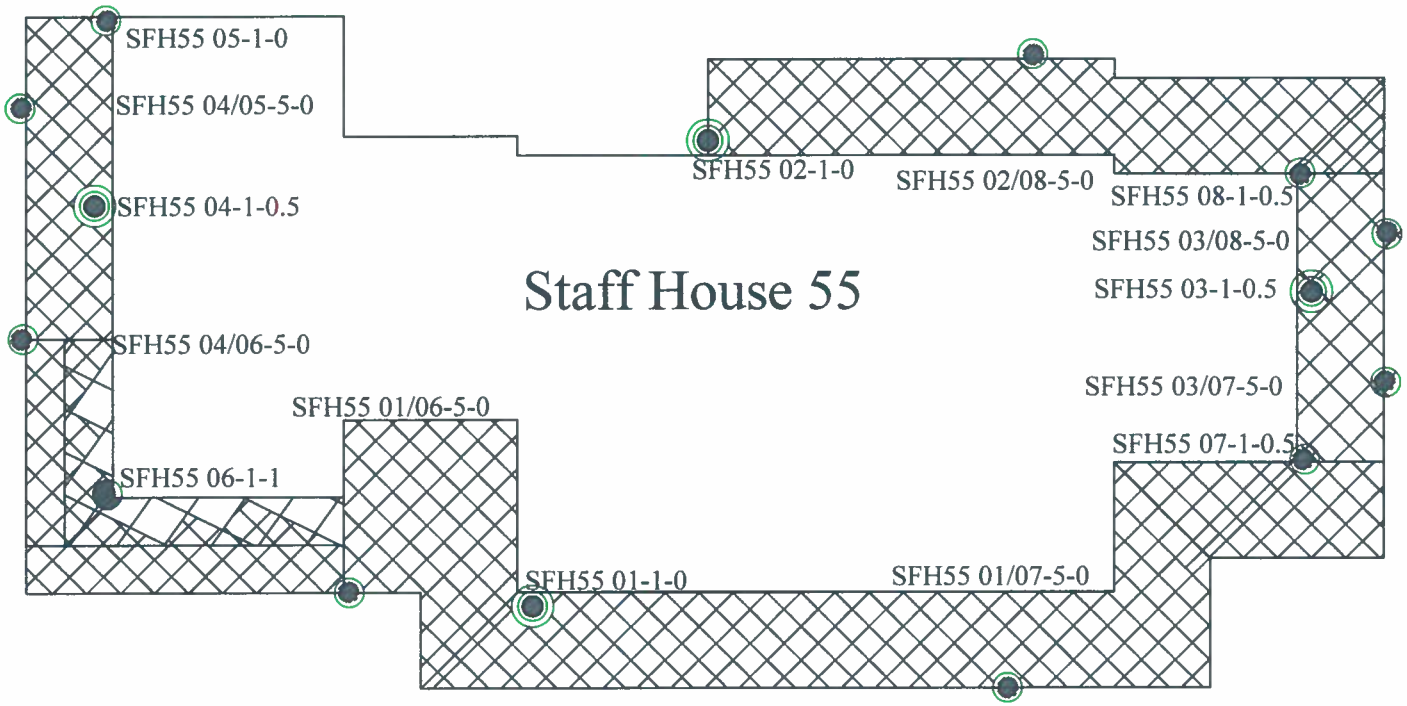
R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Single Family Home 53 Remediatiion
Approximate Scale: 1 Inch = 10 Feet	Date: July 3, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: SFH 53 5-2-06 Remediation Figure.dwg	



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Final excavation area

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Single Family Home 54 Remediatiion
Approximate Scale: 1 Inch = 10 Feet	Date: June 6, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: SFH 54 xx-xx-06 Remediation Figure.dwg	



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

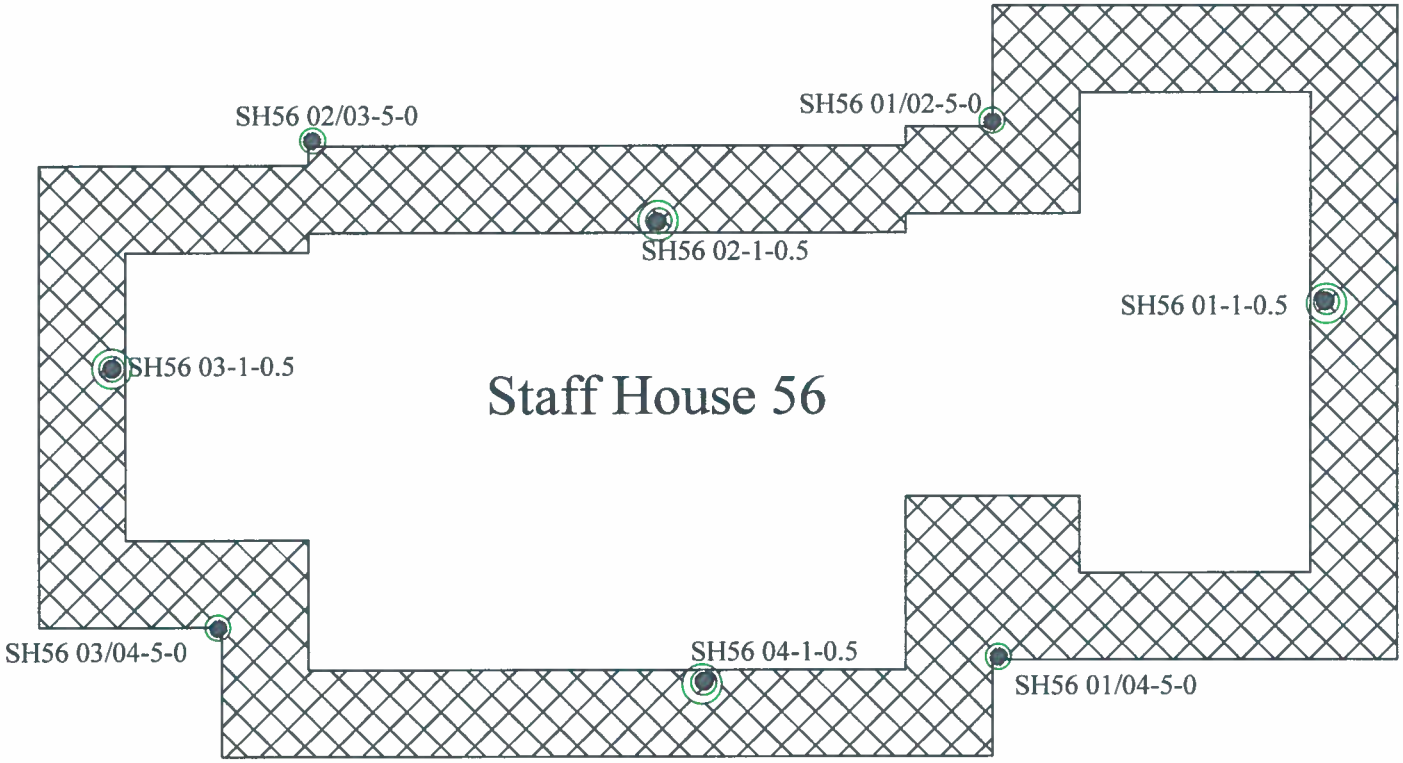
- Sampling location
- Area requiring excavation
- Final remediation area

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: May 24, 2006
Project No.: 1018.WA8	File: SFH 55 5-1-06 Remediation Figure.dwg

Single Family Home 55 Remediatiion

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

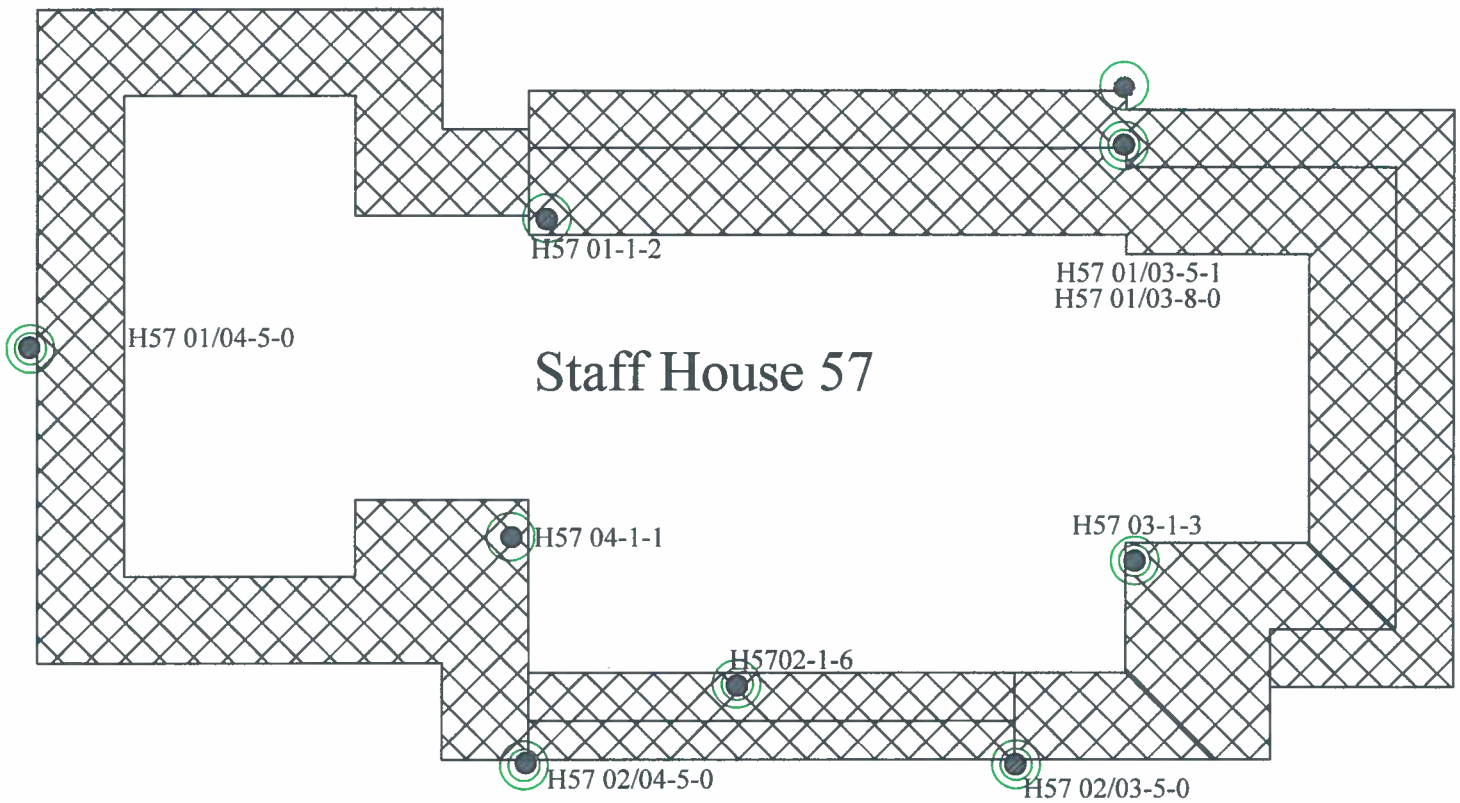
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Final excavation area

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: May 23, 2006
Project No.: 1018.WA8	File: SFH 56 xx-xx-06 Remediation Figure.dwg

Single Family Home 56 Remediatiion

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Final excavation area

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Single Family Home 57 Remediatiion
Approximate Scale: 1 Inch = 10 Feet	Date: July 9, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: SFH 57 Finak Remediation Figure.dwg	

KENT BUILDING

Kent Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
K01-1/T	104.00									0.005								
K01/13-5-0	110.00																	
K02-1-0	**894.00**																	
K02-1-0.1	317.00																	
K02-1-2	0.52																	
K02/09-5-0	64.50																	
K02/57-5-0	38.50																	
K03-1/T	173.00							0.046		0.140		0.080						
K03-1-0	225.00	0.038			0.280	~~0.280~~				0.069		0.061						
K04/51-5-0	31.00																	
K04-1/T	**510.00**		0.006	0.006						0.007		0.005						
K04-1-0			**0.008**	**0.013**														
K04-1-2	18.70																	
K04/63-5-0	30.40																	
K05-1/T	**510.00**		**5.600**	**38.000**														
K05-6/T	115.00			**0.035**														
K05-1/1	112.00		**4.900**	**9.400**										0.092				
K05-1/2	51.20		**3.500**	**3.100**										0.042				
K05-1/3			**0.015**	**0.400**														
K05-1-6	5.56																	
K05-3/1	17.70			**0.042**														
K05-3/2																		
K05-3/3																		
K05/50-5-0	350.00		**0.500**	**3.000**	0.320	**0.320**				0.770		0.800						
K05/50-5-3	2.67																	
K05/50-10-0																		
K06/43-5-0	190.00	0.042	**0.033**	**0.590**	0.470	**0.470**				0.440		0.190						
K06/43-5-4			**0.040**	**1.100**														
K06/43-5-6																		
K06/43-10-0				**0.016**						0.046		0.029						
K06/43-10-4			**0.022**	**0.110**														
K06/43-10-6																		
K06/43-15-0																		
K06-1/T	368.00		**0.650**	**12.000**						0.084								
K06-1-4	12.20		**0.510**	**2.700**										0.037				
K06-1-6																		
K06/44-4.5-0	132.00		**0.019**	**0.380**	**0.560**	**0.560**				0.330		0.360						
K06/44-5-4				**0.038**														
K06/44-5-6																		
K06/44-10-0				**0.008**						0.037		0.023						
K06/44-10-4																		
K06/44-15-0	37.80									0.026								
K07/39-5-0	55.60		**0.250**	**0.082**						0.033		0.034						
K07/39-5-3			**0.018**	**0.017**														
K07/39-5-4.5																		

Kent Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
K07/39-10-0			**0.018**	**0.016**						0.056		0.031						
K07/39-10-3																		
K07/39-15-0																		
K07-1/T	21.90		**0.042**	**0.087**														
K07-1-3	90.40		**0.026**	**0.028**														
K07-1-3.1	9.43		**0.022**	**0.027**														
K07-1-4.5			**0.008**	**0.065**														
K07-1-4.5.1			**0.011**	**0.063**														
K07-1-6																		
K07/40-5-0	**460.00**		**0.140**	**0.250**						0.024		0.038						
K7/40-5-3	8.16		**0.009**	**0.025**														
K07/40-5-4																		
K07/40-10-0	17.50									0.028		0.029						
K07/40-10-0.1	18.30			0.007						0.030		0.033						
K08/24-4.5-0	373.00	0.065	**0.110**	**0.120**						0.160		0.160						
K08/24-5-4																		
K08/24-10-0								0.030		0.400		0.420						
K08-1/T	398.00		**1.600**	**12.000**						0.055		0.070						
K08-1-4	2.28																	
K08-1-4.1	0.98			**0.021**														
K08-1-6				**0.014**														
K08-1-6				**0.010**														
K08-1-8																		
K08/25-5-0	23.60			**0.020**														
K08/25-5-2																		
K08/25-10-0			**0.014**	**0.021**						0.084		0.150						
K08/25-10-2																		
K08/25-15-2																		
K08/25-23-0																		
K09-1-0	222.00	0.082																
K10/57-5-0	20.40																	
K10/57-5-0.1	16.70																	
K10/57-5-0																		
K10-1-0	**565.00**	0.114																
K10-1-1	0.94																	
K10-1-1																		
K10/11-5-0	108.00																	
K11-1-0	**443.00**	0.054																
K11-1-1	10.60																	
K11-1-1																		
K11/12-5-0	71.60																	
K12-1-0	**686.00**	**1.010**										0.015						
K12-1-1	14.70																	
K12-1-1																		
K12/58-5-0	327.00	0.017																

Kent Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
K13-1-0	116.00	0.020																
K14-1-0	**439.00**	0.088																
K14-1-1	0.87																	
K14-5-0	246.00	0.017																
K14/15-5-0	125.00																	
K15-1-0					0.007	0.007		0.017		0.058		0.100						
K15-1-0	**420.00**									0.023								
K15-1-1	20.40																	
K15-1-1																		
K15/59-5-0	**2990.00**																	
K15/59-5-2	0.69																	
K15/59-10-0	**685.00**																	
K15/59-10-2	1.87																	
K15/59-10-2		0.039																
K15/59-15-0	297.00																	
K15/59-15-0R	14.00																	
K16-1-0	**431.00**	**0.256**																
K16-1-1	41.80																	
K16-1-1																		
K17/60-5-0	75.40																	
K17-1-0	234.00	0.034																
K17/61-5-0	161.00																	
K18-1-0			**0.250**	**0.630**														
K18-1-1	3.82		**0.010**	**0.390**														
K18-1-5				**0.032**														
K18-1-7																		
K18/19-4.5-0	**989.00**		**0.010**	**0.070**														
K18/19-5-1	2.05																	
K18/19-5-1																		
K18/19-10-0	108.00																	
K19-1-0			**13.000**	**27.000**										0.430				
K19-1-4.5	9.32																	
K19/20-5-0	132.00																	
K19/20-1-3	4.58		**0.070**	**0.038**														
K19/20-1-4				**0.130**														
K19/20-1-9																		
K19/20-1-9	3.62	0.020																
K20-1-0			**0.016**	**0.150**	**0.500**	**0.500**				0.007		0.015						
K20-1-3	13.20		**0.310**	**1.200**														
K20-1-6			**0.074**	**0.270**														
K20-1-7			**1.100**	**0.560**														
K20-1-9				**0.150**														
K20-1-10				**0.014**														
K20-1-10																		
K20/21-5-0	61.30			**0.079**														

Kent Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
K20/21-5-4	5.72		0.010	0.026														
K20/21-5-6				0.009														
K20/21-5-8			0.010	0.012														
K20/21-5-8																		
K20/21-10-0																		
K20/21-10-4	15.70			0.026														
K20/21-10-6				0.009														
K20/21-10-8			0.011	0.034														
K20/21-10-8																		
K20/21-15-0	23.30																	
K21-1-0			0.620	5.700				0.008		0.110		0.120						
K21-1-4	5.62			0.056														
K21-1-6																		
K21/22-5-0	96.50																	
K21/22-5-0.1	208.00																	
K22-1-0			1.000	2.500								0.015						
K22-1-4	2.37			0.013														
K22-1-6																		
K22-1-7			1.100	0.560														
K22/23-4.5-0	385.00	0.027	0.350	0.520						0.063		0.120						
K22/23-5-4				0.025														
K22/23-5-5																		
K22/23-10-0			0.010															
K22/23-10-4			0.064	0.019														
K22/23-10-5																		
K22/23-15-0	44.50																	
K23-1-0			4.900	19.000						0.170		0.340		0.075				
K23-1-4	2.21		0.026	0.800														
K23-1-6																		
K24-1-0				0.021						0.010		0.012						
K24-1-2	76.40									0.055		0.023						
K25-1-0				0.100				0.007		0.014		0.020						
K25-1-2	10.30																	
K25-1-2.1	14.70																	
K25/26-5-0	45.90									0.023								
K26-1-0			0.230	4.500														
K26-1-4	2.83			0.170														
K26-1-6																		
K26/27-4.5-0	111.00			0.035														
K26/27-5-3																		
K26/27-10-0	49.50			0.008														
K36/27-10-2																		
K26/27-15-0																		
K27-1-0			0.300	2.700								0.007						
K27-1-6			0.190	2.000														

Kent Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
K27-1-7				0.008														
K27-1-9																		
K27-1-9																		
K27/28-5-0	63.80																	
K28-1-0			0.055	0.440								0.005						
K28-1-2	1.59			0.380														
K28-1-5				0.120														
K28-1-5.5																		
K28/29-4.5-0	242.00	0.044		0.025														
K28/29-5-2																		
K28/29-10-0																		
K29-1-0				0.019														
K29-1-2	1.22		0.053	0.047														
K29-1-6			0.008															
K29-1-6.1			0.017															
K29-1-6.5			0.160															
K29-1-9																		
K29/30-5-0	431.00																	
K29/30-5-2	4.15																	
K29/30-10-0	41.10																	
K30-1-0			0.430	4.800										0.038				
K30-1-4	3.84		0.150	0.990														
K30-1-6			0.019	0.058														
K30-1-8																		
K30/31-5-0	785.00		0.010	0.047														
K30/31-5-4	0.82																	
K30/31-10-0	122.00																	
K31-1-0			0.031	0.970														
K31-1-4	4.11		0.009	0.089														
K31-1-6	3.76																	
K31/32-5-0	32.20																	
K32-1-0			22.000	46.000				0.054		0.072		0.021						
K32-1-5.5	0.66																	
K32/33-4.5-0	208.00	0.050	0.008	0.027														
K32/33-5-2.5				0.031														
K32/33-5-5																		
K32/33-10-0																		
K33-1-0			0.180	2.300								0.021						
K33-1-4	2.94			0.180														
K33-1-6	22.80			0.062														
K33-1-6.5																		
K33/34-5-0	155.00	0.018		0.040														
K33/34-5-2.5																		
K33/34-10-0																		
K34-1-0			0.300	3.100								0.010						

Kent Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
K34-1-4	3.64			**0.370**														
K34-1-6				**0.011**														
K34-1-6.5																		
K34/35-5-0	147.00	0.016																
K35-1-0	288.00	0.097																
K35/36-5-0	49.80																	
K36-1-0			**3.600**	**14.000**				0.015				0.039		0.046				
K36-1-2	3.37																	
K36/37-4.5-0	103.00		**0.044**	**0.210**														
K36/37-4.5-0.1	103.00		**0.041**	**0.280**														
K36/37-5-3	3.03																	
K36/37-5-3.1	3.41																	
K36/37-10-0																		
K37-1-0			**22.000**	**34.000**				0.024		0.056		0.200		0.170				
K37-1-5.5	4.56			**0.090**														
K37-1-7																		
K37/66-5-0	37.80			**0.059**						0.041		0.049						
K37/66-5-1																		
K37/66-10-0	36.40			**0.012**														
K37/66-10-1																		
K37/66-13-0																		
K66-1-0	33.30		**0.011**	**0.040**														
K38-1-0			**2.700**	**5.900**				0.011		0.064		0.170						
K38-1-4	7.42		**0.008**	**0.120**														
K38-1-6																		
K38/39-4.5-0	**412.00**		**0.820**	**0.990**	**0.920**	**0.920**		0.029		0.180		0.410						
K38/39-5-4	3.61			**0.011**														
K38/39-5-6				**0.010**														
K38/39-5-6.5																		
K38/39-10-0	90.50		**0.130**	**0.085**	0.220	**0.220**				0.027		0.025						
K38/39-10-4																		
K38/39-15-0			**0.033**	**0.020**						0.047		0.038						
K38/39-15-4																		
K38/39-20-0			**0.032**	**0.045**														
K38/39-20-5																		
K38/39-25-0			**0.008**	**0.009**						0.031		0.027						
K38/39-25-0.5										0.033								
K38/39-28-0			**0.011**	**0.027**						0.037								
K38/39-28-0.5										0.046		0.025						
K38/39-31-0										0.025		0.029						
K39-1-0			**24.000**	**37.000**	**1.200**	**1.200**		0.064		0.280		1.400		0.280		0.030	**0.030**	
K39-1-5.5	3.51			**0.024**														
K39-1-7.5																		
K40-1-0			**0.410**	**1.800**	**0.680**	**0.680**				0.140		0.240						
K40-1-3	2.71							0.042		0.064		0.140						

Kent Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
K40/41-5-0	135.00		**0.074**	**0.200**						0.055		0.071						
K40/41-5-3	2.33																	
K40/41-10-0			**0.150**	**0.420**						0.085		0.120						
K40/41-10-3				**0.014**														
K40/41-10-4																		
K40/41-15-0			**0.043**	**0.042**						0.110		0.075						
K40/41-15-4																		
K40/41-20-0			**0.007**							0.110		0.047						
K40/41-20-1.5																		
K40/41-22-0				**0.007**						0.067		0.029						
K40/41-22-0.5																		
K40/41-20-0.5																		
K40/41-24-0.5																		
K40/41-28-0				**0.008**						0.070		0.033						
K40/41-28-0.5												0.034						
K40/41-28-0.5.1										0.037		0.020						
K40/41-31-0			**0.027**	**0.012**						0.084		0.051						
K40/41-31-0.5																		
K40/41-34-0				**0.009**						0.440		0.033						
K40/41-34-0.5										0.034								
K40/41-28-0.5										0.034								
K40/41-37-0			0.007							0.033		0.025						
K41-1-0			**0.084**	**0.045**						0.049		0.066						
K41-1-3	22.70			**0.044**						0.150		0.041						
K41-1-4			**0.013**	**0.053**														
K41-1-8				**0.009**														
K41-1-8																		
K41/42-5-0	28.20			**0.018**						0.051		0.086						
K41/42-5-4				**0.012**						0.051		0.041						
K41/42-5-5																		
K41/42-10-0										0.160		0.100						
K42-1-0			**1.000**	**4.800**	**0.510**	**0.510**		0.027		0.190		0.490						
K42-1-4	5.56																	
K42/43-5-0	62.70			**0.014**														
K42/43-5-4	11.00		**0.088**	**0.150**														
K42/43-5-6				**0.058**														
K42/43-5-7																		
K42/43-10-0										0.120		0.051						
K43-1-0			**0.083**	**0.880**	0.190	**0.190**				0.051		0.058						
K43-1-4	4.49																	
K6/44-10-4																		
K44-1-0			**1.000**	**23.000**	0.380	**0.380**				0.100		0.094		0.091				
K44-1-4.5	6.37			**0.056**														
K44-1-6																		
K45-1-0				**0.120**						0.018		0.120						

Kent Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
K45-1-2	20.40	**1.050**																
K45-1-2		**0.190**																
K45-5-2	30.90																	
K45-5-0S	165.00																	
K45-5-0N	56.10									0.075		0.090						
K45-5-0N																		
K45-10-0	67.00									0.084		0.084						
K45-10-0																		
K45/62-5-0	224.00																	
K46/62-1-0	96.30											0.023						
K46/62-1-0																		
K46-1-0				**0.028**						0.036		0.059						
K46-1-2	6.90																	
K46-1-2																		
K46-10-0	92.80																	
K46/47-10-0	124.00	0.034			0.220	~~**0.220**~~				0.046		0.062						
K47-1-0			**0.330**	**3.400**	0.240	**0.240**				0.043		0.096						
K47-1-4																		
K47/48-5-0	337.00			0.007														
K48-1-0			**0.170**	**1.800**	**0.550**	**0.550**		0.024		0.670		0.570						
K48-1-4	0.56			**0.120**														
K48-1-4.1	0.61			**0.130**														
K48-1-7																		
K48/49-5-0	99.10		**0.012**	**0.160**	0.310	**0.310**				0.700		0.570						
K48/49-5-4																		
K48/49-10-0	64.40									0.033								
K49-1-0			**0.770**	**8.800**	0.270	**0.270**				0.037								
K49-1-4	1.07		**0.430**	**3.000**														
K49-1-6																		
K50-1-0				**0.018**				0.009		0.058		0.031						
K50-1-3	2.90																	
K50-10-0	35.40									0.024								
K50/51-5-0	104.00			**0.009**						0.073		0.068						
K50/51-5-2																		
K50/51-10-0										0.086		0.041						
K51-1-0	**731.00**	0.133								0.015		0.025						
K51-1-2	13.80																	
K52/63-5-0	50.10																	
K52-1-0					0.310	**0.310**		0.006		0.082		0.140						
K52-1-0	**748.00**				0.280	**0.280**				0.036		0.047						
K52-1-2	23.80																	
K52-1-5																		
K52/64-5-0	44.10																	
K53-1-0					0.220	**0.220**		0.004		0.044		0.071						
K53-1-0	**481.00**	0.062			~~**0.360**~~	**0.360**				0.043		0.058						

Kent Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
K53-1-1	20.60																	
K53/65-5-0	137.00																	
K53/54-5-0	32.40																	
K54-1-0	82.60	0.027																
K55-1-0	173.00	0.053										0.069						
K56-1-0	137.00	0.015																
K57-1-0	113.00	0.026	**0.018**	**0.19**														
K57-1-2																		
K58-1-0	352.00	0.094																
K58-1-0																		
K59-1-0	**1640.00**																	
K59-1-2	67.90																	
K59-1-2																		
K59/60-5-0	258.00	0.015																
K60-1-0	**1430.00**																	
K60-1-1	28.00																	
K60-1-1	41.80	0.046																
K61-1-0	210.00	0.021		**8.6**														
K61-1-1																		
K61-1-1.5																		
K61-10-0	57.70																	
K62-1-0	52.60	0.144																
K62-1-0.1	**428.00**	0.072																
K62-1-2	32.60	0.143																
K63-1-0	210.00	0.082	**0.110**	**0.880**	0.280	**0.280**				0.045		0.14						
K63-1-2			**0.012**	**0.048**														
K63-1-5			**0.074**	**0.022**														
K63-1-7				**0.090**														
K63-1-9			**0.059**	**0.090**														
K63-1-10																		
K64-1-0	184.00																	
K65-1-0	191.00	0.034																
K66-1-0	33.30		**0.011**	**0.040**														
K67-1-0	150.00	0.025																
K68-1-0	161.00	0.050								0.032								
K68-1-0																		

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.
Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken
Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken
A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)
0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

Kent Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.00	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

0.260 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

- SPLP test was not performed for sample because location was not in compliance based on total contentrations; **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC

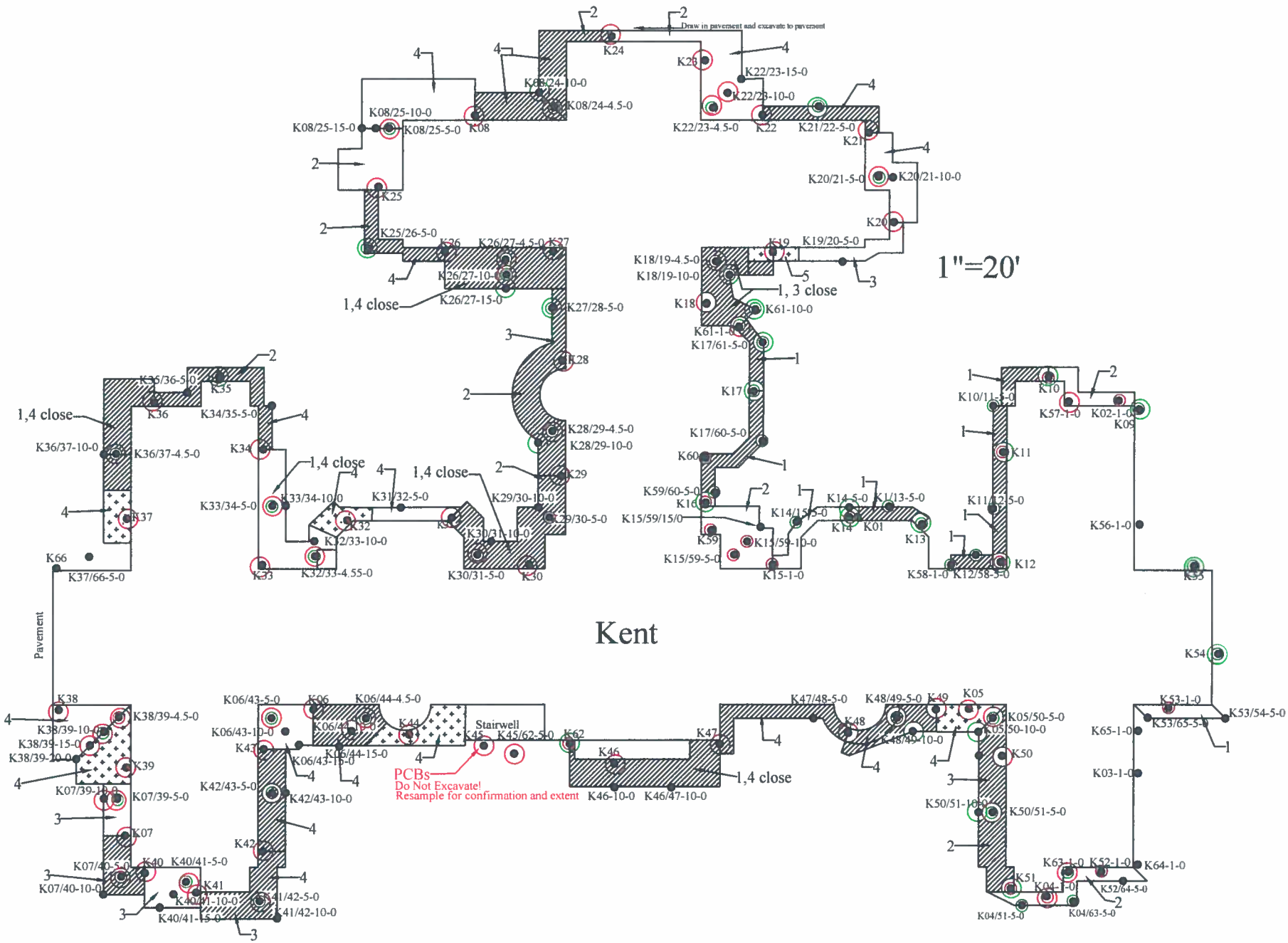
- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance

- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.

- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems

The detection limits for DDD, DDT, DDE, Endrin, and Heptachlor mass analyses are less than or equal to 20 times the SPLP criteria, therefore, if a mass analysis is non-detect for these compounds the PMC criteria is met.



Legend

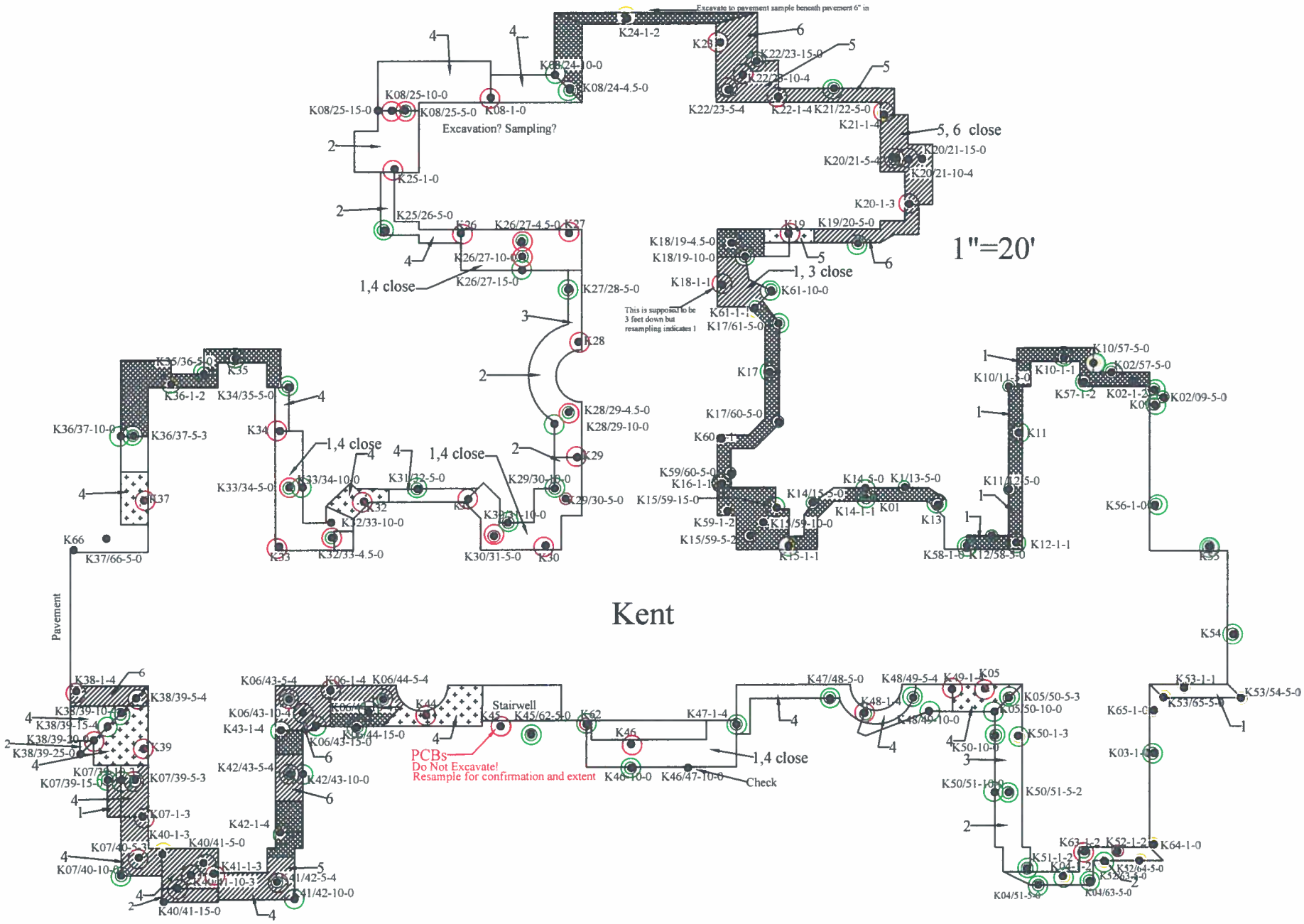
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: December 15, 2005
Project No.: 1018.WA8	File: Kent Initial Excavation Figure.dwg

Kent Initial Excavation Figure

Fairfield Hills Hospital - Kent Building
Wesserman Way
Newtown, Connecticut



Legend

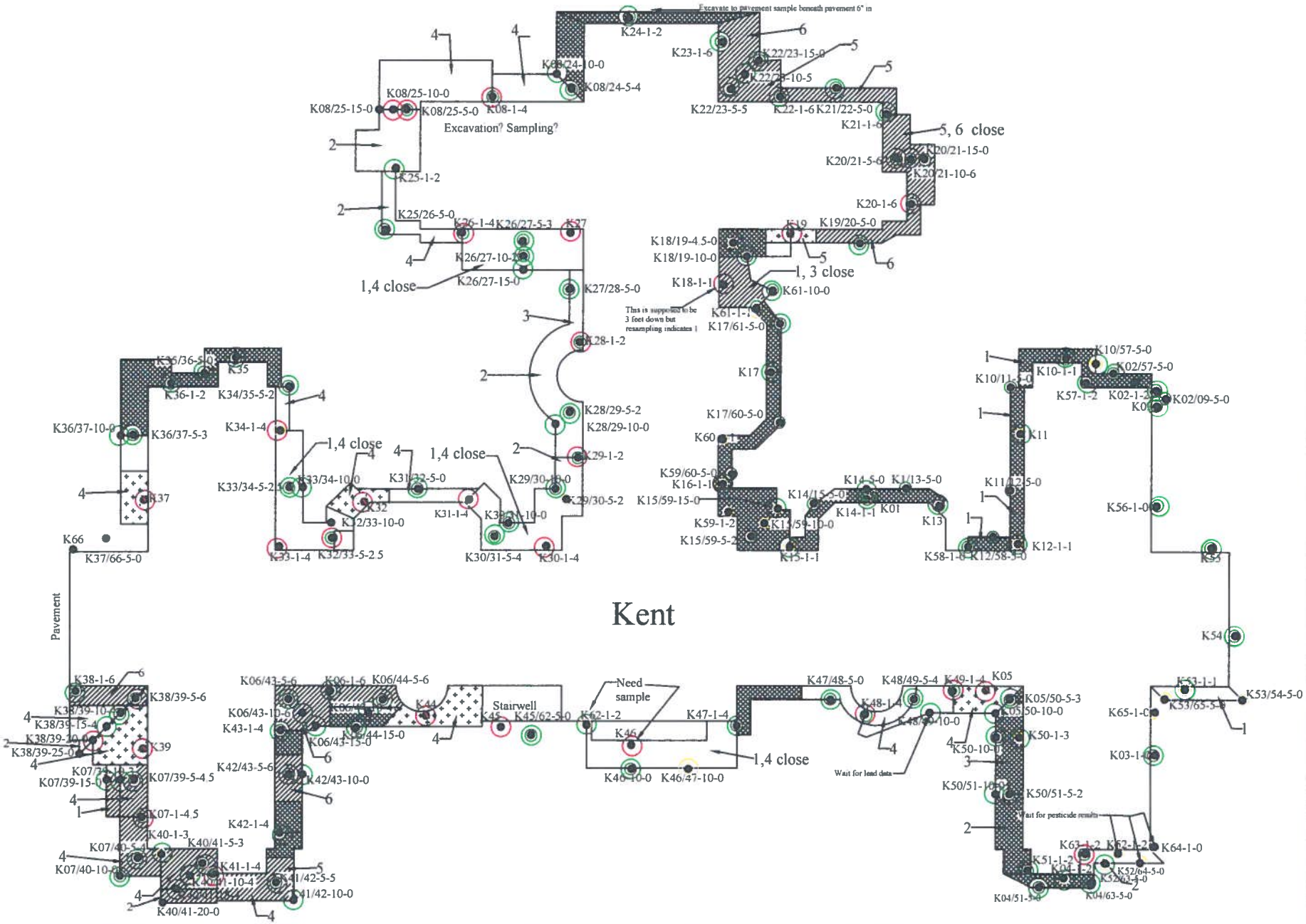
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: December 15, 2005
Project No.: 1018.WA8	File: Kent 12-15-05 Remediation Figure.dwg

Kent 12-15-05 Remediation Figure

Fairfield Hills Hospital - Kent Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

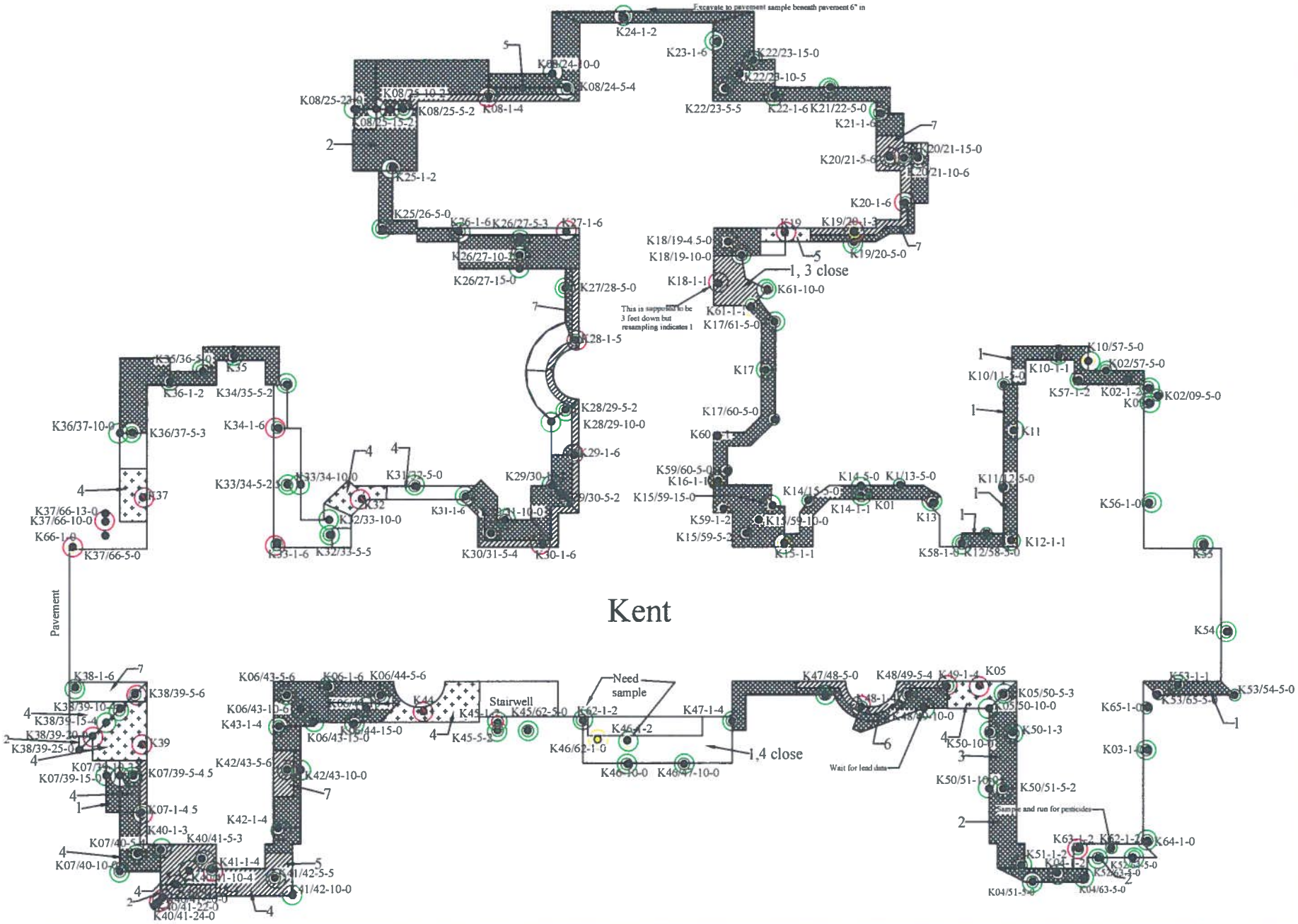
- Sampling location
- Area can be backfilled
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: December 21, 2005
Project No.: 1018.WA8	File: Kent 12-21-05 Remediation Figure.dwg

Kent 12-21-05 Building Remediation

Fairfield Hills Hospital - Kent Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

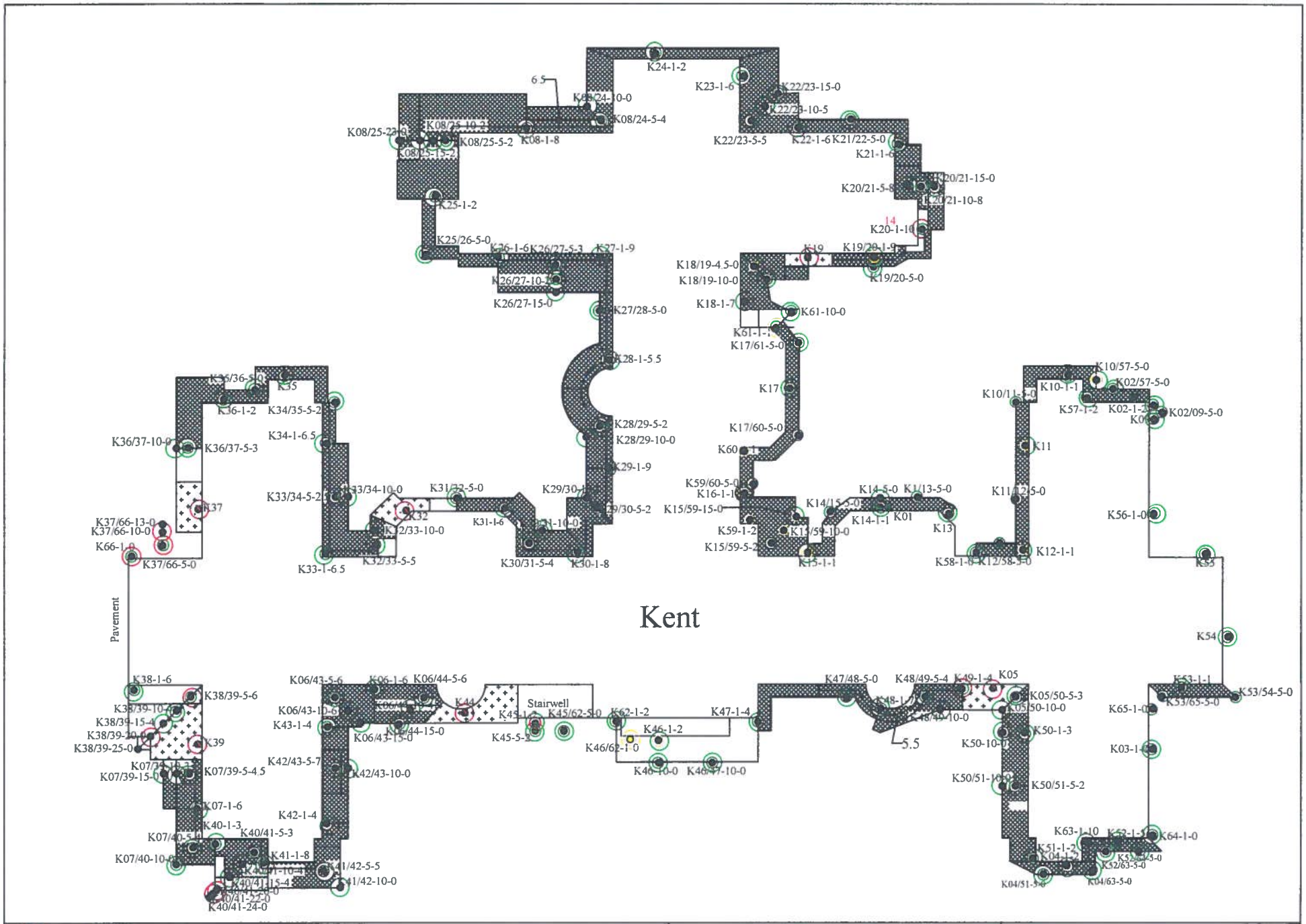
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: December 29, 2005
Project No.: 1018.WA8	File: Kent 12-29 Remediation Figure.dwg

Kent 12-29-05 Remediation Figure

Fairfield Hills Hospital - Kent Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

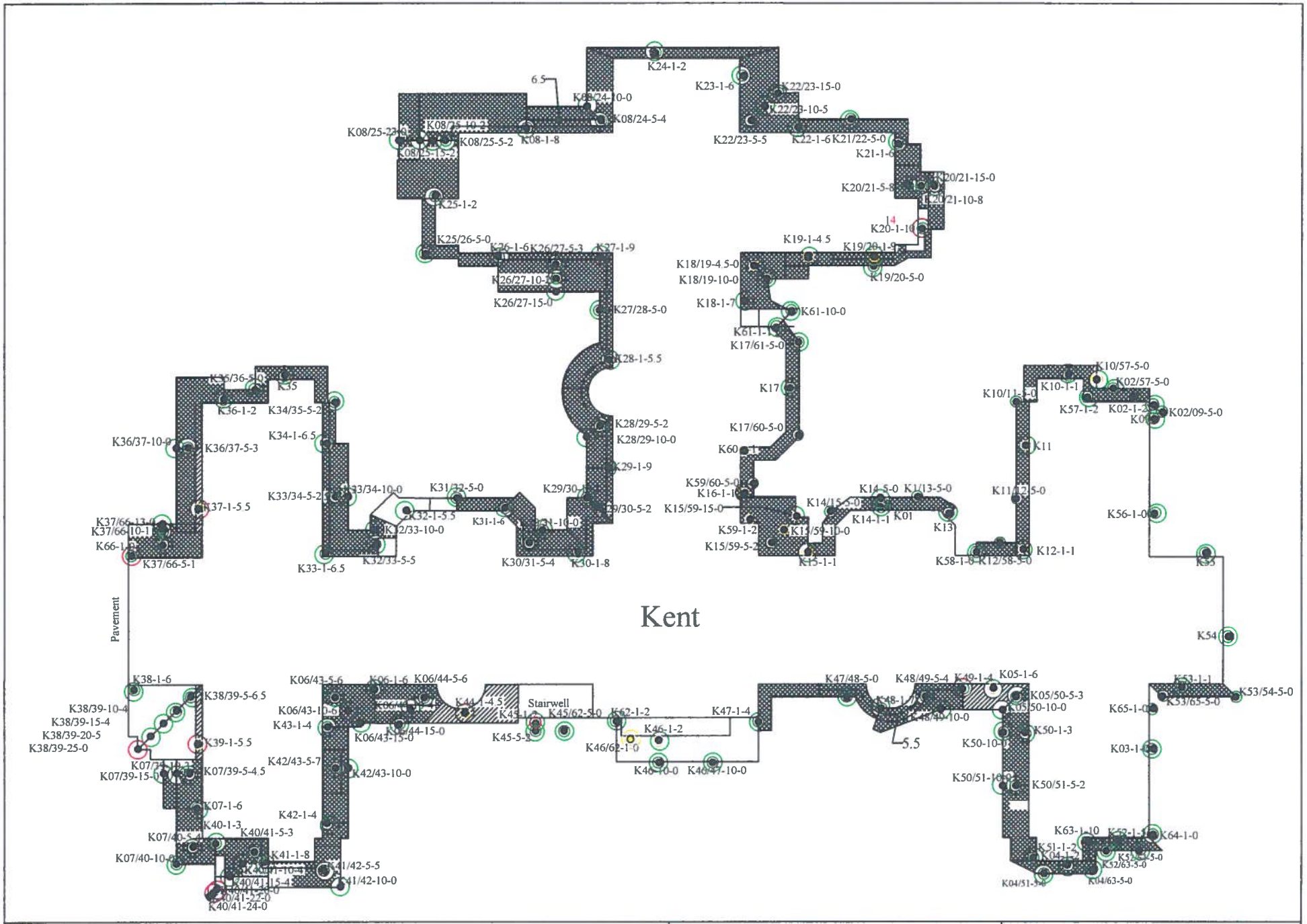
- Sampling location
- Area can be backfilled
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: January 24, 2006
Project No.: 1018.WA8	File: Kent 1-24-06 Remediation Figure.dwg

Kent 1-24-06 Remediation Figure

Fairfield Hills Hospital - Kent Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

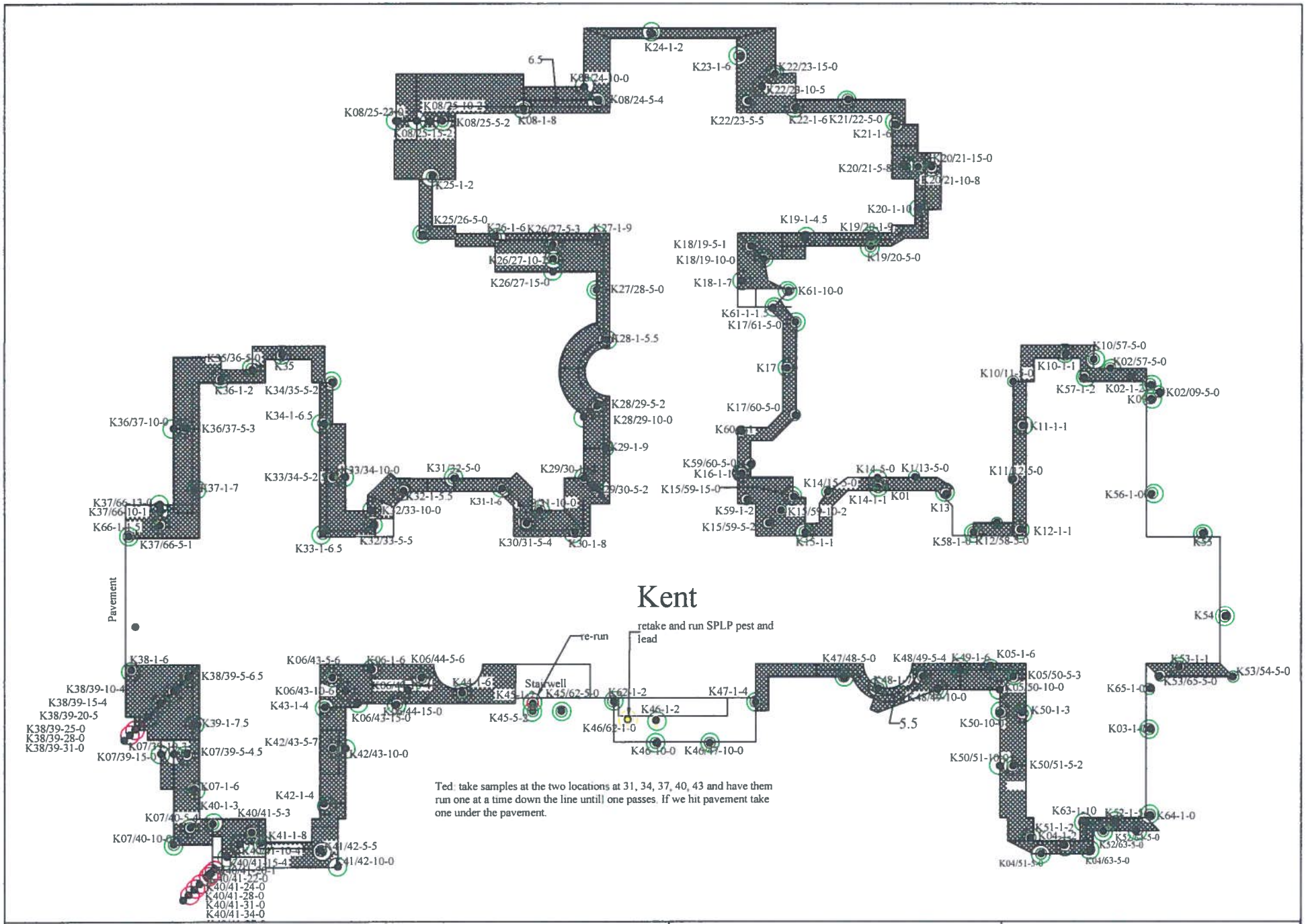
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: January 27, 2006
Project No.: 1018.WA8	File: Kent 1-27-06 Remediation Figure.dwg

Kent 1-27-06 Remediation Figure

Fairfield Hills Hospital - Kent Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

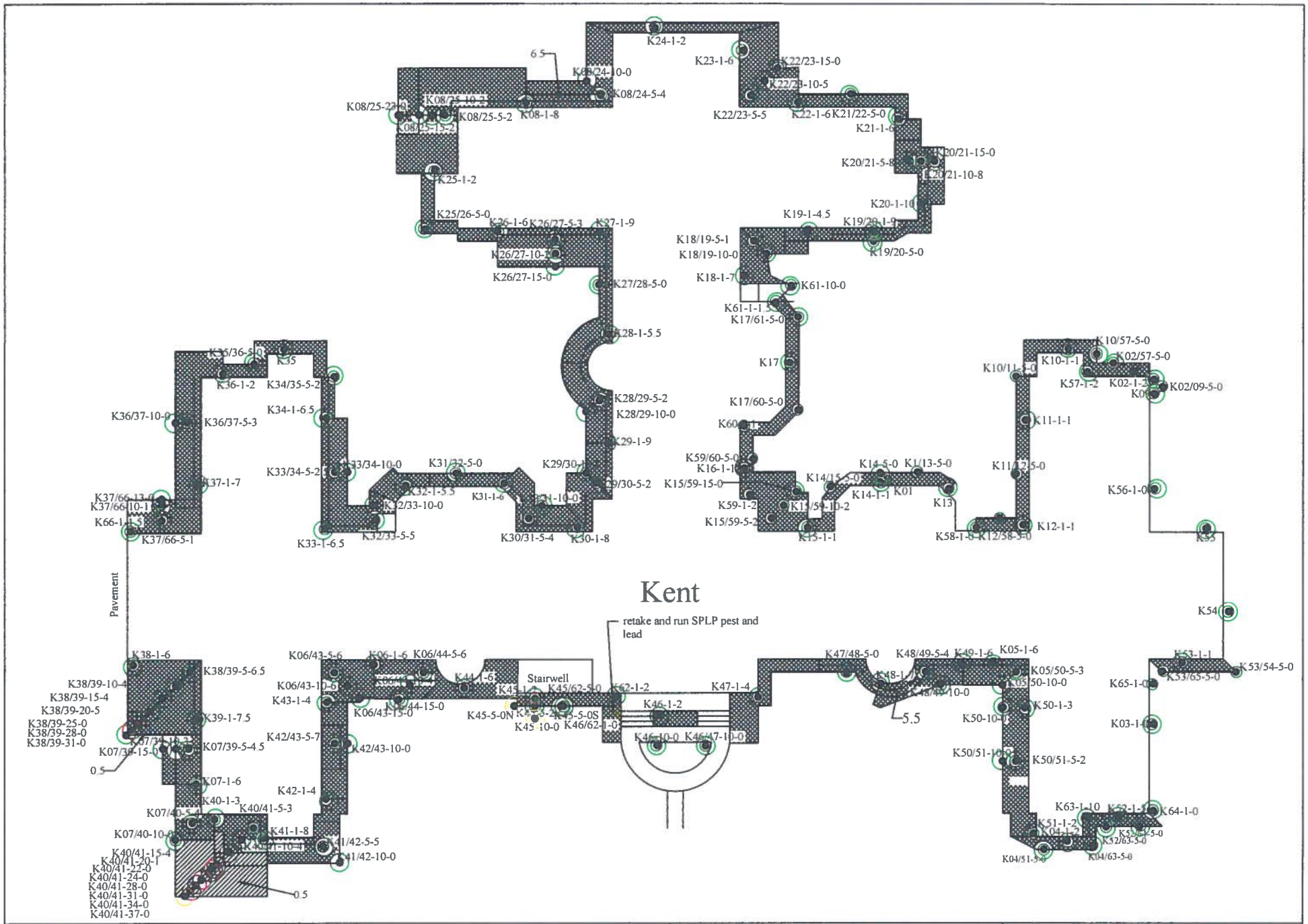
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: July 30, 2006
Project No.: 1018.WA8	File: Kent 7-30-06 Remediation Figure.dwg

Kent 7-30-06 Remediation Figure

Fairfield Hills Hospital - Kent Building
Wesserman Way
Newtown, Connecticut



Legend

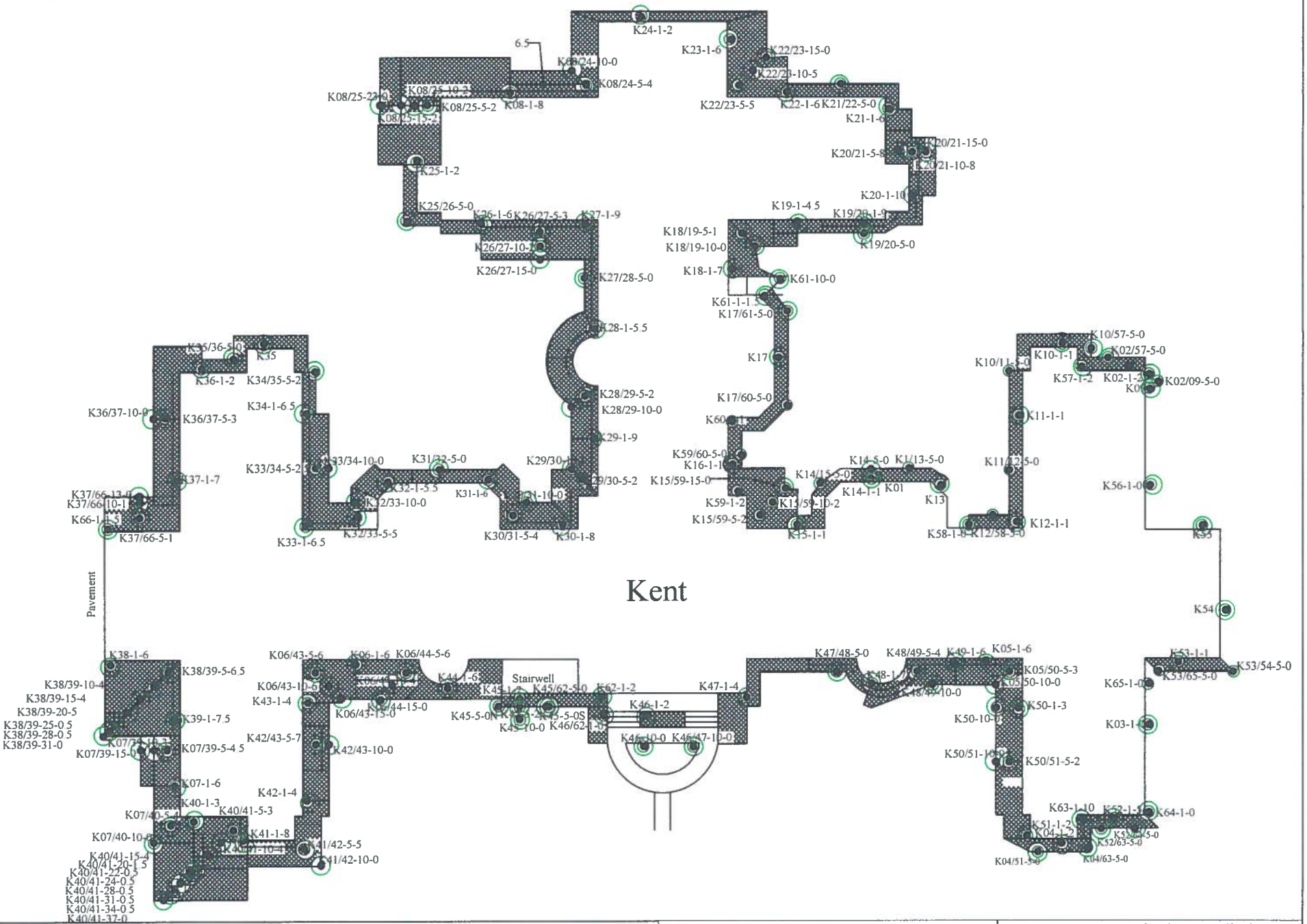
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: August 15, 2006
Project No.: 1018.WA8	File: Kent 8-15-06 Remediation Figure.dwg

Kent 8-15-06 Remediation Figure

Fairfield Hills Hospital - Kent Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: August 24, 2006
Project No.: 1018.WA8	File: Kent 8-24-06 Final Remediation Figure.dwg

Kent 8-24-06 Final Remediation Figure

Fairfield Hills Hospital - Kent Building
Wesserman Way
Newtown, Connecticut

LITCHFIELD BUILDING

Litchfield Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
L01-1-0	386.0	0.028								0.095		0.038						
L01/31-5-0	176.0	0.019								0.022								
L02-1-0	**551.0**	0.063								0.140		0.130						
L02-1-1	22.8	0.015																
L02/31-5-0	175.0									0.031								
L02/32-5-0	134.0									0.063		0.030						
L03-1-0	**460.0**	0.026								0.056		0.034						
L03-1-1	27.5	0.056																
L03/32-5-0	178.0	0.016																
L03/33-5-0	64.7									0.075		0.026						
L04-1-0	71.8	0.016			0.150	0.150												
L05-1-0	19.8																	
L06-1-0	49.1	0.027																
L07-1-0	**490.0**	0.027								0.065								
L07-1-1	12.2																	
L07/08-5-0	107.0																	
L07/34-5-0	95.7	0.020								0.034								
L08-1-0	146.0	0.058																
L08/21-5-0	75.2																	
L09-1-0	**2140.0**	0.074								0.280	0.300	0.080						
L9-1-1	9.0	0.016																
L09-10-0																		
L09/21-5-0	165.0									0.059								
L09/22-5-0	109.0																	
L10-1-0	**410.0**	0.056								0.100	0.130	0.065						
L10/22-5-0	340.0																	
L10/23-5-0	156.0									0.049								
L11-1-0	**947.0**	0.043																
L10-1-1	11.3																	
L11.1.1	11.6																	
L11-10-0																		
L11/23-5-0	79.0																	
L11/24-5-0	115.0																	
L12-1-0	250.0	0.027																
L12/24-5-0	131.0																	
L12/25-5-0	71.5																	
L13-1-0	**2480.0**	0.045								0.160		0.060						
L13-1-1	33.8	0.031																
L13-10-0																		
L13/25-5-0	127.0																	
L13/25-5-0																		
L13/14-5-0	91.5																	
L14-1-0				**0.041**														
L14-1-1	39.9	0.043																

Litchfield Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
L14/15-5-0	71.6																	
L14/15-5-0.1	70.4																	
L15-1-0	**640.0**	**0.330**								0.093	0.550	0.052	0.250					
L15-1-1	58.4	0.023																
L15/26-5-0	76.4																	
L16-1-0	86.7				0.410	~~0.410~~												
L17-1-0				**0.010**	0.320	**0.320**				0.078		0.150						
L17-1-1	15.7	0.017																
L17-1-1.1	27.0									0.027		0.049						
L17/27-5-0	141.00				0.160	~~0.160~~				0.022								
L18-1-0	**588.00**	0.131			0.130	~~0.130~~				0.210	0.330	0.150	0.250					
L18-1-1	9.85																	
L18/27-5-0	151.00																	
L18/27-5-0										0.037								
L18/28-5-0	81.70																	
L19-1-0	260.00	0.120								0.066		0.073						
L20-1-0	169.00	0.025			**0.630**	~~0.630~~				0.070		0.042						
L20-1-0	53.40																	
L20-1-1																		
L20-10-0																		
L20/29-5-0	55.60																	
L20/29-5-0																		
L20/30-5-0	150.00																	
L20/30-5-0																		
L21-1-0	**874.00**																	
L21-1-1	53.10	0.021																
L21-1-1.1	12.50	0.018																
L22-1-0	**651.00**																	
L22-1-1	10.60	0.024																
L23-1-0	330.00	0.059																
L23-1-1																		
L24-1-0	**981.00**																	
L24-1-0.1	**809.00**																	
L24-1-1	34.20	0.031																
L25-1-0	**576.00**																	
L25-1-1	37.10	0.029																
L26-1-0	287.00	0.027																
L26-1-0										0.210		0.360						
L27-1-0	**1220.00**				0.094	~~0.094~~												
L27-1-1	5.09																	
L28-1-0	322.00	0.023																
L28-1-0																		
L29-1-0					0.170	~~0.170~~				0.034		0.049						
L29-1-0	147.00	0.044																

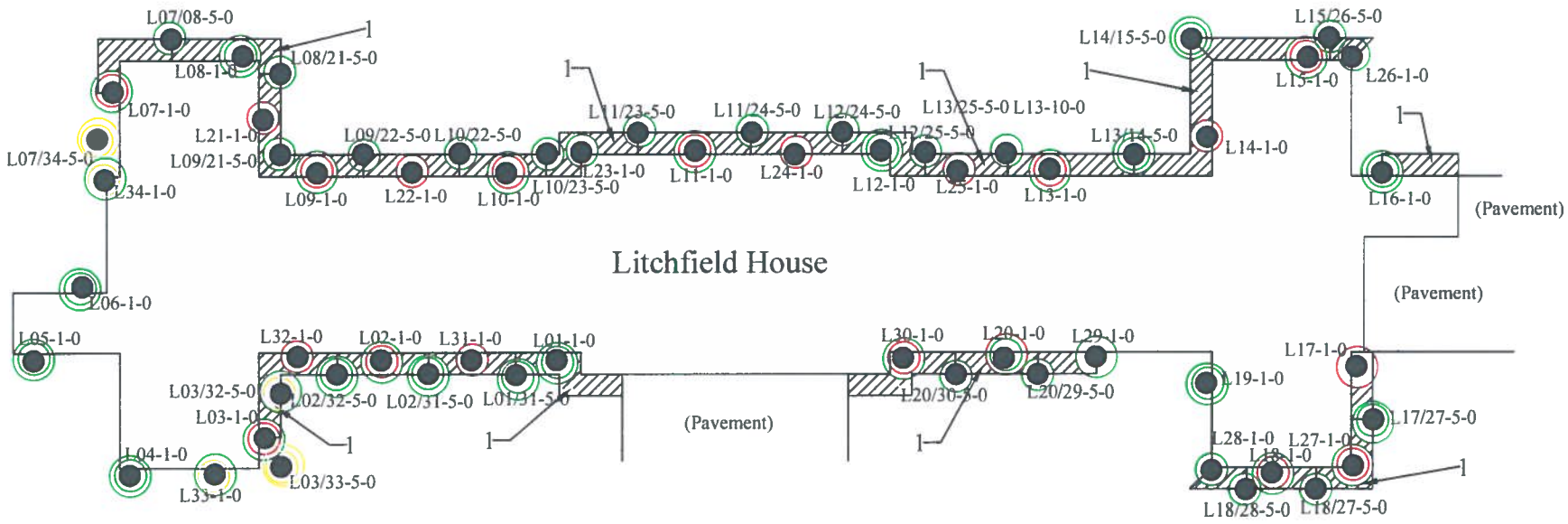
Litchfield Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
L30-1-0	**1740.00**	0.124			0.250	~~0.250~~				0.069		0.060						
L30-1-1	14.80																	
L31-1-0				**0.010**	0.340	**0.340**		0.049		0.170		0.240						
L31-1-1	4.68																	
L32-1-0	**565.00**	**0.162**			0.160	**0.160**				0.043		0.057						
L32-1-1	6.96	0.024																
L33-1-0	90.70	0.016																
L34-1-0	266.00	0.047																
L34-1-0.1	215.00	0.040																
L35-1-0	5.99																	
L35-1-0.5	38.10	0.017																
L36-1-0	19.30	0.038																

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.
Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken
Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken
A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion
0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion
- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion
~~0.250~~ - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion
- SPLP test was not performed for sample because location was not in compliance based on total contentrations; **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC
- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance
- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.
- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed
R-resampling due to quality assurance problems



Legend

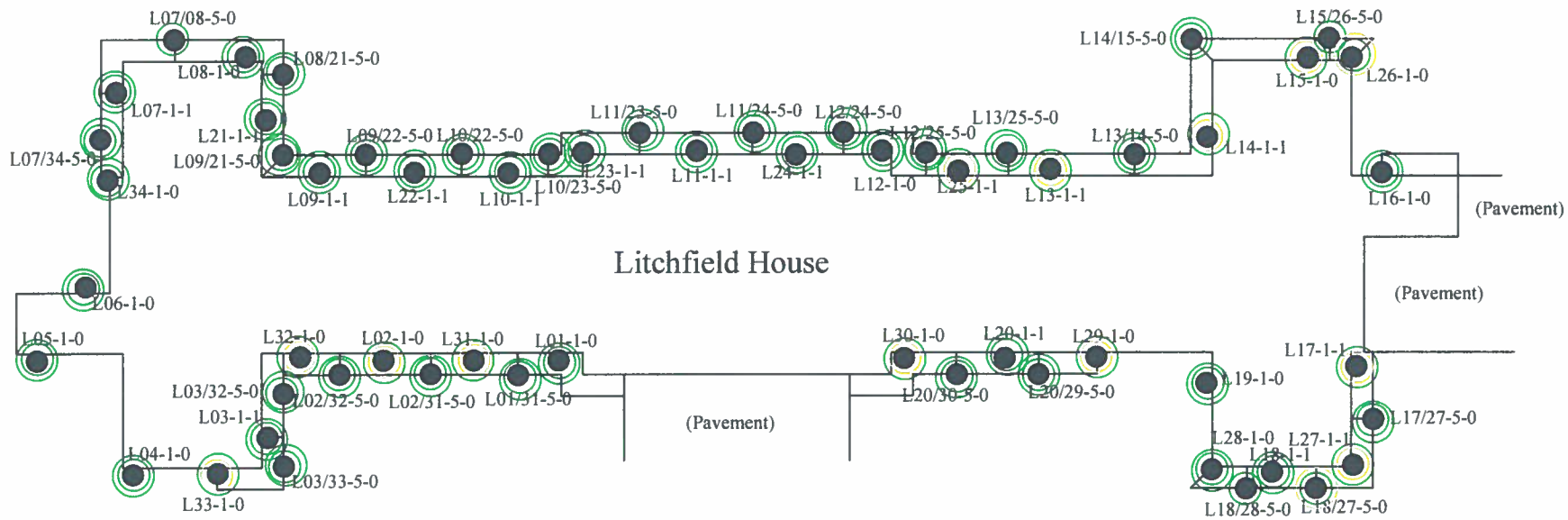
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area ready for backfill
- Need SPLP
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: March 25, 2006
Project No.: 1018.WA8	File: Litchfield X-XX-06 Remediation Figure.dwg

Litchfield Remediation Figure 3-25-06

Fairfield Hills Hospital - Litchfield House
Wesserman Way
Newtown, Connecticut



Legend

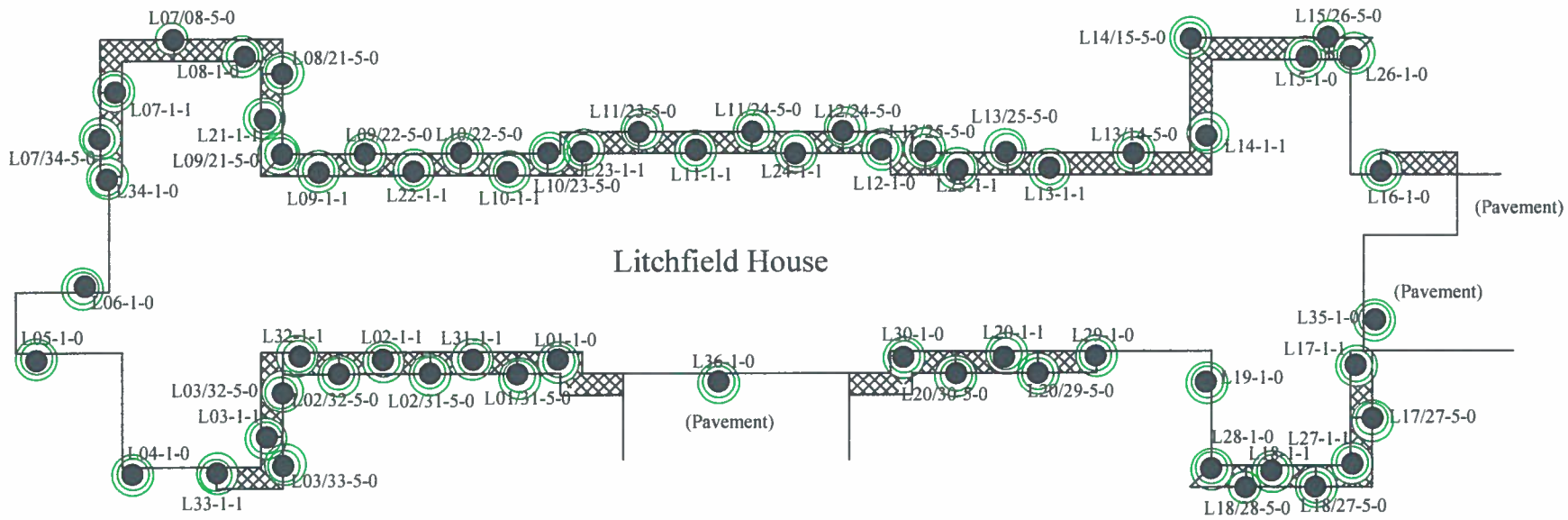
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)
- Need SPLP

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: April 17, 2006
Project No.: 1018.WA8	File: Litchfield 4-17-06 Remediation Figure.dwg

Litchfield Remediation Figure 4-17-06

Fairfield Hills Hospital - Litchfield House
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: August 20, 2006
Project No.: 1018.WA8	File: Litchfield 8-20-06 Remediation Figure.dwg

Litchfield Final Remediation Figure
8-20-06

Fairfield Hills Hospital - Litchfield House
Wesserman Way
Newtown, Connecticut

NEWTOWN BUILDING

Fairfield Hills Newtown Building Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
NE01-1-0	498							0.032		0.150		0.550						
NE02/15-5-0	68	0.031								0.930	0.100	0.490						
NE02/15-5-0.5	8																	
NE02/15-8-0	32																	
NE02-1-0	782							0.040		0.290		0.380		0.050				
NE02-1-0.5	36									0.024								
NE02-1-0.5.1	12	0.017																
NE02-1-1.5	5																	
NE02/17-5-0	108	0.017			0.100	~~0.100~~				0.310	0.130	0.360	0.160					
NE02/17-5-0.5	8																	
NE02/17-8-0	38				0.310	~~0.310~~				0.140		0.120						
NE03-1-0	800							0.041		0.730		0.720						
NE03-1-0.5	78	0.033								0.081		0.060						
NE03-1-1.5	4																	
NE03/15-5-0	88									0.520		0.260						
NE03/15-5-0.5	48	0.049																
NE03/15-5-1	11	0.088																
NE03/15-5-3	3																	
NE03/15-8-0	50																	
NE03/14-5-0.1	102	0.015								0.390	0.120	0.400						
NE03/14-5-0.5	18	0.023																
NE03/14-5-1	27	0.046								0.120		0.042						
NE03/14-5-3	2.82																	
NE03/14-8-0	47																	
NE04-1-0	556									0.360		0.220						
NE05-1-0	258				86.000	86.000												
NE06-1-0			0.016							0.088		0.180				0.056	0.056	
NE06-1-0.5																		
NE06-1-0.5	9.43																	
NE06/07-5-0	229	0.020								0.240		0.260						
NE06/07-5-0.5	14.4																	
NE06/07-8-0	66.7																	
NE06/17-5-0	88.7	0.019																
NE06/17-5-0.5	17																	
NE06/17-8-0	59																	
NE07-1-0			0.034					0.009		0.140		0.350						
NE07-1-0.5	34	0.023																
NE07-1-1.5	86	0.123																
NE07-1-3	4																	
NE07/08-5-0	644									2.700		3.000						
NE07/08-5-2	6.46											0.036						
NE07/08-16-0	101	0.019								0.560		0.810						
NE07/08-16-0.5	26.4																	
NE07/08-18-0	74.1	0.018																

Fairfield Hills Newtown Building Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
NE07/08-18-0.5	80.2																	
NE07/08-20-0.5	156	0.021																
NE07/08-20-1	14.2																	
NE07/08-22-0	14.4	0.016																
NE08-1-0			0.027	0.034	4.400	4.400				0.530		0.960				0.061	0.061	
NE08-1-3	15				0.180	~~0.180~~												
NE08/09-5-0	310									0.140		0.130						
NE09-1-0					740.000	740.000												
NE09-1-3	4				1.600	1.600												
NE09-1-6	3				0.580	0.580	0.094											
NE09-1-8							~~1.200~~											
NE09/10-5-0	60	0.030			6.900	6.900				0.072		0.120						
NE09/10-5-2	21				7.000	7.000												
NE09/10-5-6																		
NE09/10-16-0	70	0.016								0.260		0.290						
NE09/10-16-0.5	20																	
NE09/10-18-0	107																	
NE10-1-0					66.000	66.000												
NE10-1-4	60				1.000	1.000												
NE10-1-5.5																		
NE10-8-0	269	0.047			0.450	~~0.450~~				0.560		0.290						
NE10-8-5	5				0.450	~~0.450~~				0.560		0.290						
NE10-17-0	87									1.400	0.180	0.650	0.120					
NE10-17-1										0.190		0.140						
NE10-20-0										1.200		0.410						
NE10/11-5-0	3090									2.800		3.300						
NE10/11-5-0.5	7.98																	
NE10/11-8-0	76.6									0.960		0.390						
NE11-1-0	529	0.025			0.350	~~0.350~~				0.630		0.270						
NE11-1-0.5	436	0.064																
NE11-1-1.5	7																	
NE11-1-1.5	7																	
NE11/12-5-0	166									1.000	0.110	0.340						
NE11/12-5-0.5	71																	
NE11/12-5-0.5										0.052								
NE11/12-8-0	49									0.780		0.380						
NE12-1-0	438	0.019			0.380	~~0.380~~				0.420		0.110						
NE12-1-0.5	138	0.049																
NE12-1-1.5	23	0.017																
NE12-1-2.5	3																	
NE12/13-5-0	93	0.016								0.130		0.046						
NE12/13-5-0.5	24	0.016																
NE12/13-5-1	55																	
NE12/13-8-0	66																	

Fairfield Hills Newtown Building Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	**0.015**	**0.007**	**0.007**	**0.490**	**0.066**	**0.300**	**2.600**	**0.150**	**1.800**	**0.100**	**1.800**	**0.100**	**20.000**	**42.000**	**0.067**	**0.020**	**0.200**
NE12/13-8-0										0.780		0.380						
NE13-1-0	523	0.044			0.250	~~0.250~~				0.260		0.120						
NE13-1-0.5	350	0.050																
NE13-1-1.5	14																	
NE13/14-5-0	245	0.021								0.810		0.300						
NE13/14-5-0.5	48	0.021																
NE13/14-5-1	3																	
NE13/14-8-0	42																	
NE14-1-0	540	0.088			0.470	~~0.470~~				0.490	0.130	0.450						
NE14-1-0.5	272	0.054								0.180		0.079						
NE14-1-1.5	15																	
NE15-1-0	557	0.093			0.590	~~0.590~~				0.420	0.200	0.230						
NE15-1-0.5	55	0.045								0.170		0.051						
NE15-1-1.5	10																	
NE16-1-0	713	0.126			0.930	~~0.930~~				0.410		0.520						
NE17-1-0	1390	0.177								0.039		0.089				0.056	0.056	
NE17-1-0.5	191	0.068																
NE17-1-1.5	5																	

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimiter sampling location-- xx/xx indicates that the sample was taken between two premier locations at some distance from the foundation.

Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken

Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken

A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

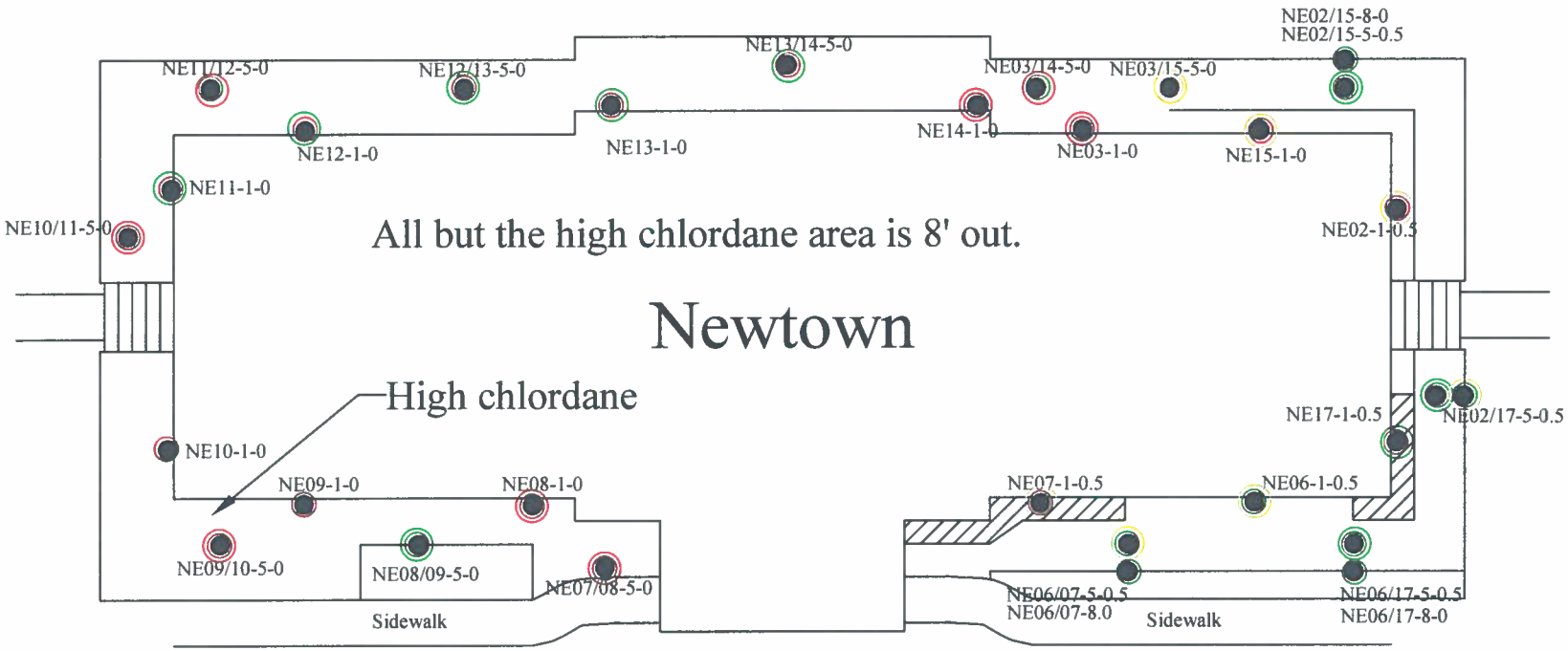
0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

~~0.250~~ - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

- SPLP test was not performed for sample and chemical because total concentration was less than Pollutant Mobility criteria

- blank cell indicates that the particular chemical was not analyzed for in that particular sample because a previous result closer to the foundation or shallower in depth was in compliance



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required

Legend

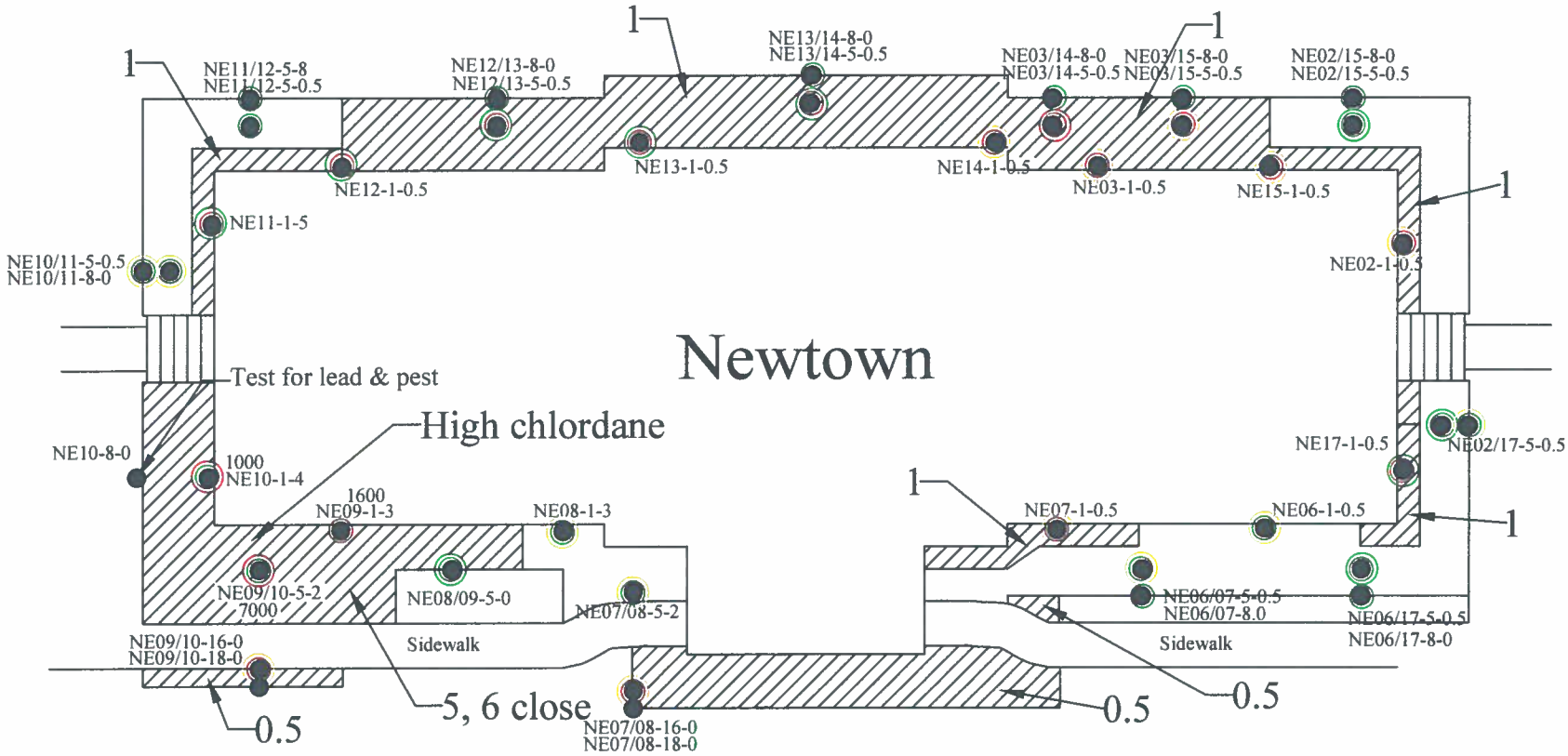
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: April 5, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure X-XX-06.dwg

Newtown April 5, 2006 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required

Legend

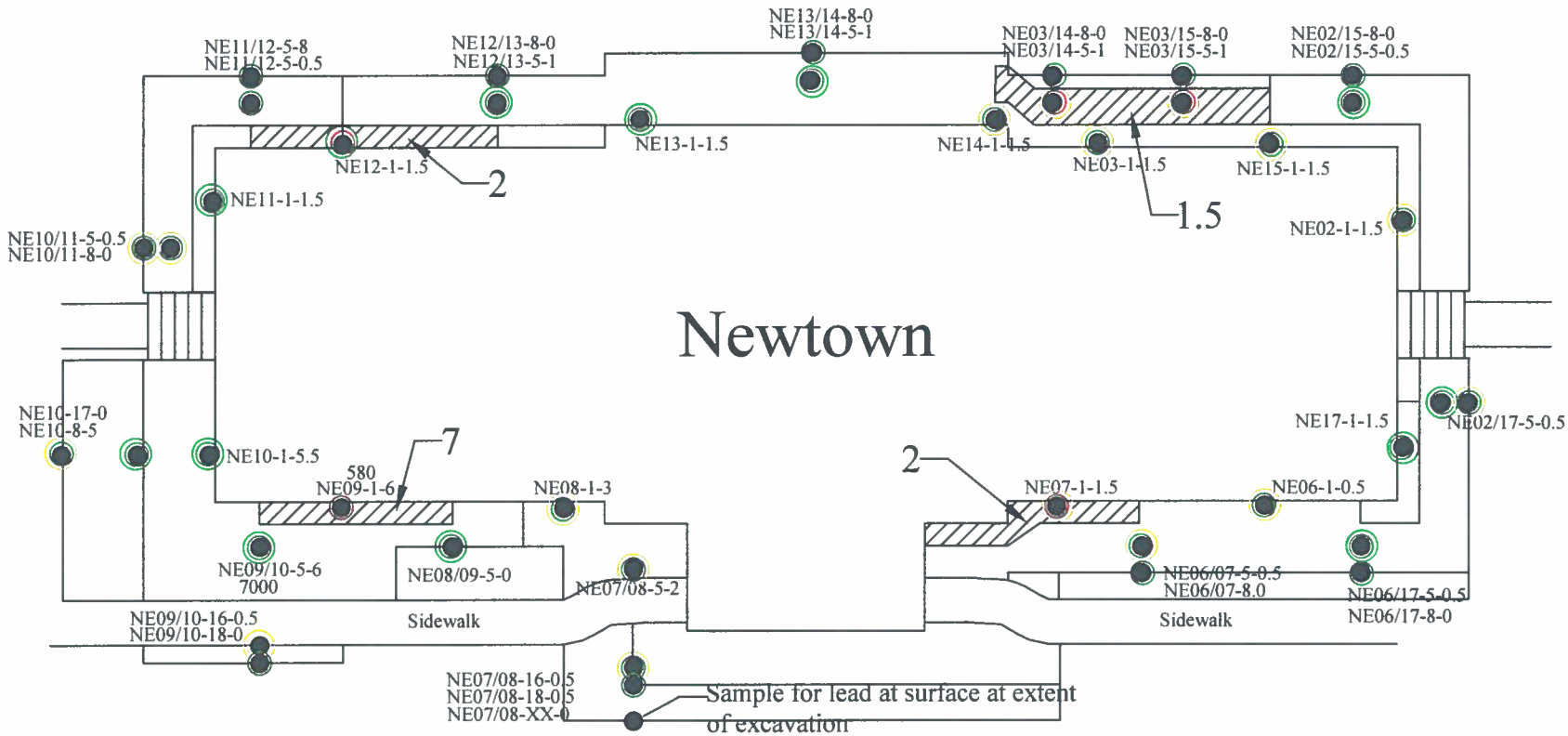
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: April 13, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure X-XX-06.dwg

Newtown April 13, 2006 Remediaiton Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

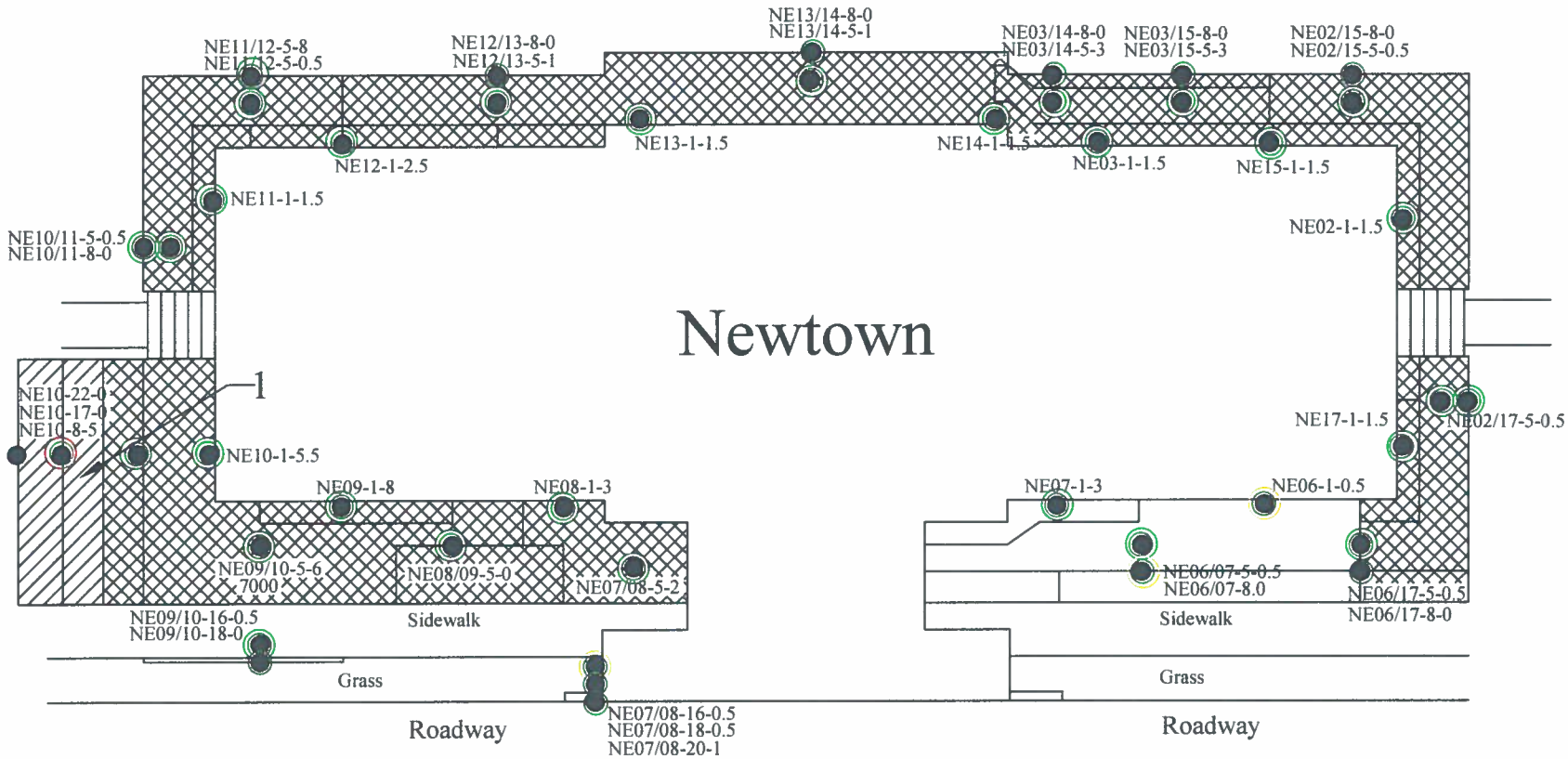
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: April 24, 2006
Project No.: 1018.WA8	File: Newtown Remediation Figure 4-24-06.dwg

Newtown April 24, 2006 Remediaiton Figure

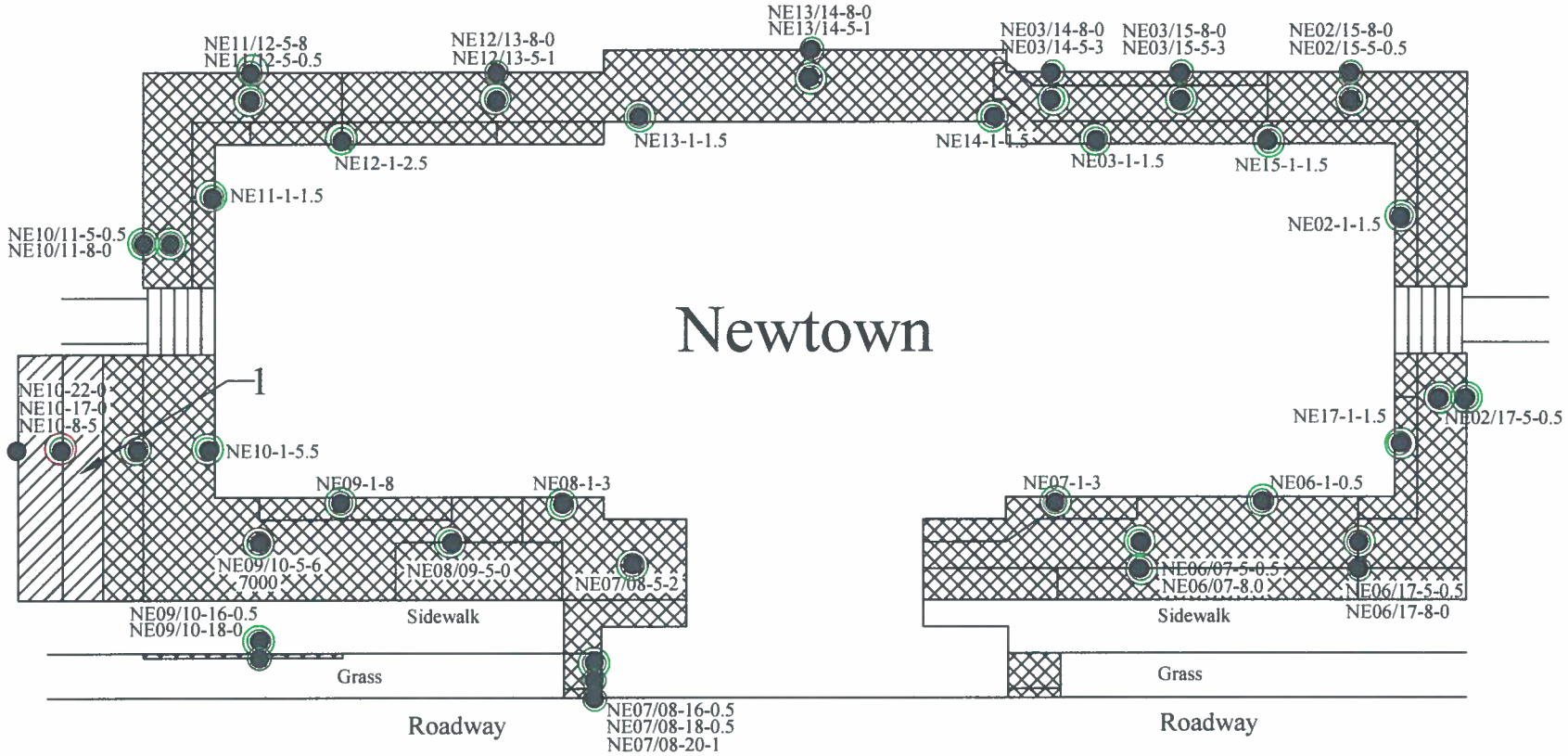
Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- SPLP Required
- Sampling location
- Area for additional excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Newtown May 10, 2006 Remediaiton Figure
Approximate Scale: 1 Inch = 20 Feet	Date: May 10, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Shelton Remediation Figure X-XX-06.dwg	



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

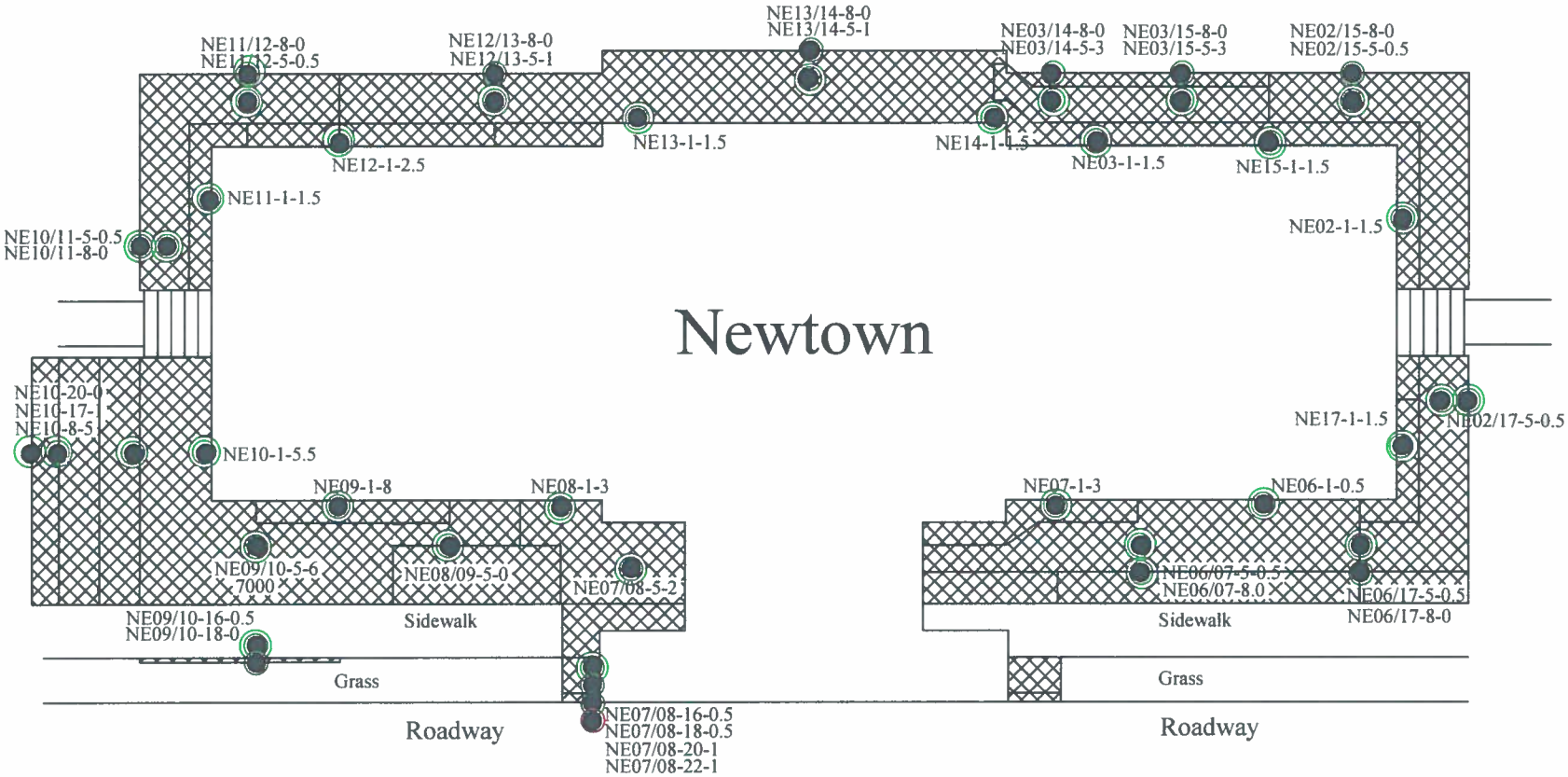
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: May 24, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure X-XX-06.dwg

Newtown May 24, 2006 Remediaiton Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Newtown July 02, 2006 Final Remediaiton Figure
Approximate Scale: 1 Inch = 20 Feet	Date: July 02, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Newtown Final Remediation Figure.dwg	

NORWALK BUILDING

Fairfield Hills Norwalk Building Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
N01-1-0	365.0							0.009		0.094		0.055						
N01-1-0										0.021								
N01-1-0.5	9.2																	
N01-1-1																		
N01/14-5-0	75.7																	
N01/14-5-0																		
N01/15-5-0	48.5	**0.023**																
N01/15-5-0.5	22.4																	
N01/15-6-0	29.6																	
N01/15-10-0	30.8																	
N02-1-0	**2000.0**									0.070		0.100						
N02-1-0										0.110		0.170						
N02-1-1	3.5																	
N02/11-5-0	**534.0**																	
N02/11-5-0										0.160		0.220						
N02/11-5-1	30.8	**0.016**																
N02/11-5-1.5	14.5																	
N02/11-10-0	100.0	**0.027**																
N02/11-10-1.5	32.5																	
N02/11-13-0	121.0																	
N02/12-5-0	**820.0**																	
N02/12-5-0										0.140		0.130						
N02/12-5-1	12.9																	
N02/12-10-0	77.1																	
N05-1-0										0.027		0.029						
N05-1-0.5	79.6	**0.140**																
N05-1-1	5.2																	
N05/16-5-0	**980.0**																	
N05/16-5-1	11.5																	
N05/16-10-0	268.0	**0.048**																
N05/16-10-1	6.7	**0.059**																
N05/16-10-1.5	3.7																	
N05/16-13-0.5	147.0																	
N05/16-18-0	55.3																	
N05/17-5-0										0.020								
N05/17-5-0	273.0																	
N05/17-5-0.5	4.3																	
N05/17-10-0	58.8	**0.016**																
N05/17-10-0.5	11.4	0.015																
N05/17-13-0	50.6	**0.019**																
N05/17-13-0.5	35.3	**0.055**																
N05/17-13-1	1.3																	
N05/17-18-0	70.0																	
N06-1-0	**616.0**	**0.246**								0.032		0.073						
N06-1-0.5	137.0	**0.070**																

Fairfield Hills Norwalk Building Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
N06-1-1	12.8																	
N06/07-5-0	**741.0**																	
N06/07-5-0.1	**867.0**																	
N06/07-5-0.5	9.5																	
N06/07-10-0	237.0	**0.048**																
N06/07-10-0.5	9.2																	
N06/07-13-0	21.2	**0.053**																
N06/07-13-0	135.0	**0.055**																
N06/07-13-0.5	14.9																	
N06/07-18-0	53.9	**0.038**																
N06/07-18-0.5	4.1																	
N06/07-20-0	62.7																	
N06/08-5-0	**699.0**																	
N06/08-5-1	3.3																	
N06/08-10-0	243.0	**0.182**																
N06/08-10-1	1.3																	
N06/08-13-0	183.0	**0.069**																
N06/08-13-0.5	135.0	**0.019**																
N06/08-13-1																		
N06/08-18-0	192.0																	
N07-1-0	**1180.0**	**0.550**						0.023		0.026		0.120						
N07-1-0.5	8.6																	
N07-1-0.5.1	4.1	**0.020**																
N07-1-1	41.0																	
N07-1-1.1	50.2																	
N07/17-5-0	154.0																	
N07/17-5-0.5	5.4																	
N07/17-10-0	67.4																	
N08-1-0	**2490.0**	**0.469**			0.420	0.428		0.012		0.210		0.310						
N08-1-0.5	23.7	**0.052**																
N08-1-1	26.5																	
N08/09-5-0	80.0	**0.016**																
N08/09-5-0.1	7.4																	
N08/09-10-0	78.3	**0.018**																
N08/09-10-0.5	0.9																	
N08/09-13-0	59.8	**0.021**																
N08/09-13-0.5	35.0																	
N08/09-18-0	81.8																	
N09-1-0	258.0	**0.182**																
N09-1-0.5	1.4																	
N09/10-5-0	144.0	**0.035**																
N09/10-5-0										0.044		0.024						
N09/10-5-0.1										0.048		0.023						
N09/10-5-0.5	14.6																	
N09/10-10-0	181.0																	

Fairfield Hills Norwalk Building Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	**0.015**	**0.007**	**0.007**	**0.490**	**0.066**	**0.300**	**2.600**	**0.150**	**1.800**	**0.100**	**1.800**	**0.100**	**20.000**	**42.000**	**0.067**	**0.020**	**0.200**
N10-1-0	387.0	**0.140**						0.009		0.040		0.120						
N10-1-0.5	56.6	**0.041**																
N10-1-1	13.9																	
N10/11-5-0	133.0	**0.028**																
N10/11-5-0.5	2.8																	
N10/11-10-0	82.9	**0.019**																
N10/11-10-0.5	2.5																	
N10/11-13-0	99.4	**0.104**																
N10/11-13-1	5.4																	
N10/11-18-0	86.6	**0.029**																
N10/11-18-0.5	19.2																	
N10/11-24-0	109.0	**0.030**																
N10/11-24-0.5	14.7																	
N10/11-24-0.5.1	17.0																	
N10/11-28-0	93.0	**0.021**																
N10/11-28-0.5	8.2																	
N10/11-32-0	79.1	**0.148**																
N10/11-32-0.5	25.1																	
N10/11-37-0	22.2																	
N11-1-0	**6560.0**	**2.370**						0.020		0.063		0.260						
N11-1-1	9.4																	
N12-1-0	**1500.0**	**0.327**						0.025		0.064		0.190						
N12-1-1	4.7																	
N12-1-1.1	16.0																	
N12/13-5-0	183.0									0.064		0.044						
N12/13-5-1	4.8																	
N12/13-10-0	66.2																	
N13-1-0	**2740.0**	**0.482**						0.010		0.093		0.250	0.100					
N13-1-1	3.8																	
N13/14-5-0	**2120.0**									0.110		0.110						
N13/14-5-1	19.4																	
N13/14-10-0	**776.0**																	
N13/14-10-1	8.8																	
N13/14-13-0	333.0	**0.050**																
N13/14-13-0.5	20.1																	
N13/14-18-0	96.7																	
N14-1-0	**2210.0**	**0.117**								0.037		0.130						
N14-1-1	50.9																	
N15-1-0	**4580.0**	**0.838**																
N15-1-1	6.4																	
N15/16-5-0	124.0																	
N16-1-0	**1300.0**	**1.140**								0.019		0.026						
N16-1-1	3.4																	
N17-1-0	**2040.0**	**0.629**								0.038		0.062						
N07-1-0.5	4.4																	

Fairfield Hills Norwalk Building Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
N18-1-0	12.0	**0.023**																
N18-1-0.5	4.0																	
N18-5-0	5.1																	
N18A-0	**576.0**	**0.747**																
N18A-1	12.9																	
N18B-0	19.1																	
N18C-0	8.8																	
N19-1-0	4.8																	
N20-1-0	23.0	**0.026**																
N20-1-0.5	15.2																	
N20-5-0	19.1																	

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.

Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken

Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken

A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

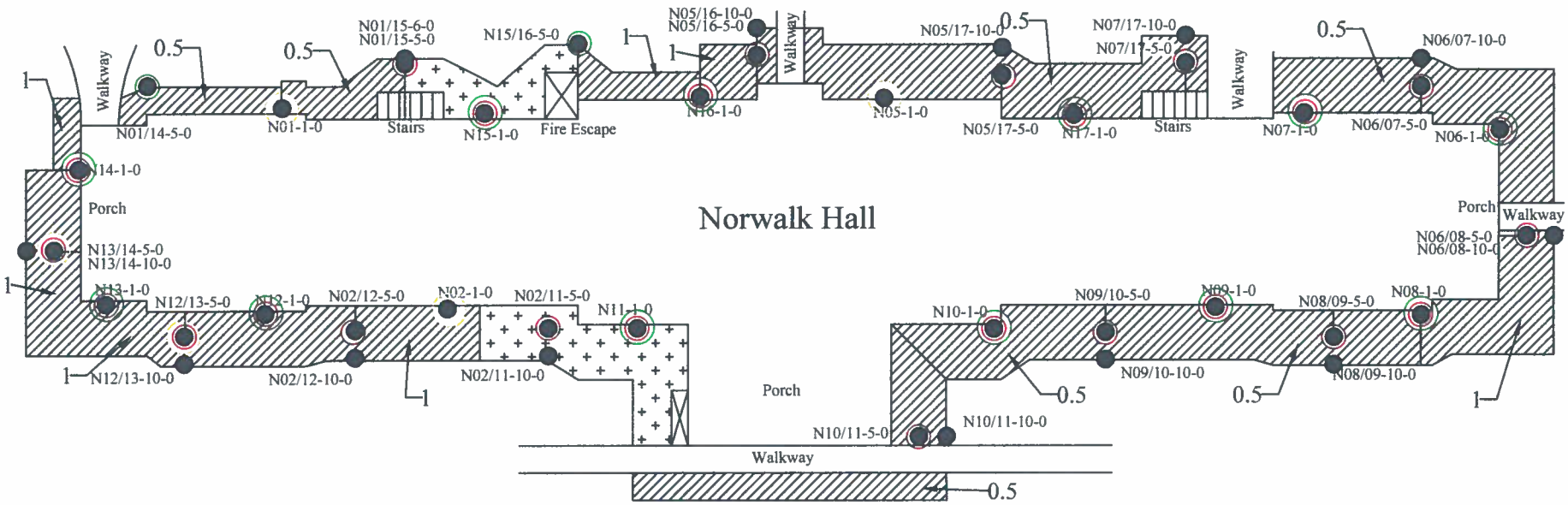
- SPLP test was not performed for sample because location was not in compliance based on total contentrations; **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC

- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance

- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.

- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

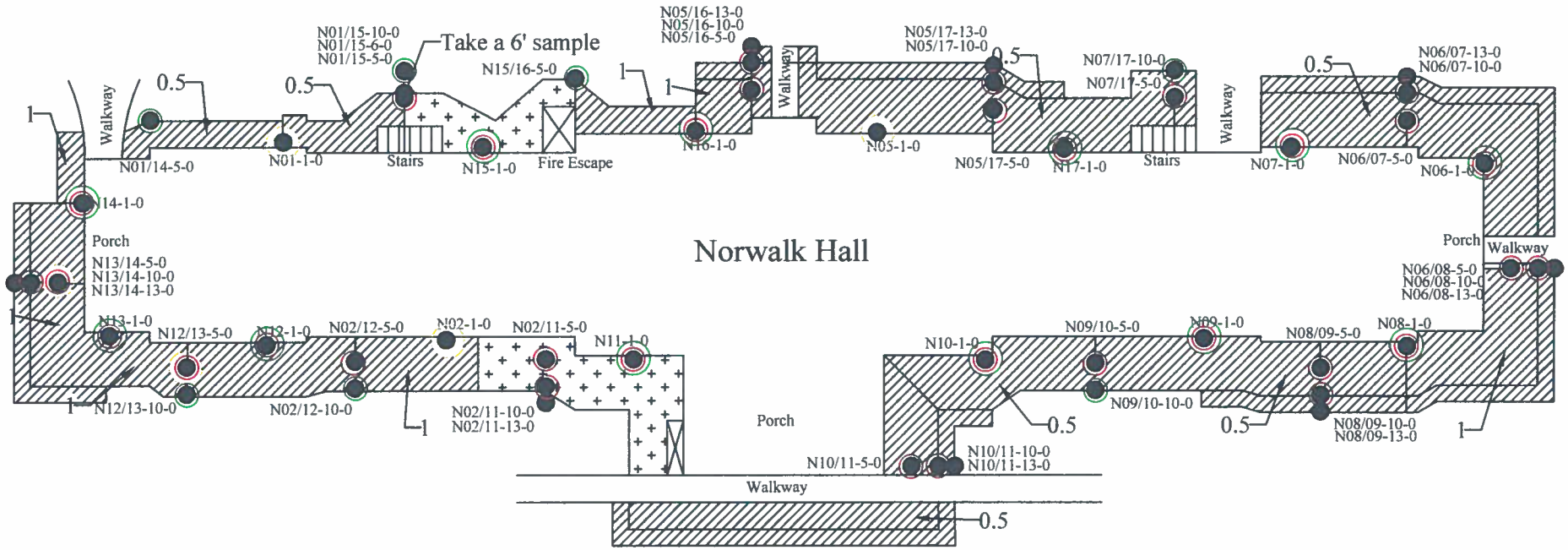
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: April 19, 2006
Project No.: 1018.WA8	File: Norwalk Remediation Figure 4-19-06.dwg

Norwalk 4-19-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

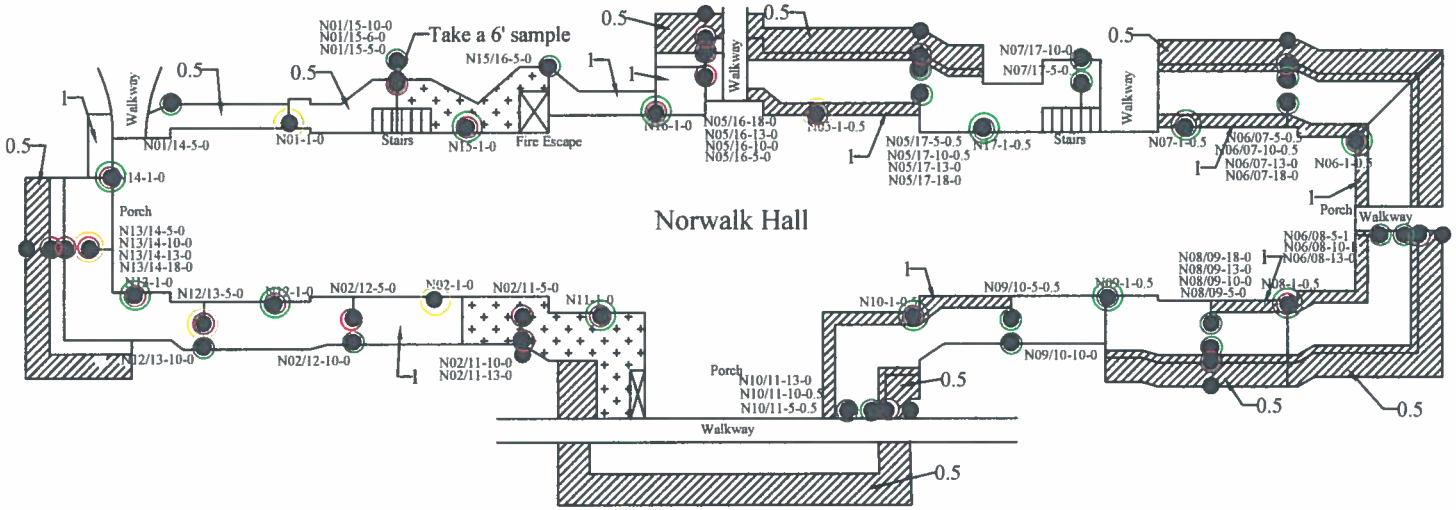
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: April 20, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure 4-20-06.dwg

Norwalk 4-20-06 Remediation Figure

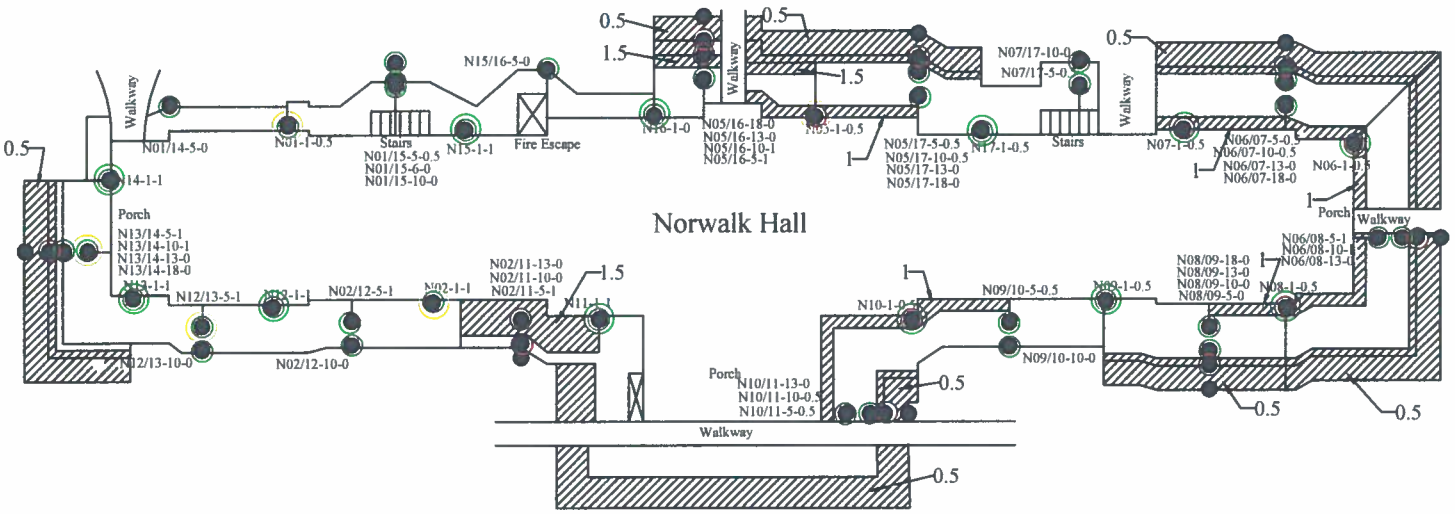
Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Norwalk 4-26-06 Remediation Figure
Approximate Scale: 1 Inch = 40 Feet	Date: April 26, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Norwalk Remediation Figure 4-26-06 dwg	



Legend

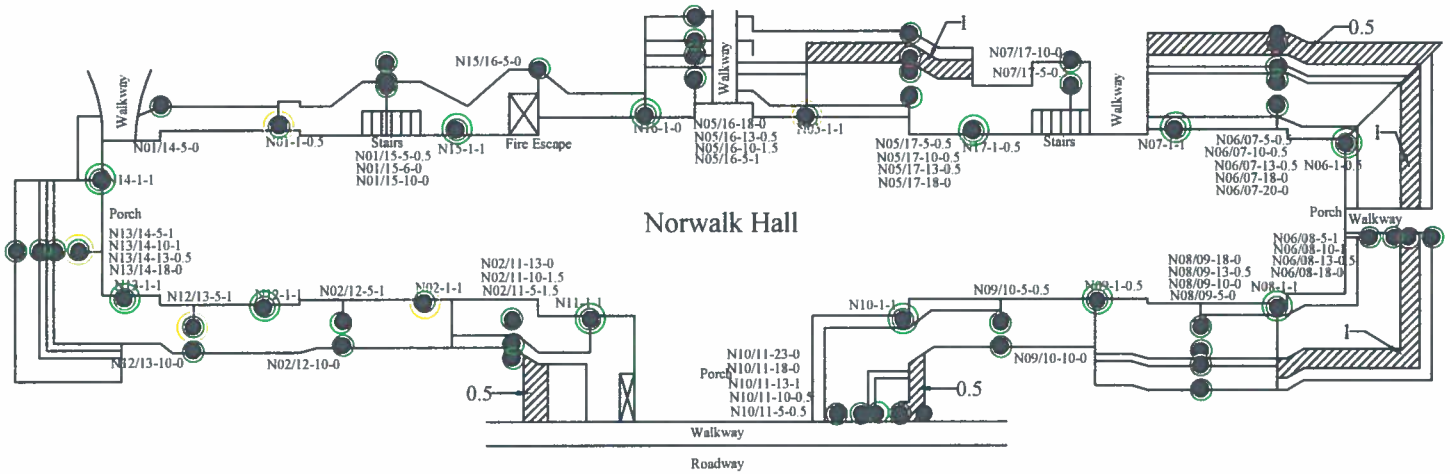
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: April 27, 2006
Project No.: 1018.WA8	File: Norwalk Remediation Figure 4-27-06.dwg

Norwalk 4-27-06 Remediation Figure

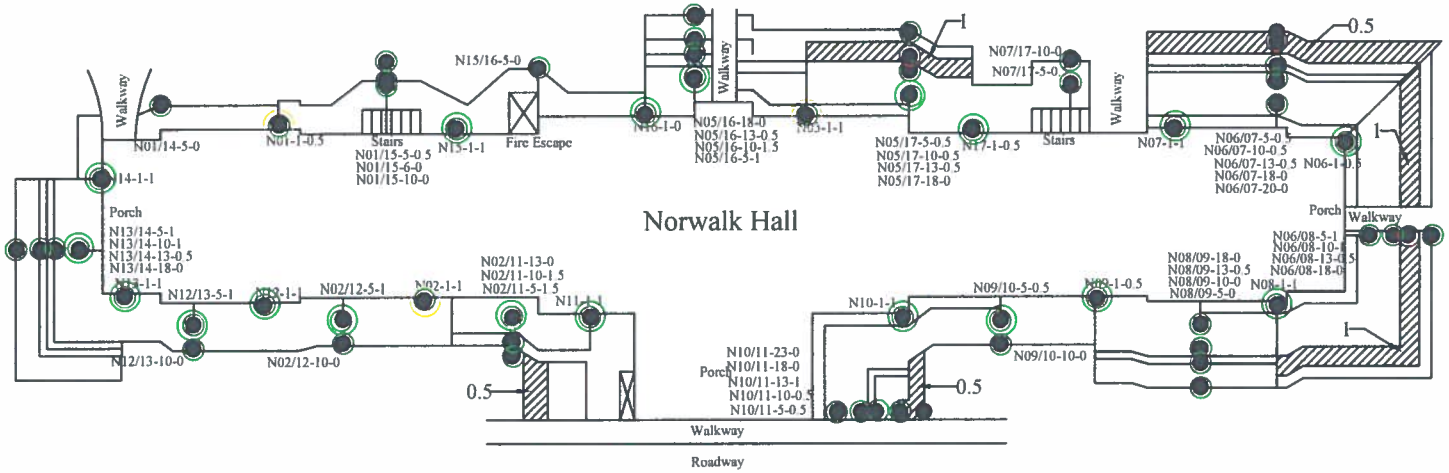
Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Norwalk 5-4-06 Remediation Figure
Approximate Scale: 1 Inch = 40 Feet	Date: May 4, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Norwalk Remediation Figure 5-4-06.dwg	



Legend

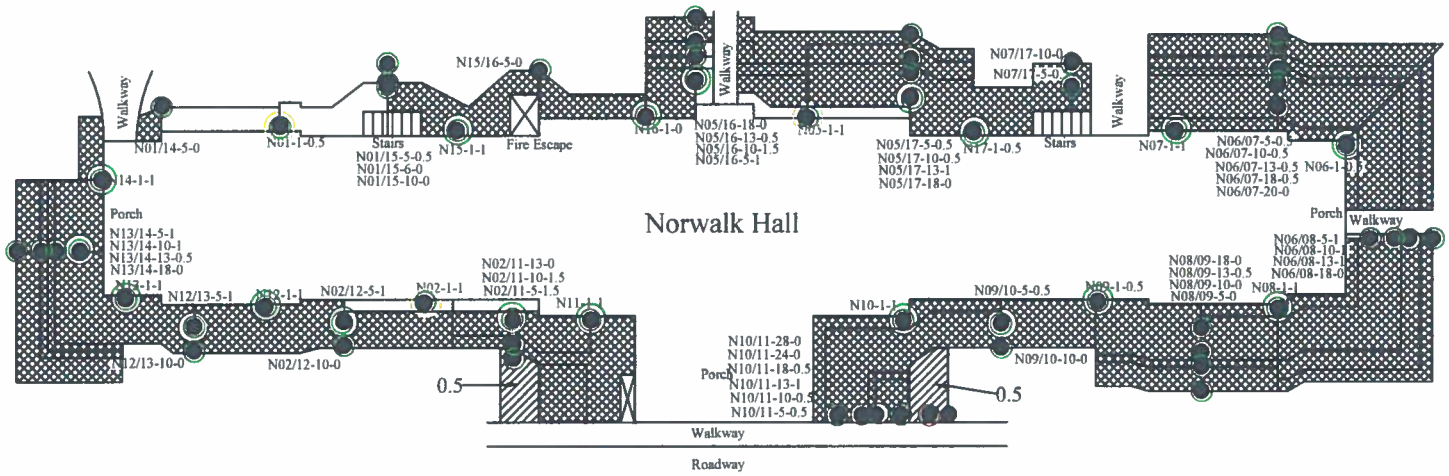
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: May 10, 2006
Project No.: 1018.WA8	File: Norwalk Remediation Figure 5-4-06.dwg

Norwalk 5-10-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

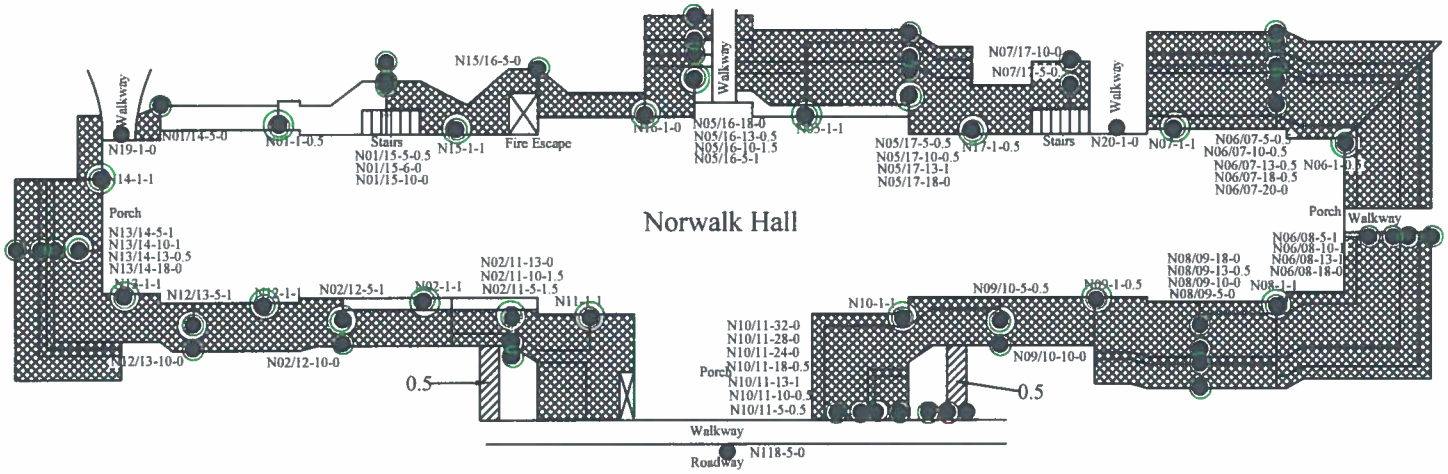
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination
- Sampling location
- Area can be backfilled
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: May 17, 2006
Project No.: 1018.WA8	File: Norwalk Remediation Figure 5-17-06.dwg

Norwalk 5-17-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

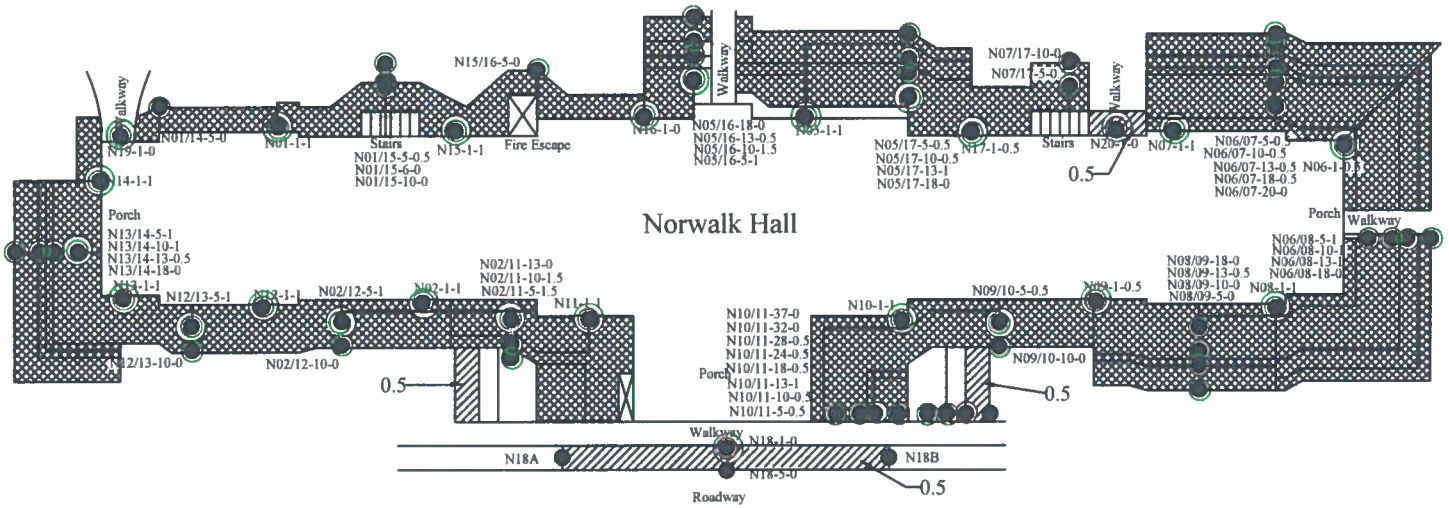
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: May 24, 2006
Project No.: 1018.WA8	File: Norwalk Remediation Figure 5-24-06.dwg

Norwalk 5-24-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

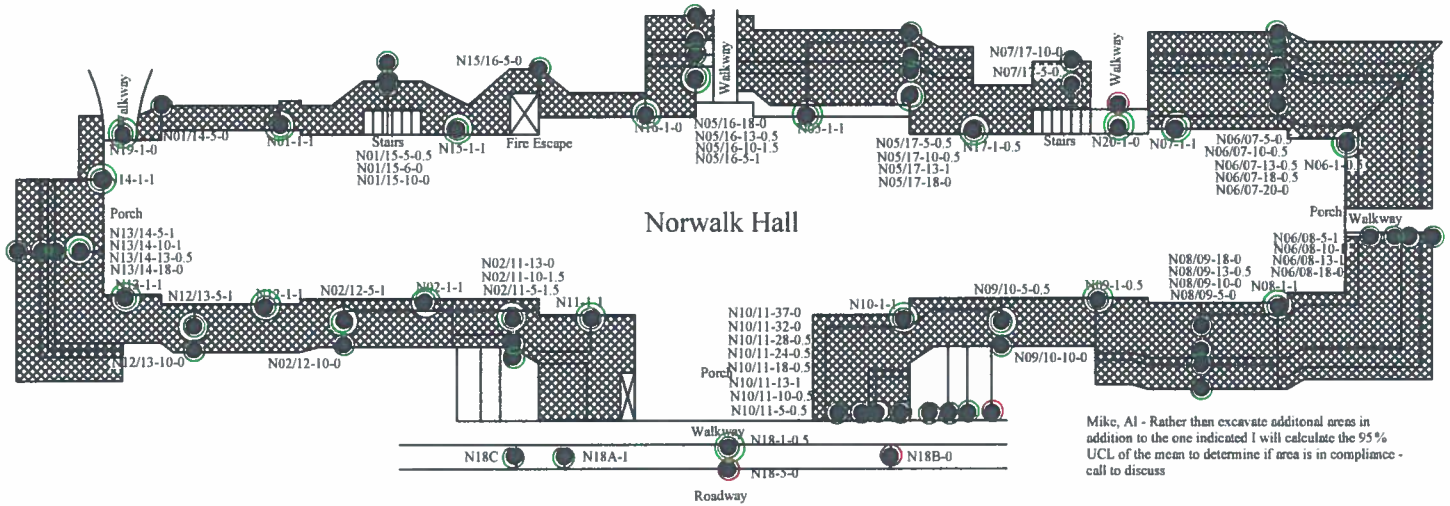
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: June 22, 2006
Project No.: 1018.WA8	File: Norwalk Remediation Figure 6-22-06.dwg

Norwalk 6-22-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Mike, Al - Rather than excavate additonal areas in addition to the one indicated I will calculate the 95% UCL of the mean to determine if area is in compliance - call to discuss

Legend

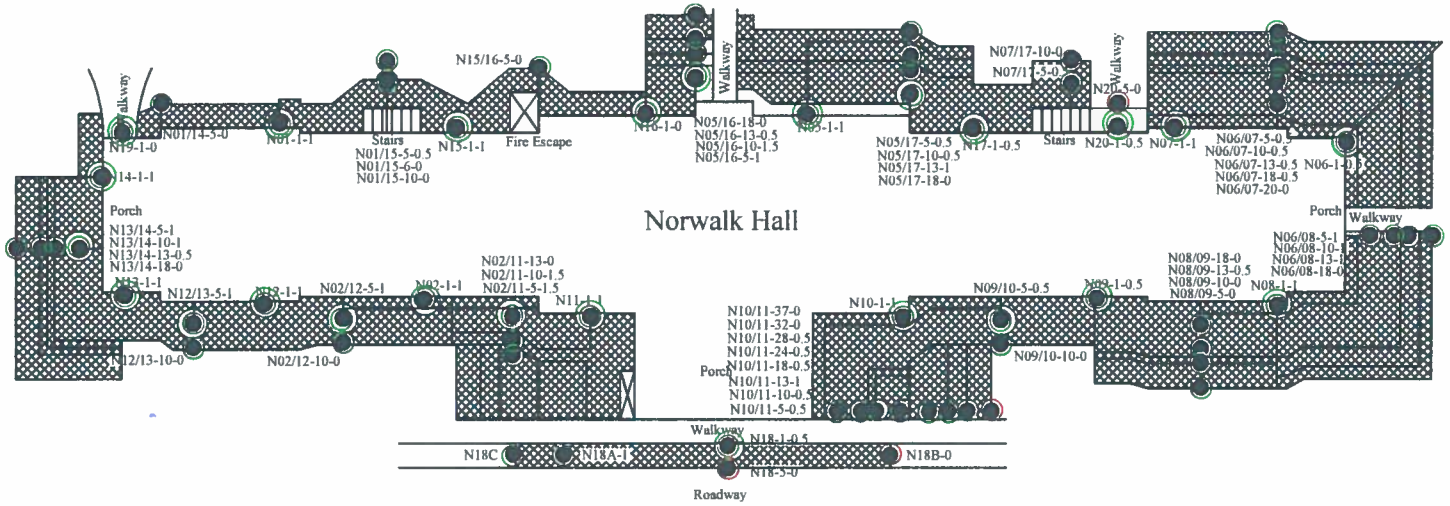
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: June 27, 2006
Project No.: 1018.WA8	File: Norwalk Remediation Figure 6-27-06.dwg

Norwalk 6-27-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: June 27, 2006
Project No.: 1018.WA8	File: Norwalk 6-27-06 Final Remediation Figure.dwg

Norwalk 6-27-06 Final Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut

Norwalk Building Lead PMC Calculation of 95% UCL

Norwalk Building Lead PMC Calculation of 95% UCL

i	Sample	SPLP Lead (mg/L) (x)	$x_i - \bar{x}$	$(x_i - \bar{x})^2$	$(i - 36)x_i$	Natural Log (y) LN(x)
1	N01-1-0.5	0.0075	-0.0007	0.00000046	-0.2625	-4.8929
3	N01/14-5-0	0.0075	-0.0007	0.00000046	-0.2475	-4.8929
4	N01/15-6-0	0.0075	-0.0007	0.00000046	-0.2400	-4.8929
5	N01/15-5-0.5	0.0075	-0.0007	0.00000046	-0.2325	-4.8929
6	N01/15-10-0	0.0075	-0.0007	0.00000046	-0.2250	-4.8929
7	N02-1-1	0.0075	-0.0007	0.00000046	-0.2175	-4.8929
8	N02/11-5-1.5	0.0075	-0.0007	0.00000046	-0.2100	-4.8929
9	N02/11-10-1.5	0.0075	-0.0007	0.00000046	-0.2025	-4.8929
10	N02/11-13-0	0.0075	-0.0007	0.00000046	-0.1950	-4.8929
11	N02/12-5-1	0.0075	-0.0007	0.00000046	-0.1875	-4.8929
12	N02/12-10-0	0.0075	-0.0007	0.00000046	-0.1800	-4.8929
13	N05-1-1	0.0075	-0.0007	0.00000046	-0.1725	-4.8929
14	N05/16-5-1	0.0075	-0.0007	0.00000046	-0.1650	-4.8929
15	N05/16-10-1.5	0.0075	-0.0007	0.00000046	-0.1575	-4.8929
16	N05/16-13-0.5	0.0075	-0.0007	0.00000046	-0.1500	-4.8929
17	N05/16-18-0	0.0075	-0.0007	0.00000046	-0.1425	-4.8929
18	N05/17-5-0.5	0.0075	-0.0007	0.00000046	-0.1350	-4.8929
20	N05/17-13-1	0.0075	-0.0007	0.00000046	-0.1200	-4.8929
21	N05/17-18-0	0.0075	-0.0007	0.00000046	-0.1125	-4.8929
22	N06-1-1	0.0075	-0.0007	0.00000046	-0.1050	-4.8929
23	N06/07-5-0.5	0.0075	-0.0007	0.00000046	-0.0975	-4.8929
24	N06/07-10-0.5	0.0075	-0.0007	0.00000046	-0.0900	-4.8929
25	N06/07-13-0.5	0.0075	-0.0007	0.00000046	-0.0825	-4.8929
26	N06/07-18-0.5	0.0075	-0.0007	0.00000046	-0.0750	-4.8929
27	N06/07-20-0	0.0075	-0.0007	0.00000046	-0.0675	-4.8929
28	N06/08-5-1	0.0075	-0.0007	0.00000046	-0.0600	-4.8929
29	N06/08-10-1	0.0075	-0.0007	0.00000046	-0.0525	-4.8929
30	N06/08-13-1	0.0075	-0.0007	0.00000046	-0.0450	-4.8929
31	N06/08-18-0	0.0075	-0.0007	0.00000046	-0.0375	-4.8929
32	N07-1-0.5	0.0075	-0.0007	0.00000046	-0.0300	-4.8929
33	N07-1-1	0.0075	-0.0007	0.00000046	-0.0225	-4.8929
34	N07-1-1.1	0.0075	-0.0007	0.00000046	-0.0150	-4.8929
35	N07/17-5-0.5	0.0075	-0.0007	0.00000046	-0.0075	-4.8929
36	N07/17-10-0	0.0075	-0.0007	0.00000046	0.0000	-4.8929
37	N08-1-1	0.0075	-0.0007	0.00000046	0.0075	-4.8929
38	N08/09-5-0.1	0.0075	-0.0007	0.00000046	0.0150	-4.8929
39	N08/09-10-0.5	0.0075	-0.0007	0.00000046	0.0225	-4.8929
40	N08/09-13-0.5	0.0075	-0.0007	0.00000046	0.0300	-4.8929
41	N08/09-18-0	0.0075	-0.0007	0.00000046	0.0375	-4.8929
42	N09-1-0.5	0.0075	-0.0007	0.00000046	0.0450	-4.8929
43	N09/10-5-0.5	0.0075	-0.0007	0.00000046	0.0525	-4.8929
44	N09/10-10-0	0.0075	-0.0007	0.00000046	0.0600	-4.8929
45	N10-1-1	0.0075	-0.0007	0.00000046	0.0675	-4.8929
46	N10/11-5-0.5	0.0075	-0.0007	0.00000046	0.0750	-4.8929
47	N10/11-10-0.5	0.0075	-0.0007	0.00000046	0.0825	-4.8929
48	N10/11-13-1	0.0075	-0.0007	0.00000046	0.0900	-4.8929
49	N10/11-18-0.5	0.0075	-0.0007	0.00000046	0.0975	-4.8929

Norwalk Building Lead PMC Calculation of 95% UCL

i	Sample	SPLP Lead (mg/L) (x)	$x_i - \bar{x}$	$(x_i - \bar{x})^2$	$(i - 36)x_i$	Natural Log (y) LN(x)
50	N10/11-24-0.5	0.0075	-0.0007	0.00000046	0.1050	-4.8929
51	N10/11-24-0.5.1	0.0075	-0.0007	0.00000046	0.1125	-4.8929
52	N10/11-28-0.5	0.0075	-0.0007	0.00000046	0.1200	-4.8929
53	N10/11-32-0.5	0.0075	-0.0007	0.00000046	0.1275	-4.8929
55	N11-1-1	0.0075	-0.0007	0.00000046	0.1425	-4.8929
56	N12-1-1	0.0075	-0.0007	0.00000046	0.1500	-4.8929
57	N12-1-1.1	0.0075	-0.0007	0.00000046	0.1575	-4.8929
58	N12/13-5-1	0.0075	-0.0007	0.00000046	0.1650	-4.8929
59	N12/13-10-0	0.0075	-0.0007	0.00000046	0.1725	-4.8929
60	N13-1-1	0.0075	-0.0007	0.00000046	0.1800	-4.8929
61	N13/14-5-1	0.0075	-0.0007	0.00000046	0.1875	-4.8929
62	N13/14-10-1	0.0075	-0.0007	0.00000046	0.1950	-4.8929
63	N13/14-13-0.5	0.0075	-0.0007	0.00000046	0.2025	-4.8929
64	N13/14-18-0	0.0075	-0.0007	0.00000046	0.2100	-4.8929
65	N14-1-1	0.0075	-0.0007	0.00000046	0.2175	-4.8929
66	N15-1-1	0.0075	-0.0007	0.00000046	0.2250	-4.8929
67	N15/16-5-0	0.0075	-0.0007	0.00000046	0.2325	-4.8929
68	N16-1-1	0.0075	-0.0007	0.00000046	0.2400	-4.8929
69	N07-1-0.5	0.0075	-0.0007	0.00000046	0.2475	-4.8929
70	N18-1-0.5	0.0075	-0.0007	0.00000046	0.2550	-4.8929
72	N18A-1	0.0075	-0.0007	0.00000046	0.2700	-4.8929
74	N18C-0	0.0075	-0.0007	0.00000046	0.2850	-4.8929
75	N19-1-0	0.0075	-0.0007	0.00000046	0.2925	-4.8929
76	N20-1-0.5	0.0075	-0.0007	0.00000046	0.3000	-4.8929
19	N05/17-10-0.5	0.015	0.0068	0.00004654	-0.2550	-4.1997
54	N10/11-37-0	0.016	0.0078	0.00006119	0.2880	-4.1352
77	N20-5-0	0.017	0.0088	0.00007783	0.6970	-4.0745
73	N18B-0	0.02	0.0118	0.00013977	0.7400	-3.9120
71	N18-5-0	0.021	0.0128	0.00016441	0.7350	-3.8632
	Average =	**0.0082**				**-4.8365**

Sum = $(x_i - \bar{x})^2$ = **0.000522**

Sum = $(i - 70)x_i$ = **3.3375**

i= 71		1/2(n+1)=	36
$s=(1/71 \times 0.08692)^{1/2}$	=	0.003054	
D=3.3375/(5041xs)	=	0.216779	
Denominator of Y	=	0.003559	
Y = D - 0.28209479/0.004007 =		-18.354	

H_0: The sample population has a normal distribution. Reject H_0 if Y is < -2.146 ($Y_{0.05}$). Y = -18354; therefore H_0 is rejected. The sample population has a lognormal distribution.

For computation of the 95% UCL of the mean,

S = Standard deviation of log samples	=	0.216189
x = Average value of log samples	=	-4.8365
$H_{0.95}$ interpolated from Gilbert Table A12	=	1.7110

(Gilbert Table A12 is found in "Statistical Methods for Environmental Pollution Monitoring", Gilbert, 1987

95% UCL = $e^{(\bar{y} + 0.5s^2 + sH\sqrt{n-1})}$ = 0.008489 mg/L

1. UCL to be calculated in accordance with EPA publication 9285.7-081, Supplemental Guidance to RAGS:Calculating the Concentration Term May 1992, EPA, 199:

2. For all instances of nondetection, the value was assumed to be one-half of the detection limit (0.0075 mg/L).

PLYMOUTH BUILDING

Plymouth Sampling Results

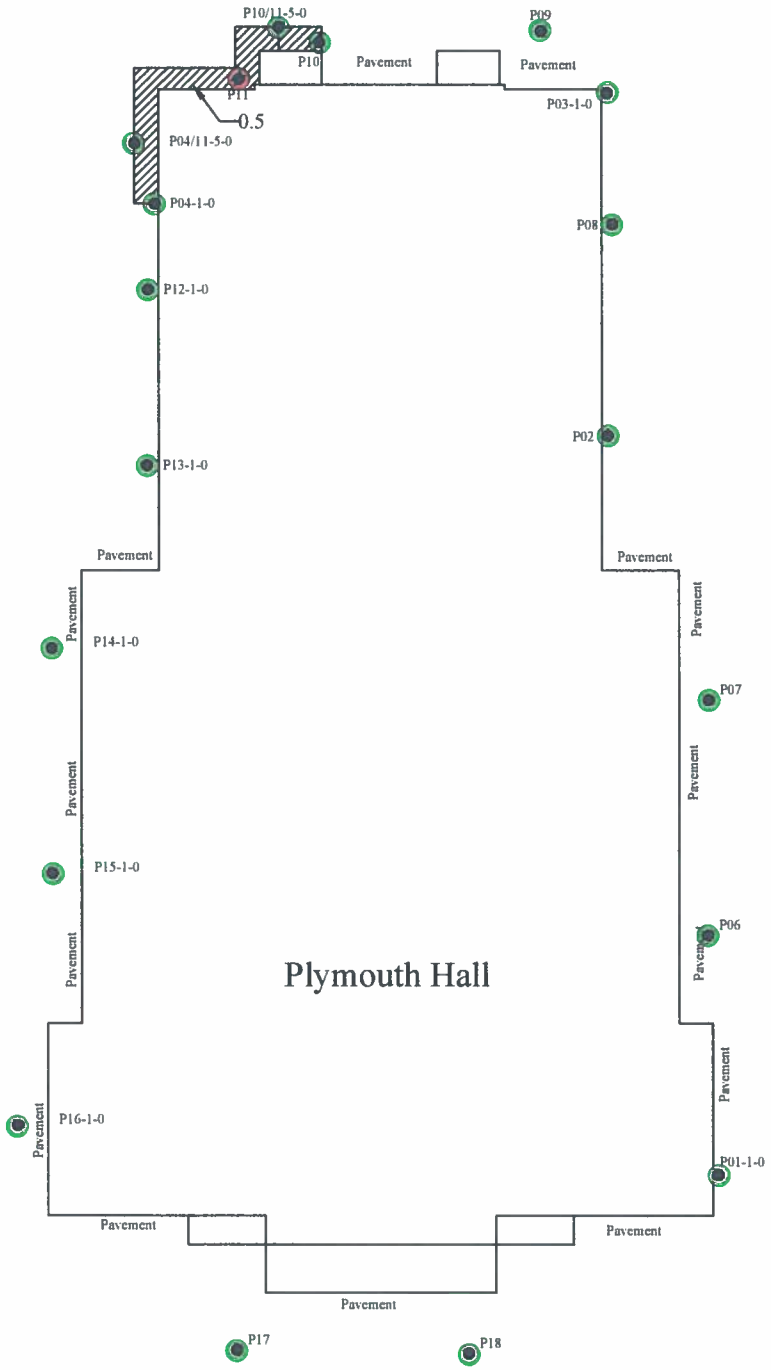
Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	**0.015**	**0.007**	**0.007**	**0.490**	**0.066**	**0.300**	**2.600**	**0.150**	**1.800**	**0.100**	**1.800**	**0.100**	**20.000**	**42.000**	**0.067**	**0.020**	**0.200**
P01-1-0	62.6							0.006		0.007		0.016						
P01-1-0	50.4																	
P01-1-0.1	45.9																	
P02-1-0	43.5							0.008		0.015		0.010						
P02-1-0	28.0																	
P03-1-0	49.5									0.005								
P03-1-0	76.7																	
P04-1-0	41.0																	
P04-1-0	24.6																	
P04/11-5-0	24.0																	
P05-1-0	35.4																	
P06-6-0	35.8				0.130	~~0.130~~												
P07-6-0	33.2				0.110	~~0.110~~												
P08-1-0	53.4				0.150	~~0.150~~												
P09-12-0	39.8				0.160	~~0.160~~												
P10-6-0	44.6				0.120	~~0.120~~												
P10/11-5-0	32.4																	
P11-1-0	79.5	**0.017**			**0.500**	~~0.500~~				0.005		0.006						
P11-1-0.5	33.1				0.160	~~0.160~~				0.020								
P12-1-0	49.5				0.350	~~0.350~~												
P13-1-0	95.0				0.260	~~0.260~~												
P14-6-0	50.3				0.100	~~0.100~~				0.006		0.005						
P15-6-0	73.6				0.086	~~0.086~~				0.009		0.008						
P16-6-0	14.5																	
P17-27-0	37.5				0.210	~~0.210~~		0.005		0.016		0.018						
P18-12-0	43.5				0.079	~~0.079~~												

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.
Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken
Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken
A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion
0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion
- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion
~~0.250~~ - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion
- SPLP test was not performed for sample because location was not in compliance based on total contentrations; or total concentration was less than total PMC or total concentration was less than or equal to 20 times SPLP PMC
- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance
- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(c)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.
- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems
The detection limits for DDD, DDT, DDE, Endrin, and Heptachlor mass analyses are less than or equal to 20 times the SPLP criteria, therefore, if a mass analysis is non-detect for these compounds the PMC criteria is met.



- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

Legend

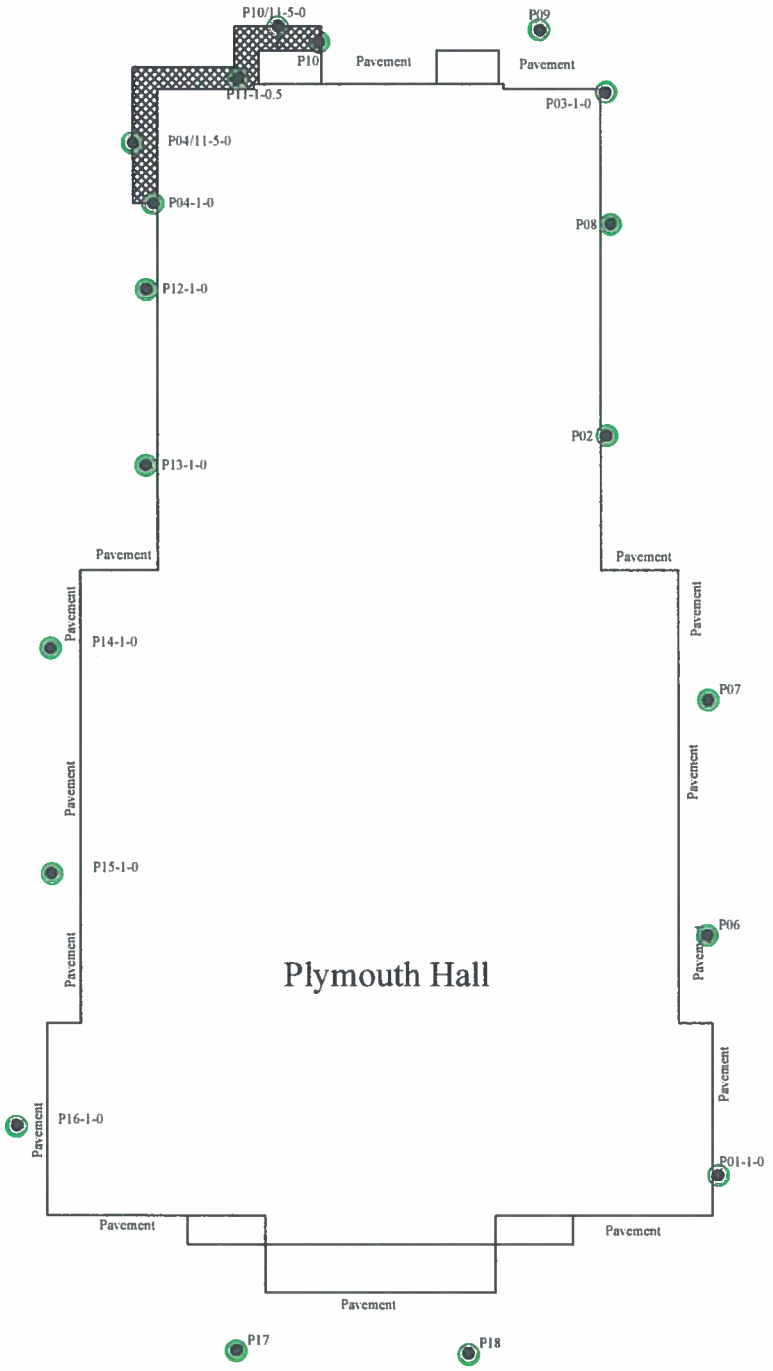
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: May 4, 2006
Project No.: 1018.WA8	File: Plymouth 5-4-06 Remediation Figure

Plymouth 5-4-06 Remediation Figure

Fairfield Hills Hospital
Wasserman Way
Newtown, Connecticut



- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: May 25, 2006
Project No.: 1018.WA8	File: Plymouth 5-25-06 Remediation Figure

Plymouth 5-25-06 Final Remediation Figure

Fairfield Hills Hospital
Wasserman Way
Newtown, Connecticut

SHELTON BUILDING

Shelton Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
SE01-1-0	1550.0		0.340	7.500						0.240		0.170						
SE01-1-4	3.1																	
SE01/09-5-0	65.7			0.013	0.290	0.290				0.370		0.120						
SE01/09-5-4	35.5		0.250	0.980						0.038		0.021						
SE01/09-5-5.5																		
SE01/09-8-0	36.0			0.012						0.390		0.200						
SE01/09-8-1																		
SE01/09-10-0										0.410		0.180						
SE09-1-0			0.56	5.700	0.55	0.550		0.120		3.900		1.500						
SE09-1-4	5.3		0.033	0.150														
SE09-1-4	5.6		0.0083	0.170														
SE09-1-6																		
SE09/10-5-0	54.8			0.010						0.130		0.087						
SE09/10-5-1	4.6																	
SE09/10-10-0	36.7				0.240	~~0.240~~				0.210		0.120						
SE10-1-0			0.51	6.100				0.010		0.150		0.180						
SE10-1-4	3.6			0.130														
SE10-1-6				0.400														
SE10-1-6.1				0.310														
SE10-1-9																		
SE10/11-5-0	120.0									0.130		0.054						
SE11-1-0	628.0	0.502	0.088	0.140						0.170		0.100						
SE11-1-4	1.8		1.7	0.420														
SE11-1-7			0.092	0.180														
SE11-1-9				0.260														
SE11-1-11																		
SE11-1-11-R																		
SE02/11-5-0	171.0	0.053	0.023	0.048						0.820		0.800						
SE02/11-5-2	11.4			0.012														
SE02/11-5-4																		
SE02/11-10-0	141.0									0.320		0.240						
SE02-1-0	530.0		0.340	1.800						0.130		0.110						
SE02-1-4	2.4																	
SE12-1-0			14	51.000	0.29	0.290		0.055		0.100		0.660		0.45				
SE12-1-4	0.7																	
SE12-1-4.1	1.2																	
SE12/13-5-0	151.0	0.023	0.023							0.520		0.360						
SE12/13-5-2	4.3																	
SE12/13-10-0	136.0									0.350		0.230						
SE13-1-0			2.5	14.000				0.023		0.170		0.210		0.063				
SE13-1-4	1.9			0.200														
SE13-1-7																		
SE13/14-5-0	3210.0		0.024							0.230		0.130						
SE13/14-5-2	5.5		0.010															

Shelton Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
SE13/14-5-5																		
SE13/14-10-0	70.5									0.280		0.110						
SE14-1-0			15	33.000	1.2	1.200		0.088		0.570		0.920				0.087	0.087	
SE14-1-4	2.3																	
SE14/15-5-0	66.4	0.046								0.240		0.150						
SE14/15-5-2	7.3																	
SE14/15-8-0	37.1																	
SE15-1-0			0.75	5.400				0.008		0.190		0.170						
SE15-1-4	2.4		0.073	0.072														
SE15-1-6				0.012														
SE15-1-7				0.048														
SE15-1-7.1				0.110														
SE15-1-8																		
SE15/16-5-0	192.0	0.016	0.008	0.019				0.066		1.700		1.400						
SE15/16-5-2	3.6																	
SE15/16-10-0	45.3									0.680	0.14	0.450						
SE15/16-10-0.1	56.3									0.830	0.12	0.480						
SE15/16-10-2			0.048															
SE15/16-10-4																		
SE15/16-12-0										0.330		0.130						
SE16-1-0	7500.0	1.260	0.092	0.280						0.045		0.074						
SE16-1-4	2.3			0.091						0.027								
SE16-1-6																		
SE03/16-5-0	461.0			0.012														
SE03/16-5-2	63.5									0.027								
SE03/16-5-3.5	36.3	0.616																
SE03/16-5-4.5	4.2																	
SE03/16-10-0	30.2									0.110		0.028						
SE03/16-10-0.1	33.5									0.300		0.110						
SE03-1-0	10600.0		43.000	53.000				0.140		0.350		0.410						
SE03-1-4	2.3			0.150														
SE03-1-5																		
SE03/17-5-0	67.1									0.052		0.021						
SE17-1-0			0.11	0.490						0.054		0.033						
SE17-1-4	3.9			0.035														
SE17-1-6																		
SE17/18-5-0	68.0									0.046								
SE18-1-0			3.4	19.000	0.36	0.360		0.006		0.035		0.049		0.11				
SE18-1-4	4.9		0.012	0.160														
SE18-1-6																		
SE04/18-5-0	124.0	0.032								0.088		0.029						
SE04/18-5 excavated to top of tunnel																		
SE04/18-8-2	39.2																	
SE04/18-10-0	24.7									0.049								

Shelton Sampling Results
Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	**0.015**	**0.007**	**0.007**	**0.490**	**0.066**	**0.300**	**2.600**	**0.150**	**1.800**	**0.100**	**1.800**	**0.100**	**20.000**	**42.000**	**0.067**	**0.020**	**0.200**
SE04-1-0	303.0		**13.000**	**120.000**						0.322		0.290		0.320				
SE04-1-4	3.8		**0.011**	**0.012**														
SE04-1-6																		
SE04/19-5-0	36.7		**0.030**	**0.097**														
SE04/19-5-4	3.7																	
SE04/19-10-0	32.3	**0.033**	**0.052**							0.035		0.350						
SE04/19-10 excavated to top of tunnel																		
SE04/19-14-2	4.1																	
SE04/19-15-0	33.7									0.220		0.054						
SE19-1-0	140.0	**0.244**	**0.070**	**0.350**						0.038		0.021						
SE19-1-3	5.3			**0.038**														
SE19-1-5	2.3																	
SE19/20-3-5																		
SE19/20-5-0	24.3	**0.056**	**0.036**	**0.170**						0.040		0.032						
SE19/20-5-0.1	25.8		**0.023**	**0.170**						0.040		0.026						
SE19/20-5 excavated to top of tunnel																		
SE19/20-10-0	30.2		**0.014**	**0.042**						0.260		0.091						
SE19/20-10-2																		
SE19/20-15-0	24.3									0.053								
SE20-1-0			**0.65**	**8.000**						0.180		0.110						
SE20-1-4	4.6			**0.120**						0.180		0.110						
SE20-1-6																		
SE20/21-5-0	85.5		**0.008**	**0.022**						0.210		0.075						
SE20/21-5-4	1.7									0.210		0.075						
SE20/21-10-0	29.2									0.410		0.150						
SE21-1-0			**18**	**57.000**	0.31	**0.310**		0.012		0.097		0.130						
SE21-1-4	2.6			**0.250**														
SE21-1-6				**0.011**														
SE21-1-6.1				**0.015**														
SE21-1-7.5																		
SE05/21-5-0	61.1		**0.009**	**0.018**						0.240		0.098						
SE05/21-5-2.5																		
SE05/21-10-0	26.2			**0.009**						0.600		0.280						
SE05/21-10-1	1.3																	
SE05/21-12-0	30.3									0.290		0.099						
SE05-1-0	**468.0**		**0.170**	**4.400**						0.270		0.190						
SE05-1-4	3.4																	
SE05/22-5-0	64.5			**0.009**						0.260		0.110						
SE05/22-5-2.5	3.9																	
SE05/22-8-0	26.1									0.420		0.240						
SE22-1-0			**1.8**	**5.000**				0.009		0.330		0.240						
SE22-1-4	3.7			**0.066**														
SE22-1-6				**0.039**														
SE22-1-6.1				**0.017**														

Shelton Sampling Results
Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	**0.015**	**0.007**	**0.007**	**0.490**	**0.066**	**0.300**	**2.600**	**0.150**	**1.800**	**0.100**	**1.800**	**0.100**	**20.000**	**42.000**	**0.067**	**0.020**	**0.200**
SE22-1-7.5																		
SE22/23-5-0	**651.0**		**0.022**	**0.040**						0.210		0.430						
SE22/23-5-2.5	4.2																	
SE22/23-5-2.5.1	6.6																	
SE22/23-10-0	186.0	**0.033**								0.047		0.230						
SE22/23-10-1	11.0									0.100		0.034						
SE22/23-12-0	91.6	**0.047**																
SE22/23-12-1	21.5									0.280		0.140						
SE23-1-0			**9.1**	**51.000**	0.42	**0.420**		0.059		0.064		0.280		0.6				
SE23-1-4	1.7																	
SE06/23-5-0	128.0	**0.018**	**0.089**	**0.062**						0.290		0.810						
SE06/23-5-2	9.8																	
SE06/23-10-0	94.7	**0.017**	**0.009**	**0.007**						0.440		1.300						
SE06/23-10-1																		
SE06/23-12-0	156.0							0.075		0.210		0.860						
SE06-1-0	**810.0**		**1.200**	**3.200**						0.310		1.100						
SE06-1-4	3.9		**0.015**	**0.210**														
SE06-1-7																		
SE06/24-5-0	208.0	**0.037**	**0.240**	**0.720**						0.062		0.250						
SE06/24-5-2	288.0		**0.180**	**0.420**						0.022		0.060						
SE06/24-5-7																		
SE06/24-10-0	130.0	**0.123**	**0.050**	**0.130**														
SE06/24-10-2	42.0		**0.054**	**0.280**														
SE06/24-10-7																		
SE06/24-15-0					**1.5**	**1.500**												
SE06/24-15-0.5																		
SE06/24-20-0																		
SE24-1-0	**609.0**	**0.514**	**0.056**	**0.220**				0.086				0.080						
SE24-1-4	23.2																	
SE24/25-5-0	277.0	**0.062**	**0.056**	**0.260**						0.570		0.310						
SE24/25-5-2	5.9									0.037								
SE24/25-10-0	22.0	**0.037**																
SE24/25-10-1	4.7																	
SE24/25-12-0				**0.017**								0.300						
SE24/25-12-1				**0.010**								0.028						
SE24/25-12-1.5																		
SE24/25-13-0										0.057		0.170						
SE24/25-13-0																		
SE25-1-0			**0.17**	**0.960**				0.030		0.530		0.460						
SE25-1-4	**1390.0**		**0.038**	**0.130**														
SE25-1-4.1	35.7		**0.050**	**0.150**														
SE25-1-6.5	3.3			**0.079**														
SE25-1-9																		
SE07/25-5-0	179.0	**0.028**	**0.015**	**0.013**						0.500		0.340						

Shelton Sampling Results
Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	**0.015**	**0.007**	**0.007**	**0.490**	**0.066**	**0.300**	**2.600**	**0.150**	**1.800**	**0.100**	**1.800**	**0.100**	**20.000**	**42.000**	**0.067**	**0.020**	**0.200**
SE07/25-5-3	28.6		**0.016**	**0.033**						0.025		0.025						
SE07/25-5-4			**0.034**															
SE07/25-5-6																		
SE07/25-8-0	60.9									0.560		0.420						
SE07-1-0	**491.0**		**24.000**	**130.000**						0.450		0.850						
SE07-1-4	27.0		**0.340**	**1.100**														
SE07-1/1	36.1		**1.000**	**14.000**						0.096		0.150						
SE07-1/2	13.9		**0.022**	**0.990**						0.008								
SE07-1/3			**0.029**	**0.920**														
SE07-1-6				**0.017**														
SE07-1-7.5				**0.013**														
SE07-1-9																		
SE07/26-5-0	63.1			**0.023**						0.550		0.370						
SE07/26-5-3	2.4		**0.023**	**0.031**														
SE07/26-5-6																		
SE07/26-8-0	42.6									0.410		0.240						
SE26-1-0			**0.9**	**15.000**						0.800		0.810		0.072				
SE26-1-3	2.4			**0.260**														
SE26-1-6																		
SE26/27-5-0	154.0	**0.021**	**0.025**	**0.075**						0.500		0.290						
SE26/27-5-4	4.3																	
SE26/27-10-0	61.2		**0.024**	**0.100**						0.630		0.280						
SE26/27-10-2																		
SE26/27-15-0	24.8	**0.113**								0.350		0.140						
SE26/27-15-1	6.1																	
SE26/27-16-0	31.7																	
SE27-1-0			**3.3**	**26.000**	**0.69**	**0.690**		0.074		0.410		0.900		0.26				
SE27-1-4	6.5																	
SE27/28-5-0	89.4		**0.013**	**0.067**	0.440	**0.440**				1.100		0.690						
SE27/28-5-0.1	106.0		**0.015**	**0.059**	0.440	**0.440**				1.000		0.630						
SE27/28-5-2																		
SE27/28-10-0	53.3		0.007	**0.015**	0.230	**0.230**				0.960		0.270						
SE27/28-10-1																		
SE27/28-13-0	34.6									0.390		0.150						
SE28-1-0			**2.4**	**14.000**	0.29	**0.290**		0.057		0.710		1.100						
SE28-1-4	6.6																	
SE28/29-5-0	73.9			**0.015**	0.250	**0.250**				0.320		0.150						
SE28/29-5 excavated to top of tunnel																		
SE28/29-4-6																		
SE28/29-8-0	18.4									0.350		0.150						
SE29-1-0			**0.33**	**3.900**	0.11	**0.110**		0.048		0.590		0.480						
SE29-1-4	4.4			**0.220**														
SE29-1-6																		
SE08-1-0	**1260.0**		**0.210**	**3.700**				0.047		0.290		0.290						

Shelton Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	**0.015**	**0.007**	**0.007**	**0.490**	**0.066**	**0.300**	**2.600**	**0.150**	**1.800**	**0.100**	**1.800**	**0.100**	**20.000**	**42.000**	**0.067**	**0.020**	**0.200**
SE08 location replaced by location SE29																		
SE08/30-5-0	110.0		**0.017**	**0.100**	0.180	**0.180**				0.560		0.460						
SE08/30-5-2																		
SE08/30-10-0	41.4			**0.029**						0.550		0.230						
SE08/30-10-1																		
SE08/30-13-0				**0.022**						0.350		0.110						
SE08/30-13-1																		
SE08/30-18-0										0.130		0.045						
SE30-1-0			**1.2**	**5.700**	0.49	**0.490**				0.320		0.250						
SE30-1-4	4.4			**2.300**														
SE30-1-6				**0.340**														
SE30-1-8																		
SE30/31-5-0	60.8									0.110		0.120						
SE31-1-0			**0.5**	**2.500**	0.13	**0.130**		0.008		0.097		0.120						
SE31-1-4	4.4			**0.350**														
SE31-1-6				**0.140**														
SE31-1-8																		
SE31/32-5-0	385.0	**0.056**		**0.032**	0.110	**0.110**				0.460		0.320						
SE31/32-5-2	3.7																	
SE31/32-10-0	103.0									0.510		0.310						
SE32-1-0			**1.8**	**11.000**	0.49	**0.490**				0.640		1.400		0.1				
SE32-1-4	2.4			**0.009**														
SE32-1-6																		
SE01/32-5-0	**839.0**		**0.085**	**0.190**	0.330	**0.330**				0.810		1.200						
SE01/32-5-4	2.5																	
SE01/32-10-0	219.0		**0.017**	**0.041**						0.450		0.450						
SE01/32-10-1																		
SE01/32-15-0	37.9				0.320	**0.320**				0.270		0.240						

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.

Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken

Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken

A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

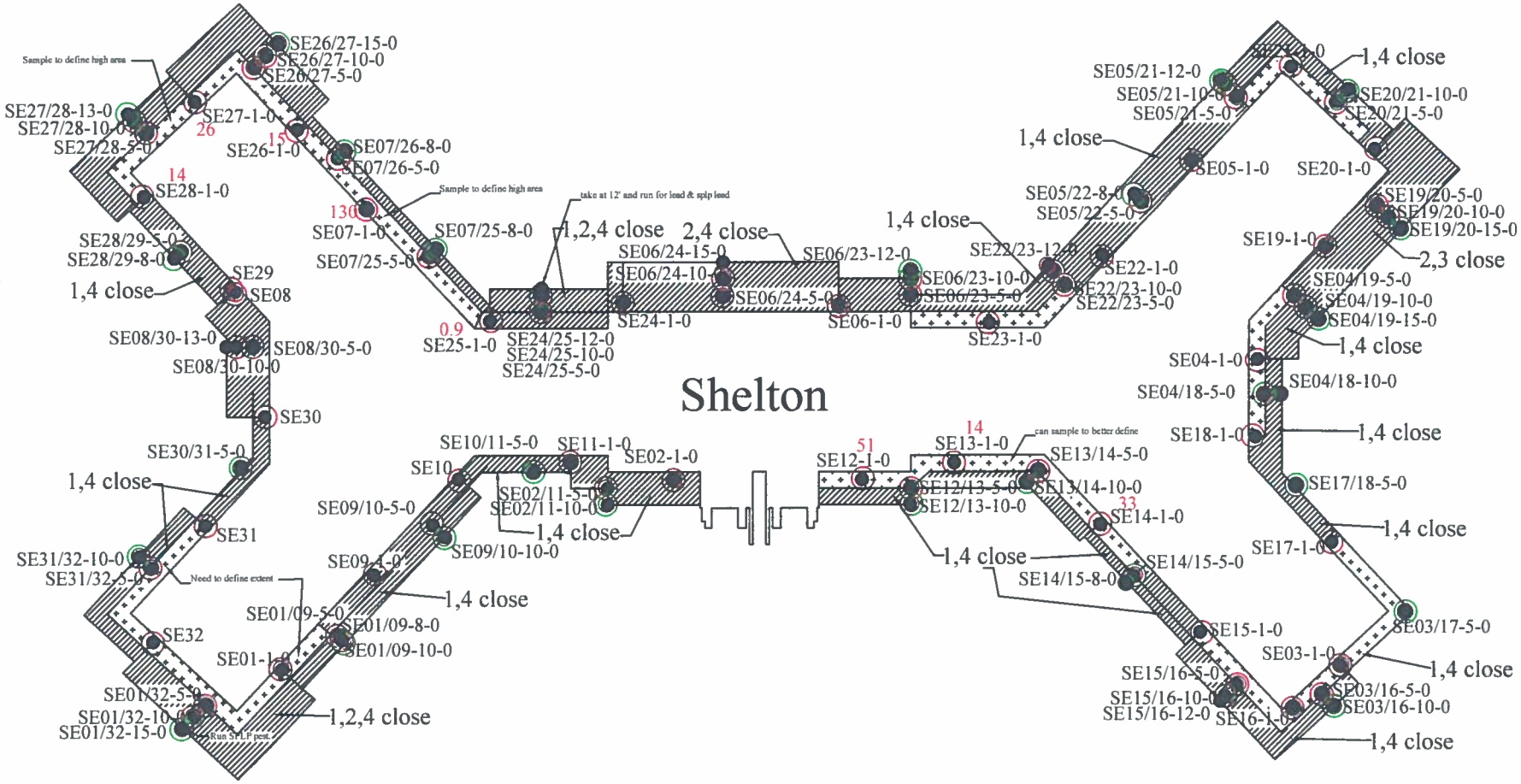
- SPLP test was not performed for sample because location was not in compliance based on total contentrations; **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC

- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance

- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.

- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

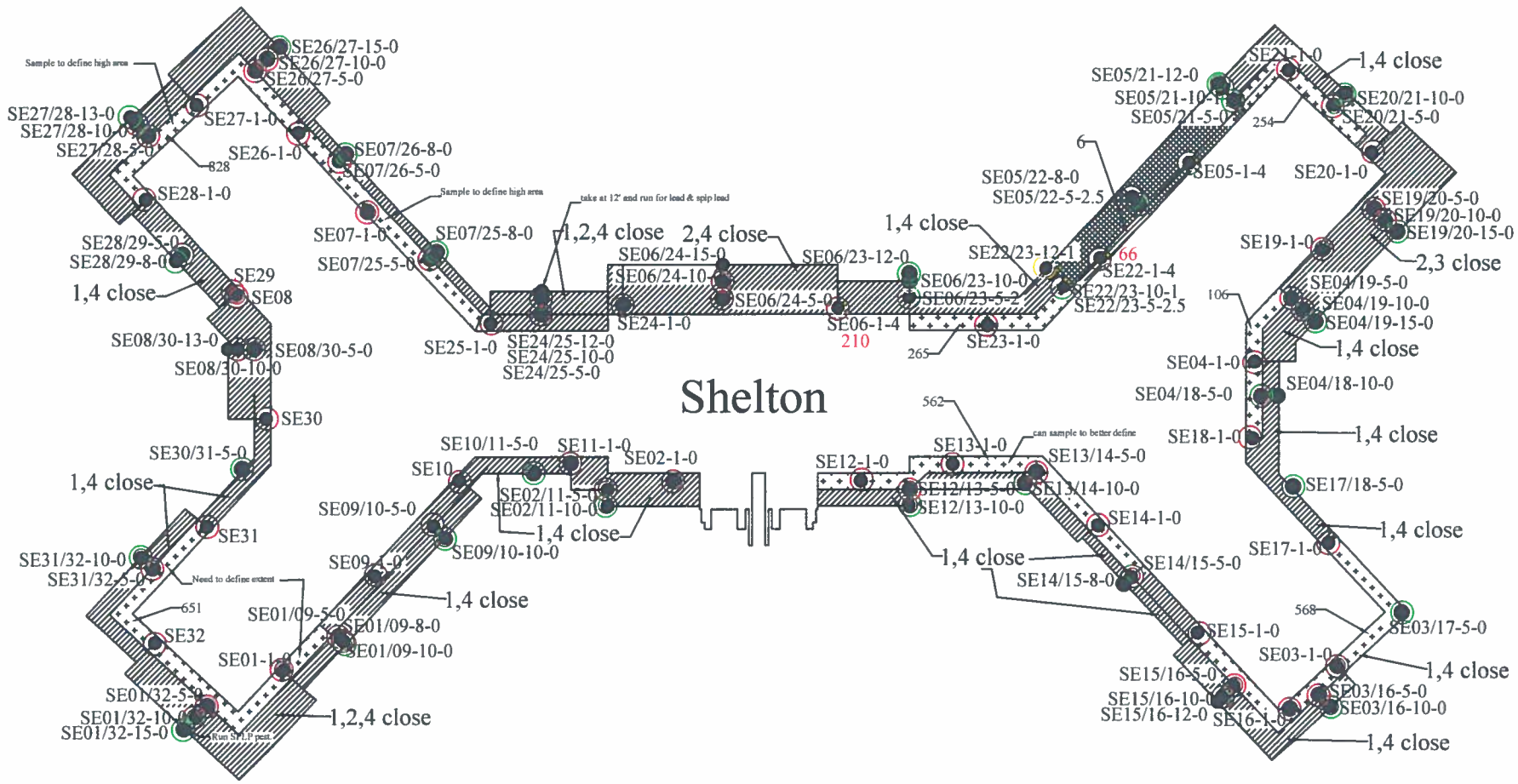
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: February 2006
Project No.: 1018.WA3	File: Shelton Pre-Remediation Figure 2-7-06.dwg

Shelton Remediation Figure 2-7-06

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



Legend

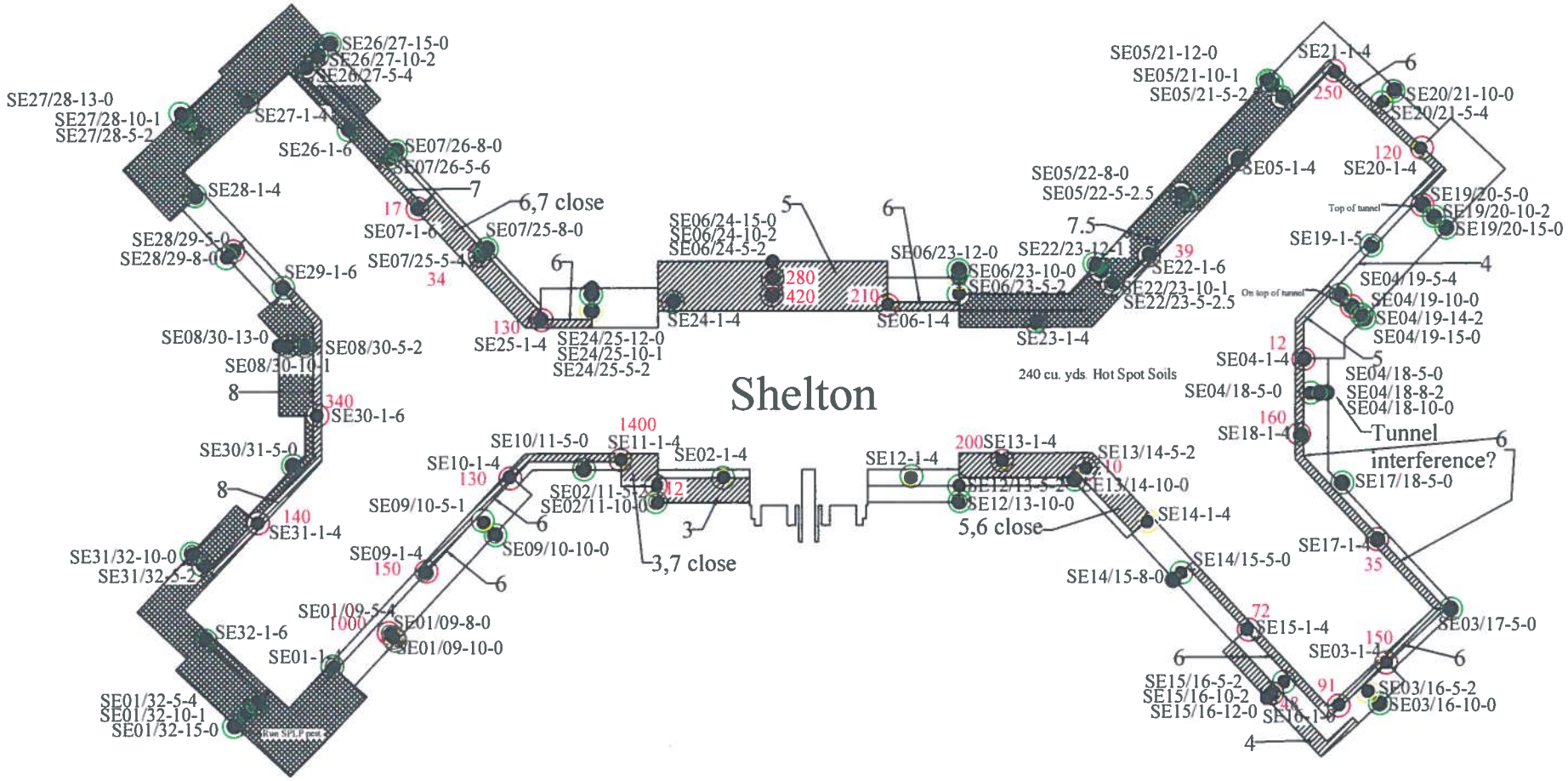
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: February 2006
Project No.: 1018.WA3	File: Shelton Remediation Figure 2-16-06.dwg

Shelton Remediation Figure 2-16-06

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

130 - Dieldrin concentration in ppb

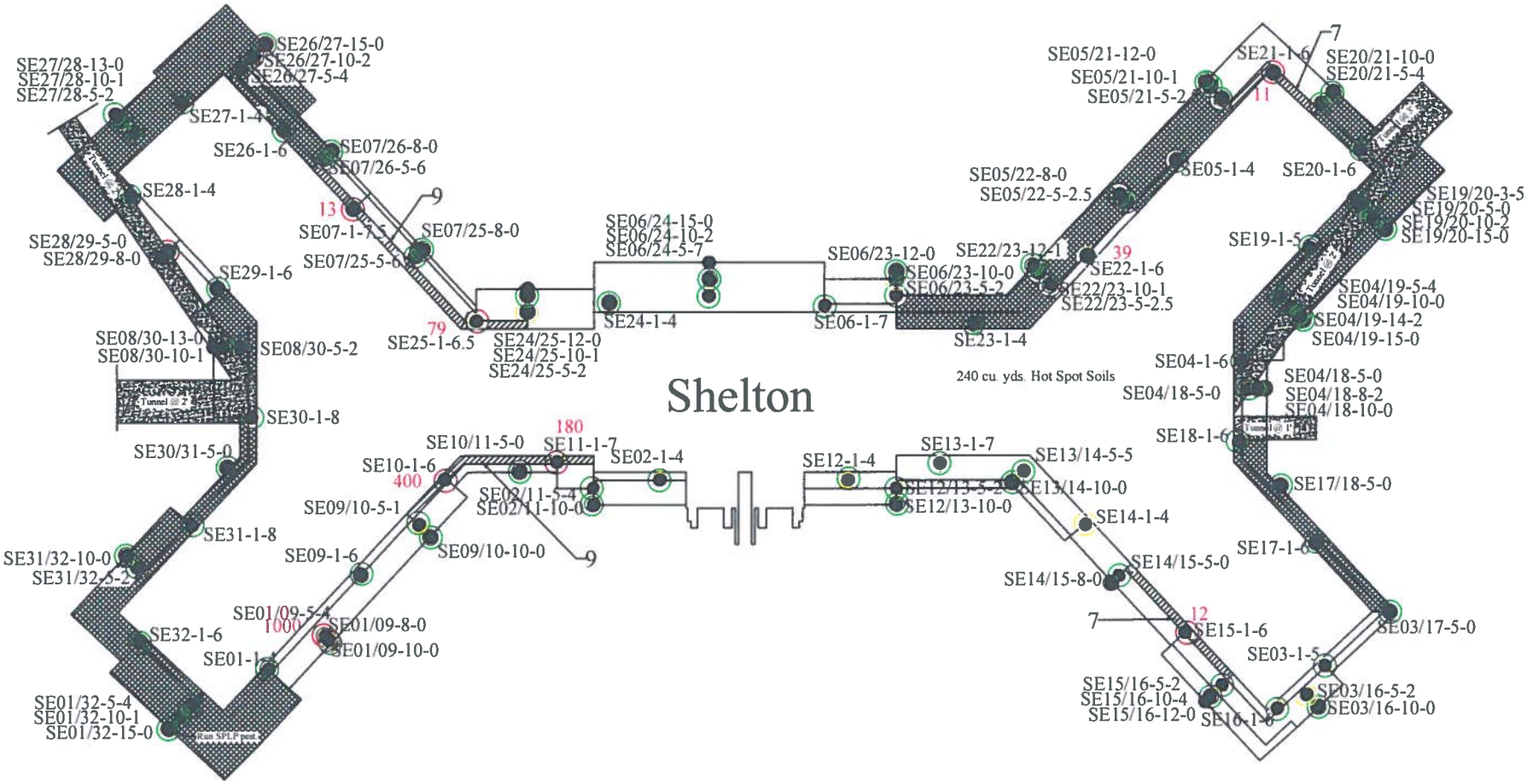
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: March 10, 2006
Project No.: 1018.WA3	File: Shelton Remediation Figure 3-10-06.dwg

Shelton 3-10-06 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



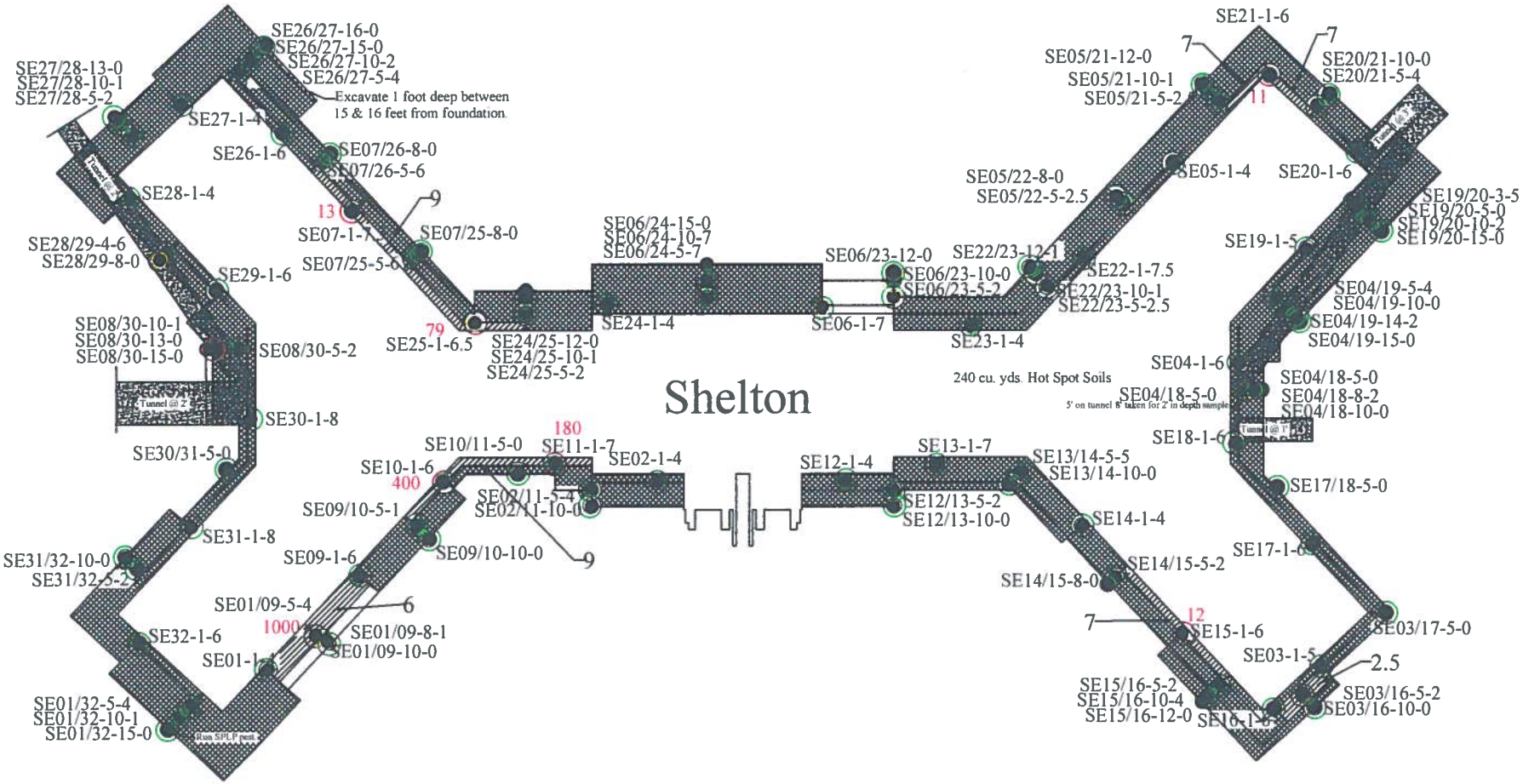
Legend		
- Lead in compliance at sampling location	130 - Dieldrin concentration in ppb	
- Lead not in compliance at sampling location	- Sampling location	
- Pesticide in compliance at sampling location	- Area requiring excavation	
- Pesticides not in compliance at sampling location	- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW	
- Need SPLP data for determination		

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: March 10, 2006
Project No.: 1018.WA3	File: Shelton Remediation Figure 3-14-06.dwg

Shelton 3-14-06 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

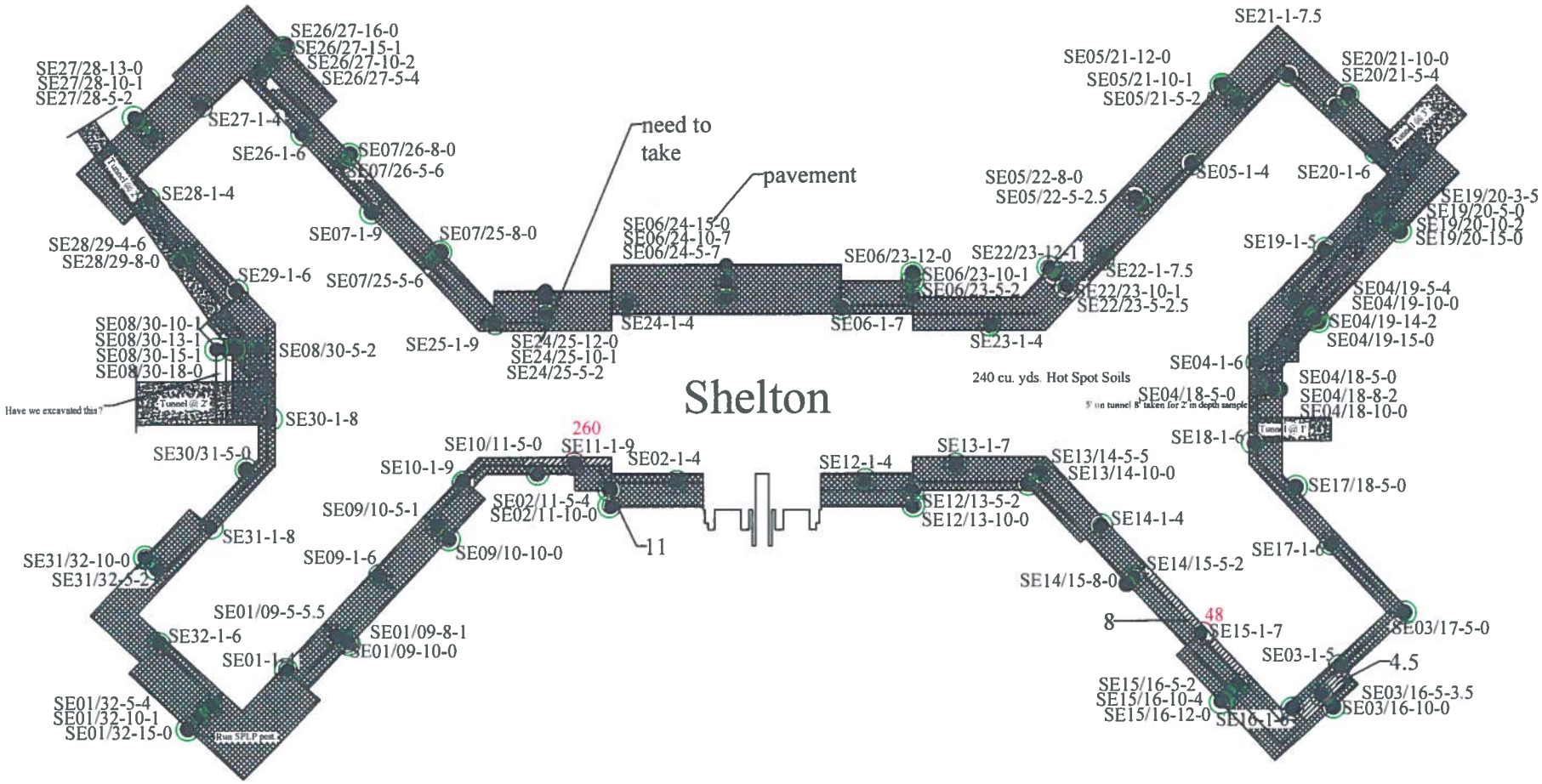
- Sampling location
- Area can be backfilled
- 130 - Dieldrin concentration in ppb
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: March 21, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure 3-21-06.dwg

Shelton 3-21-06 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



Legend

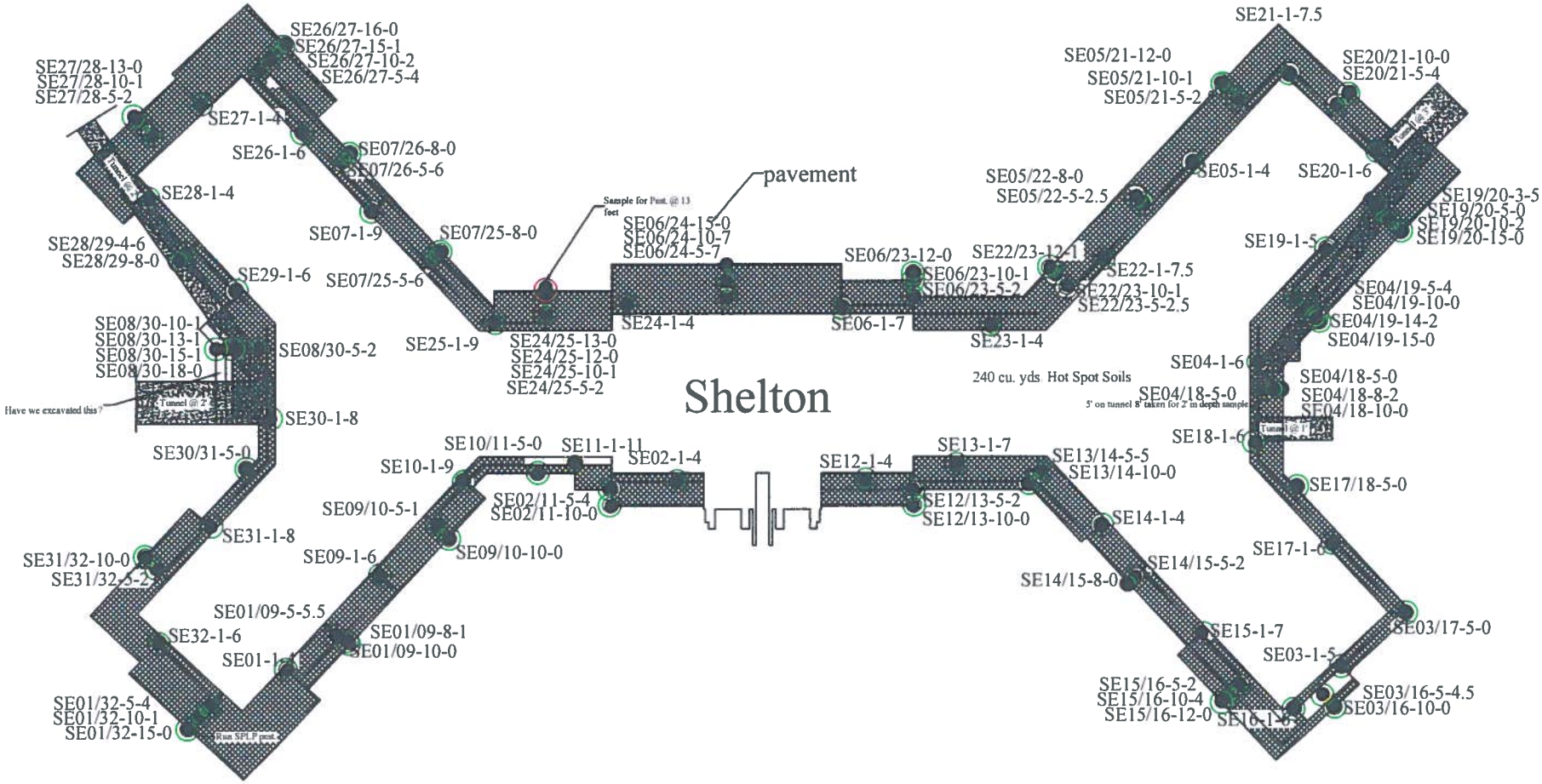
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled
- 130 - Dieldrin concentration in ppb

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: March 23, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure 3-23-06.dwg

Shelton 3-23-06 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut

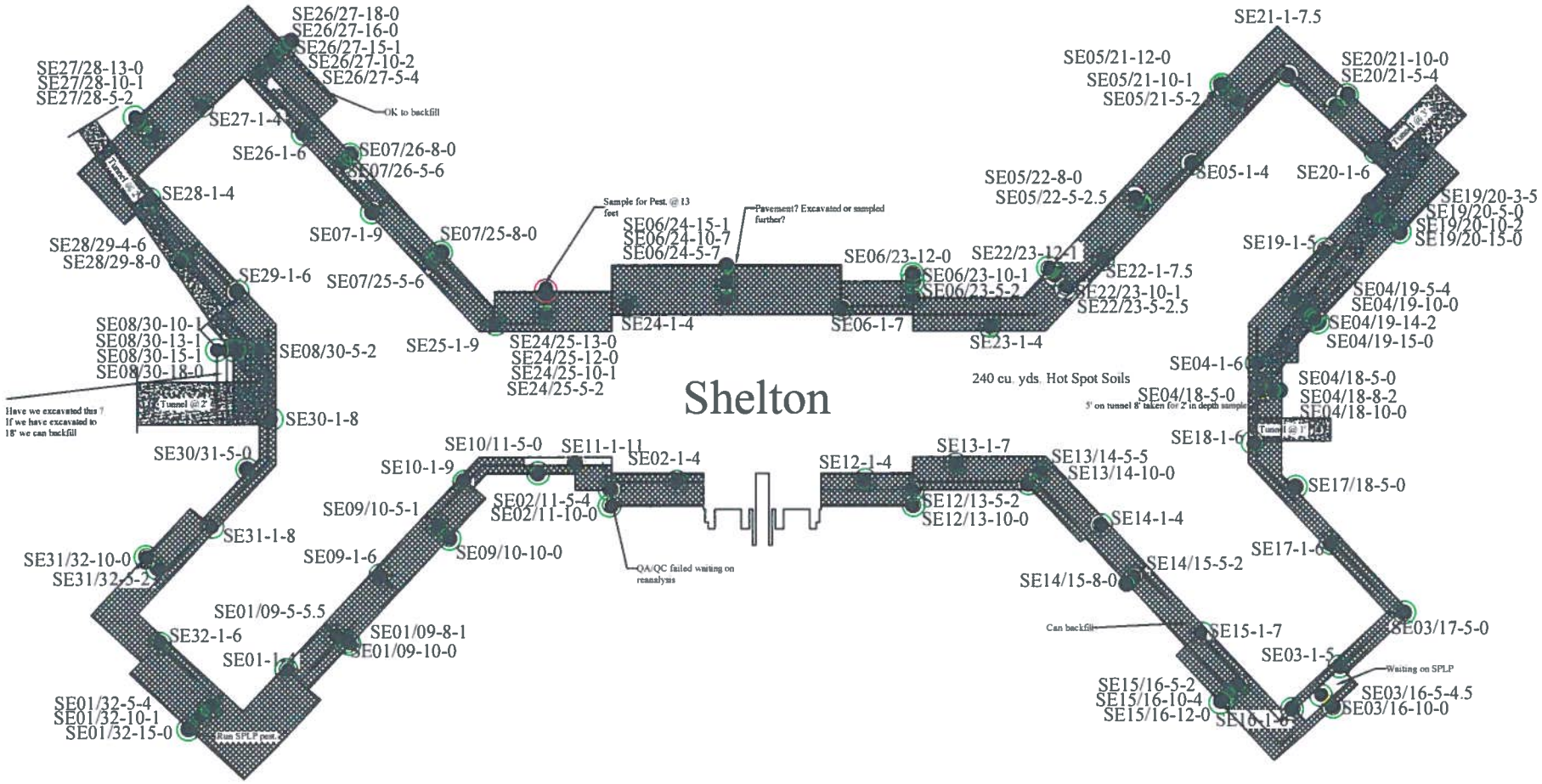


- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut	Shelton 3-28-06 Remediation Figure
Approximate Scale: 1 Inch = 50 Feet Date: March 28, 2006	Fairfield Hills Hospital - Shelton Building Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8 File: Shelton Remediation Figure 3-28-06.dwg	



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

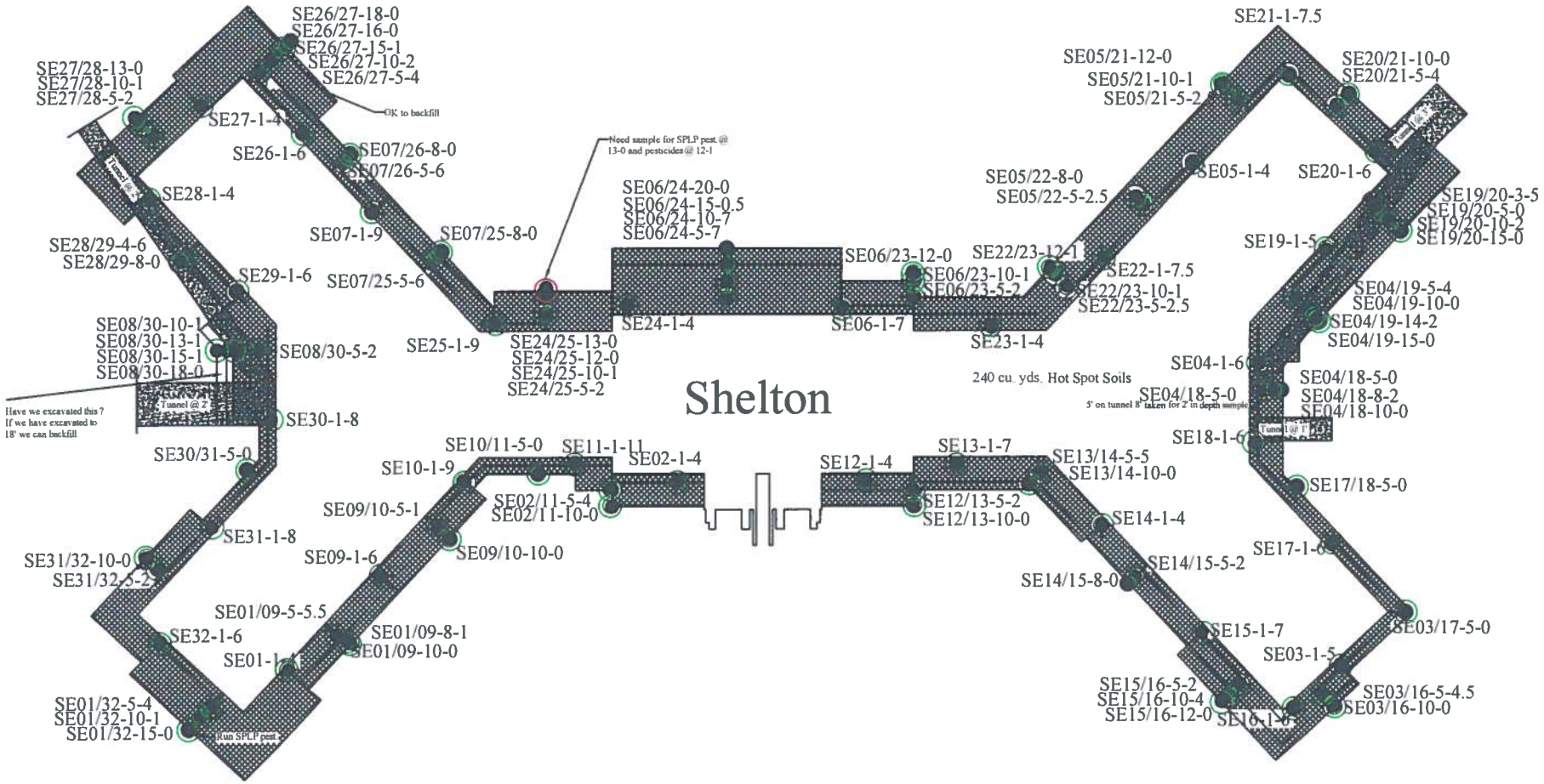
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: March 29, 2006
Project No.: 1018 WA8	File: Shelton Remediation Figure 3-29-06.dwg

Shelton 3-29-06 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



Legend

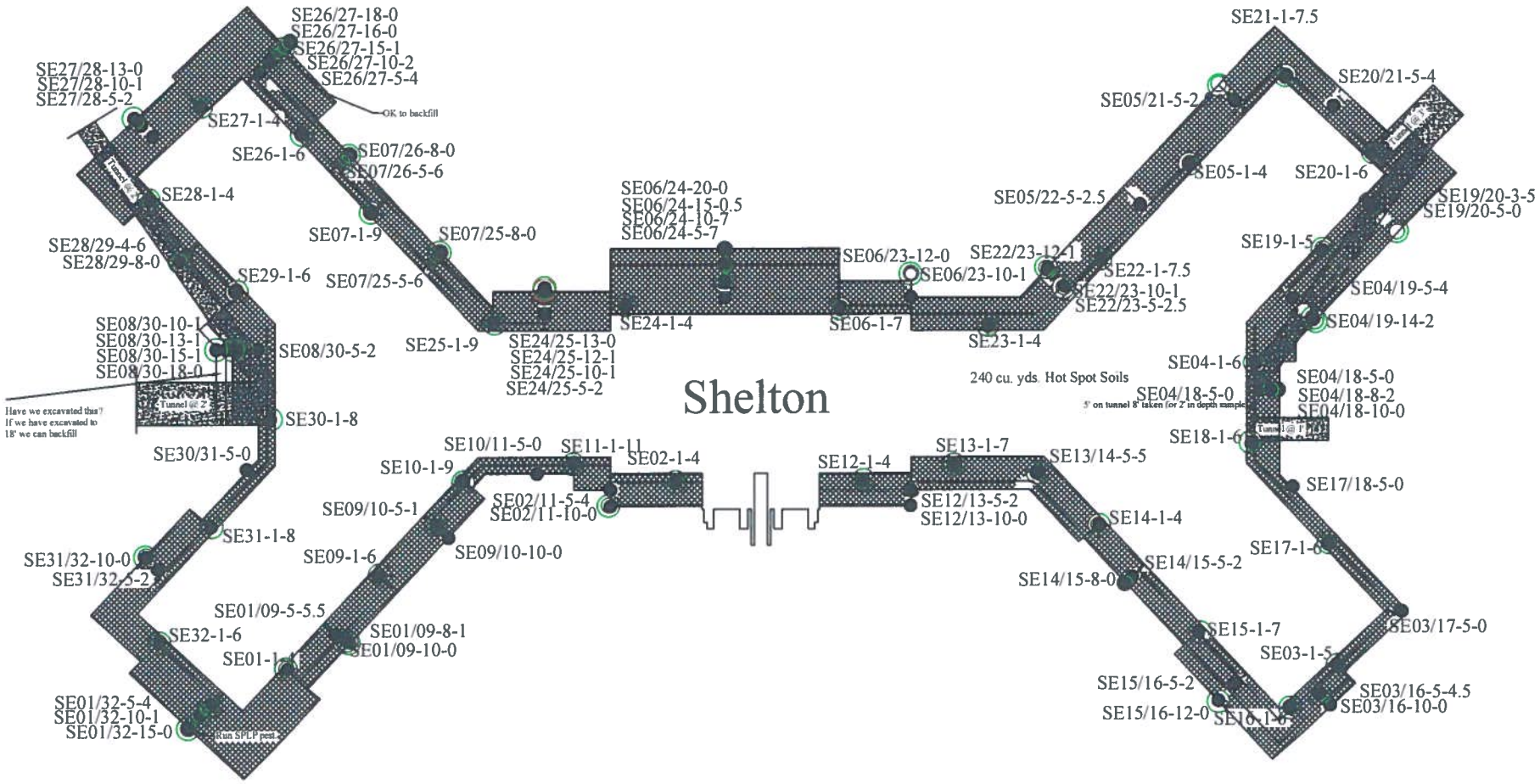
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: June 27, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure 6-27-06.dwg

Shelton 6-27-06 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



Legend

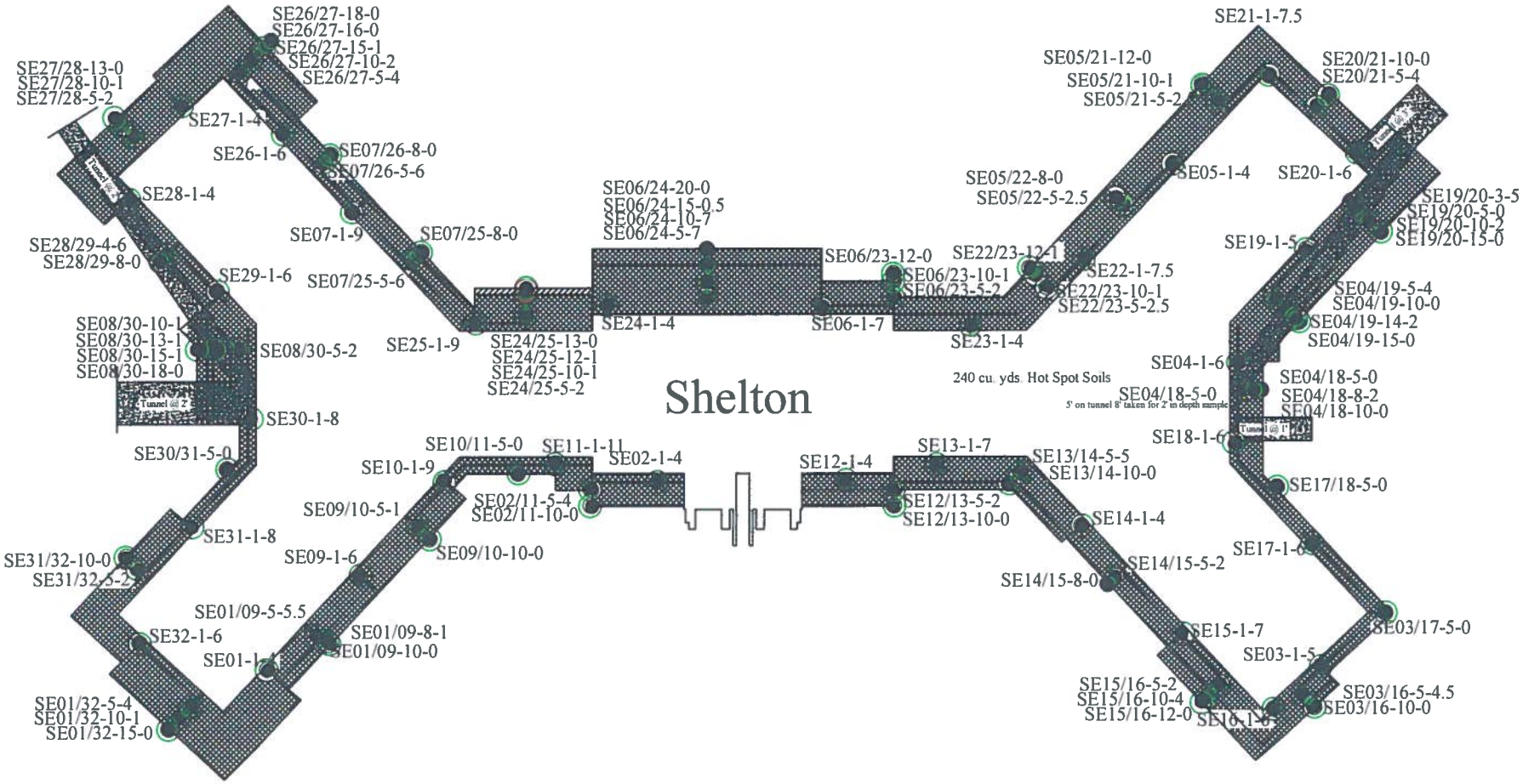
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 50 Feet	Date: August 24, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure 8-24-06.dwg

Shelton 8-24-06 Remediation Figure

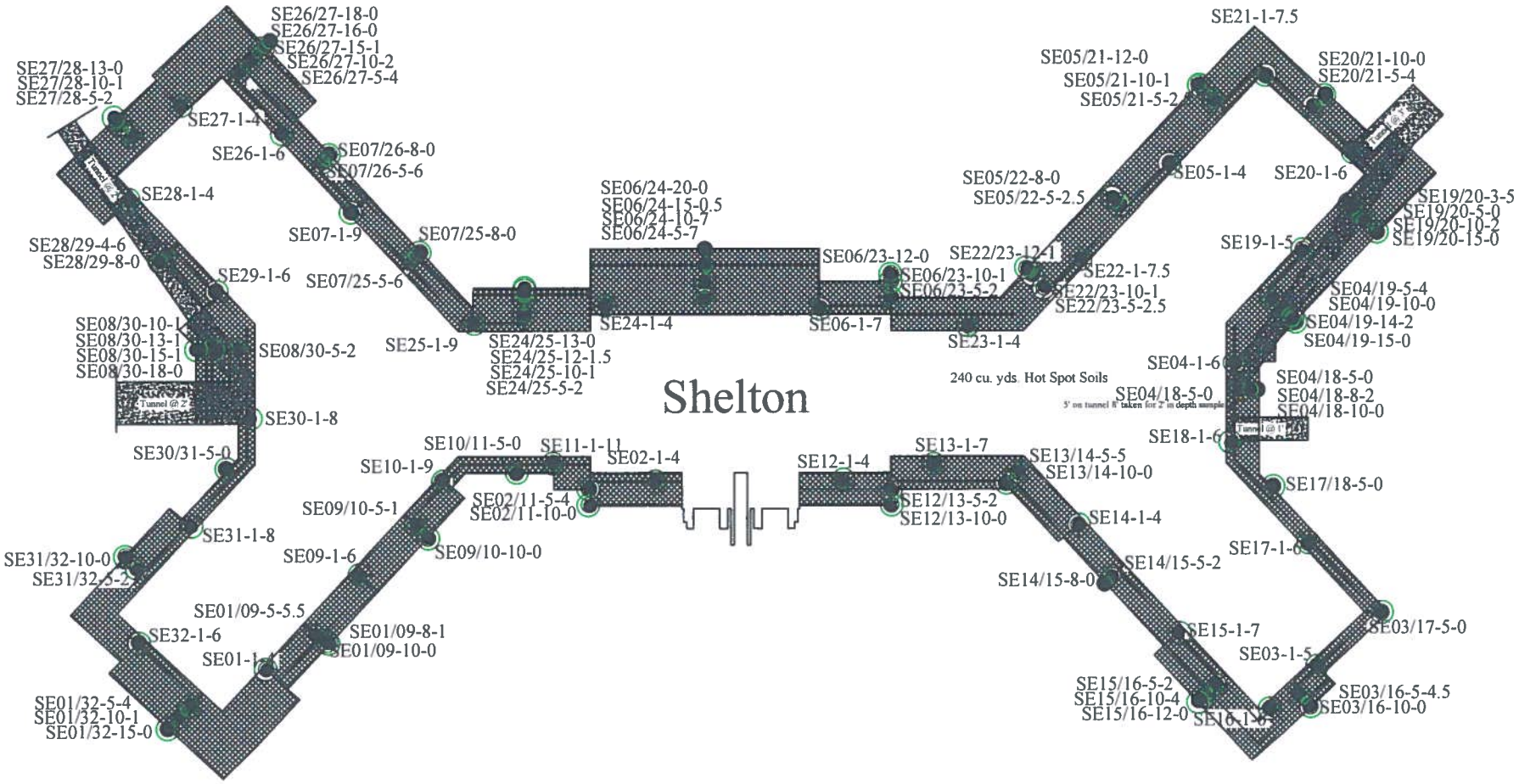
Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut	Shelton 8-30-06 Remediation Figure
Approximate Scale: 1 Inch = 50 Feet Date: August 30, 2006	Fairfield Hills Hospital - Shelton Building Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8 File: Shelton Remediation Figure 8-30-06.dwg	



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Shelton 9-7-06 Remediation Figure
Approximate Scale: 1 Inch = 50 Feet	Date: September 7, 2006	Fairfield Hills Hospital - Shelton Building Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Shelton Remediation Figure 9-7-06.dwg	

STAMFORD BUILDING

Stamford Building Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
SM01-1-0	**1700.0**	**0.352**		**0.013**						0.081		0.063						
SM01-1-0.5	34.1			**0.013**						0.081		0.063						
SM01/19-5-0	53.7																	
SM01/02-5-0	103.0									0.140		0.066						
SM02-1-0	**1880.0**	**1.180**								0.033		0.029						
SM02-1-0.5	24.7	**0.017**																
SM02-1-2	7.4																	
SM02/03-5-0	131.0	**0.080**																
SM02/03-5-0.5	10.5																	
SM02/03-10-0	75.0	**0.025**																
SM02/03-10-0.5	248.0	**0.070**																
SM02/03-10-1.5																		
SM02/03-12-0	79.9																	
SM03-1-0	**776.0**	**0.539**								0.025		0.010						
SM03-1-0.5	10.8									0.025		0.010						
SM03/04-5-0	178.0	**0.142**																
SM03/04-5-0	32.3	**0.021**																
SM03/04-5-2	3.7																	
SM03/04-10-0	85.5																	
SM04-1-0	**3740.0**	**1.610**								0.240		0.110						
SM04-1-1	1.3																	
SM04/05-5-0	351.0	**0.145**																
SM04/05-5-0	29.8	**0.051**																
SM04/05-5-2	0.5																	
SM04/05-10-0	73.5	**0.020**																
SM04/05-10-0.5	8.8																	
SM04/05-12-0	73.7																	
SM05-1-0	**1720.0**	**0.830**						0.008		0.280		0.100						
SM05-1-0.5	60.2	**0.016**																
SM05-1-1.5.1	1.0																	
SM05-1-1.5.1	0.8																	
SM05/06-5-0	70.9	**0.019**																
SM05/06-5-0.5	36.0	**0.045**																
SM05/06-5-1.5	2.3																	
SM05/06-10-0	44.5																	
SM06-1-0	208.0	**0.105**						0.009		0.320		0.110						
SM06-1-0.5	23.9	**0.019**																
SM06-1-1.5																		
SM06/07-5-0	103.0	**0.027**																
SM06/07-5-0	36.0																	
SM06/07-5-0.5	16.5																	
SM07-1-0	285.0	**0.234**								0.260		0.064						
SM07-1-0.5	58.8																	
SM07/08-5-0	27.1									0.190		0.070						
SM08-1-0	272.0	**0.218**						0.023		0.420	**0.180**	0.170						

Stamford Building Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
SM08-1-0.5	5.1																	
SM08-1-0.5.1	6.6																	
SM08/20-5-0.1	332.0	**0.074**								0.250		0.160						
SM08/20-5-0	326.0	**0.129**								0.210		0.150						
SM08/20-5-0.5	31.9	**0.096**																
SM08/20-5-2	1.0																	
SM08/20-14-0	**435.0**	**0.095**																
SM08/20-14-0.5	65.8																	
SM08/20-18-0	**1150.0**	**0.243**																
SM08/20-18-0.5	21.2	**0.042**																
SM08/20-18-1																		
SM08/20-27-0	59.1																	
SM09-1-0	**2370.0**	**1.220**						0.008		0.035		0.100						
SM09-1-0.5	**1420.0**	**0.291**																
SM09-1-1.5	5.4																	
SM09/20-5-0	**427.0**																	
SM09/20-5-0										0.810		0.590						
SM09/20-5-0.5	32.9	**0.049**																
SM09/20-5-2	173.0	**0.160**																
SM09/20-5-4	0.7																	
SM09/20-12-0	161.0	**0.039**																
SM09/20-12-0.5	25.3	**0.016**																
SM09/20-12-0.75	39.8	**0.099**																
SM09/20-15-0	8.1																	
SM09/10-5-0	**1980.0**																	
SM09/10-5-1.5																		
SM09/10-12-0	248.0	**0.147**																
SM08/10-12-0.5	36.1																	
SM09/10-15-0	108.0																	
SM10-1-0	**970.0**	**0.231**						0.035		0.600		0.670						
SM10-1-0.5	6.1																	
SM10/11-5-0	81.5	**0.029**																
SM10/11-5-0.5	22.8																	
SM10/11-13-0	7.3																	
SM11-1-0	**917.0**	**0.494**						0.009		0.120		0.160						
SM11-1-0.5	79.2	**0.045**																
SM11-1-1.5	1.8																	
SM11/12-5-0	169.0	**0.042**																
SM11/12-5-0.5	27.9	**0.042**																
SM11/12-5-1	6.0																	
SM11/12-10-0	99.5	**0.020**																
SM11/12-10-1	18.6																	
SM11/12-10-0.5	17.9	**0.016**																
SM11/12-10-0.1	96.6	**0.017**																
SM11/12-15-0	89.6																	

Stamford Building Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
SM12-1-0	**662.0**	**0.295**								0.041		0.110						
SM12-1-0.5	36.0	**0.017**																
SM12-1-1																		
SM12/13-5-0	**453.0**																	
SM12/13-5-0.5	22.5																	
SM12/13-10-0	74.7																	
SM13-1-0	**1720.0**	**0.679**						0.009		0.069		0.150						
SM13-1-0.5	1.9																	
SM13/14-5-0	247.0	**0.043**																
SM13/14-5-0.5	4.9																	
SM13/14-10-0	57.3	**0.020**																
SM13/14-10-0.5	4.7																	
SM13/14-13-0	58.8																	
SM14-1-0	265.0	**0.265**						0.006		0.220		0.160						
SM14-1-0.5	19.1																	
SM14/15-5-0	108.0	**0.023**																
SM14/15-5-0.5	27.8	**0.020**																
SM14/15-5-1	0.8																	
SM14/15-10-0	132.0	**0.021**																
SM14/15-10-0.5	18.5																	
SM14/15-13-0	109.0																	
SM15-1-0	**1880.0**	**0.812**								0.041		0.094						
SM15-1-0.5	43.7	**0.026**																
SM15-1-2																		
SM15/16-5-0	**402.0**	**0.176**																
SM15/16-5-0.5	13.0	**0.019**																
SM15/16-5-2																		
SM15/16-14-0	7.4	**0.050**																
SM15/16-14-0.5	9.6																	
SM15/16-20-0	40.7	**0.020**																
SM15/16-20-0.5	15.6	**0.016**																
SM15/16-20-2																		
SM15/16-24-0	73.0																	
SM16-1-0	**2530.0**	**0.916**								0.120		0.110						
SM16-1-0.5	58.5	**0.068**																
SM16-1-0.5.1	141.0	**0.060**																
SM16-1-2	8.4	**0.046**																
SM16/17-5-0	349.0	**0.029**																
SM16/17-5-0.5	34.2																	
SM16/17-10-0	54.5																	
SM17-1-0	**1770.0**	**0.341**								0.064		0.040						
SM17 1-0.5	58.3	**0.025**																
SM17 1-1.5	3.0																	
SM17/18-5-0	56.9																	
SM18-1-0	340.0	**0.148**								0.170		0.083						

Stamford Building Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
SM18-1-0.5	18.7																	
SM18/19-5-0	112.0	**0.018**								0.250		0.043						
SM18/19-50.5	15.4																	
SM18/19-10-0	30.2									0.250		0.043						
SM19-1-0	221.0	**0.197**						0.006		0.350	**0.140**	0.130						
SM19-1-0.5	6.0																	
SM20-1-0	**6460.0**				0.580	**0.580**				0.260		0.140						
SM20-1-2	6.1																	

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.

Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken

Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken

A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

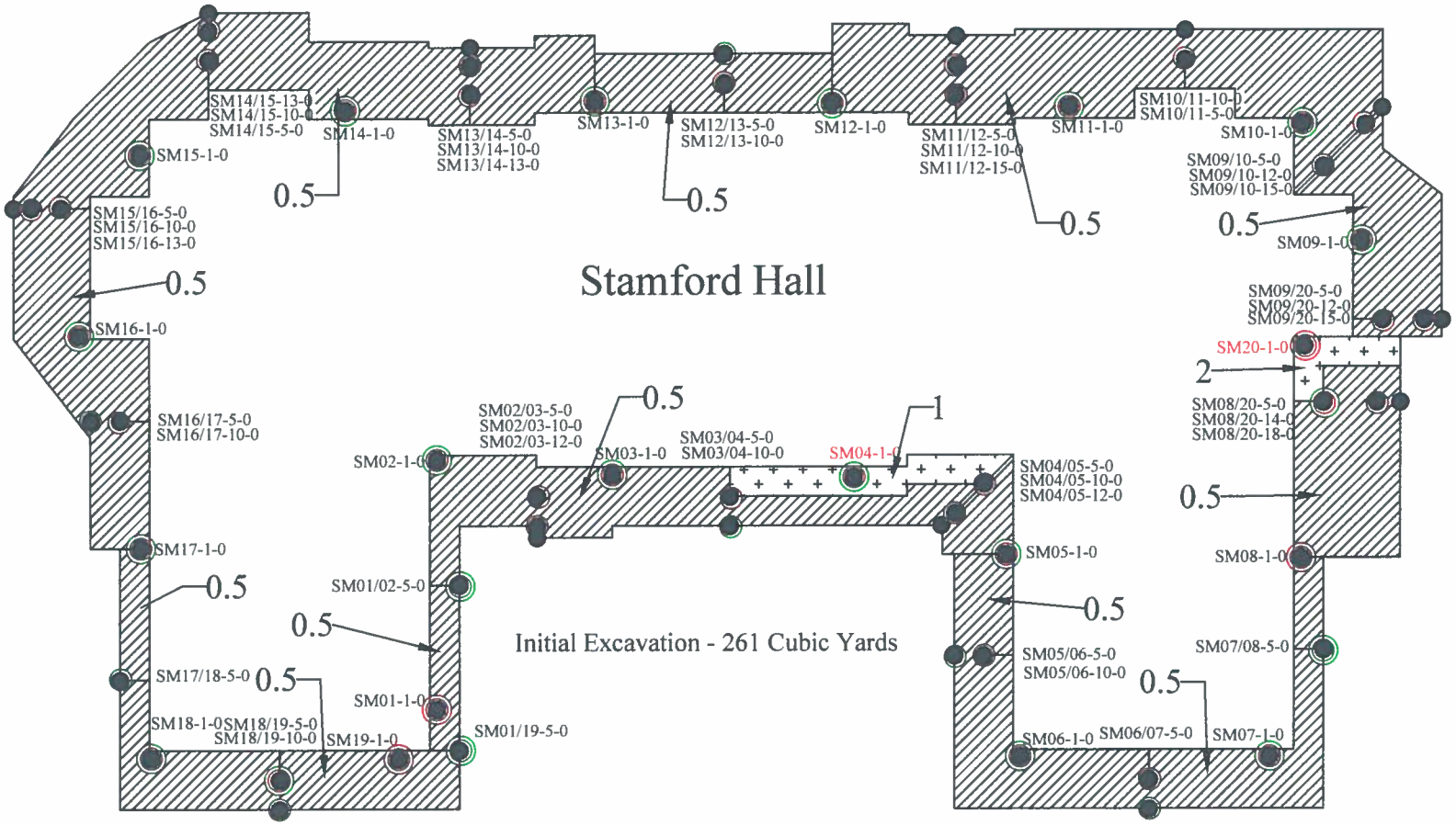
- SPLP test was not performed for sample because location was not in compliance based on total contentrations; <u>or</u> total concentration was less than total PMC <u>or</u> total concentration was less than or equal to 20 times SPLP PMC

- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance

- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.

- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems



Legend

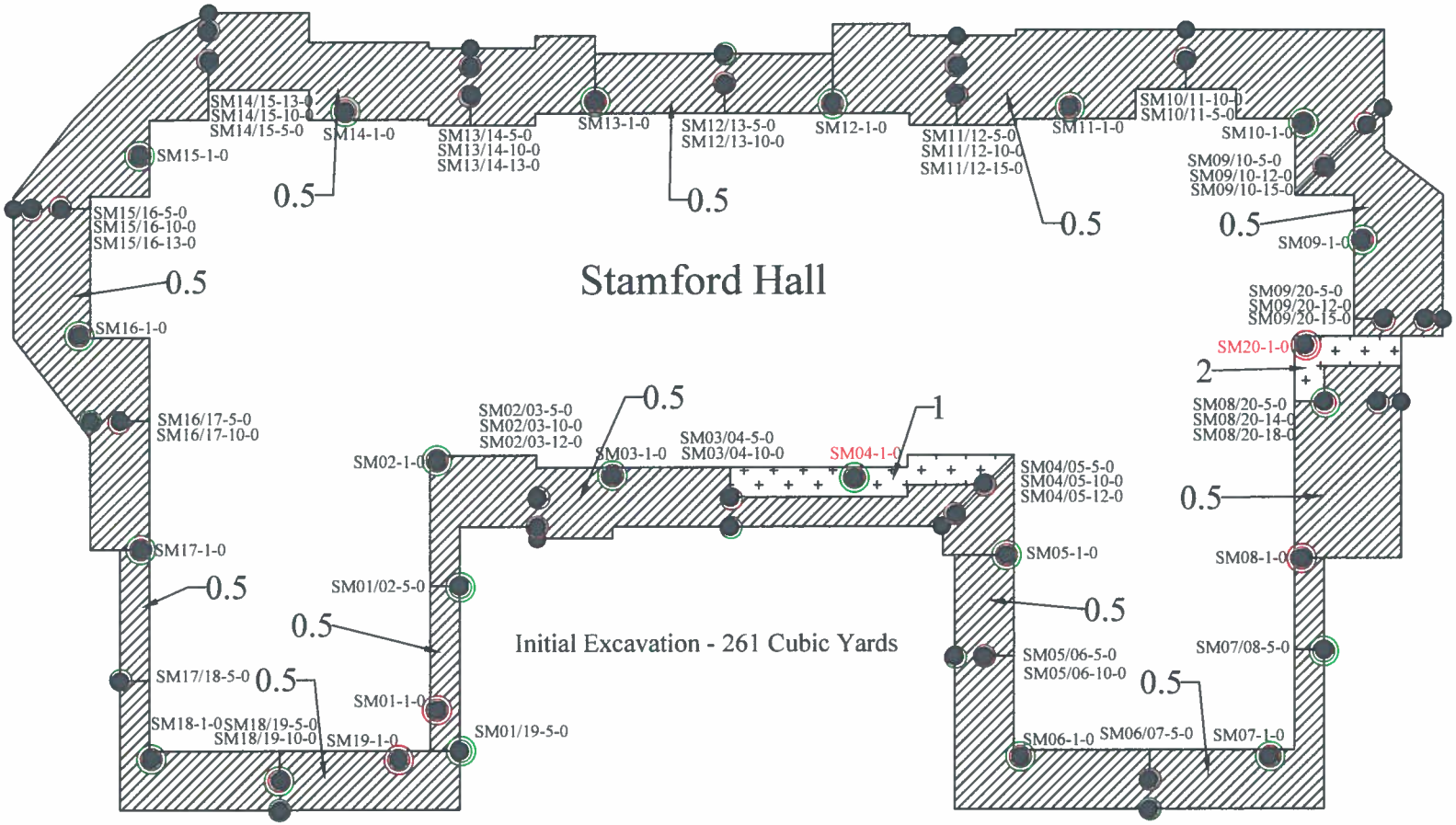
2 -Initial Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: April 9, 2006
Project No.: 1018.WA3	File: Stamford Initial Excavation.dwg

Stamford Building 4-9-06 Initial Excavation

Fairfield Hills Hospital - Stamford Building
Wasserman Way
Newtown, Connecticut



Legend

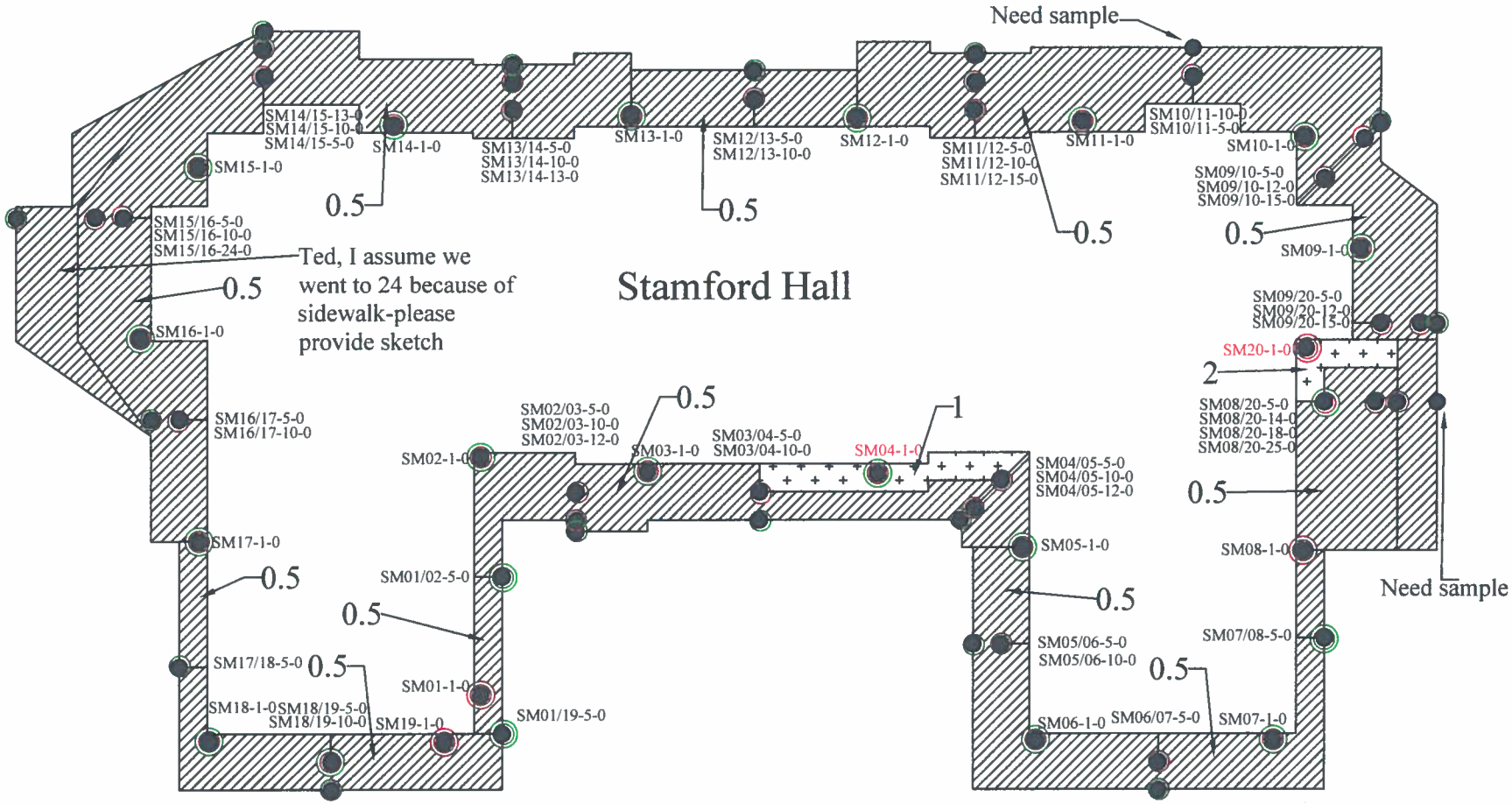
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: April 10, 2006
Project No.: 1018.WA8	File: Stamford Remediation Figure X-XX-06.dwg

Stamford 4-10-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

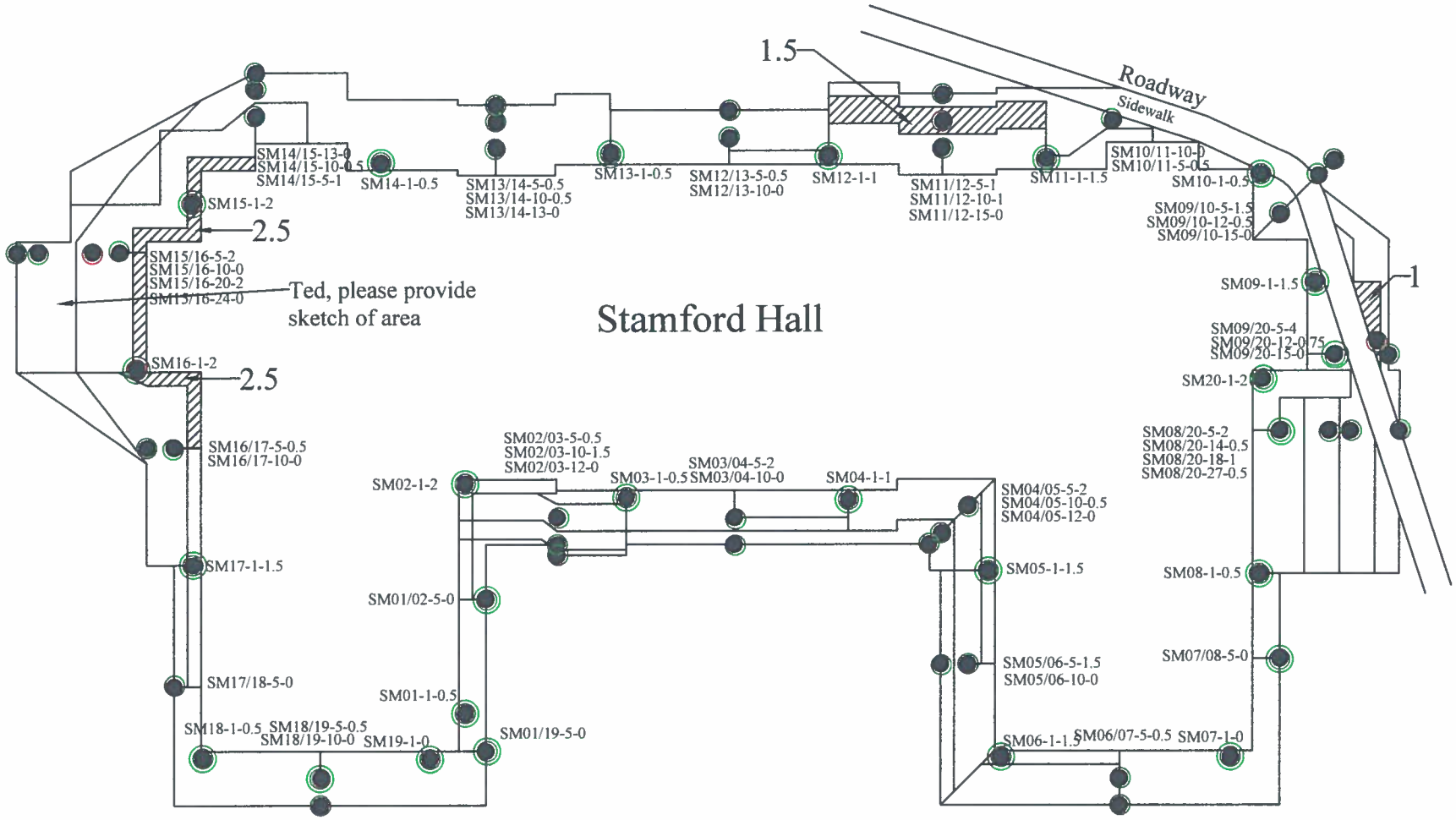
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: April 12, 2006
Project No.: 1018.WA8	File: Stamford 4-12-06 Remediation Figure.dwg

Stamford 4-12-06 Remediaiton Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
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- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

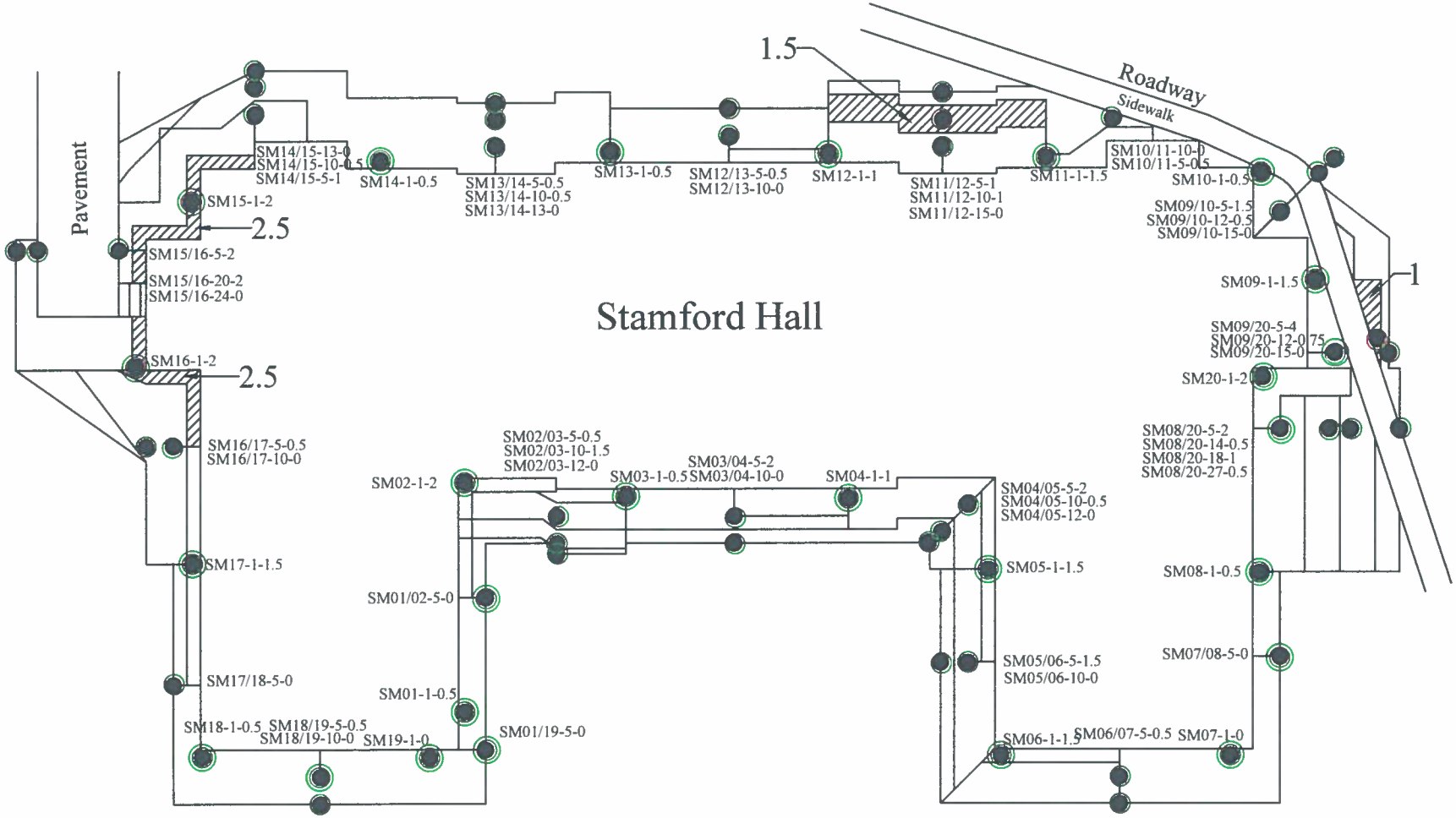
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: May 2, 2006
Project No.: 1018.WA8	File: Stamford 5-2-06 Remediation Figure.dwg

Stamford 5-2-06 Remediaiton Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

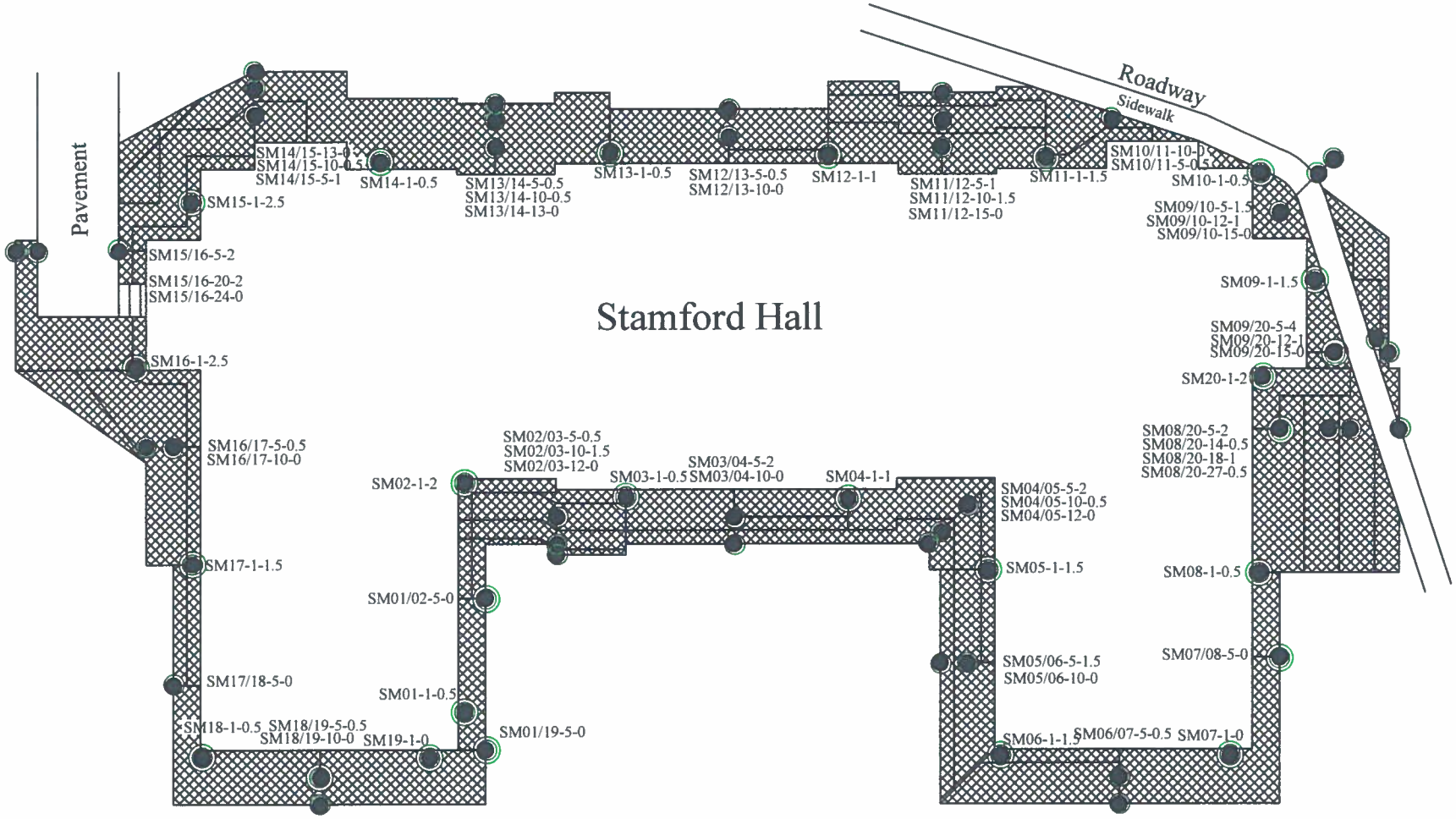
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: May 8, 2006
Project No.: 1018.WA8	File: Stamford Remediation Figure X-XX-06.dwg

Stamford 5-8-06 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



Legend

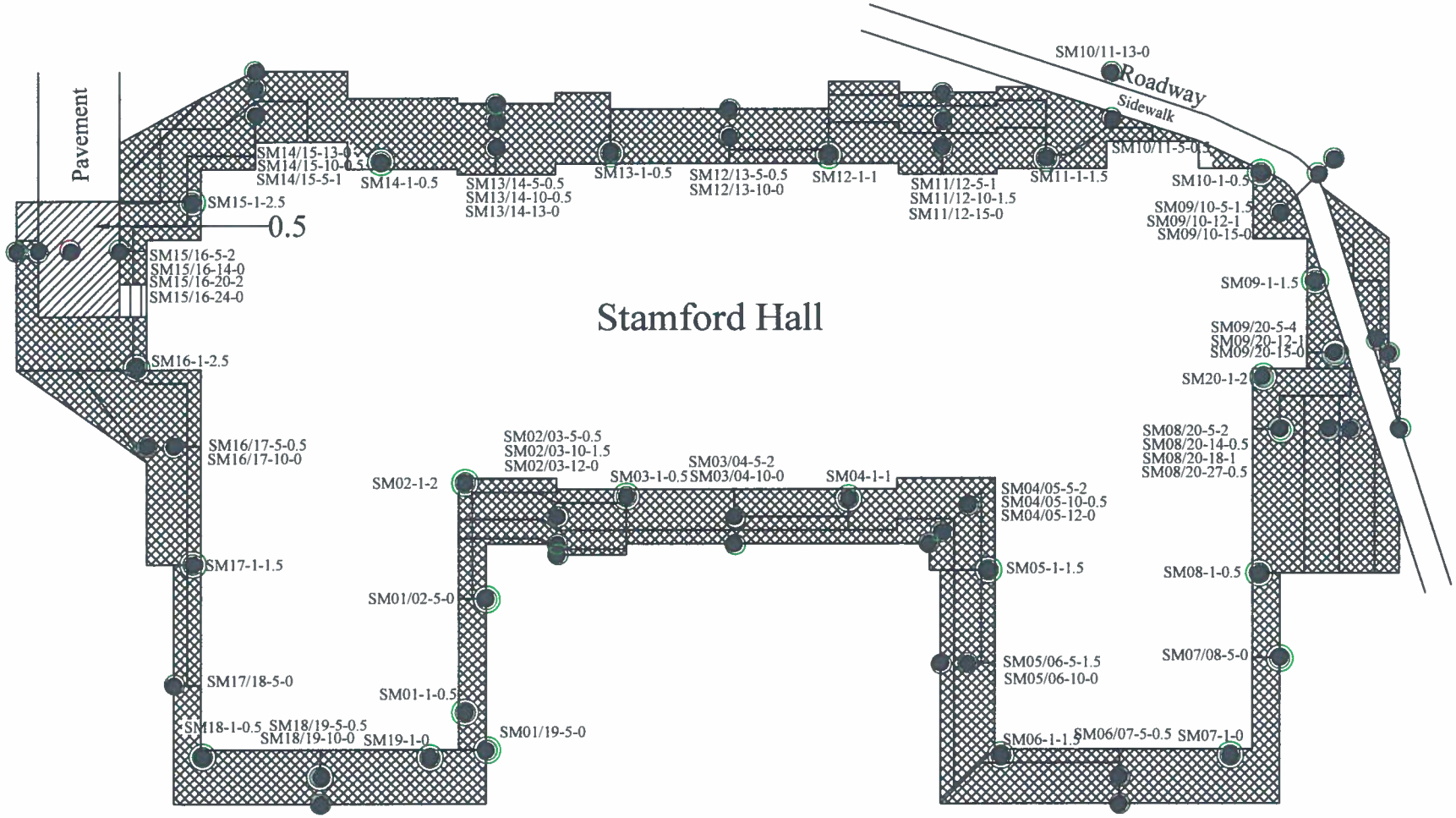
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: May 24, 2006
Project No.: 1018.WA8	File: Stamford 5-24-06 Remediation Figure.dwg

Stamford 5-24-06 Remediaiton Figure

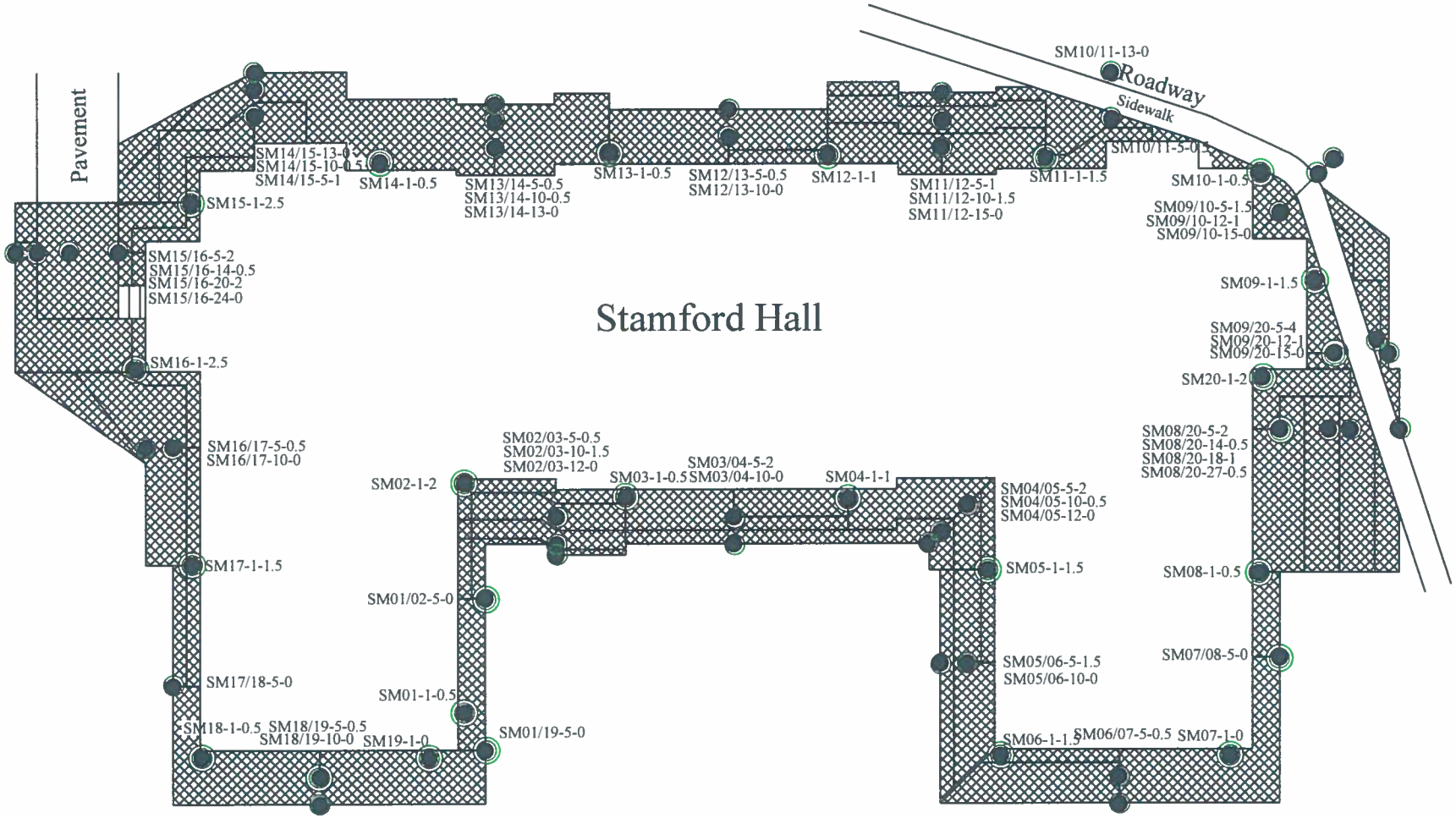
Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Stamford 6-22-06 Remediaiton Figure
Approximate Scale: 1 Inch = 30 Feet	Date: June 22, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Stamford 6-22-06 Remediation Figure.dwg	



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: August 6, 2006
Project No.: 1018.WA8	File: Stamford Final Remediation Figure.dwg

Stamford Final Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut

STRATFORD BUILDING

Stratford Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
SR01-1-0	**520.0**			**0.032**						0.830		0.570						
SR01-1-0.5	78.5																	
SR01-1-0.5.1	29.6	**0.026**																
SR01-1-1	3.8																	
SR01/07-5-0	346.0	**0.069**								0.720		0.350						
SR01/07-5-0.5	13.7																	
SR01/07-10-0	178.0																	
SR01/08-5-0	89.7	**0.020**								0.360		0.290						
SR01/08-5-0.5	13.1	**0.022**																
SR081/08-5-1	15.7																	
SR01/08-12-0	81.0																	
SR02-1-0	356.0		**0.008**	**0.035**						0.350		0.560						
SR002-1-0.5	4.2																	
SR02/03-5-0	160.0	**0.042**								0.130		0.078						
SR02/03-5-0.5	5.1																	
SR02/03-12-0	134.0	**0.197**																
SR02/03-12-1	15.7																	
SR02/03-15-0	96.7	**0.024**																
SR02/03-15-0.5	30.0																	
SR02/03-20-0.5	10.5																	
SR02/03-25-0.5	71.5																	
SR02/08-5-0	113.0	**0.017**								0.073		0.032						
SR02/08-5-0.5	21.2	**0.017**																
SR02/08-5-1	20.2																	
SR02/08-12-0	60.1																	
SR03-1-0	**984.0**							0.066		0.800		0.610						
SR03-1-0.5	143.0	**0.051**																
SR03-1-1	21.6																	
SR03/06-5-0	193.0	**0.070**								0.650		0.420						
SR03/06-5-0.5	19.0	**0.017**																
SR03/06-5-1	19.0																	
SR03/06-10-0	56.5																	
SR03/06-10-0.1	60.9																	
SR04-1-0	**584.0**							0.019		0.380		0.210						
SR04-1-0.5	107.0	**0.031**																
SR04-1-1	77.6	**0.109**																
SR04-1-1.5																		
SR04/05-5-0	245.0	**0.035**								0.360	**14.000**	0.160	**6.300**					
SR04/05-5-0.5	19.1									0.052								
SR04/05-13.5-0	82.7									0.150		0.080						
SR04/06-5-0	350.0	**0.078**								0.380		0.210						
SR04/06-5-0.5	111.0	**0.022**																
SR04/06-5-1	8.4	**0.029**																
SR04/06-5-1.5	0.9																	
SR04/06-10-0	54.6																	

Stratford Sampling Results

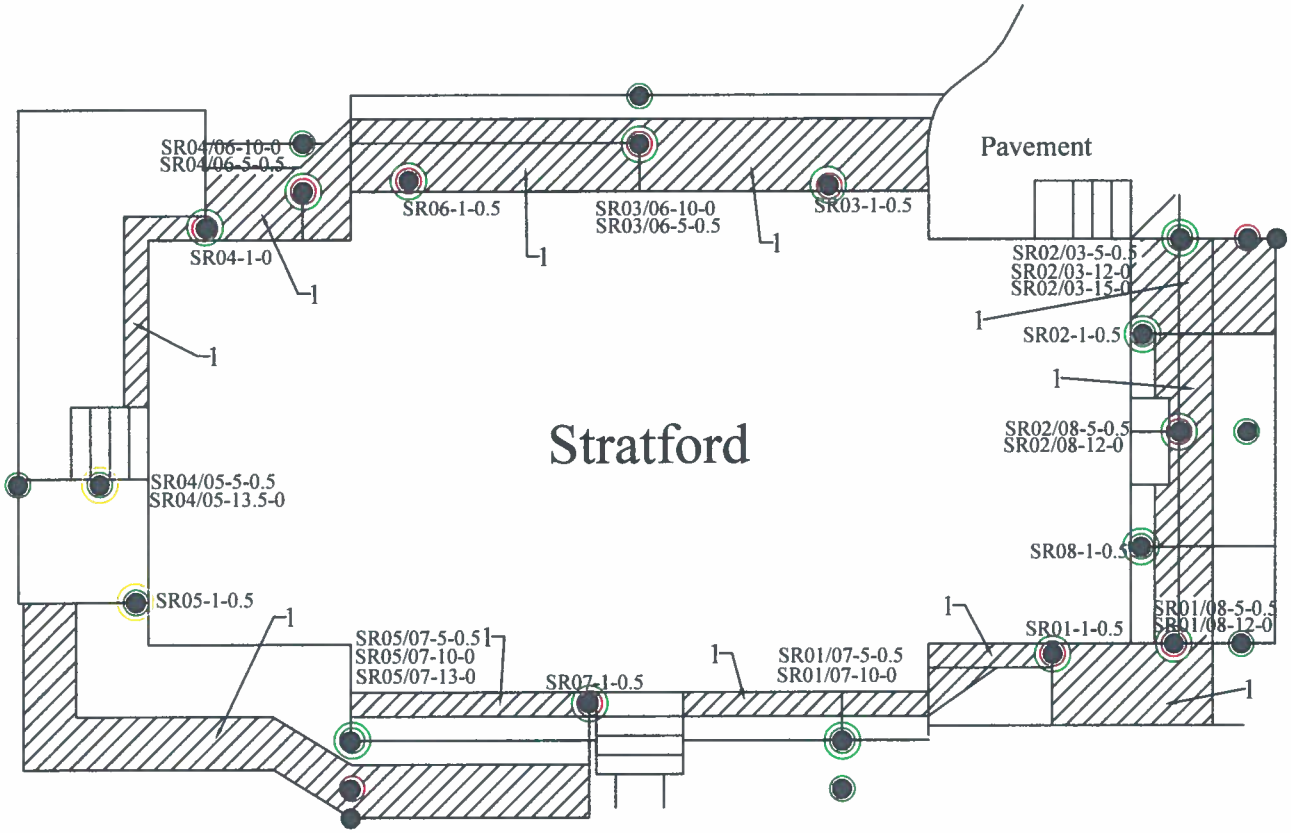
Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
SR05-1-0	**3,010.0**							0.014		0.320		0.160						
SR05-1-0.5	42.5									0.023								
SR05/07-5-0	135.0	**0.020**								0.150		0.079						
SR05/07-5-0.5	31.9																	
SR05/07-10-0	72.1	**0.028**																
SR05/07-10-1	2.5																	
SR05/07-13-0	67.0																	
SR06-1-0	**1,680.0**	**0.225**						0.009		0.190		0.150						
SR06-1-0.5	**2,820.0**	**0.027**																
SR06-1-1	3.7																	
SR07-1-0	**2,180.0**	**0.533**						0.004		0.037		0.090						
SR07-1-0.5	328.0	**0.045**																
SR07-1-1	8.9																	
SR08-1-0	**1,460.0**	**0.133**						0.016		0.300		0.410						
SR08-1-0.5	16.6																	

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimiter sampling location-- xx/xx indicates that the sample was taken between two premier locations at some distance from the foundation.
Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken
Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken
A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion
0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion
- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion
0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion
- SPLP test was not performed for sample because location was not in compliance based on total contentrations; **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC
- blank cell indicates that the particular chemical was not analyzed for in that particular sample because a previous result closer to the foundation or shallower in depth was in compliance
- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.
- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

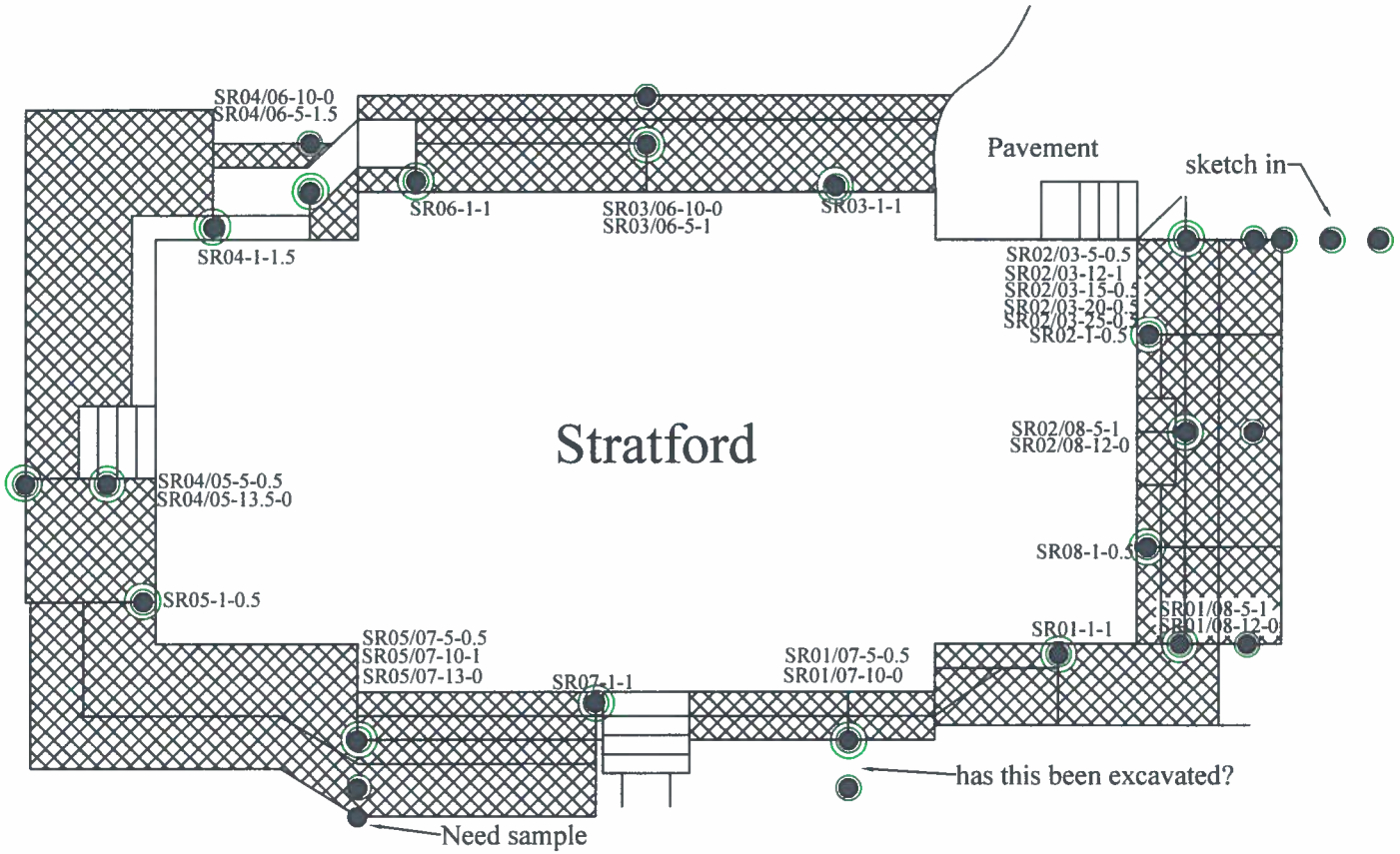
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: April 21, 2006
Project No.: 1018.WA8	File: Stratford 4-21-06 Remediation Figure.dwg

Stratford 4-21-06 Remediation Figure

Fairfield Hills
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

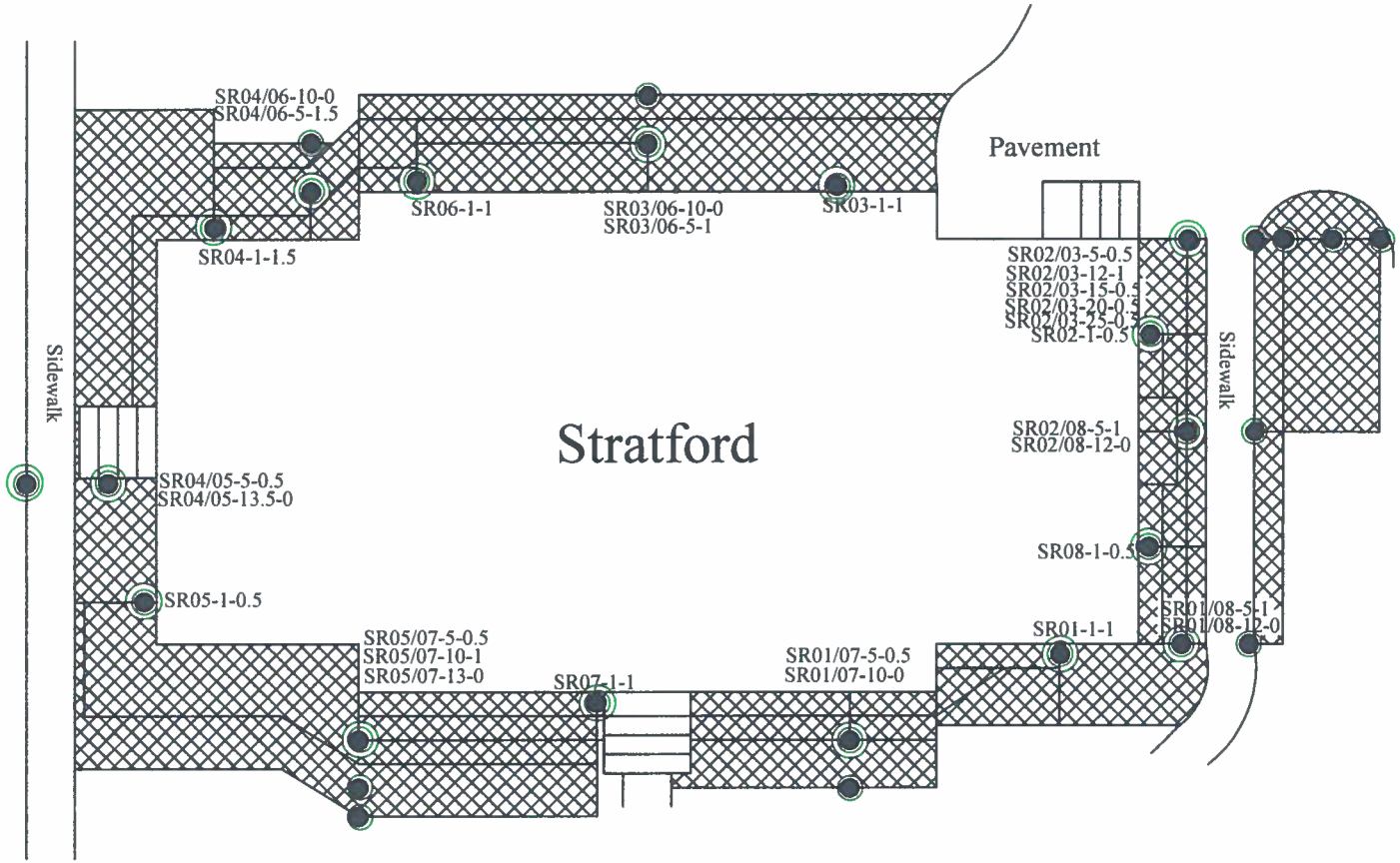
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: May 10, 2006
Project No.: 1018.WA8	File: Stratford 5-2-06 Remediation Figure.dwg

Stratford 5-10-06 Remediation Figure

Fairfield Hills
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

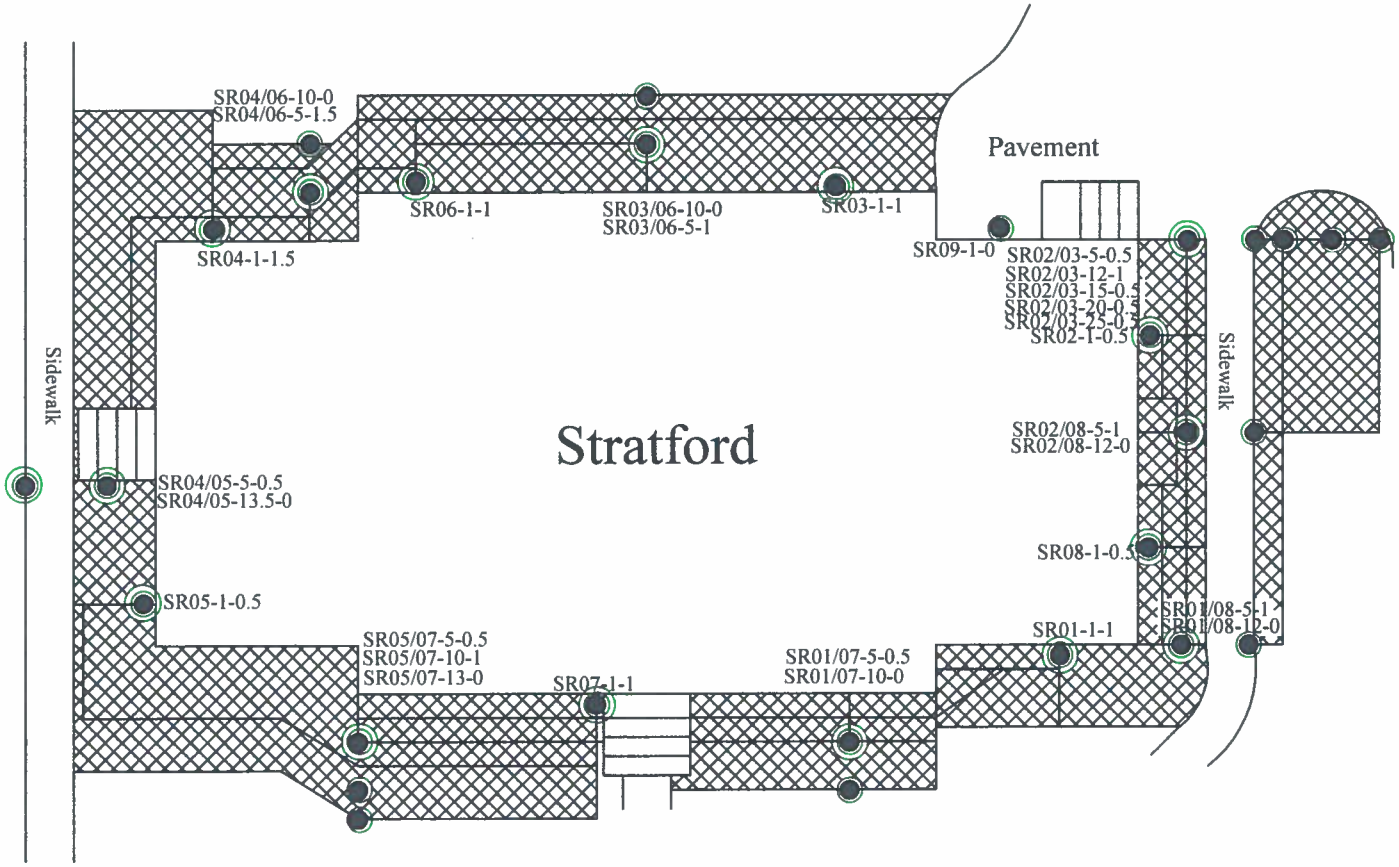
- Sampling location
- Area can be backfilled
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: May 25, 2006
Project No.: 1018.WA8	File: Stratford 5-25-06 Remediation Figure.dwg

Stratford 5-25-06 Remediation Figure

Fairfield Hills
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

- Sampling location
- Area can be backfilled
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: July 02, 2006
Project No.: 1018.WA8	File: Stratford 7-2-06 Remediation Figure.dwg

Stratford 7-2-06 Finial Remediation Figure

Fairfield Hills
Wesserman Way
Newtown, Connecticut

WOODBURY BUILDING

R. W. BARTLEY & ASSOCIATES, INC.

PHONE CONVERSATION RECORD

ORIGINATOR: Russell Bartley

CONVERSATION WITH:

NAME: Dan White

COMPANY: CT DEP

ADDRESS:

PHONE:

DATE: 6/27/06

TIME:

SUBJECT: FHH RAP Soil Remediation at Woodbury

NOTES:

We agreed that it was appropriate to finish defining the extent of lead release at Woodbury by taking a sample further out at 04/06-22-0 and take samples at or near 03/15-22-0 and at 03/16-22-0. We will run total lead and SPLP lead on the samples. If the totals are in the low double digits then that will define the release area. Then for compliance with lead PMC we can perform the 95% upper confidence level of the mean on all final lead SPLP results at Woodbury.

R.W. BARTLEY & ASSOCIATES, INC.
(860) 871-4966
37 BALD HILL ROAD
TOLLAND, CT 06084
FAX: (860) 871-4998
RBARTLEY@RWBARTLEY.COM

April 1, 2009

Ms. Sheila Gleason
Environmental Analyst
Remediation Division
Bureau of Water Protection and Land Reuse
Connecticut Department of Environmental Protection
79 Elm St.
Hartford, Connecticut 06106-5127

Re: Former Fairfield Hills Mental Health Hospital Site
Newtown, Connecticut

Dear Ms. Gleason:

I am completing the Fairfield Hills remediation report for submission to your agency. There is one issue that I want to ensure is resolved prior to submitting the report; because if this issue is not resolved in the manner that I discussed with the former DEP project manager, Dan White, additional soil excavation may be required.

The issue involves soil remediation at the Woodbury building. The issue was raised by me because of unusual soil lead leachate analysis data for soils at this building. The soil lead RSRs Pollutant Mobility criteria was established at 0.015 milligrams per liter because there was not fifteen feet of groundwater over bedrock in accordance with 22a-133k-1(c)(2)(C). SPLP test results for some samples were greater than 0.015 milligrams per liter even though total lead in the soil sample was extremely low. Soil samples with low double digit total lead concentrations had SPLP test results greater than 0.015 milligrams per liter. Most of these soil samples were taken at more than twenty feet from the building and from below asphalt that had always been there, indicating that the soil had not been impacted by lead releases from the building. The specific locations discussed with Mr. White are as follows:

Woodbury Building Soil Samples Compliance Discussed with DEP

Sample Location	Total Lead Result (mg/kg)	SPLP Result (mg/l)
W03/16-22-0	13.5	0.037
W04/16-22-0	20.2	0.021
W04/06-22-0	88.1	0.030
W06/07-22-0	15.6	0.023
W14/15-5-0	264.0	0.034

The reason this issue was raised was because the extent of remediation under the agreed-upon compliance sampling plan and RSRs criteria was causing remediation of very low concentration soils at this building. It was generally agreed that low double digit total lead results would define the extent of horizontal contamination even if the SPLP results were greater than 0.015 mg/l and that compliance would be achieved if the 95% Upper Confidence Level of the mean of the final site-wide lead SPLP results were less than 0.015 mg/l.

Other information that may be pertinent to this issue is that it is my understanding that the requirement for 15 feet of groundwater over bedrock in 22a-133k-1(c)(2)(C) may be removed as part of the revisions of the RSRs. If this is the case, all sample locations at this building would be in full compliance.

I have enclosed a table of all Woodbury building sampling results, a table of the final Woodbury building sampling results, the Woodbury building March 31, 2006 remediation figure, the April 12, 2006 remediation figure, the final Woodbury building remediation figure, the phone conversation record with the former DEP project manager, and the 95% upper confidence level of the mean calculation for Woodbury building lead SPLP sampling results.

This information can be confusing without an understanding of the specific compliance sampling scheme for Fairfield Hills soil remediation, therefore, I suggest we discuss this information by phone or in a meeting after an initial brief review by you, so I can explain the application of the material to the remediation scheme – this should save you significant review time. The sampling scheme is described in the DEP-approved "RAP Soil Remediation Confirmation Sampling Plan, Former Fairfield Hills Mental Health Hospital, Newtown, Connecticut, May 2006".

Please call me with any questions.

Sincerely,

R. W. BARTLEY & ASSOCIATES, INC.

Russell Bartley

Russell W. Bartley, PE, LEP
President

C: File

Fairfield Hills Woodbury Building Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
W01-1/T	257.0									0.032		0.032						
W01-1-0.5	10.5																	
W01/11-5-0	385.0	**0.049**								0.350	**0.160**	0.140						
W01/11-5-0.5	23.1									0.026								
W01/11-8-0	126.0	**0.024**								0.140		0.053						
W01/11-8-0.1	104.0	**0.021**								0.190		0.083						
W01/11-8-0.5	3.2																	
W01/11-12-0.5	3.5																	
W01/11-15-0	52.9																	
W01/12-5-0	71.2	**0.030**								0.032								
W01/12-5-0.5	56.5	**0.028**																
W01/12-5-1	68.2	**0.043**																
W01/12-5-1.5	1.5																	
W01/12-8-0	61.1																	
W02-1/T	71.7																	
W03-1/T	**1080.0**									1.200		0.500						
W03-1-0.5	88.8	**0.054**								0.047		0.029						
W03-1-1.5	2.3																	
W03/15-5-0	143.0	**0.022**								0.790		0.300						
W03/15-5-0.5	6.9																	
W03/15-15-0	157.0	**0.029**																
W03/15-15-0.5	11.6																	
W03/15-22-0	9.9																	
W03/16-5-0	105.0	**0.020**								0.420		0.190						
W03/16-5-0.5	8.6																	
W03/16-15-0	108.0	**0.022**																
W03/16-15-0.5	15.8																	
W03/16-22-0	13.5	0.037																
W04-1/T	**2040.0**							0.260		**2.300**		**7.300**						
W04-1-0.5	119.0	**0.025**								**2.500**	**0.140**	**4.700**	**0.170**					
W04-1-1	46.3																	
W04/16-5-0	301.0	**0.042**								0.540		**1.900**						
W04/16-5-0.5	70.9	**0.016**								0.290		0.240						
W04/16-5-1.5	3.1																	
W04/16-14-0	**434.0**	**0.082**								0.400		0.490						
W04/16-14-0.5	15.2	**0.035**																
W04/16-14-1	17.4																	
W04/16-22-0	20.2	0.021																
W04/06-5-0	261.0	**0.072**								0.430		0.490						
W04/06-5-0.5 - R	195.0									0.330		0.340						
W04/06-15-0	144.0	**0.025**			**0.64**	**0.640**				0.360		0.820						
W04/06-15-0.5	15.9	**0.021**																
W04/06-15-1	30.7																	
W04/06-22-0	88.1	0.023																

Fairfield Hills Woodbury Building Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
W04/06-27-0	8.1																	
W04-6T	204.0							0.081		0.730		0.970		0.150				
W04-1/1	70.1									0.038		0.180						
W04-1/2	30.3																	
W04-1/3																		
W05-1/T	276.0							0.007		0.150		0.130						
W05-1-0.5	**445.0**	**0.026**																
W05-1-1.5	6.9																	
W05-1-1.5.1	188.0																	
W05/07-5-0	**477.0**									0.043		0.042						
W05/07-5-0.5	227.0	**0.041**																
W05/07-5-1.5	7.2																	
W05/07-8-0	104.0	**0.027**																
W05/07-8-0.5	33.4																	
W05/07-12-0.5	28.9																	
W05/07-15-0.5	5.9																	
W05/07-17-0	43.5																	
W05/08-5-0	237.0	**0.035**								0.390	**0.120**	0.160						
W05/08-5-0.5	6.7																	
W05/08-8-0	119.0				0.17	**0.170**				0.260		0.120						
W06-1-0	**1470.0**	**0.504**								1.5	**0.130**	0.92						
W06-1-0.5	80.1	**0.041**								0.150		0.130						
W06-1-1	56.3																	
W06/07-5-0.1	163.0	**0.032**	**0.007**							1.100		0.950						
W06/07-5-0	173.0	**0.022**								0.990		0.850						
W06/07-5-0.5	36.8									0.260		0.270						
W06/07-15-0	135.0	**0.028**																
W06/07-15-0.5	5.0																	
W06/07-22-0	15.6	0.025																
W07-1-0	**1730.0**	**0.156**								0.024		0.072						
W07-1-0.5	8.0																	
W08-1-0	400.0	**0.145**								0.058		0.06						
W08-1-0.5	20.8	**0.027**																
W08-1-1.5	3.1																	
W08/09-5-0	95.2																	
W09-1-0	110.0	**0.041**								0.077		0.037						
W09-1-0.5	4.7	**0.019**																
W09-1-1.5	4.0																	
W09/10-5-0	**602.0**																	
W09/10-5-0.5	55.3	**0.042**																
W09/10-5-1	21.1	**0.018**																
W09/10-5-1.5	2.7																	
W09/10-8-0	47.9																	
W10-1-0	381.0	**0.137**			0.16	~~0.180~~				0.035		0.021						

Fairfield Hills Woodbury Building Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200
W10-1-0.5	14.0																	
W10/11-5-0	100.0	**0.033**																
W10/11-5-0.5	89.1	**0.026**																
W10/11-5-1	50.1																	
W10/11-5-1	22.3																	
W10/11-8-0	51.8	**0.019**																
W10/11-8-1	7.1																	
W11-1-0	**672.0**	**0.181**								0.03		0.023						
W11-1-0.5	80.5	**0.059**																
W11-1-1	28.5																	
W12-1-0	**550.0**	**0.173**								0.0079		0.0081						
W12-1-0.5	227.0	**0.088**																
W12-1-1	111.0	**0.066**																
W12-1-1.5	19.6																	
W12-1-2	4.2																	
W12/13-5-0	114.0	**0.023**																
W12/13-5-0.5	8.0																	
W12/13-8-0.5	11.8																	
W12/13-12-0	72.0																	
W13-1-0	125.0	**0.051**								0.019		0.015						
W13-1-0.5	4.5	**0.020**																
W13-1-1.5	4.5																	
W08/09-5-0	83.2																	
W14-1-0	374.0	**0.097**						0.012		0.43		0.21						
W14-1-0.5	9.7	**0.017**																
W14-1-1.5	2.4																	
W14/15-5-0	264.0	0.034																
W14/15-8-0	2.7																	
W15-1-0	**530.0**	**0.068**								0.04		0.073						
W15-1-0.5	172.0	**0.059**																
W15-1-0.5.1	**729.0**	**0.103**																
W15-1-1.5	3.0																	
W16-1-0	**1700.0**	**0.186**						0.013		0.84		0.55						
W16-1-0.5	103.0	**0.030**								0.130		0.081						
W16-1-1.5	2.2																	
W04/16-5-0.5	103.0	**0.030**								0.130		0.081						
W04/16-5-1.5	3.1																	

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.
Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken
Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken
A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

Fairfield Hills Woodbury Building Sampling Results

Detected Compounds in all Samples Taken

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.015	0.007	0.007	0.490	0.066	0.300	2.600	0.150	1.800	0.100	1.800	0.100	20.000	42.000	0.067	0.020	0.200

0.31 - **not bold number - sample result of indicated chemical that is less than applicable criterion**

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

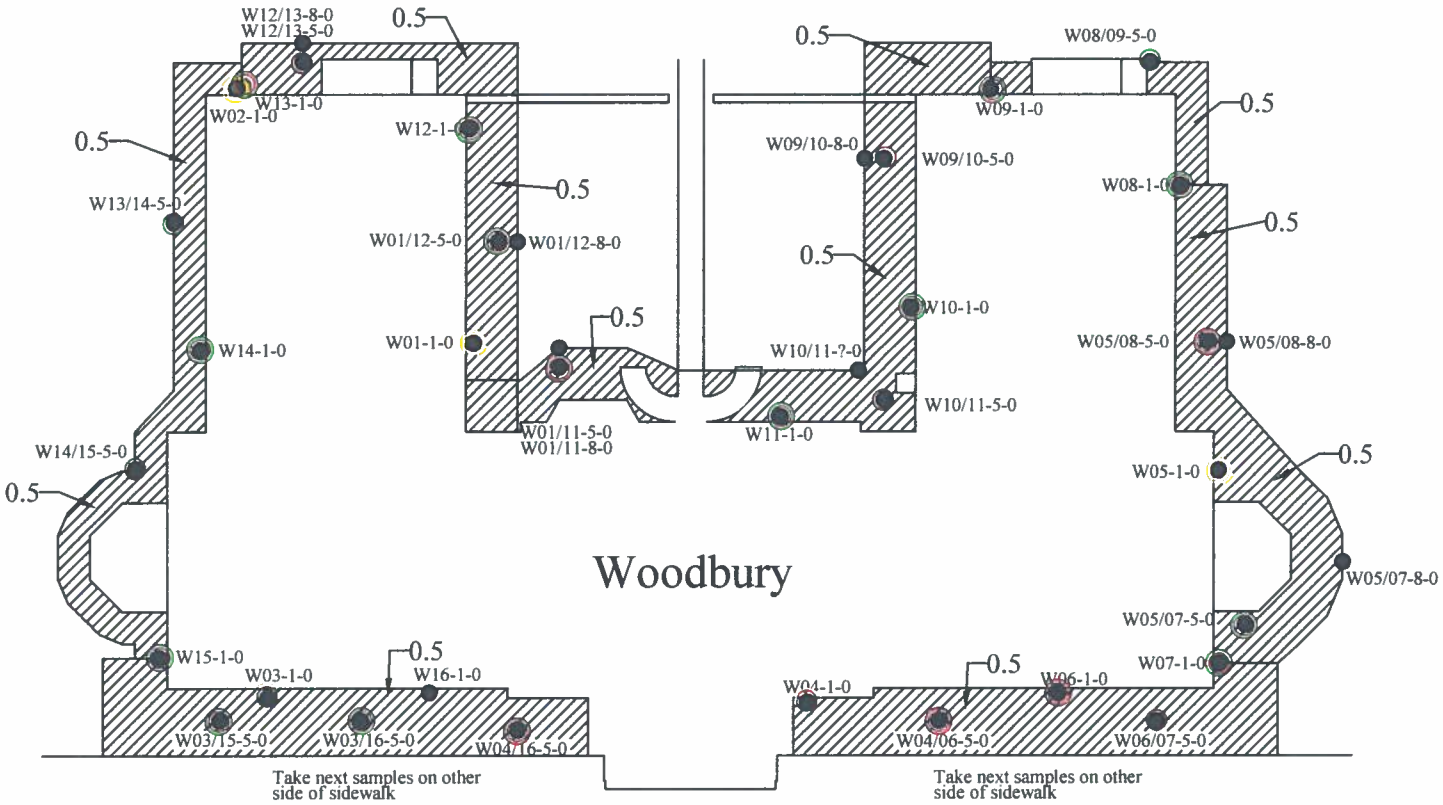
0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

- SPLP test was not performed for sample and chemical because total concentration was less than Pollutant Mobility criteria

- blank cell indicates that the particular chemical was not analyzed for in that particular sample because a previous result closer to the foundation or shallower in depth was in compliance

- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEEP that SPLP can be greater than 2 times criteria.

R-resampling due to quality assurance problems

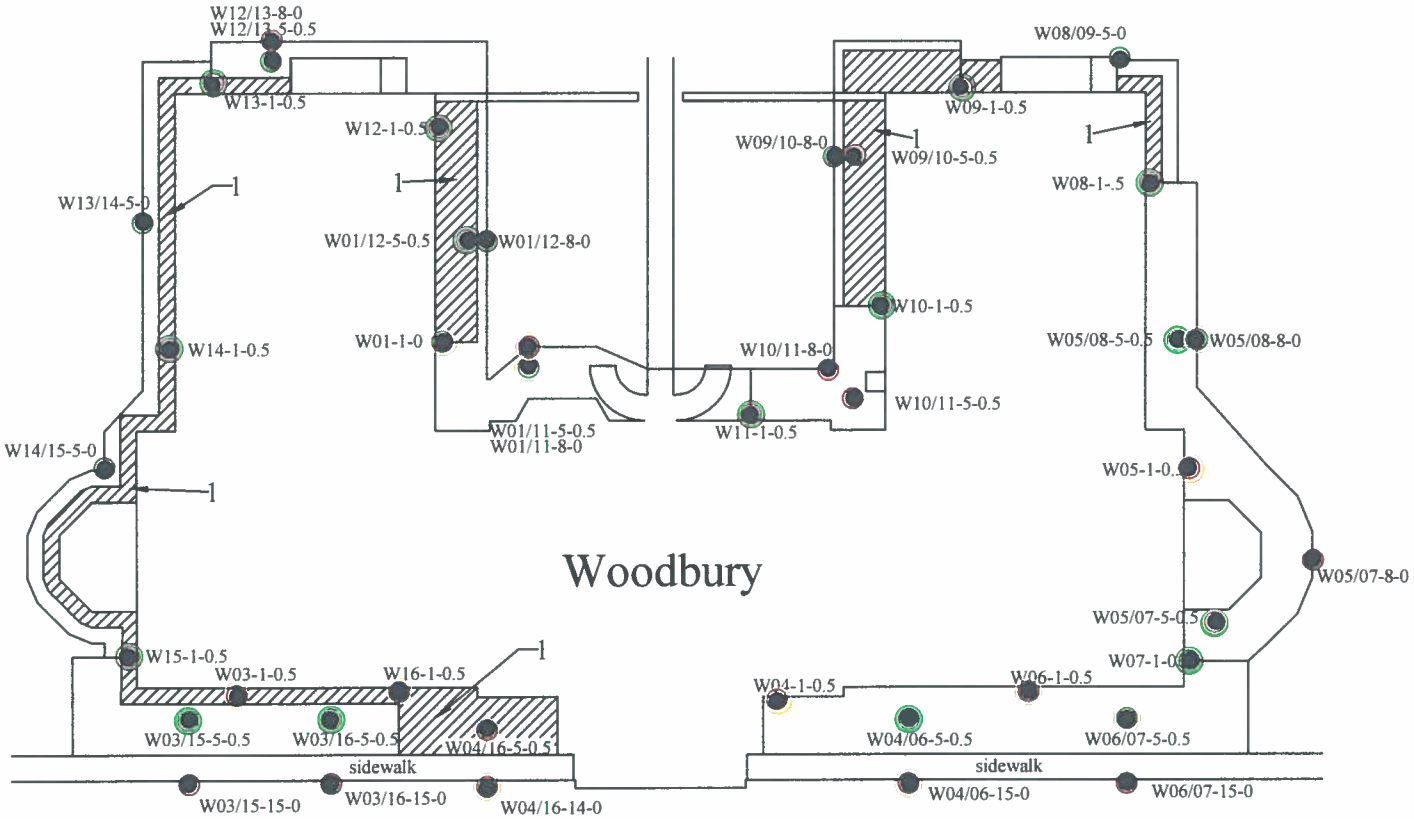


- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Woodbury March 31, 2006 Remediaiton Figure
Approximate Scale: 1 Inch = 30 Feet	Date: March 31, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Woodbury 3-31-06 Remediation Figure.dwg	



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

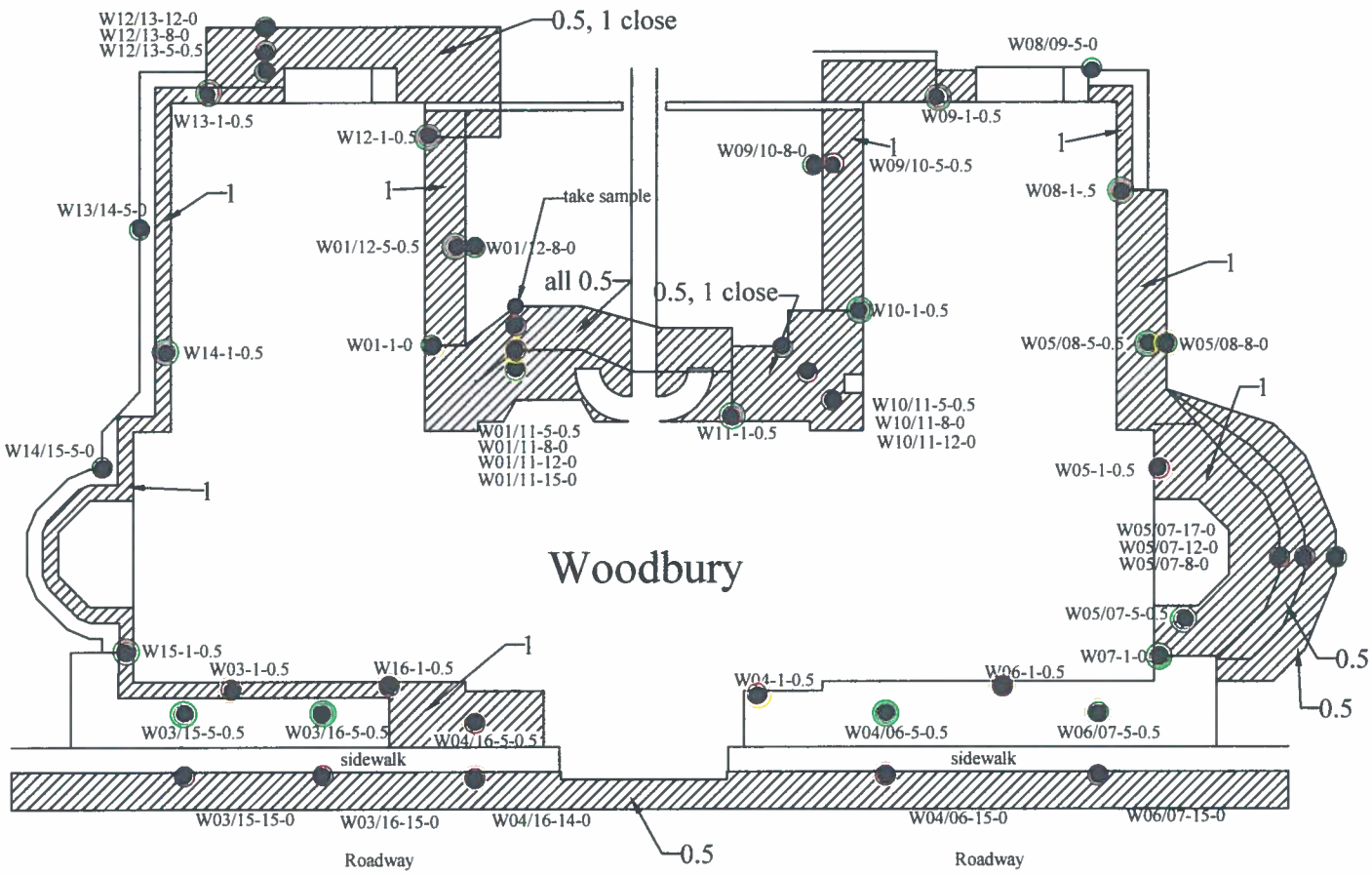
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: April 9, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure X-XX-06.dwg

Woodbury April 9, 2006 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut

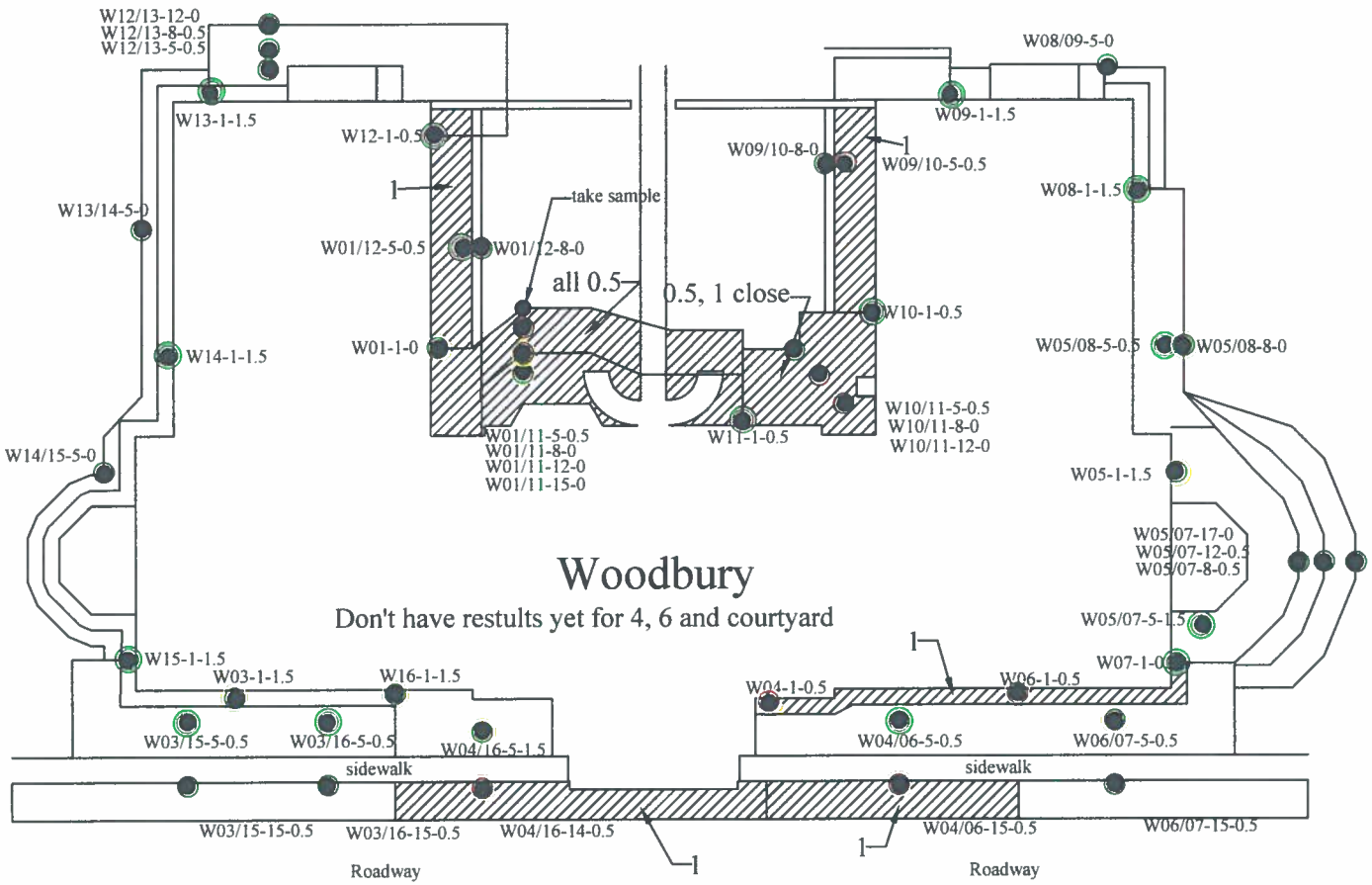


- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut	Woodbury April 12, 2006 Remediaiton Figure
Approximate Scale: 1 Inch = 30 Feet Date: April 12, 2006	Fairfield Hills Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8 File: Woodbury 4-12-06 Remediation Figure.dwg	



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

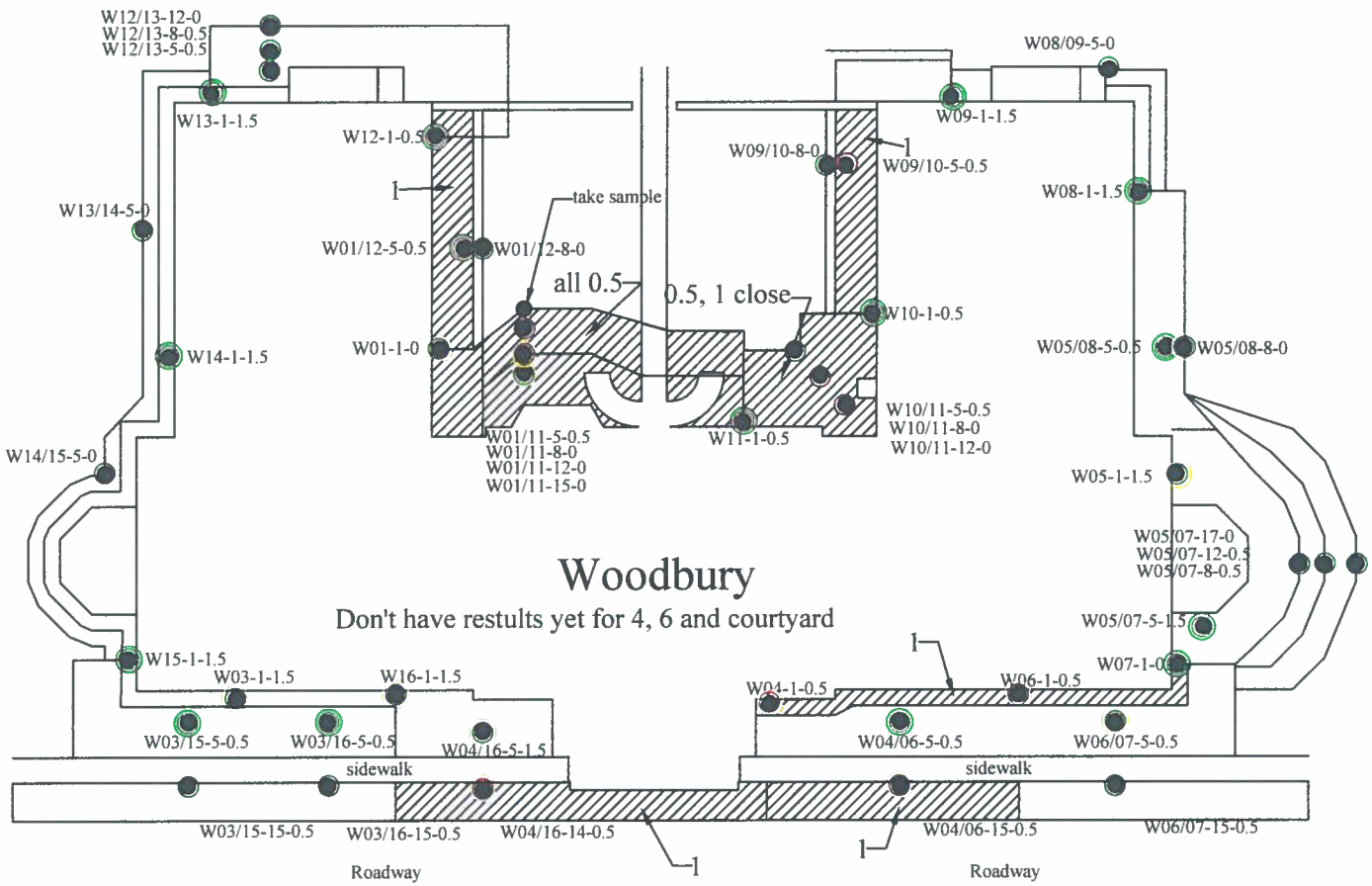
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: April 21, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure X-XX-06 dwg

Woodbury April 21, 2006 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

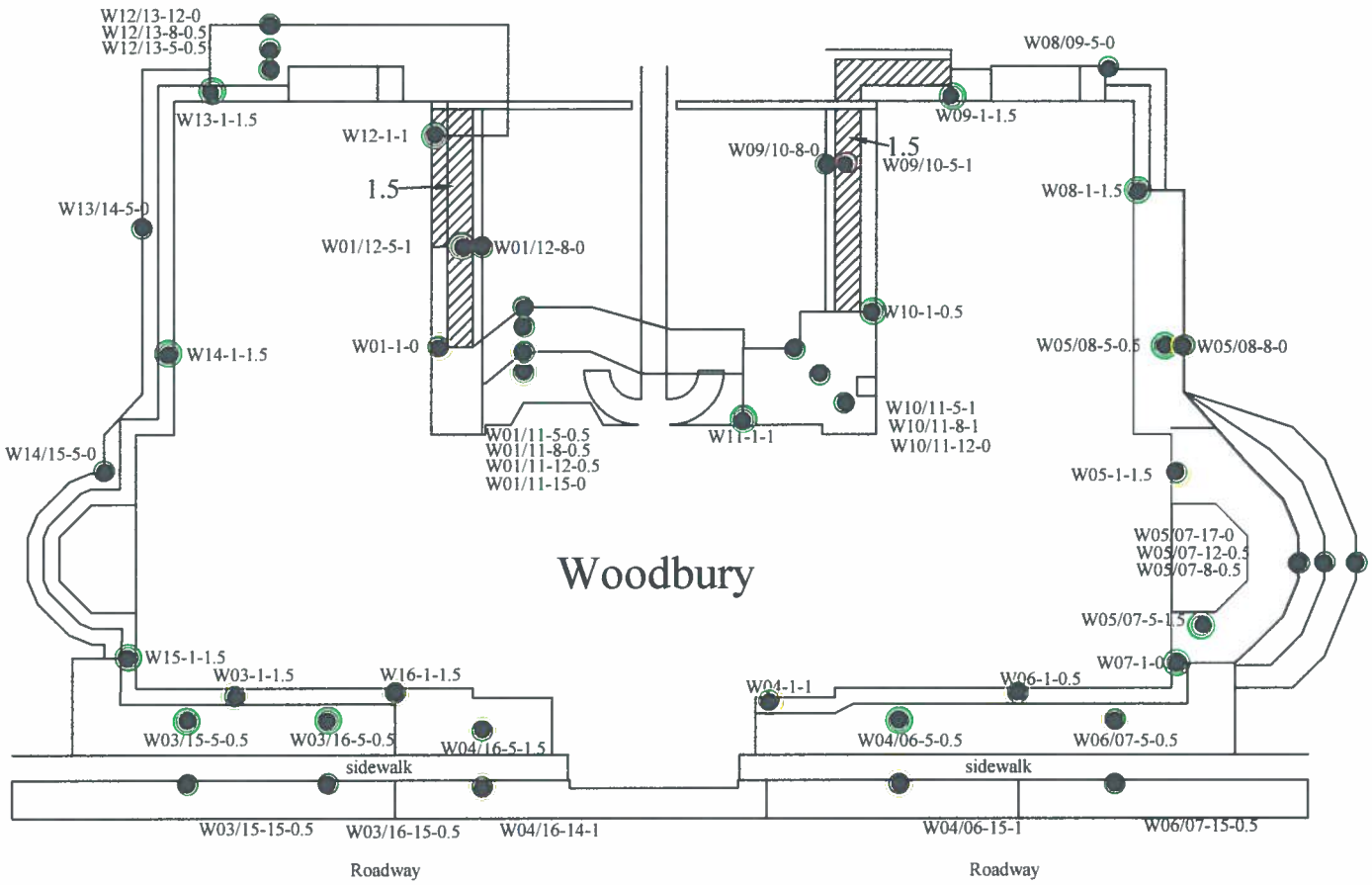
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: April 25, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure X-XX-06.dwg

Woodbury April 25, 2006 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

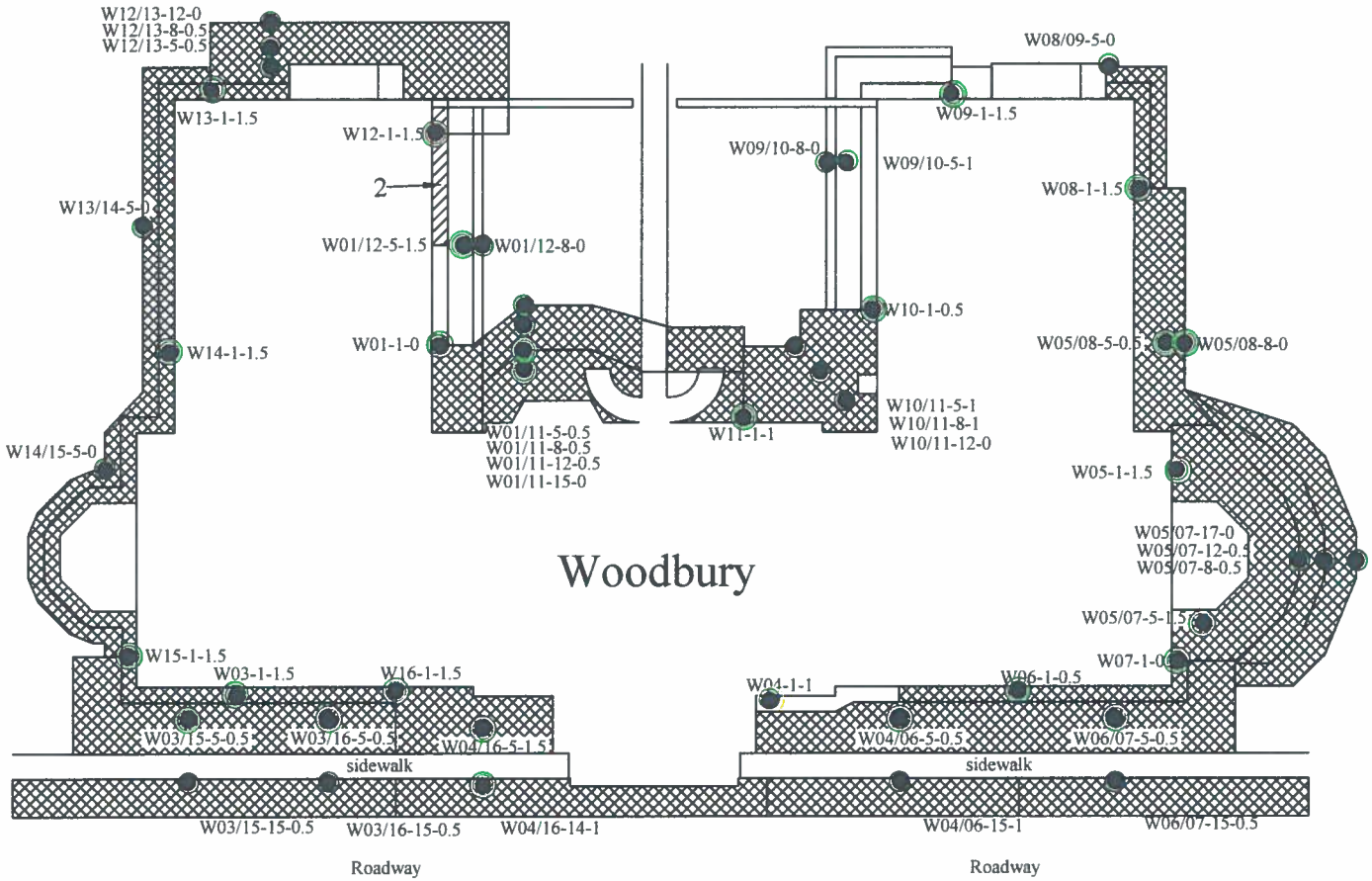
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: May 4, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure X-XX-06.dwg

Woodbury May 4, 2006 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



Legend

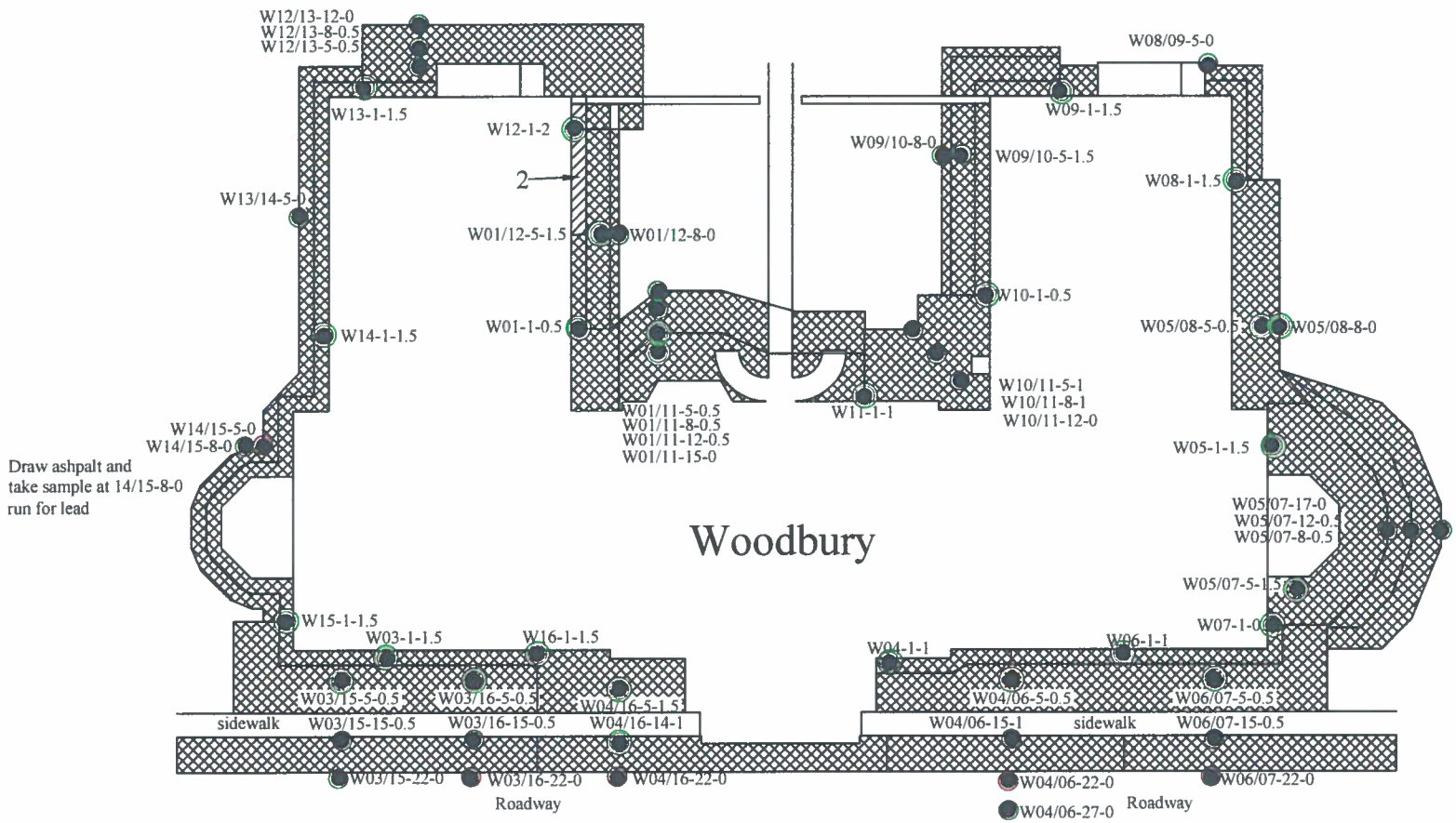
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: May 10, 2006
Project No.: 1018.WA8	File: Shelton Remediation Figure X-XX-06.dwg

Woodbury May 10, 2006 Remediation Figure

Fairfield Hills Hospital - Shelton Building
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 30 Feet	Date: August 30, 2006
Project No.: 1018.WAB	File: Woodbury Remediation Figure 6-30-06.dwg

Woodbury Final Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut

Fairfield Hills Remediation
Woodbury Building Lead PMC Calculation of 95% UCL of Mean

i	Sample	SPLP Lead (mg/L) (x)	$x_i - \bar{x}$	$(x_i - \bar{x})^2$	$(i - 28.5)x_i$	Natural Log (y) LN(x)
1	W01-1-0.5	0.0075	-0.0019	0.000004	-0.2063	-4.8929
2	W01/11-5-0.5	0.0075	-0.0019	0.000004	-0.1988	-4.8929
3	W01/11-8-0.5	0.0075	-0.0019	0.000004	-0.1913	-4.8929
4	W01/11-12-0.5	0.0075	-0.0019	0.000004	-0.1838	-4.8929
5	W01/11-15-0	0.0075	-0.0019	0.000004	-0.1763	-4.8929
6	W01/12-5-1.5	0.0075	-0.0019	0.000004	-0.1688	-4.8929
7	W01/12-8-0	0.0075	-0.0019	0.000004	-0.1613	-4.8929
8	W02-1/T	0.0075	-0.0019	0.000004	-0.1538	-4.8929
9	W03-1-1.5	0.0075	-0.0019	0.000004	-0.1463	-4.8929
10	W03/15-5-0.5	0.0075	-0.0019	0.000004	-0.1388	-4.8929
11	W03/15-15-0.5	0.0075	-0.0019	0.000004	-0.1313	-4.8929
12	W03/15-22-0	0.0075	-0.0019	0.000004	-0.1238	-4.8929
13	W03/16-5-0.5	0.0075	-0.0019	0.000004	-0.1163	-4.8929
14	W03/16-15-0.5	0.0075	-0.0019	0.000004	-0.1088	-4.8929
15	W04-1-1	0.0075	-0.0019	0.000004	-0.1013	-4.8929
16	W04/16-5-1.5	0.0075	-0.0019	0.000004	-0.0938	-4.8929
17	W04/16-14-1	0.0075	-0.0019	0.000004	-0.0863	-4.8929
18	W04/06-5-0.5	0.0075	-0.0019	0.000004	-0.0788	-4.8929
19	W04/06-15-1	0.0075	-0.0019	0.000004	-0.0713	-4.8929
20	W04/06-27-0	0.0075	-0.0019	0.000004	-0.0638	-4.8929
21	W05-1-1.5	0.0075	-0.0019	0.000004	-0.0563	-4.8929
22	W05/07-5-1.5	0.0075	-0.0019	0.000004	-0.0488	-4.8929
23	W05/07-8-0.5	0.0075	-0.0019	0.000004	-0.0413	-4.8929
24	W05/07-12-0.5	0.0075	-0.0019	0.000004	-0.0338	-4.8929
25	W05/07-15-0.5	0.0075	-0.0019	0.000004	-0.0263	-4.8929
26	W05/07-17-0	0.0075	-0.0019	0.000004	-0.0188	-4.8929
27	W05/08-5-0.5	0.0075	-0.0019	0.000004	-0.0113	-4.8929
28	W05/08-8-0	0.0075	-0.0019	0.000004	-0.0038	-4.8929
29	W06-1-1	0.0075	-0.0019	0.000004	0.0038	-4.8929
30	W06/07-5-0.5	0.0075	-0.0019	0.000004	0.0113	-4.8929
31	W06/07-15-0.5	0.0075	-0.0019	0.000004	0.0188	-4.8929
32	W07-1-0.5	0.0075	-0.0019	0.000004	0.0263	-4.8929
33	W08-1-1.5	0.0075	-0.0019	0.000004	0.0338	-4.8929
34	W08/09-5-0	0.0075	-0.0019	0.000004	0.0413	-4.8929
35	W09-1-1.5	0.0075	-0.0019	0.000004	0.0488	-4.8929
36	W09/10-5-1.5	0.0075	-0.0019	0.000004	0.0563	-4.8929
37	W09/10-8-0	0.0075	-0.0019	0.000004	0.0638	-4.8929
38	W10-1-0.5	0.0075	-0.0019	0.000004	0.0713	-4.8929
39	W10/11-5-1	0.0075	-0.0019	0.000004	0.0788	-4.8929
40	W10/11-5-1	0.0075	-0.0019	0.000004	0.0863	-4.8929
41	W10/11-8-1	0.0075	-0.0019	0.000004	0.0938	-4.8929
42	W11-1-1	0.0075	-0.0019	0.000004	0.1013	-4.8929
43	W12-1-1.5	0.0075	-0.0019	0.000004	0.1088	-4.8929
44	W12-1-2	0.0075	-0.0019	0.000004	0.1163	-4.8929
45	W12/13-5-0.5	0.0075	-0.0019	0.000004	0.1238	-4.8929
46	W12/13-8-0.5	0.0075	-0.0019	0.000004	0.1313	-4.8929
47	W13-1-1.5	0.0075	-0.0019	0.000004	0.1388	-4.8929
48	W08/09-5-0	0.0075	-0.0019	0.000004	0.1463	-4.8929
49	W14-1-1.5	0.0075	-0.0019	0.000004	0.1538	-4.8929
50	W15-1-1.5	0.0075	-0.0019	0.000004	0.1613	-4.8929
51	W16-1-1.5	0.0075	-0.0019	0.000004	0.1688	-4.8929
52	W04/16-22-0	0.021	0.0116	0.000134	0.4935	-3.8632
53	W06/07-22-0	0.023	0.0136	0.000184	0.5635	-3.7723
54	W04/06-22-0	0.03	0.0206	0.000424	0.7650	-3.5066
55	W14/15-5-0	0.034	0.0246	0.000604	0.9010	-3.3814
56	W03/16-22-0	0.037	0.0276	0.000761	1.0175	-3.2968

Average = **0.0094** **-4.7742**

Sum = $(x_i - \bar{x})^2$ = **0.002295**

Sum = $(i - 70)x_i$ = **2.7843**

i= 56 1/2(n+1)= 28.5

$s=(1/56 \times 0.08692)^{1/2}$ = 0.0064016

D=74.6210/(19,321xs)'= = 0.022511

Denominator of Y = 0.004007

Y = D - 0.28209479/0.004007 = -64.781886

H_0: The sample population has a normal distribution. Reject H_0 if Y is < -2.2000 ($Y_{0.05}$). Y = -70.377; therefore H_0 is rejected. The sample population has a lognormal distribution.

For computation of the 95% UCL of the mean,

S = Standard deviation of log samples = 0.388029

x = Average value of log samples = -4.7742

$H_{0.95}$ interpolated from Gilbert Table A12 = 6.6150

(Gilbert Table A12 is found in "Statistical Methods for Environmental Pollution Monitoring", Gilbert, 1987)

95% UCL = e $(\bar{y} + 0.5s2 + sH/\sqrt{n-1})$) = **0.011329 mg/L**

[1.] UCL to be calculated in accordance with EPA publication 9285.7-081, Supplemental Guidance to RAGS:Calculating the Concentration Term May 1992, EPA, 1992.

[2.] For all instances of nondetection, the value was assumed to be one-half of the detection limit (0 0075 mg/L).

YALE LABORATORY

Yale Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
Y01-1-0	**2910.0**	0.016			**0.970**	**0.970**										**0.098**	**0.098**	
Y01-1-0.5	6.9																	
Y01/07-5-0	76.7	0.023			0.380	**0.380**												
Y01/08-5-0	81.2				0.230	**0.230**												
Y02-1-0	125.0				0.310	**0.310**				0.038		0.034				0.053	**0.053**	
Y03-1-0	26.8																	
Y03/04-5-0				**0.012**	0.210	**0.210**												
Y03/04-5-0.5				**0.066**	**0.910**	**0.910**						0.034						
Y03/04-5-1				**0.120**	**0.770**	**0.770**												
Y03/04-5-3			**0.077**	**30.000**	**2.000**	**2.000**		0.022		0.047		0.042		0.210				
12)																		
Y03/04-8-0																		
Y04-1-0	92.5				**1.700**	**1.700**						0.058				0.033	**0.033**	
Y04/09-5-0	35.9																	
Y04-1-0.5																		
Y04-1-0.5.1																		
Y05-1-0	50.2	0.057																
Y06-1-0	25.7																	
Y07-1-0	50.2				0.190	**0.190**												
Y07-1-0	191.0	0.094																
Y08-1-0	283.0	0.019			**180.000**	**180.000**												
Y08-1-0.1	196.0				**290.000**	**290.000**												
Y09-1-0	**423.0**	0.067																
Y09-1-0.5	**544.0**	0.031																
Y09-1-1	16.2	0.015																
Y09/10-5-0					0.280	**0.280**				0.031		0.023						
Y09/11-5-0	29.7																	
Y10-1-0	221.0	0.073			0.280	**0.280**						0.035						
Y10-1-0.1	207.0	0.066			0.300	**0.300**						0.048						
Y11-1-0	41.3				0.330	**0.330**												

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.

Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken

Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken

A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

- SPLP test was not performed for sample because location was not in compliance based on total contentrations; <u>or</u> total concentration was less than total PMC <u>or</u> total concentration was less than or equal to 20 times SPLP PMC

- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance

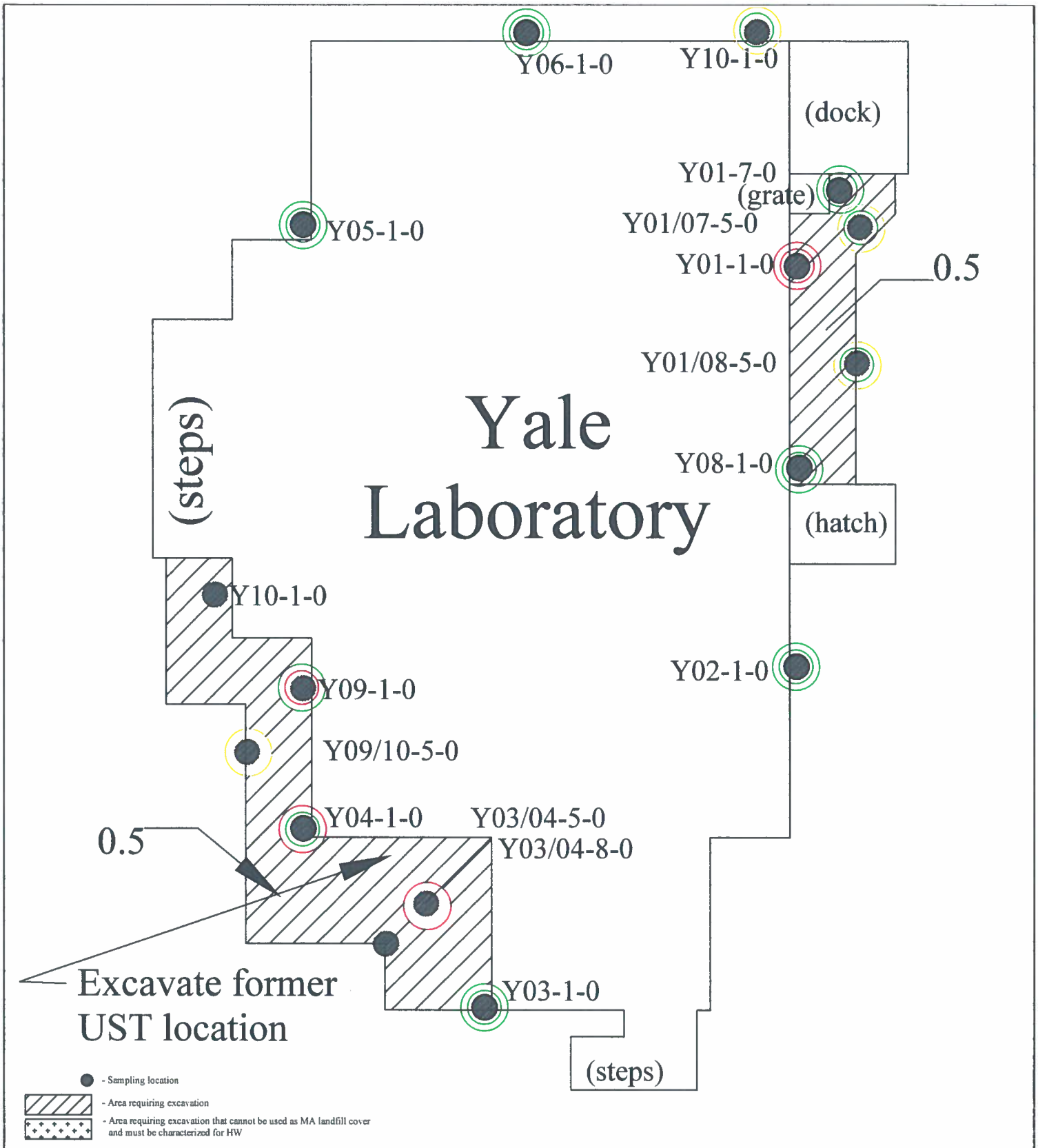
- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.

- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems

Yale Sampling Results																		
Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000

The detection limits for DDD, DDT, DDE, Endrin, and Heptachlor mass analyses are less than or equal to 20 times the SPLP criteria, therefore, if a mass analysis is non-detect for these compounds the PMC criteria is met.



Legend

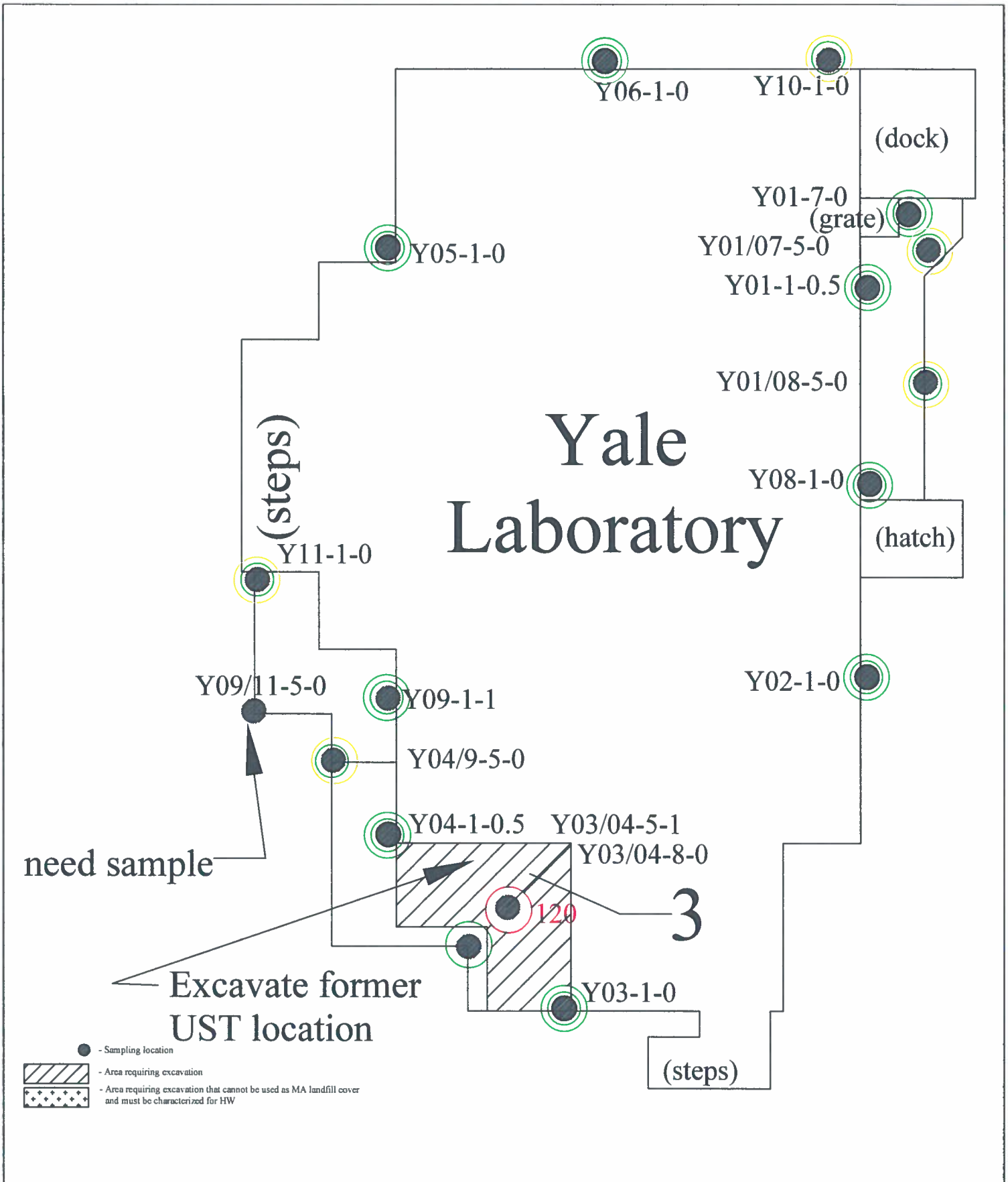
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

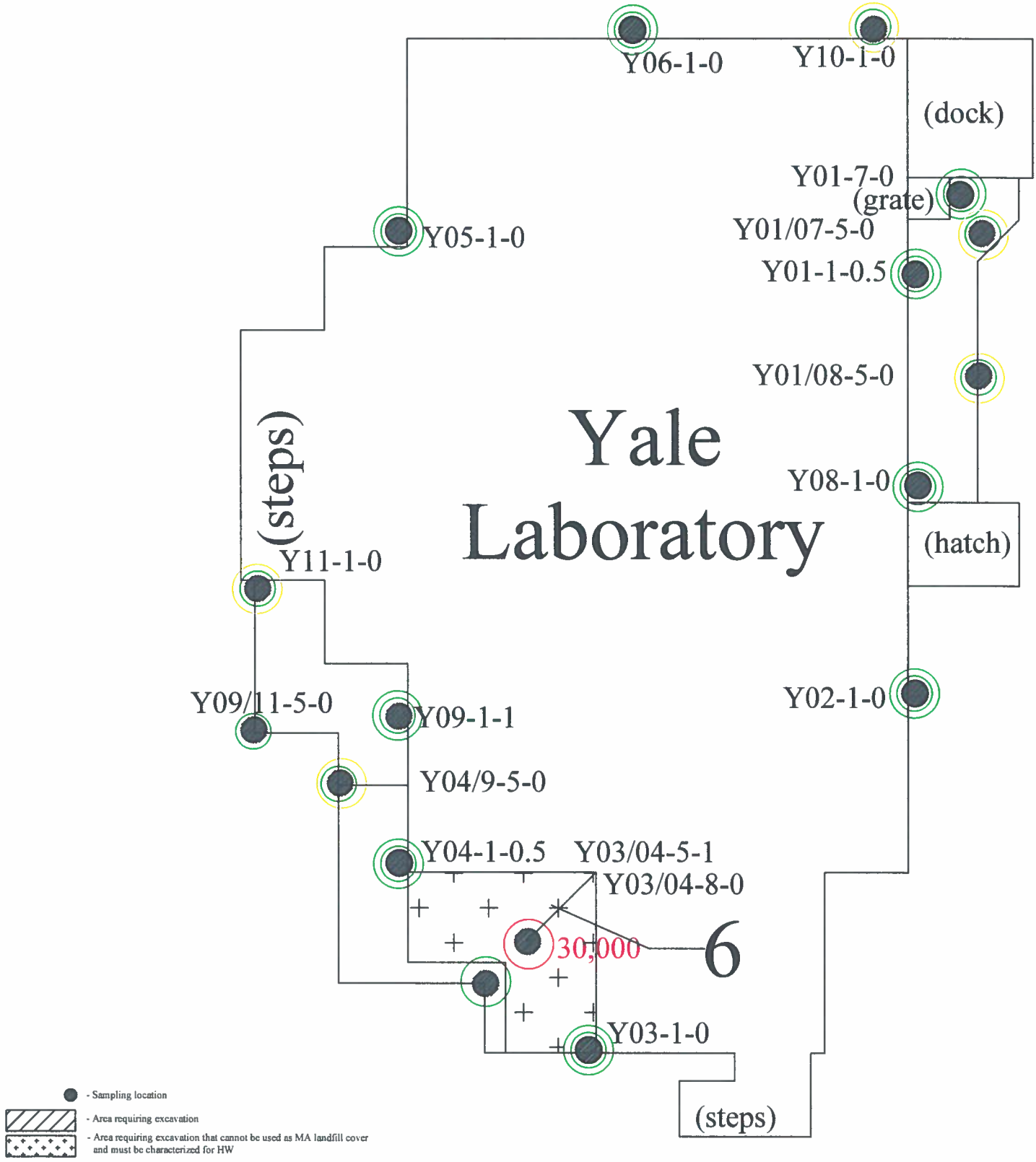
Approximate Scale: 1 Inch = 10 Feet	Date: May 4, 2006
Project No.: 1018.WA8	File: Yale 5-4-06 Remediation Figure

Yale 5-4-06 Remediation Figure

Fairfield Hills Hospital
Wasserman Way
Newtown, Connecticut



Legend	R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Yale 6-8-06 Remediation Figure
- Lead in compliance at sampling location - Lead not in compliance at sampling location - Pesticide in compliance at sampling location - Pesticides not in compliance at sampling location - Need SPLP data for determination	Approximate Scale: 1 Inch = 10 Feet	Date: June 8, 2006	Fairfield Hills Hospital Wasserman Way Newtown, Connecticut
	Project No.: 1018.WA8	File: Yale 6-8-06 Remediation Figure	



Legend

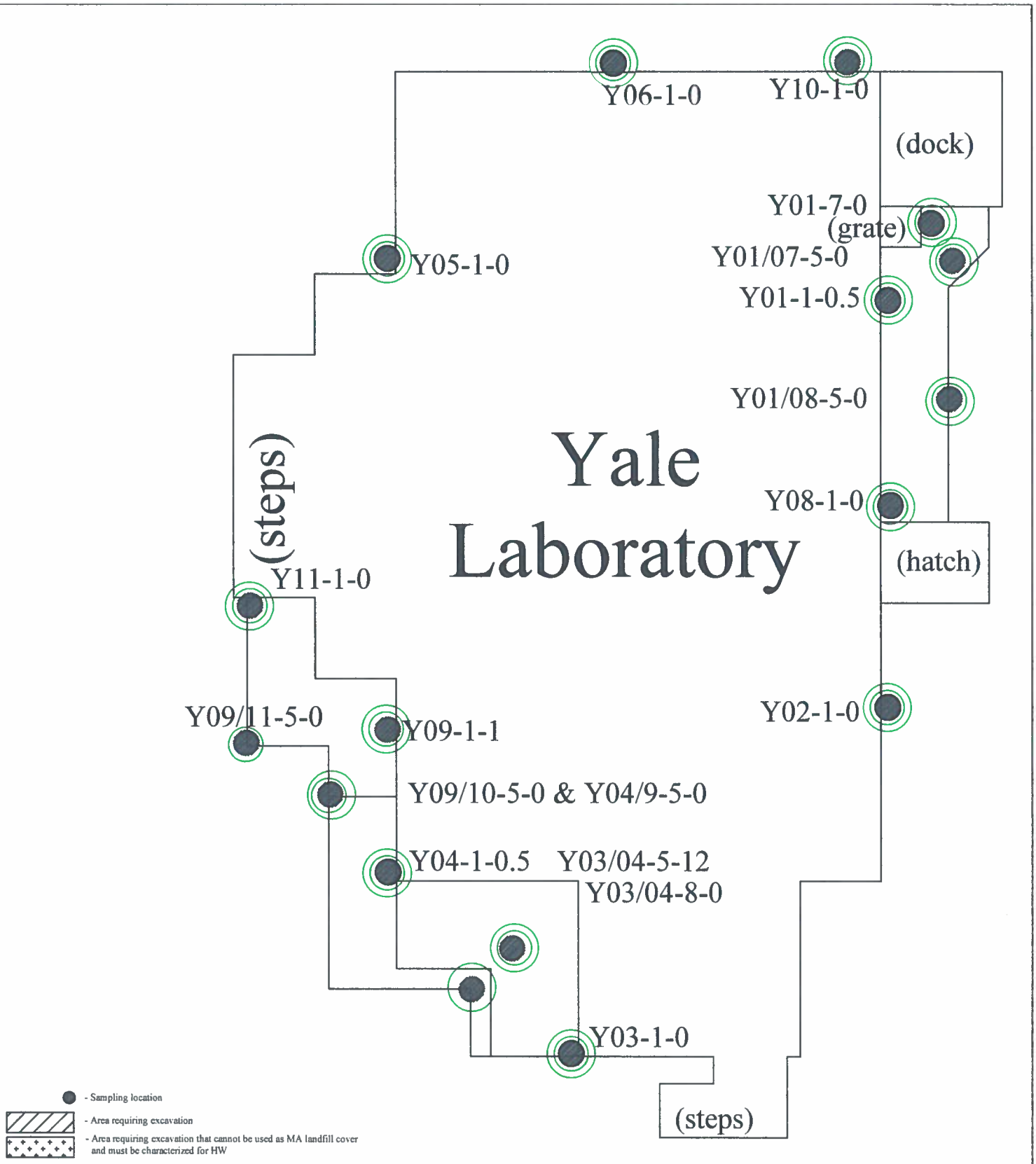
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale:	Date:
1 Inch = 10 Feet	June 13, 2006
Project No.:	File:
1018.WA8	Yale 6-13-06 Remediation Figure

Yale 6-13-06 Remediation Figure

Fairfield Hills Hospital
Wasserman Way
Newtown, Connecticut



Legend

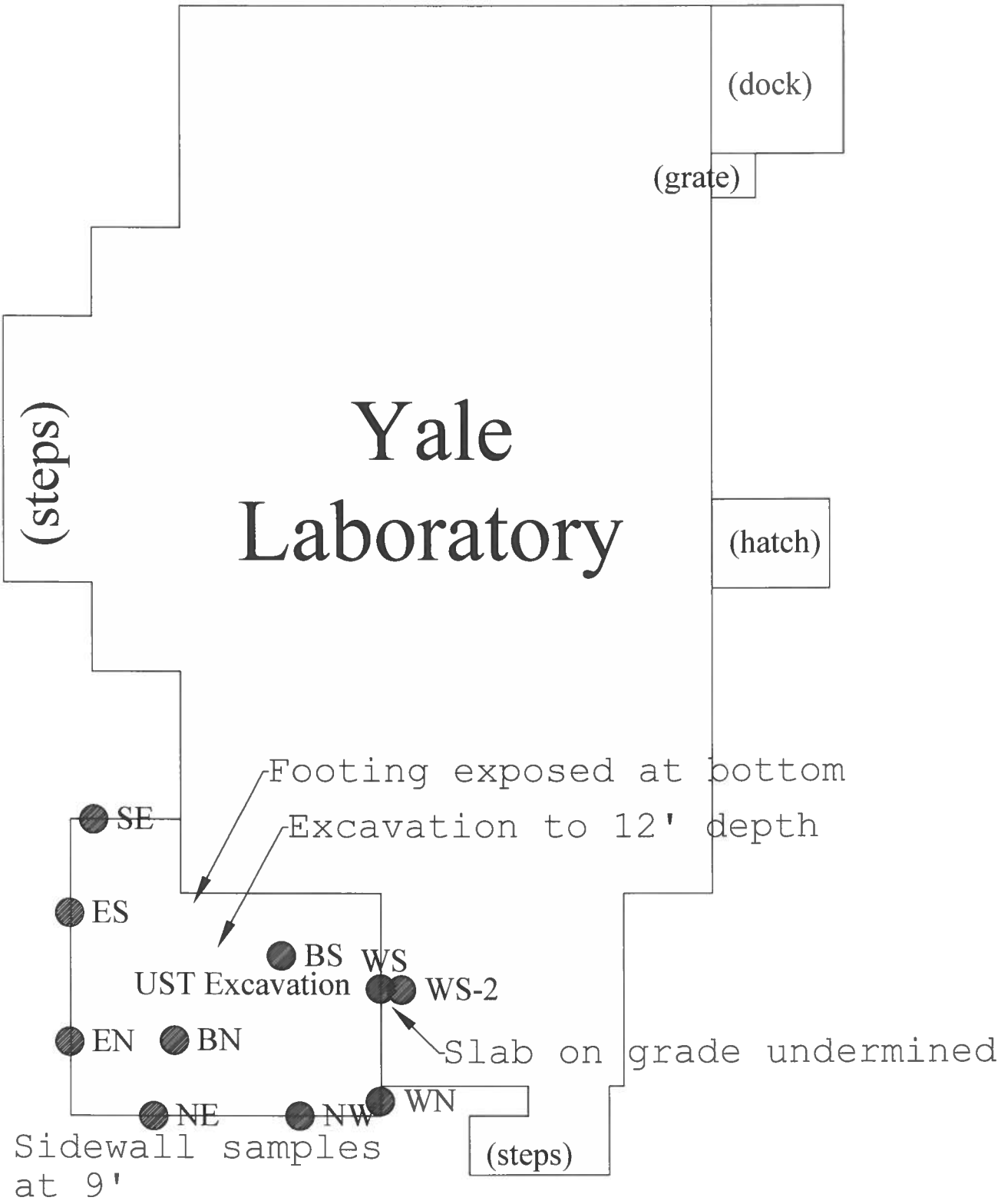
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: August 3, 2006
Project No.: 1018.WA8	File: Yale 8-3-06 Final Remediation Figure

Yale 8-3-06 Final Remediation Figure

Fairfield Hills Hospital
Wasserman Way
Newtown, Connecticut



Legend

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Yale UST Excavation Figure

Approximate Scale 1 Inch = 10 Feet	Date December 24, 2006
Project No 1018.WA8	File Yale UST Excavation Figure

Fairfield Hills Hospital
Wasserman Way
Newtown, Connecticut

LAUNDRY BUILDING

Laundry Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	**0.150**	**0.007**	**0.007**	**0.490**	**0.066**	**3.000**	**2.600**	**1.500**	**1.800**	**1.000**	**1.800**	**1.000**	**20.000**	**420.000**	**0.067**	**0.020**	**2.000**
LN01/0-4										0.072		0.075						
LN01-1-0	46.9	0.030																
LN01/13-5-0	123.0	0.048																
LN01/35-5-0	49.2	0.030																
LN02/0-4	266.0	**0.357**								0.032	0.017	0.041	0.017					
LN02-1-0	**2480.0**																	
LN02-1-0.5	51.9																	
LN02/1-2	9.9																	
LN02/06-5-0	109.0	0.041																
LN02/07-5-0	105.0	0.090																
LN03-1-0.5	**12000.0**	**0.154**																
LN03-1-1	326.0	**0.281**																
LN03-1-1.5	247.0	0.040																
LN03/0-4	**1310.0**	**5.490**								0.620	0.170	0.410	0.069					
LN03/1-2	**1180.0**									0.130		0.110						
LN03/28-5-0	53.9	0.062								0.460		0.320						
LN03/35-5-0	146.0	0.137								0.250		0.240						
LN04/0-4	137.0									0.230	0.015	0.230	0.009					
LN04-1-0.5	152.0	0.046																
LN04/1-2	14.2																	
LN04/28-5-0	13.2	0.018								0.220		0.085						
LN04/29-9-0	111.0	0.040																
LN05-1-0	**415.0**																	
LN05-1-0.5	30.3																	
LN05/29-5-0	49.5	0.023																
LN05/14-5-0	79.5	0.030																
LN05/0-4										0.930		1.000						
LN05/0-4D	121.0				0.240	0.240		0.037		0.990	0.250	1.200	0.390					
LN13-1/0-4	177.0	**1.310**																
LN05/1-2	13.2																	
LN06-1-0	**1410.0**									0.300		0.330						
LN06-1-0.5	13.7																	
LN06-1-0.5.1	8.4																	
LN07-1-0	**1380.0**									0.032		0.057						
LN07-1-0.1	**883.0**											0.048						
LN07-1-0.5	132.0	0.016																
LN07/13-5-0	79.1	0.111																
LN05-0-0	**415.0**																	
LN13-2/0-4	123.0	**1.130**																
LN13-1-0										0.023		0.045						
LN13-1-0.5	79.1	0.019																
LN14-1-0.5	29.0																	
LN14-2/0-4	81.1	**0.325**								0.420	0.015	0.560	0.021					
LN14-2/1-2	23.2																	
LN14/36-5-0	61.9	0.029																

Laundry Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
LN15-1/0-4	45.6	**0.409**																
LN15-2/0-4	94.2	**1.680**																
LN27/0-1	44.7																	
LN27-1-0																		
LN28/0-4	52.8								0.063	1.000	0.098	**3.700**	0.200					
LN28-1-0.5	44.8				0.420	~~0.420~~				0.720		0.320						
LN28/1-2	18.3									0.028		0.029						
LN29/0-4	14.6									0.049		0.057						
LN29-1-0	178.0	0.089								0.090		0.099						
LN30/0-4	51.2	**0.427**								0.610	0.099	0.420	0.069					
LN30/0-4D										0.440		0.320						
LN31/0-4	51.2									0.310		0.180						
LN32/0-4	37.7	0.040								0.440	0.032	0.190	0.007					
LN33/0-4	162.0	0.031			**0.430**	~~0.430~~				0.950	0.230	0.650	0.170					
LN34/0-4	39.1				0.480	~~0.480~~		0.063		1.100	0.041	1.200	0.035					
LN35-1-0	278.0	**0.202**			0.110	~~0.110~~				0.120		0.180						
LN35-1-0.5	38.1	0.017																
LN36-1-0	108.0	0.047								0.520		0.310						
LN37-1-0	2.0																	
LN38-1-0	3.1																	
LN39-1-0	1.6																	

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.

Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken

Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken

A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

~~0.250~~ - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

- SPLP test was not performed for sample because location was not in compliance based on total contentrations; **or** total concentration was less than total PMC **or** total concentration was less than or equal to 20 times SPLP PMC

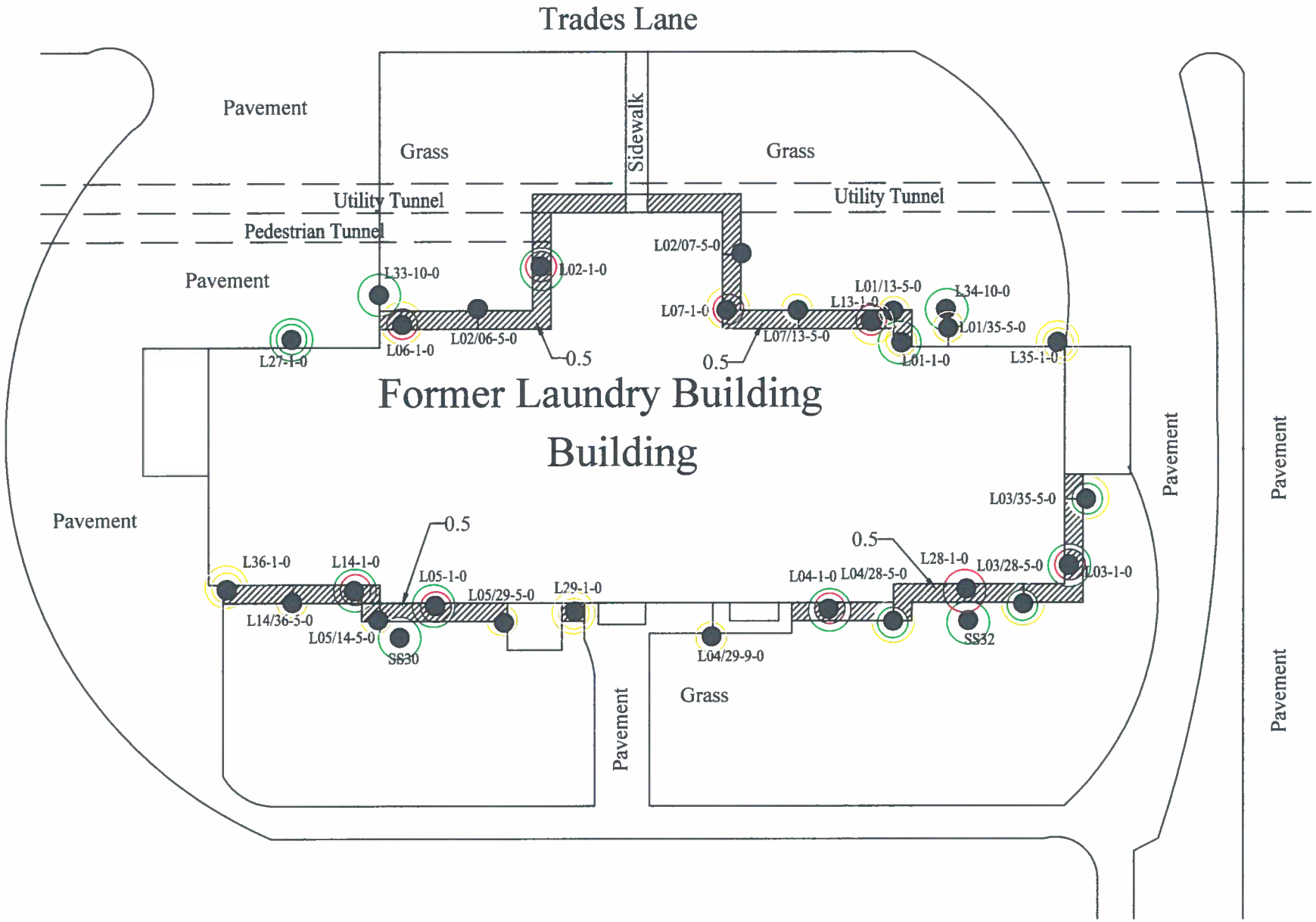
- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance

- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.

- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems

The detection limits for DDD, DDT, DDE, Endrin, and Heptachlor mass analyses are less than or equal to 20 times the SPLP criteria, therefore, if a mass analysis is non-detect for these compounds the PMC criteria is met.



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

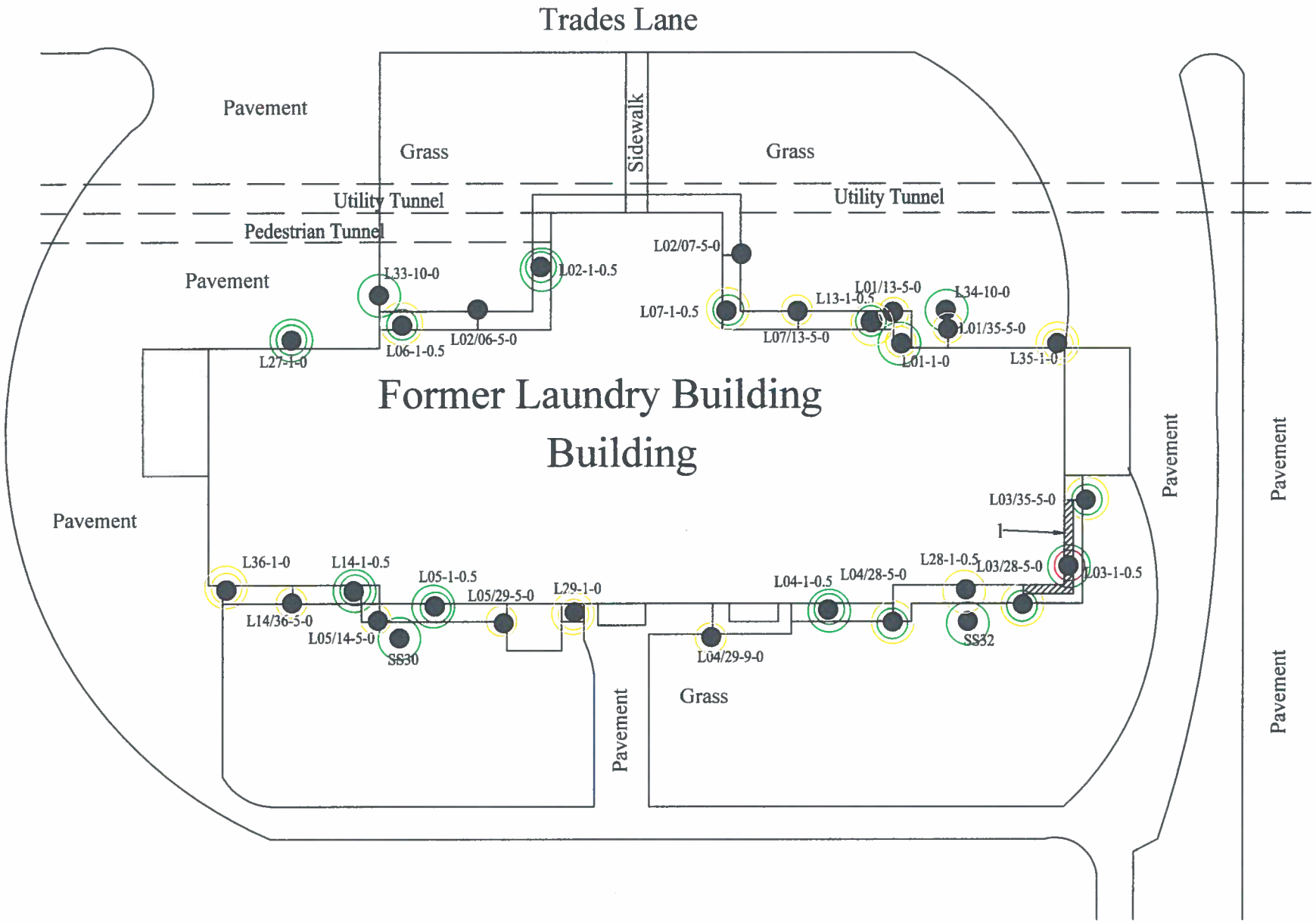
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: June 2, 2006
Project No.: 1018.WA8	File: Laundry 6-2-06 Remediation Figure.dwg

Laundry 6-2-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

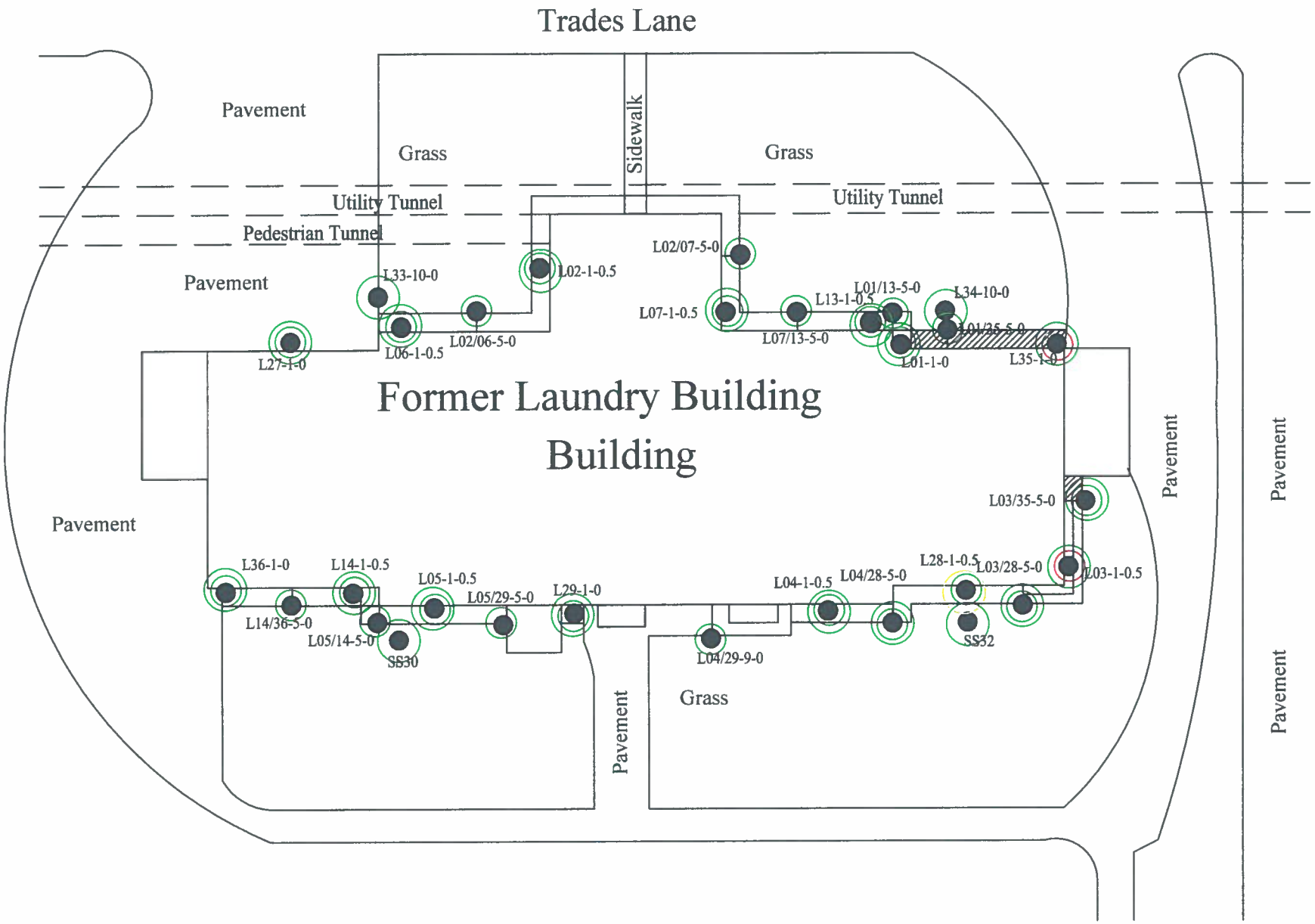
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: June 8, 2006
Project No.: 1018.WA8	File: Laundry 6-8-06 Remediation Figure.dwg

Laundry 6-8-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

- Sampling location
- Area requiring excavation
- Area ready for backfill

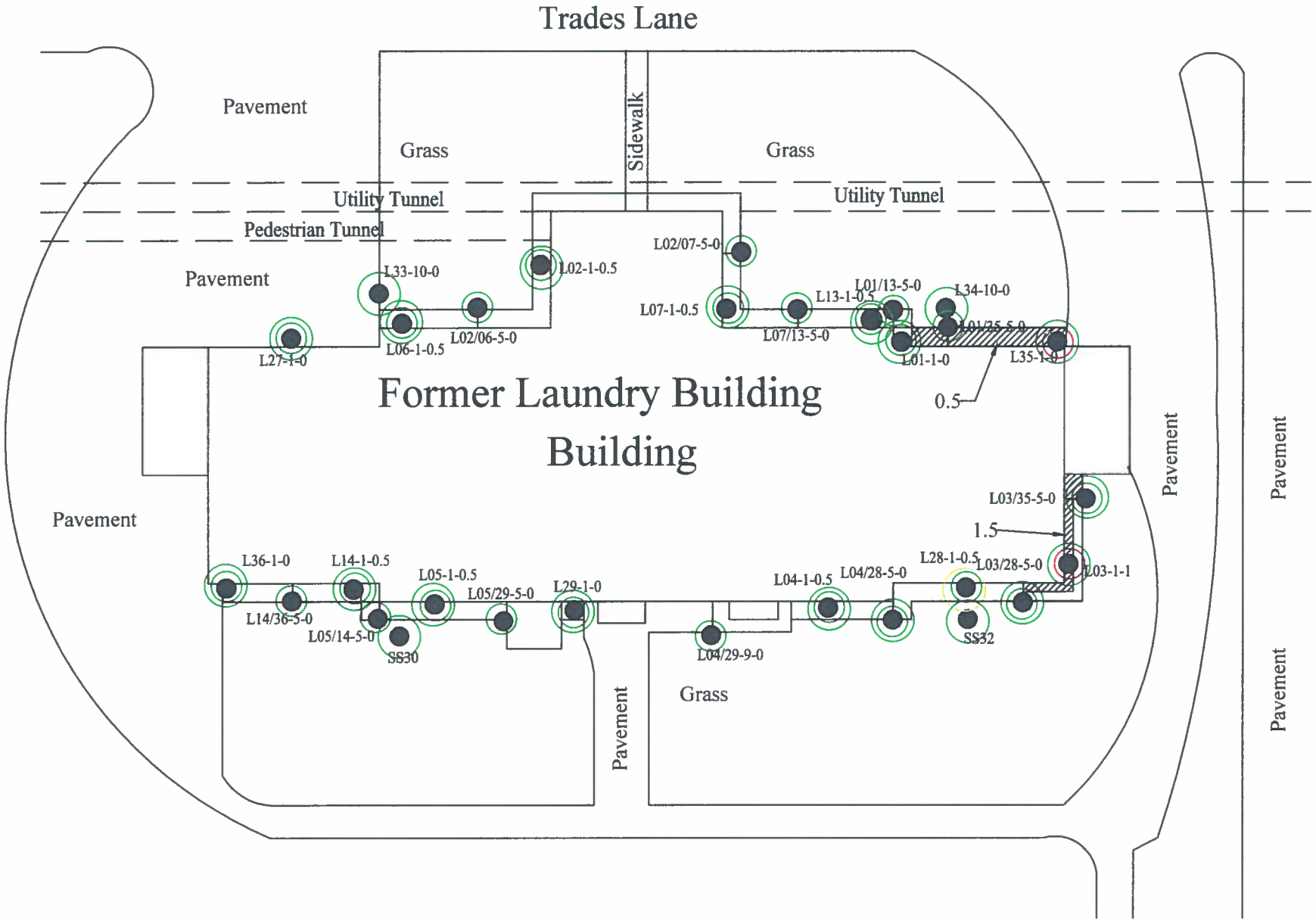
2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: June 12, 2006
Project No.: 1018.WA8	File: Laundry 6-12-06 Remediation Figure.dwg

Laundry 6-12-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Need SPLP data for determination

Legend

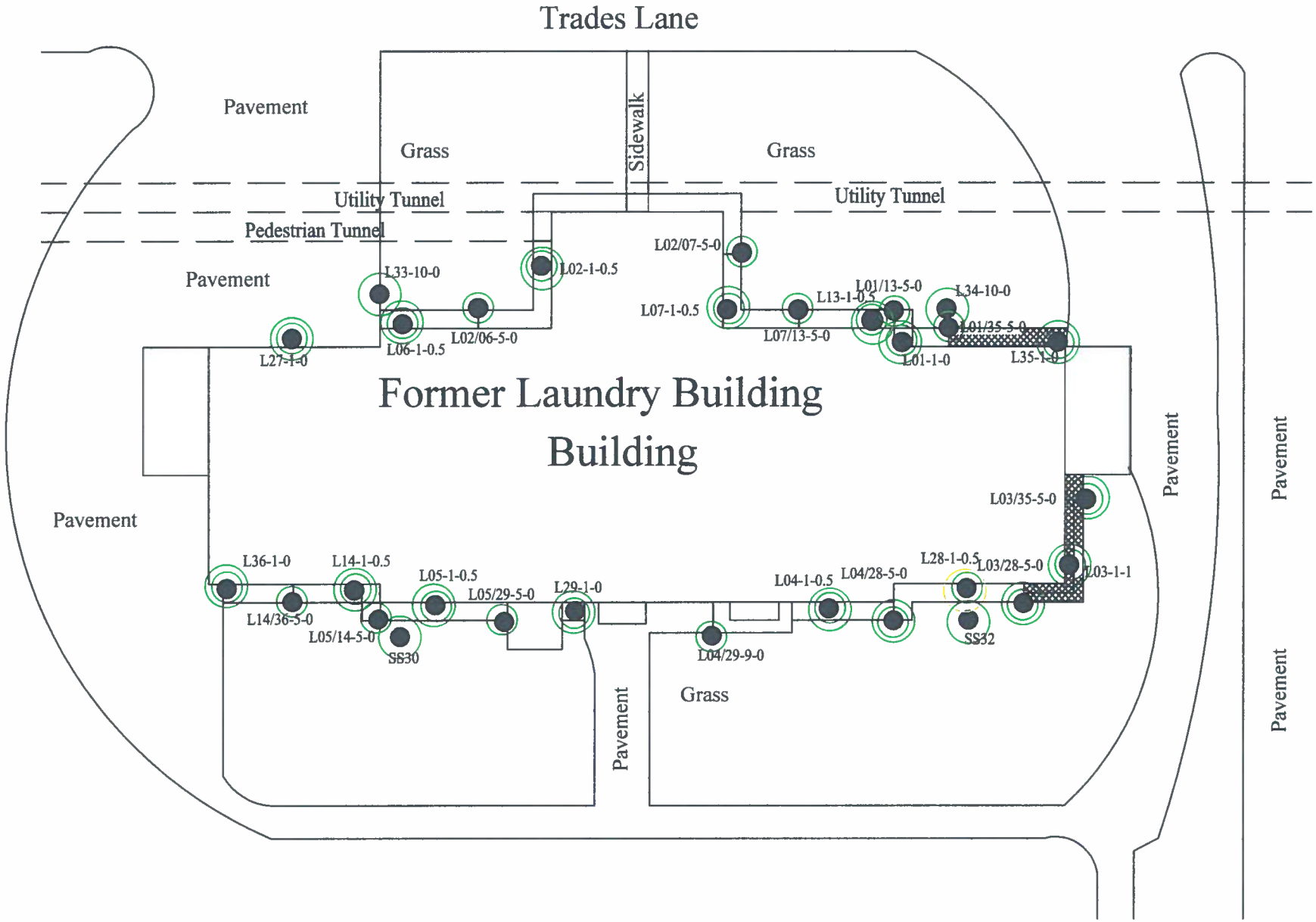
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: June 13, 2006
Project No.: 1018.WA8	File: Laundry 6-13-06 Remediation Figure.dwg

Laundry 6-13-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

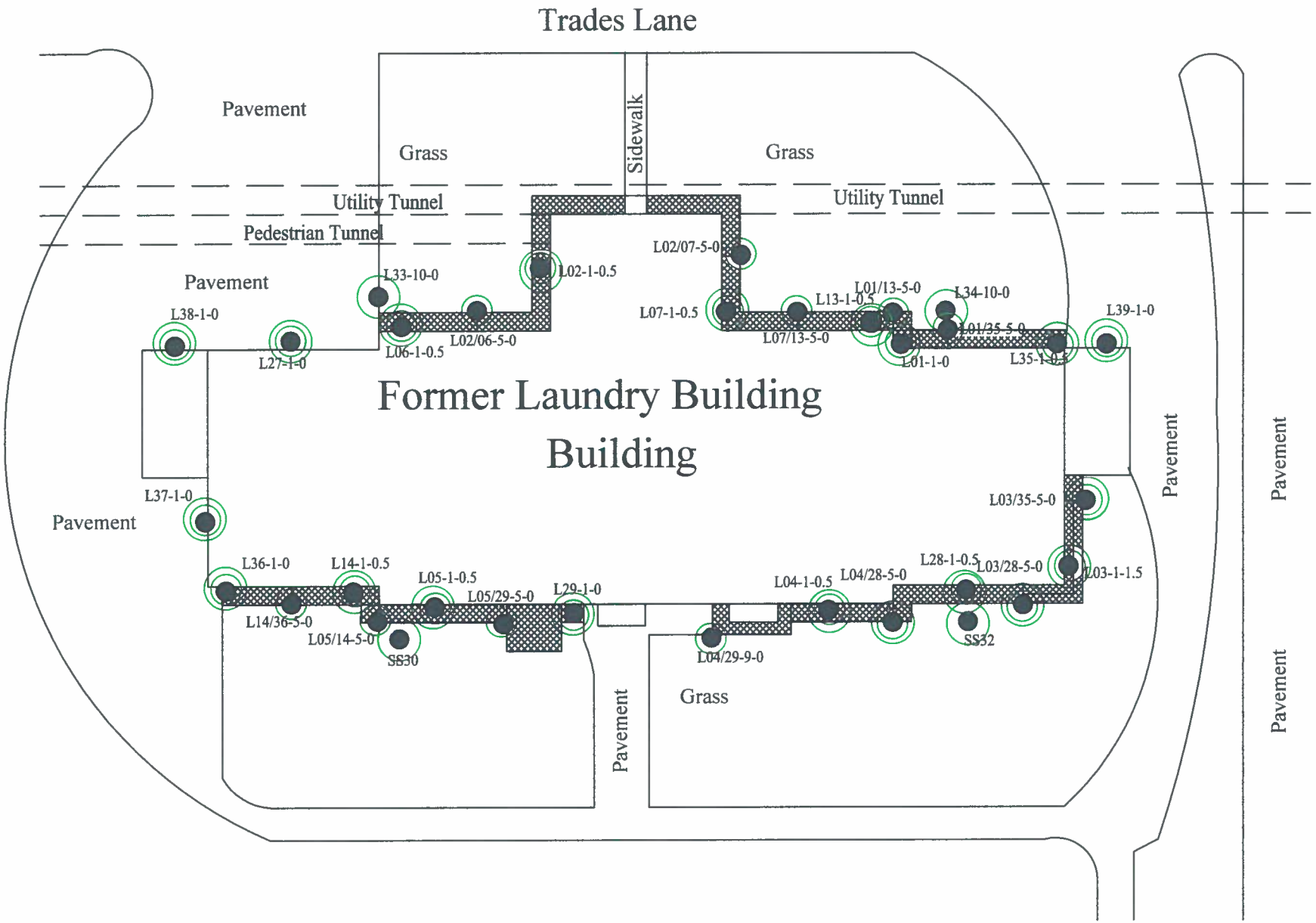
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: June 21, 2006
Project No.: 1018.WA8	File: Laundry 6-21-06 Remediation Figure.dwg

Laundry 6-21-06 Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

Legend

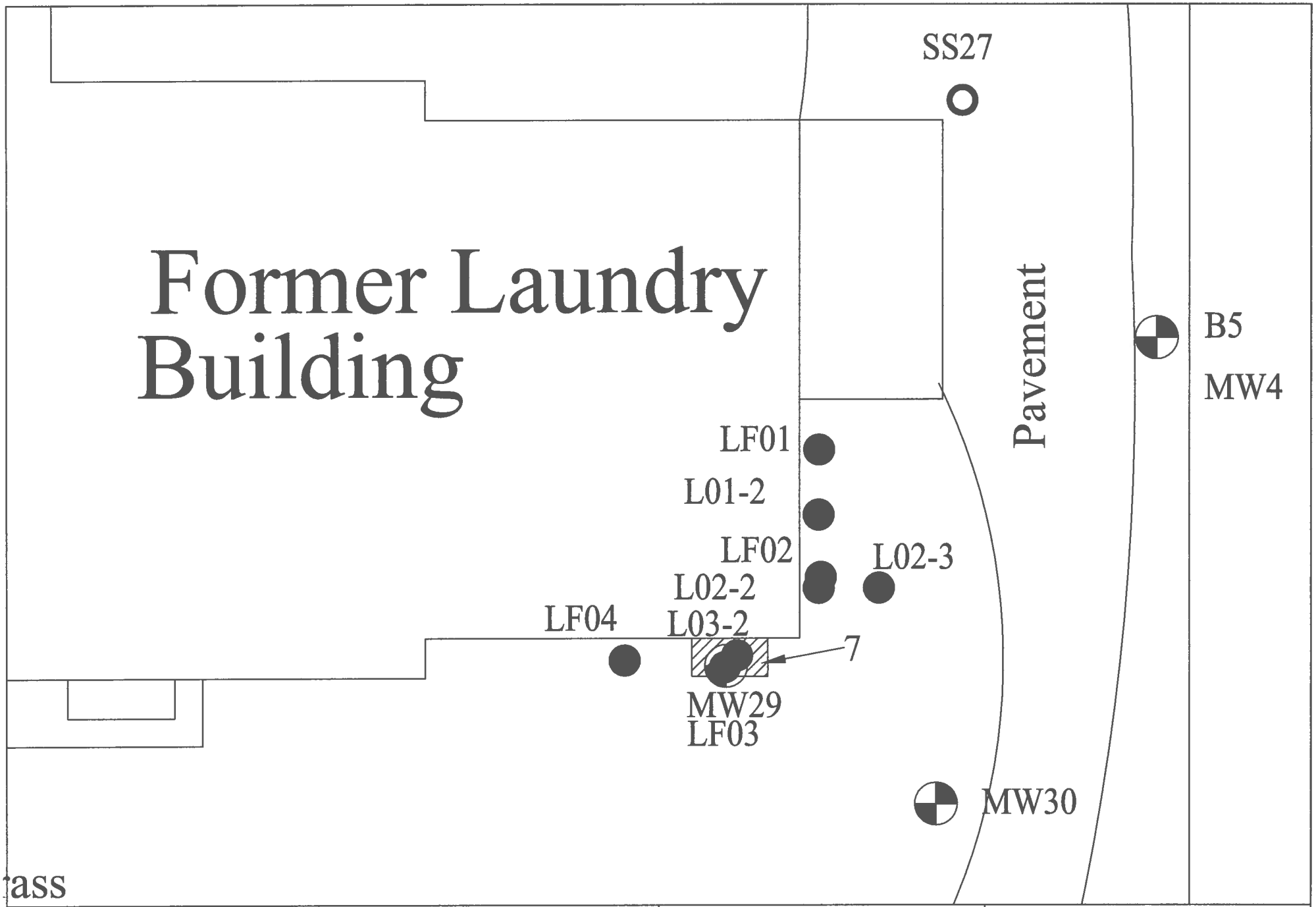
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 40 Feet	Date: July 3, 2006
Project No.: 1018.WA8	File: Laundry X-XX-06 Remediation Figure.dwg

Laundry July 3, 2006 Final Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location
- Sampling location
- Area requiring excavation
- Area ready for backfill
- 2 -Excavation Depth (ft)

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: June 23, 2006
Project No.: 1018.WA8	File: Laundry 6-23-06 Remediation Figure.dwg

Laundry 6-23-06 PCE Remediation Figure

Fairfield Hills Hospital
Wesserman Way
Newtown, Connecticut

GREENHOUSE

Greenhouse Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
SS19-x-0	21.3			**0.140**														
SS19-0.5	40.7	0.015		**0.500**				0.070		0.940		0.920		0.270				
SS19-1				**0.310**	0.220	**0.220**				0.350		0.290		0.150				
SS19-1.5																		
SS20-x-0	113.0			**0.620**								0.095						
SS20-0.5	4.5			**0.025**						0.085		0.069						
SS20-1																		
SS21-x-0	22.0									0.071		0.350		0.089				
SS35-1-0										0.240	0.077	0.470	0.150	0.052				
SS36-1-0										0.150		0.240						
SS37-1-0				**0.100**				0.150		0.510		1.700		0.470				
SS38-1-0										0.047		0.058						
SS39-1-0										0.130		0.380						
SS40-x-0				**0.470**						0.037		0.015		0.100				
SS40-0.5	34.1	0.034		**0.600**	0.230	**0.230**		0.035		0.360		0.910		0.160				
SS40-1				**0.046**						0.043		0.074						
SS41-x-0				**0.650**						0.120		0.460		0.100				
SS41-0.5	22.6	0.019		**0.120**				0.028		0.390		0.740		0.033				
SS40-1.5																		
SS41-1				**0.053**														
SS41-1.5																		
SS41-1.5.1																		
SS42-x-0				**0.015**				0.042		0.110		0.170		0.100				
SS43-x-0				**0.086**						0.690		1.700		0.190				
GH01-1-0				**0.120**	0.340	**0.340**				0.140		0.047		0.110				
GH01-1-0.5	48.4																	
GH01-1-0.5.1	23.6																	
GH01/05-5-0	89.4									0.190		0.200						
GH01/02-5-0	30.6									0.021		0.025						
GH02-1-0										0.080		0.095						
GH02-1-0	46.8			**0.017**						0.021								
GH02-1-0.5																		
GH02/38-5-0																		
GH02/37-8-0																		
GH03-1-0	11.7																	
GH03/38-5-0																		
GH04-1-0.1	43.4			**0.049**						0.037		0.045						
GH04-1-0.1	35.2			**0.045**						0.041		0.055						
GH04-1-0.5																		
GH05-1-0	89.1	0.096								0.068		0.053						
GH05/35-5-0	75.7	0.056								0.210		0.160						
GH03/37-5-0	22.0			**0.024**	0.170	**0.170**				0.076		0.250						
GH03/37-5-0.5										0.079		0.200						
GH02/38-5-0																		
GH03/38-5-0																		

Greenhouse Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
GH02/37-8-0																		
GH37/39-5-0	54.7			**0.013**	**1.300**	**1.300**				0.120		0.220						
GH37/39-5-0.5																		
GH37/39-8-0																		
GH04/39-5-0																		
GH04/36-5-0										0.120		0.140						
GH35-1-0.5	8.1	0.018																
GH35/36-5-0	38.0									0.045		0.035						
GH36-1-0	74.6									0.100		0.110						
GH3/39-8-0																		
GH37-1-0.5	62.1	0.037								0.150		0.550						
GH38-1-0	62.5			**0.025**														
GH38-1-0.5																		
GH39-1-0	170.0	0.016								0.160		0.340						
GH21-0	10.2																	
GH42-1	12.1				0.230	**0.230**				0.080		0.260		0.044	0.180			
GH43-1	12.3				0.082	**0.082**				0.068		0.130						
GH44-1	8.3	0.023																
GH45-1	4.4				0.074	**0.074**				0.053	0.120	0.091	0.230		0.130			
GH46-0	23.8									0.034		0.180						
GH46-0.5	13.7			**0.120**								0.063						
GH46-1																		
GH47-0	11.1											0.074						
GH47-0.5	42.7			**0.270**				0.023		0.250		0.530		0.110				
GH47-1				**0.007**														
GH47-1.5																		
GH48-0.5	17.3									0.020		0.037						
GH48-1																		
GH49-0.5	88.5	0.017		**1.230**						0.051		0.110						
GH49-1				**0.065**						0.049		0.054						
GH49-1.5																		
GH50-0.5	50.4	0.020		**0.510**	0.350	**0.350**				0.190		0.450		0.038				
GH50-1																		
GH51-0.5	14.1			**0.056**						0.260		0.310						
GH51-1																		
GH52-0.5	69.8	0.022		**0.200**				0.040		0.150		0.900						
GH52-1				**0.012**														
GH52-1.5																		
GH53-0.5	43.2			**0.230**	0.280	**0.280**				0.260		0.290						
GH53-1				**0.010**	0.180	**0.180**				0.052		0.041						
GH53-1.5																		
GH54-0.5	14.0			**0.780**				0.034		0.093		0.530		0.032				
GH54-1				**0.013**														
GH54-1.5																		
GH55-0.5	59.7	0.026		**0.091**						0.140		0.360						

Greenhouse Sampling Results

Location	Lead RDEC (mg/kg)	Lead GAGWPC SPLP (mg/l)	Aldrin GA PMC (mg/kg)	Dieldrin GA PMC (mg/kg)	Chlordane RDEC (mg/kg)	Chlordane GA PMC (mg/kg)	Chlordane GAGWPC SPLP (ug/l)	4,4'-DDD RDEC (mg/kg)	4,4'-DDD GAGWPC SPLP (ug/l)	4,4'-DDE RDEC (mg/kg)	4,4'-DDE GAGWPC SPLP (ug/l)	4,4'-DDT RDEC (mg/kg)	4,4'-DDT GAGWPC SPLP (ug/l)	Endrin RDEC (mg/kg)	Endrin GAGWPC SPLP (ug/l)	Heptachlor Epoxide RDEC (mg/kg)	Heptachlor Epoxide GAPMC (mg/kg)	GAGWPC SPLP Heptachlor Epoxide (ug/l)
	Applicable RSRs Criteria																	
	400.0	0.150	0.007	0.007	0.490	0.066	3.000	2.600	1.500	1.800	1.000	1.800	1.000	20.000	420.000	0.067	0.020	2.000
GH55-1																		
GH56-0.5	18.4	0.016		**0.140**						0.070		0.079						
GH56-0.5.1	17.8			**0.250**						0.110		0.160						
GH56-1																		
GH56-1.1																		

Notes:

Beginning letters and numbers in the sample location symbol before the "-" indicate the building perimeter sampling location-- xx/xx indicates that the sample was taken between two perimeter locations at some distance from the foundation.

Second number in the sample location symbol represents the distance from the foundation of the location where the sample was taken

Third number in the sample location symbol represents the depth from the ground surface of the location where the sample was taken

A "D" after the sample location symbol, or the .1 after the depth, indicates that the sample is a duplicate sample (i.e., another sample at a same location)

0.31 - not bold number - sample result of indicated chemical that is less than applicable criterion

0.68 - bold number - sample result of indicated chemical that is greater than applicable criterion

- sample result of indicated chemical that is less than the laboratory detection limit and less than applicable criterion

0.250 - sample result of indicated chemical that is greater than the Pollutant Mobility criteria, but is acceptable because the SPLP result of the same sample was below applicable criterion

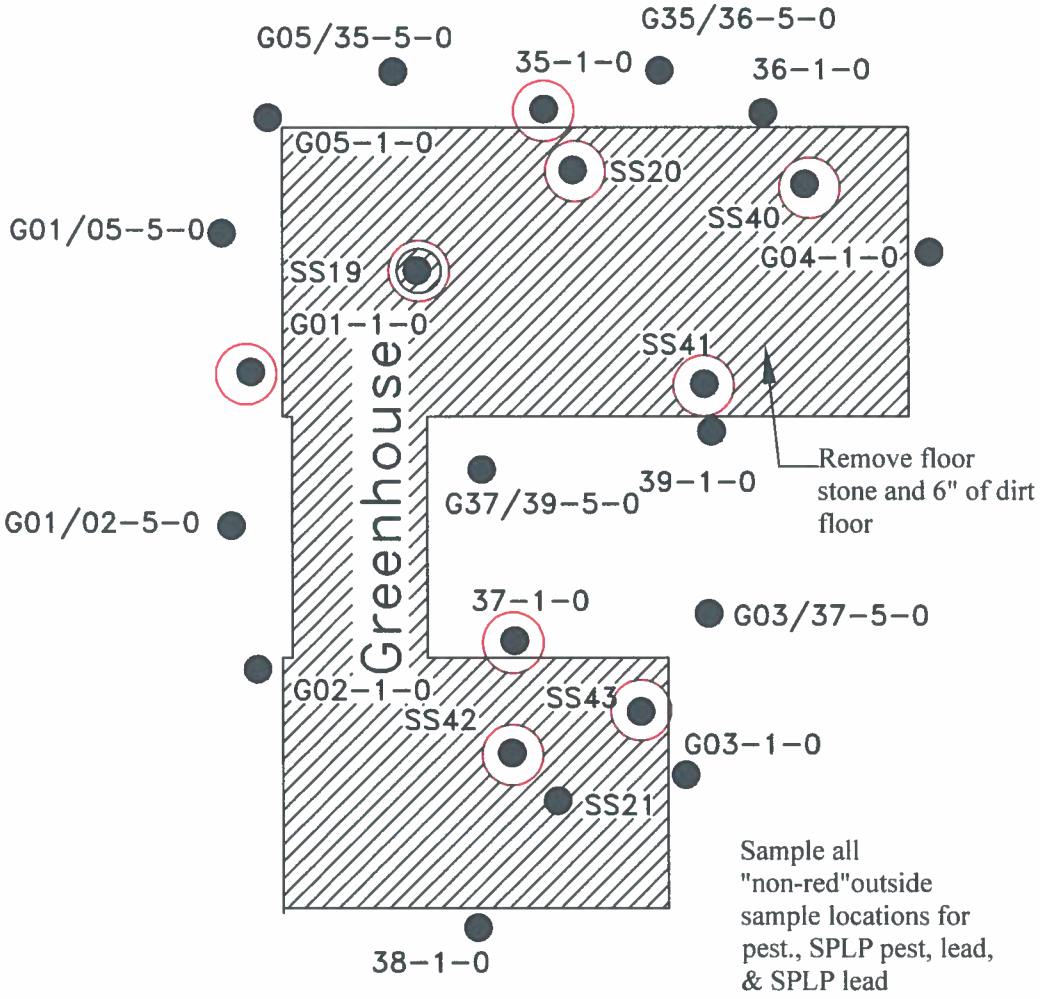
- SPLP test was not performed for sample because location was not in compliance based on total contentrations; <u>or</u> total concentration was less than total PMC <u>or</u> total concentration was less than or equal to 20 times SPLP PMC

- blank cell indicates that the chemical was not analyzed or the specific analysis not performed because a previous result closer to the foundation or shallower in depth was in compliance

- determined to be in compliance by 95% upper confidence level of the mean less than criteria in accordance with 22a-133k(2)(e)(2)(A)(i) and agreement with DEP that SPLP can be greater than 2 times criterion.

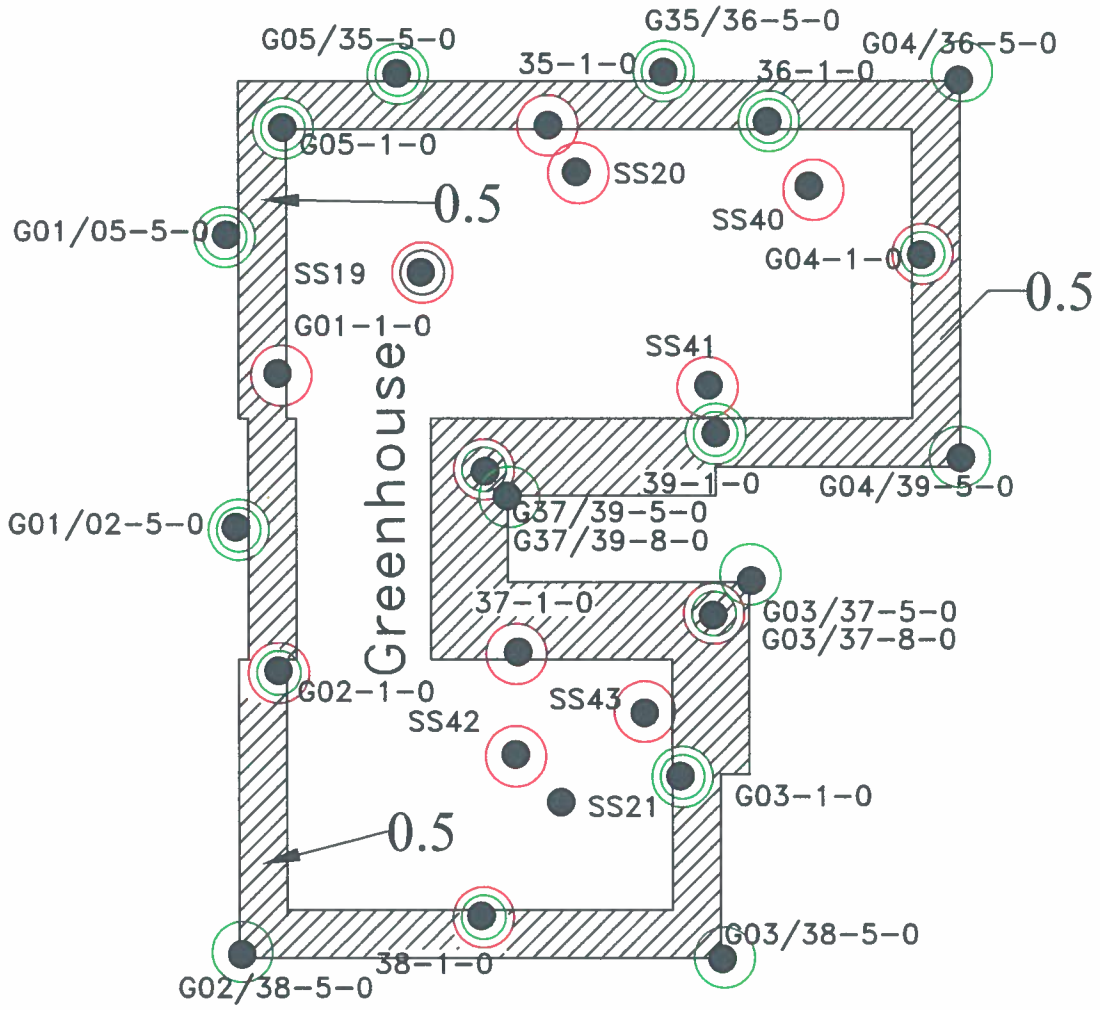
- indicates that detection limit was less than total criteria but greater than 20 times SPLP PMC therefore sample location is not compliant with PMC unless SPLP test is performed

R-resampling due to quality assurance problems



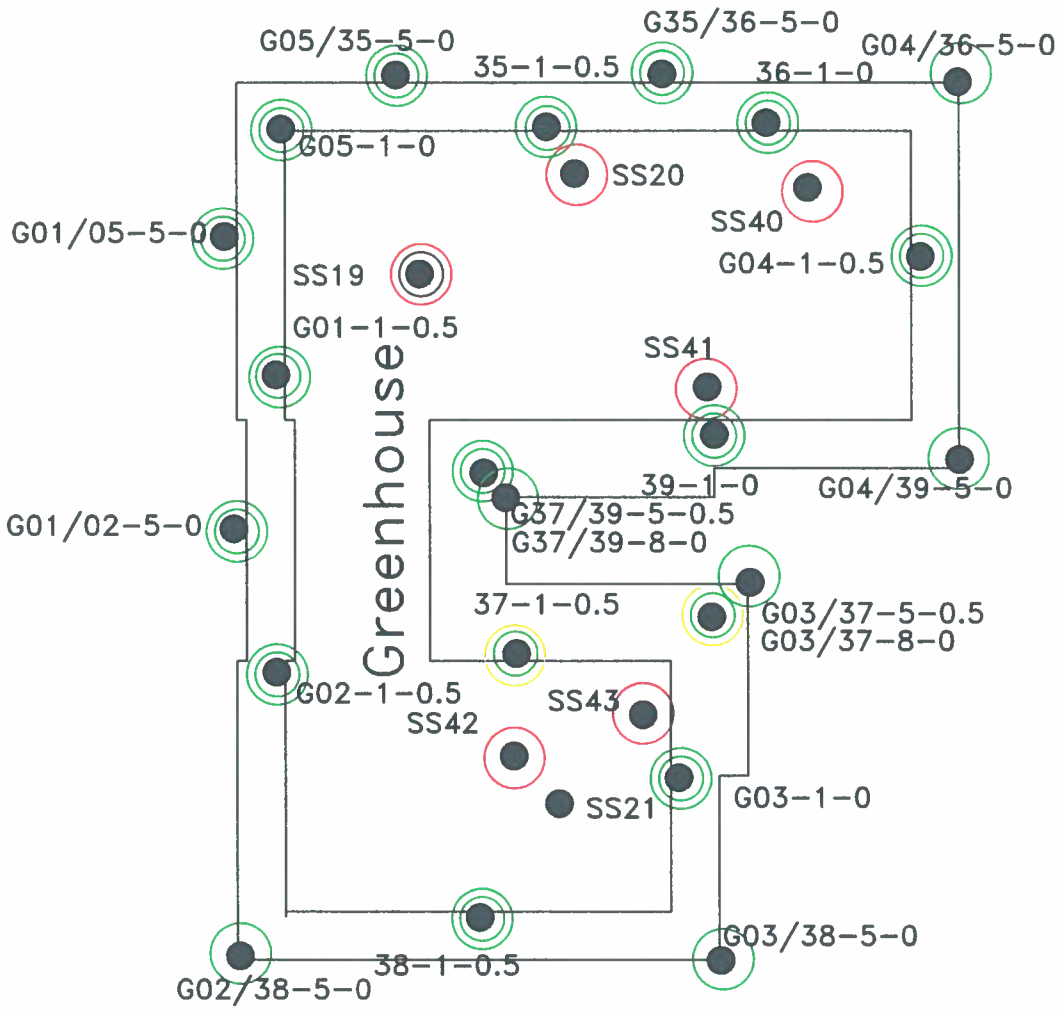
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

Legend			
- Lead in compliance at sampling location - Lead not in compliance at sampling location - Pesticide in compliance at sampling location - Pesticides not in compliance at sampling location	**R. W. Bartley & Associates, Inc.** 37 Bald Hill Road Tolland, Connecticut		Greenhouse 5-9-06 Remediation Figure
	Approximate Scale: 1 Inch = 20 Feet	Date: May 9, 2006	Fairfield Hills Hospital Wasserman Way Newtown, Connecticut
	Project No.: 1018.WA8	File: Greenhouse X-XX-06 Remediation Figure	



- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

Legend			
- Lead in compliance at sampling location - Lead not in compliance at sampling location - Pesticide in compliance at sampling location - Pesticides not in compliance at sampling location	**R. W. Bartley & Associates, Inc.** 37 Bald Hill Road Tolland, Connecticut		Greenhouse 5-25-06 Remediation Figure
	Approximate Scale: 1 Inch = 20 Feet	Date: May 25, 2006	Fairfield Hills Hospital Wasserman Way Newtown, Connecticut
	Project No.: 1018.WA8	File: Greenhouse 5-25-06 Remediation Figure	



- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

Legend

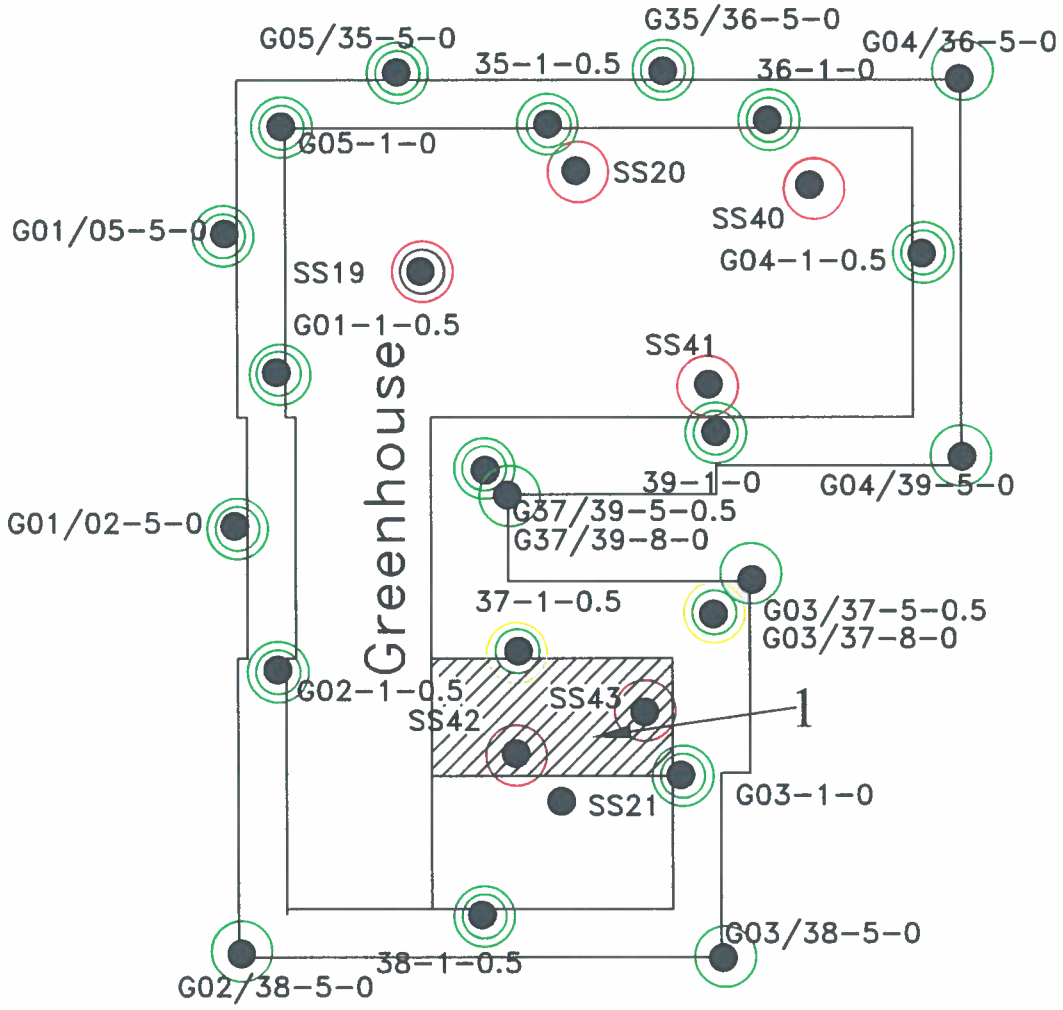
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 20 Feet	Date: June 13, 2006
Project No.: 1018.WA8	File: Greenhouse 6-13-06 Remediation Figure

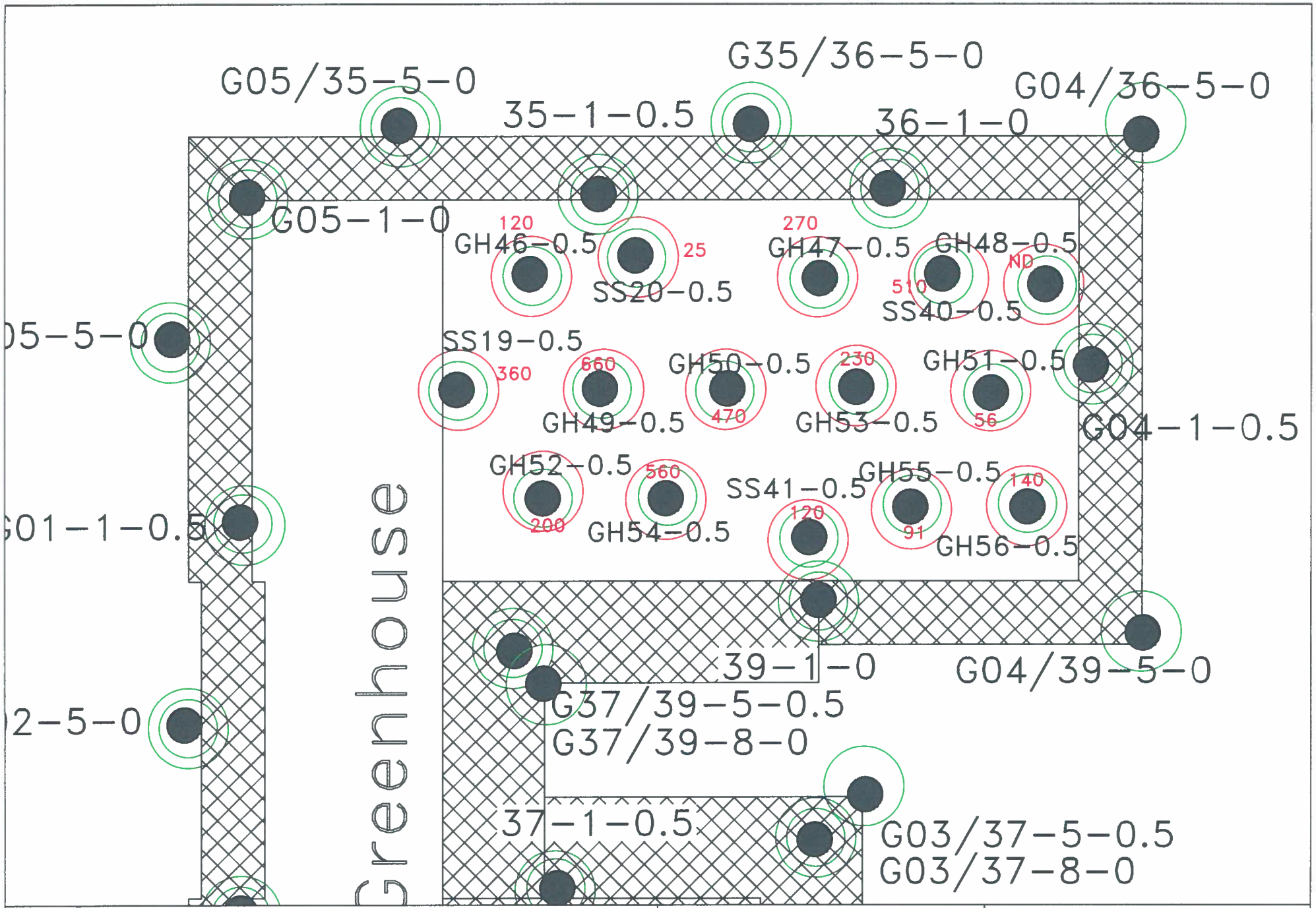
Greenhouse 6-13-06 Remediation Figure

Fairfield Hills Hospital
Wasserman Way
Newtown, Connecticut



- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW

Legend			
- Lead in compliance at sampling location - Lead not in compliance at sampling location - Pesticide in compliance at sampling location - Pesticides not in compliance at sampling location	**R. W. Bartley & Associates, Inc.** 37 Bald Hill Road Tolland, Connecticut		Greenhouse 7-12-06 Remediation Figure
	Approximate Scale: 1 Inch = 20 Feet	Date: July 12, 2006	Fairfield Hills Hospital Wasserman Way Newtown, Connecticut
	Project No.: 1018.WA8	File: Greenhouse X-XX-06 Remediation Figure	



Legend

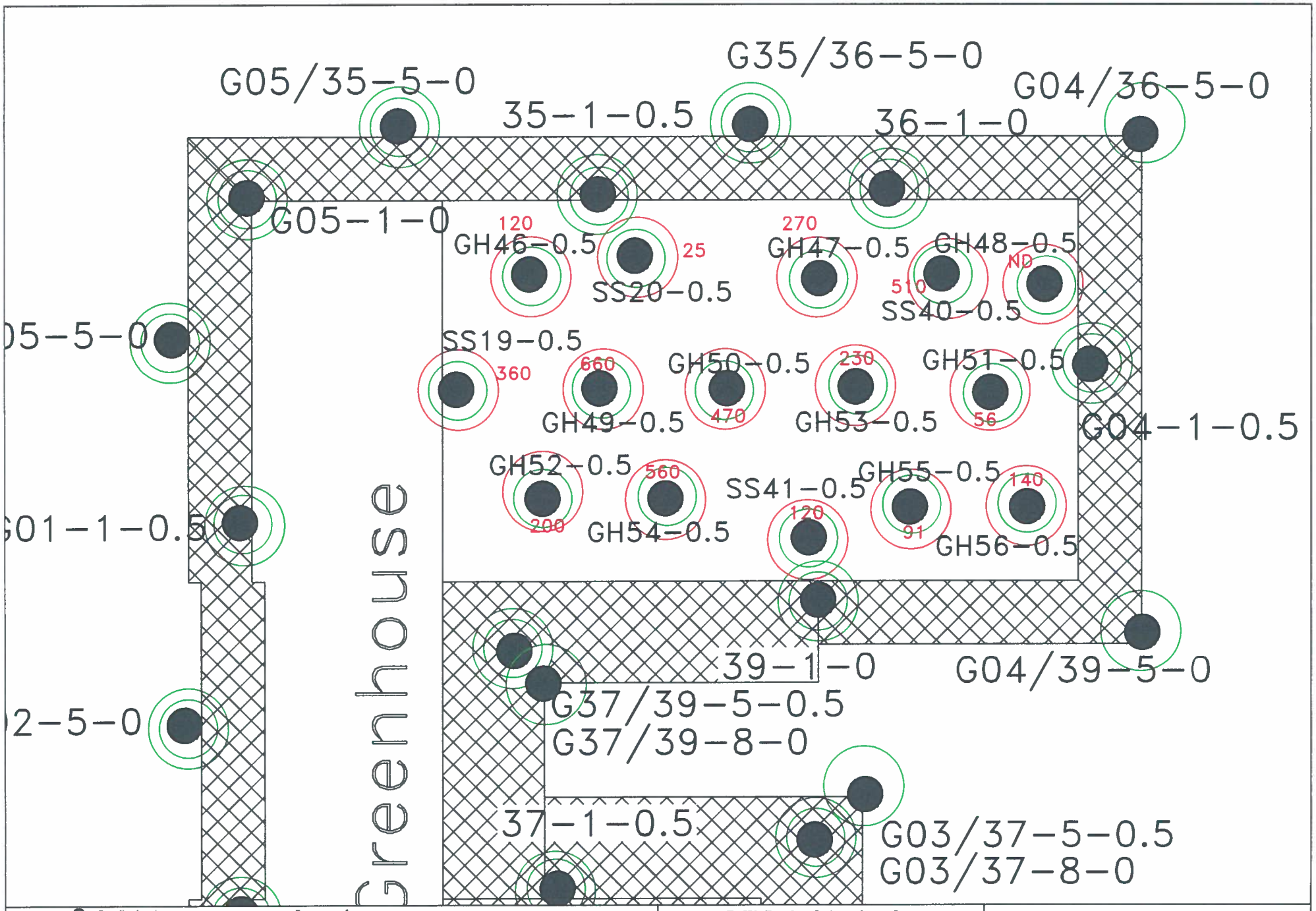
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: August 30, 2006
Project No.: 1018.WA8	File: Greenhouse 8-30-06 Remediation Figure.dwg

Greenhouse 8-30-06 Remediation Figure

Former Fairfield Hills Mental Health Hospital
Wesserman Way
Newtown, Connecticut



Legend

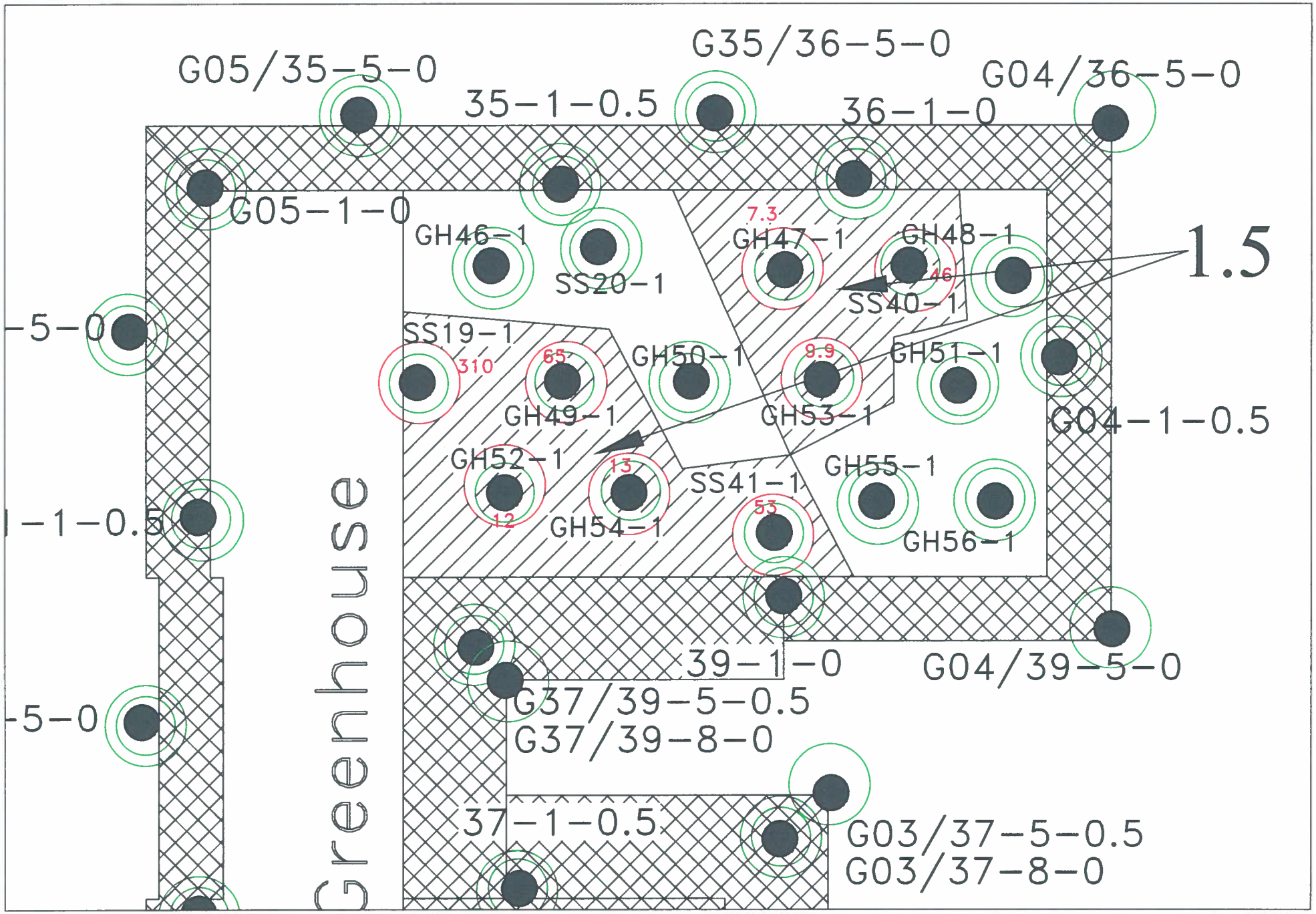
- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

R. W. Bartley & Associates, Inc.
37 Bald Hill Road
Tolland, Connecticut

Approximate Scale: 1 Inch = 10 Feet	Date: September 14, 2006
Project No.: 1018.WA8	File:Greenhouse xx-xx-06 Remediation Figure.dwg

Greenhouse 9-14-06 Remediation Figure

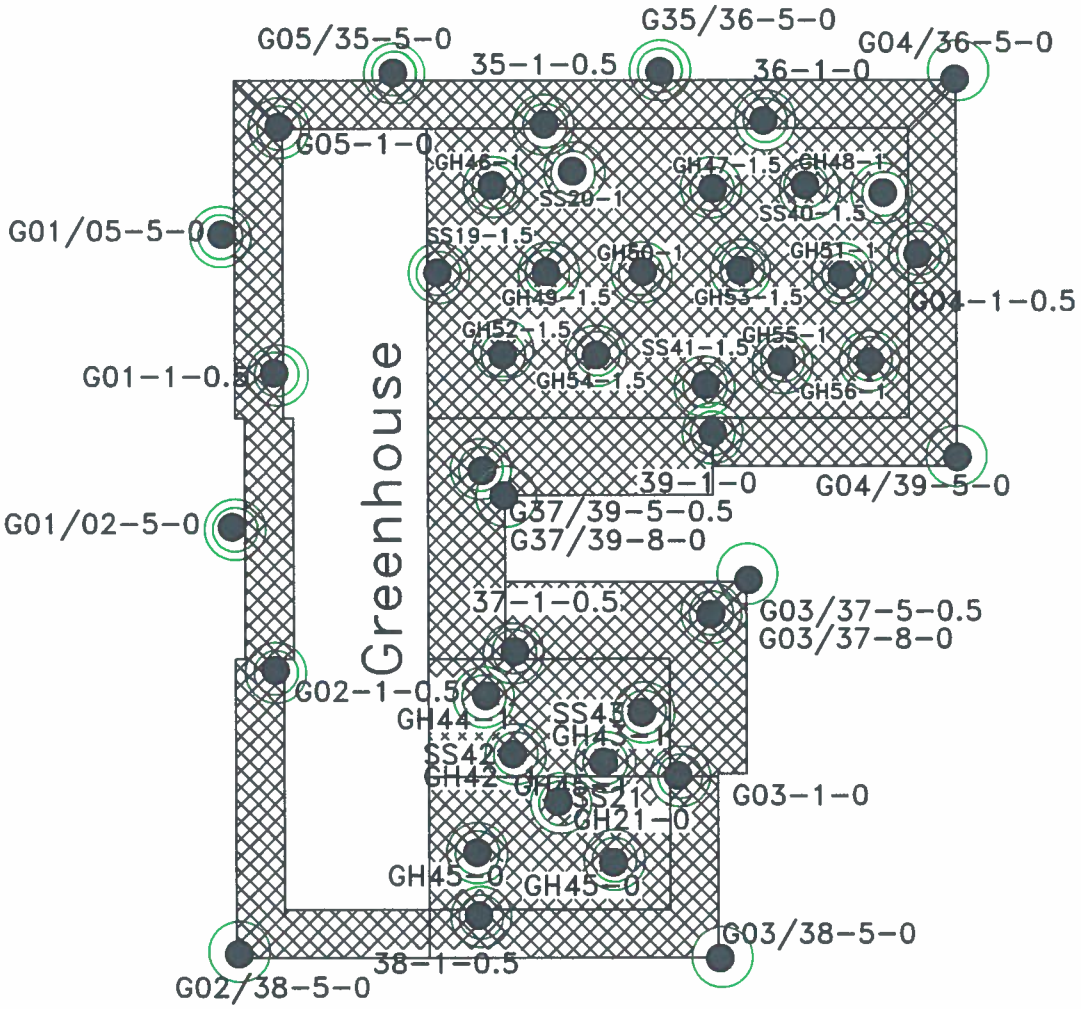
Former Fairfield Hills Mental Health Hospital
Wesserman Way
Newtown, Connecticut



Legend

- Sampling location
- Area requiring excavation
- Area requiring excavation that cannot be used as MA landfill cover and must be characterized for HW
- Area can be backfilled
- Lead in compliance at sampling location
- Lead not in compliance at sampling location
- Pesticide in compliance at sampling location
- Pesticides not in compliance at sampling location

R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Greenhouse 9-15-06 Remediation Figure
Approximate Scale: 1 Inch = 10 Feet	Date: September 15, 2006	Former Fairfield Hills Mental Health Hospital Wesserman Way Newtown, Connecticut
Project No.: 1018.WA8	File: Greenhouse 9-15-06 Remediation Figure.dwg	



Legend	R. W. Bartley & Associates, Inc. 37 Bald Hill Road Tolland, Connecticut		Greenhouse 10-4-06 Final Remediation Figure
- Lead in compliance at sampling location - Lead not in compliance at sampling location - Pesticide in compliance at sampling location - Pesticides not in compliance at sampling location	Approximate Scale: 1 Inch = 20 Feet	Date: October 4, 2006	Fairfield Hills Hospital Wasserman Way Newtown, Connecticut
	Project No.: 1018.WA8	File: Greenhouse 10-4-06 Remediation Figure	