

# **Site Review And Update**

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**METALTEC/AEROSYSTEMS**

**FRANKLIN BOROUGH, SUSSEX COUNTY, NEW JERSEY**

**CERCLIS NO. NJD002517472**

**SEPTEMBER 7, 1993**

**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**Public Health Service**

**Agency for Toxic Substances and Disease Registry**

**Division of Health Assessment and Consultation**

**Atlanta, Georgia 30333**

## **Site Review and Update: A Note of Explanation**

**The purpose of the Site Review and Update is to discuss the current status of a hazardous waste site and to identify future ATSDR activities planned for the site. The SRU is generally reserved to update activities for those sites for which public health assessments have been previously prepared (it is not intended to be an addendum to a public health assessment). The SRU, in conjunction with the ATSDR Site Ranking Scheme, will be used to determine relative priorities for future ATSDR public health actions.**

**SITE REVIEW AND UPDATE**

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**FRANKLIN BOROUGH, SUSSEX COUNTY, NEW JERSEY**

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**Prepared by:**

**The New Jersey Department of Health  
Under a Cooperative Agreement with  
The Agency for Toxic Substances and Disease Registry**

## **SUMMARY OF BACKGROUND AND HISTORY**

Metaltec Aerosystems is a 16-acre site located on Wildcat Road, at the intersection of Maple, Gilson, and Wildcat Roads in Franklin Borough, Sussex County, New Jersey (Figure 1). The site is located approximately 1 mile northeast of Route 23. The site is divided approximately in half by Wildcat Road (Figure 2). The area is rural, however, there are a few homes around the site. One residence was on the property and several residences are adjacent to the Metaltec site.

From 1965 until mid-1980 Metaltec operated a metal-plating plant that produced lipstick cases, paint spray guns, and metal ballpoint pen casings. In 1980 the plant moved to an industrial park. The site subsequently housed a light manufacturing company and a specialty glass manufacturer.

Process wastewater from the manufacturing operations was placed in an unlined on-site lagoon. Contaminants found in the lagoon water and sediments consisted of trichloroethylene, tetrachloroethylene, 1,1,1-trichloroethane, vinyl chloride, copper and chromium. These contaminants migrated to the groundwater on-site (2,5).

Discolored soil was found in several areas of the property indicating improper disposal methods. As a result of these practices, on-site soil at four different areas (Soil Parcels) and in the superficial and bedrock aquifers have become contaminated.

Off-site groundwater contained VOC's. The contamination of the aquifers resulted in the 1988 closure of three residential wells and Franklin Borough's supplemental water supply well, which is approximately 400 feet east of the site. The Borough's primary source of drinking water is Franklin Pond, about 4000 feet northeast of the site, which remains uncontaminated. In 1980, Franklin Borough pumped between 180 to 220 gpm for five to ten hours per day from the supplemental well until it was closed (2).

Contaminants were detected in off-site surface soils at an adjacent horse corral because the lagoon would sometimes overflow its bank. In 1981, the lagoon was drained and the sediment was excavated and then backfilled with clean soil. The lagoon area has been used as a parking lot.

The site was placed on the National Priorities List (NPL) in September 1983. The United States Environmental Protection Agency (USEPA) has separated the site into two Operable Units (OU). The Remedial Investigation/Feasibility Study (RI/FS) (2,3) for the first OU focused on on-site soil and was released in May 1986. In June 1986 the Record of Decision (4) was released by the USEPA which required the excavation and treatment of at least 10,000 cubic yards of contaminated soil. Three of the four contaminated soil parcels were remediated in 1988 with the removal of approximately 4,900 cubic yards of soil. The USEPA is in the process of obtaining contracts to remediate the last parcel of contaminated soil.

A separate RI/FS was prepared for the second OU in November 1989 that addressed groundwater contamination (5,6). The ROD (7) for this RI/FS was issued in September 1990. The ROD recommends remediation of the groundwater via extraction and treatment. The USEPA is working on the design for the treatment system and project to have it completed by December 1993. Past community health concerns focused on migration of the contamination off-site and contamination of the groundwater.

A Health Assessment for the Metaltec Aerosystems site was prepared by the Agency for Toxic Substances and Disease Registry (ATSDR) in November 1988 (1). Contaminated groundwater was identified as the primary potential human exposure pathway at the site. The health assessment concluded that the site is of potential public health concern because of the risk to human health resulting from possible exposure to hazardous substances at levels that may result in adverse health effects over time resulting from chronic exposure to contaminated groundwater.

### **CURRENT SITE CONDITIONS**

On June 9, 1993 a site visit was conducted by Howard Rubin, Ph.D. of the NJDOH along with a representative of the USEPA. The site was not fenced nor was it well marked with warning signs that it is a USEPA National Priority List (NPL) site. The site has been abandoned by the two companies that previously resided at the site.

The lagoon has been remediated and three of the four contaminated soil parcels have been remediated. The remediated soil parcels are overgrown with vegetation and the former lagoon area is partially overgrown with vegetation and the remainder has been used as a parking area. A barn that was on-site and adjacent to the pond burned down. A house that was on-site was demolished. All of the debris from these two structures remain where they fell.

The only changes in site conditions since the original health assessment was released was in the destruction of the barn and house. The conclusions drawn in the original health assessment are correct. New data (5) also indicate the need to take the clean-up actions proposed in the ROD's (4,7). In light of the soil data, it is possible that past and perhaps present human exposure to the contaminated on-site soils may have occurred and may be occurring.

Physical hazards exist on-site. In back of the site was an above ground storage tank. The contaminated soil parcel that has not yet been remediated is used as a parking area. Therefore, physical hazards exist due to the building debris and the storage tank. In addition, there is possible exposure to contaminants in the nonremediated soil parcel.

## **CURRENT ISSUES**

Public health concerns previously focused on the health threat posed by the lagoon and the contaminated soil parcels as well as on the groundwater (1). The current public health concerns stem from the existence of the remaining contaminated soil parcel, from the contaminated ground water, and the contaminated off-site soil and surface water. There are no newly identified public health concerns.

A portion of an adjacent horse corral off-site was contaminated when the lagoon overflowed its bank. This off-site contaminated soil is going to be remediated along with the remaining contaminated soil parcel. It is possible that exposure to the horses in the corral and their owners may have occurred.

The superficial and bedrock aquifers are contaminated. Remedial technologies are presently being designed to remediate the groundwater contamination according to the OU2 ROD. The potential for a completed human pathway is most possible in the past because nearby residents and on-site employees probably were exposed to contaminated ground water.

No community concerns were identified in the health assessment. According to the local health department there are no current community health concerns associated with the site.

## **CONCLUSIONS**

The ATSDR concluded in the original health assessment: 1) The site is of potential public health concern due to the possible exposure to hazardous substances at concentrations that may result in adverse health effects; 2) Human exposures to VOC's have probably occurred through the domestic use of contaminated groundwater; 3) Exposure to contaminated soils on and off-site probably did not occur; 4) The population of concern are the remedial workers via inhalation of and dermal contact with soils contaminated with VOC's and chromium; 5) Soil contamination was most extensive in the subsurface soils; 6) Four residential wells contaminated with VOC's for an undeterminable length of time and were taken out of service; 7) No information was available to determine the length of time the municipal well was contaminated and the potential number of people that were exposed.

Contaminated off-site soil and surface water was found adjacent to the site. This is in addition to the contaminated groundwater and contaminated on-site soils. Thus, the population of concern are those residents who frequented the contaminated horse corral, those residents who used contaminated wells, those workers who may have been exposed to contaminated on-site soils, and trespassers who may become exposed to the remaining

contaminated on-site soil parcel. The health assessment conclusions were correct except for conclusion number 3), because exposure to contaminated soils on-site and off-site may have occurred.

Recommendations in the original public health assessment that were satisfied included remedial workers having proper equipment and training and the utilization of dust control measures during excavations. Contamination of the nearby surface waters by the contaminated groundwater was addressed in the second RI. The site is not being considered for follow-up health studies by any governmental agency except the ATSDR. The facility is unsecured. Physical hazards exist at the site, and contact with the remaining contaminated soil parcel is possible.

Based on the available data, past exposure to groundwater contaminants are of concern. The contaminated lagoon and three of the four contaminated soil parcels have been remediated--the fourth contaminated soil parcel is going to be remediated. The nearby residents use alternative water supplies. The USEPA is going to remediate the contaminated off-site soil at the horse corral. Physical hazards can be prevented by securing the site. Therefore, health hazards are unlikely to occur once the remedial activities are taken; except from the off-site surface water at the corral which may be of concern.

The health assessment for this site (1) concluded that: 1) The greatest probable route of exposure was via past groundwater usage; 2) Residential wells and a municipal well were contaminated with VOC's; 3) The possibility exists that people who worked on-site, residents on well water, and the city water may have had potential adverse health effects due to using contaminated groundwater in the past; and 4) Insufficient information was available on the municipal well to be able to determine the possibility for adverse health effects.

## **RECOMMENDATIONS**

The recommendations of the original health assessment (1) were to: 1) provide remedial workers proper equipment and training; 2) Implement dust control measures during excavations; 3) Obtain historical well sampling and monitoring information; 4) Initiate a monitoring program for residential wells near the site; 5) Restrict installation of drinking water wells near the site; 6) The plant process water well should be plugged and abandoned to reduce vertical flow of contaminants; 7) Surface water contamination from the groundwater should be investigated in a supplemental RI; 8) A survey for potentially contaminated biota should be performed; 9) Confirmation that previously contaminated residential wells are not being used; and 10) Follow-up health studies need not be considered. Recommendation #'s 1) and 2) were followed, #'s 3), 4), and 9) do not have to be conducted since the residents are now on city water, #'s 5), 6), and 7) are still valid, # 8) is probably unnecessary due to the small area that was contaminated, and #

10) is no longer valid because follow-up health actions will be determined when the previous health assessment is updated.

It is currently recommended that adequate site security should be provided to prevent unauthorized access and possible exposure to physical hazards as well as to exposure to the remaining contaminated soil parcel. Also, the site should be posted indicating that it is a USEPA National Priority List site.

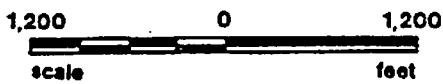
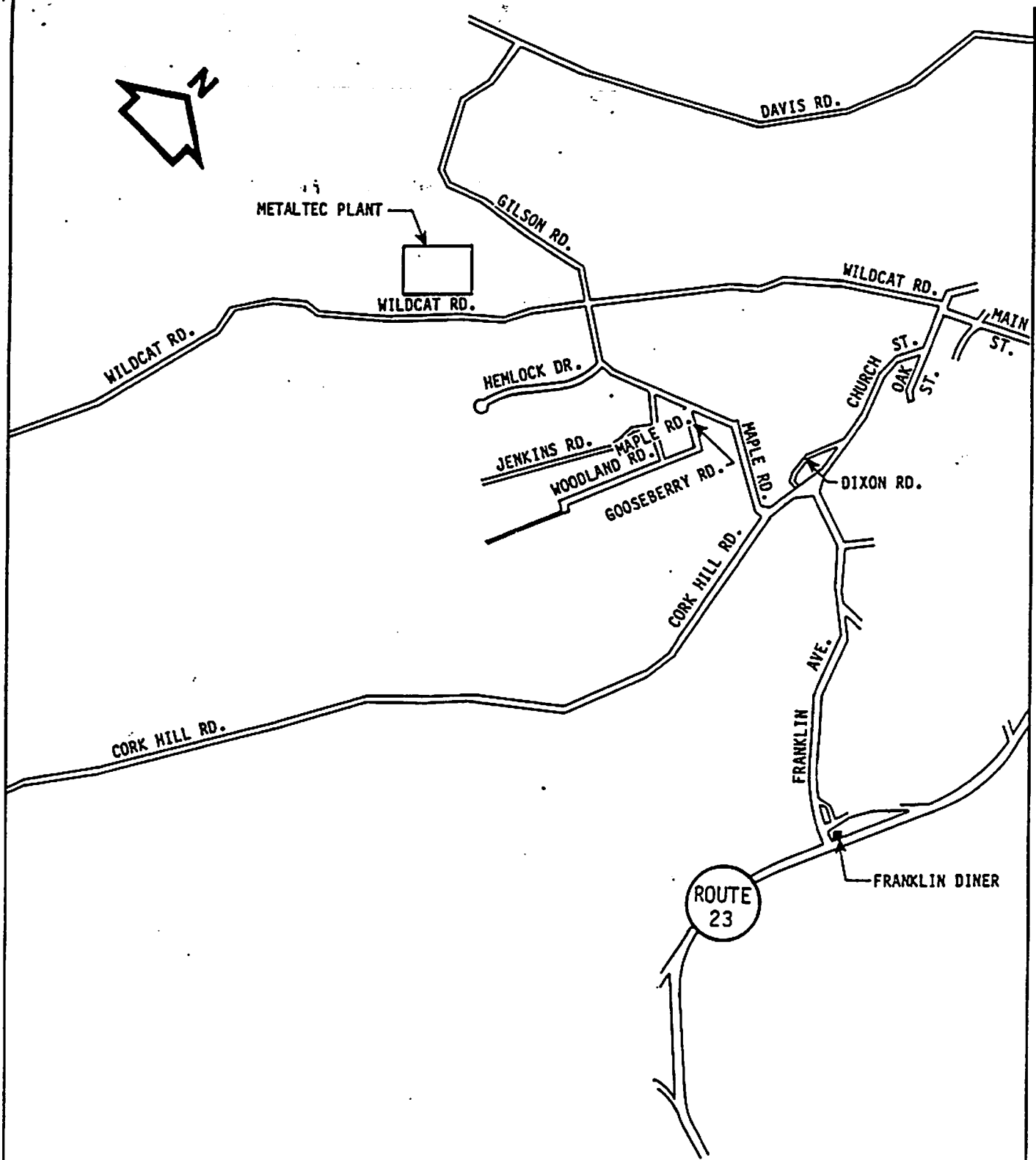
After a review of the most recent documents and the current site conditions, the ATSDR and the NJDOH have now determined that the previous health assessment should be updated. The updated health assessment should include an evaluation of groundwater as a past route of exposure, contaminated off-site soil and surface water as past and present routes of exposure, and on the contaminated on-site soils as a past and present route of exposure.

The data and information developed in the Site Review and Update have been evaluated to determine if follow-up actions may be indicated. Further site evaluation is needed to determine appropriate health actions.



## DOCUMENTS REVIEWED

1. Agency for Toxic Substances and Disease Registry. Health Assessment for Metaltec/Aerosystems, Franklin Borough, New Jersey. November 1988.
2. United States Environmental Protection Agency. Remedial Investigation Report for the Metaltec Aerosystem Site, Franklin Borough, New Jersey. May 1986.
3. United States Environmental Protection Agency. Draft Feasibility Study Report for the Metaltec Aerosystem Site, Franklin Borough, New Jersey. May 1986.
4. United States Environmental Protection Agency. Record of Decision for the Metaltec Aerosystem Site, Franklin Borough, New Jersey. June 1986.
5. United States Environmental Protection Agency. Draft Final Supplemental Remedial Investigation Report for the Metaltec Aerosystem Site (OU2), Franklin Borough, New Jersey. October 1989.
6. United States Environmental Protection Agency. Draft Final Feasibility Study Report for the Metaltec Aerosystem Site (OU2), Franklin Borough, New Jersey. November 1989.
7. United States Environmental Protection Agency. Record of Decision for the Metaltec Aerosystem Site (OU2), Franklin Borough, New Jersey. September 1990.

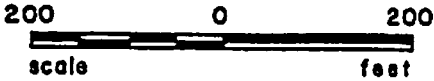
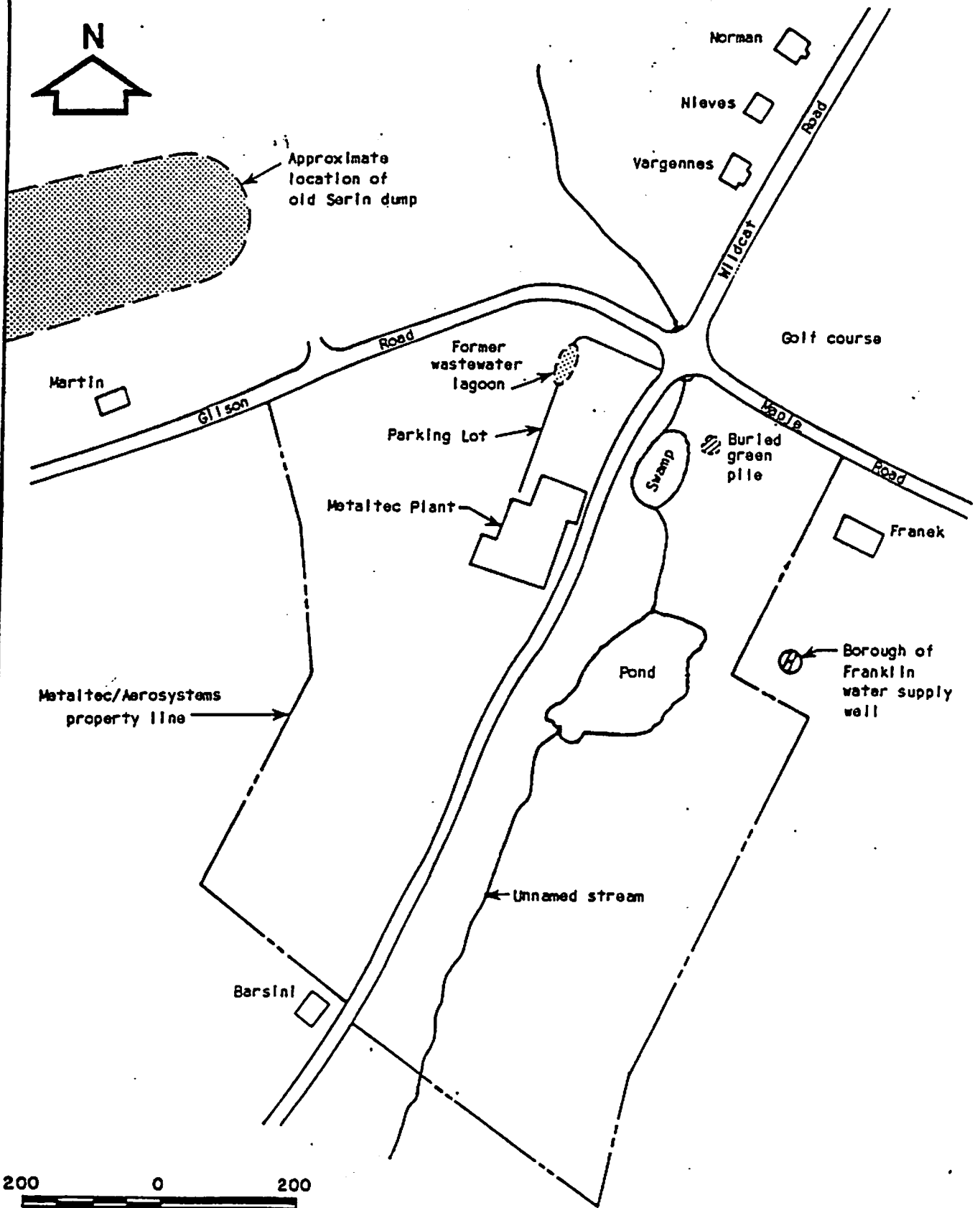


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planners & management consultants*

ROAD MAP  
(NOVEMBER 5, 1975)

BOROUGH OF FRANKLIN  
METALTEC/AEROSYSTEMS, FRANKLIN, NEW JERSEY



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METALTEC/AEROSYSTEMS SITE  
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