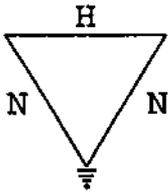


93-1458



# Nelson, Heindel, and Noyes

- Consulting Hydrogeologists
- Engineers
- Environmental Scientists

P.O. Box 64709 Burlington, Vermont 05406-4709

802-658-0820

FAX: 802-860-1014

JUN 19 10 10 AM '96  
 STATE MANAGEMENT  
 DIVISION

June 17, 1996

Mr. Chuck Schwer  
 Department of Environmental Conservation  
 Sites Management Section  
 103 South Main Street, West Office  
 Waterbury, VT 05671-0404

Dear Chuck:

I enclose for your review an investigation that we performed at the Weybridge Elementary School at the request of Mr. Merritt Chandler. Part of the report requests authorization to thin spread approximately 30 yards of soil which has been stockpiled in the area since 1993. With your authorization, Merritt will make arrangements to have this pile decommissioned.

Thank you for your assistance.

Best regards,

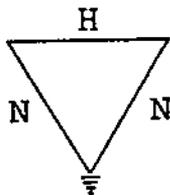
Jeffrey E. Noyes  
 Chief Hydrogeologist

JEN/jb

cc: Merritt Chandler

Enclosure

[U:\JNOYES\WP\DOCS\SCHWER.L4]



## Nelson, Heindel, and Noyes

- Consulting Hydrogeologists
- Engineers
- Environmental Scientists

P.O. Box 64709 Burlington, Vermont 05406-4709

802-658-0820

FAX: 802-860-1014

June 17, 1996

Mr. Merritt Chandler  
Addison Central Supervisory Union  
Charles Avenue  
Middlebury, VT 05753

JUN 19 10 10 AM '96

Re: Weybridge Elementary  
Soil Pile Sampling & Site Investigation

Dear Merritt:

This letter serves two purposes. The first is to report on the results of sampling in the contaminated soil pile which is present on the Weybridge School property. This soil pile was generated from a 1993 tank removal and replacement operation. The second, is to investigate the complaints of an adjoining property owner. As we understand it, the adjoining property owner believes that there has been either a surface or subsurface release of petroleum which entered surface water on an adjoining property. This report provides information necessary to close the soil pile site and dismiss the charges of a release.

### Soil Pile Investigation

The existing soil pile, is approximately 75 feet east of where the underground storage tank currently resides. As a safety measure, the 30 x 30 soil pile storage area is secured with a chain link fence (see attached photo #1). The pile measures approximately 25 feet in length, 15 feet in width and 5 feet in height, contains roughly 30 - 35 yards of soil.

The pile was cored at two locations. A composite sample was acquired from the depth of 2 feet and 4 feet. The composite samples were bagged and checked with a photoionization detection device. This device, recorded a value of 0.3 ppm which is considered background.

In addition to this, visual and olfactory testing by field staff did not observe any petroleum contaminant. Therefore, we would recommend that the soil pile be decommissioned by thin spreading and seeding at its present location. No one should touch the pile, until the State of Vermont has approved our request for closure.

Mr. Merritt Chandler  
June 17, 1996  
Page 2

### **Site Investigation Alleged Oil Release**

A property owner, adjoining the Weybridge Elementary School site, observed a number of "oil slicks" through the Summer of 1995. The concerned party assumed, that the source for oil was the soil pile or another petroleum source on the school property.

At the start of the investigation, we interviewed Mr. Ray Kelton of Bread Loaf Construction Company, for any reports of fuel releases in connection with the new school construction project. Mr. Kelton stated that there had been no surface spills of fuels, or hazardous materials that had occurred in connection with the construction activities. Further, he noted that prior to construction of the school, Bread Loaf had excavated ten test pits on the property to determine subsurface conditions. They found that bedrock is 2 to 5 feet below ground surface. He reported that there were no obvious manifestations of fuel oil or contamination in the area. The location of the test pits and the new school addition is shown on the attached site plan (see map pocket).

Ms. Christina Johnson, the principal of the Elementary School, was also interviewed. She recollected that a limited amount of contamination had been encountered during the 1993 tank removal. This is the material which has been stockpiled within the fenced enclosure. Beyond that, Ms. Johnson had nothing more to report.

After completing the interviews, we performed a limited subsurface investigation and surficial reconnaissance of the property looking for any evidence of surface spills or subsurface contamination. As discussed in the first section of this report, it is very unlikely that the contaminant in the soil pile could have resulted in a release to the surface environment. There is no evidence of any contaminant remaining in or adjacent to the pile.

With the concurrence of the school principal, we installed two hand-borings in the vicinity of the existing UST. The notes are contained in the Attachment on page 1. No elevated PID readings were encountered in the new UST location. No visual or olfactory evidence of contamination was observed.

Following borings in the existing UST area, we installed monitoring wells at three locations as shown on the site plan schematic (see attached). The monitoring well locations bracketed the fenced soil pile area. There was no evidence of petroleum contamination contained in the samples, nor was there visual or olfactory evidence of contamination in the water samples obtained from the wells. A summary of the field notes obtained from those locations is tabulated in the Attachment.

Mr. Merritt Chandler  
June 17, 1996  
Page 3

After the completion of the monitor wells, we performed a surficial reconnaissance along the drainage way which links the school site to the pond on the adjoining property owner's site where the petroleum slicks were observed. The notes from that reconnaissance are contained in the Attachment. Head space PID measurements at eight surface water test sites did not indicate the presence of any contamination. EPA Method 8100 test samples taken at the pond inlet and outlet did not detect any petroleum hydrocarbon. The laboratory results are attached. There were no laboratory, visual, olfactory, or field measurements that would evidence a petroleum release.

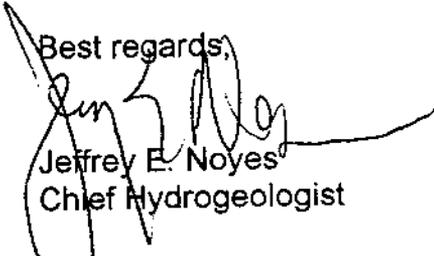
### Conclusions

Based upon the test data collected from the site, we find the following:

1. The contaminated soil pile is ready for thin spreading on the property. We recommend that the pile be uncovered, the fence dismantled, and the pile thin spread then placed, seeded and stabilized at the existing location.
2. With respect to the observations of the adjoining property owner that there were sheens on their pond, there is no evidence that the contaminants came from the Weybridge School site.

This report concludes our investigation. Please call with any questions.

Best regards,



Jeffrey E. Noyes  
Chief Hydrogeologist

JEN/jb

Attachments

cc: Chuck Schwer

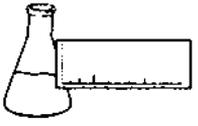
[U:\JNOYES\WPDOCS\CHANDLER.L2]

| WEYBRIDGE SCHOOL    |     |             |   |
|---------------------|-----|-------------|---|
| Surface Water Tests |     |             |   |
| Location            | PID | Sample Time | Notes   |
| 1                   | 0.2 | 9:45        | Pond to stream discharge  |
| 2                   | 0.2 | 10:00       | Pond outflow  |
| 3                   | 0.2 | 10:15       | Pond inflow from stream.  |
| 4                   | 0.2 | 10:30       | Sample Stream #1 in between the pond inflow and pond outflow points.  |
| 5                   | 0.2 | 10:45       | Stream pipe - mouth accepting water for flow into the pond from the stream  |
| 6                   | 0.2 | 11:00       | Sample Stream #2  |
| 7                   | 0.2 | 11:20       | Sample Stream #3  |
| 8                   | 0.2 | 11:40       | Sample Stream #4. Stream samples 2 and 3 are upgradient of the pond, yet downgradient of the soil pile location. Location stream #3 is upgradient of the entire site. No sheens or petroleum evidence was noted for any of the surface water samples taken. |

| WEYBRIDGE SCHOOL            |     |          |  |
|-----------------------------|-----|----------|--|
| Test Holes New UST Location |     |          |  |
| Location                    | PID | Depth    | Notes  |
| UST #1                      | 0.4 | 0.4 feet | Water encountered approximately 1 foot below ground surface within coarse gravel fill. The overlying layer was dense clayey silts and top soil. UST #1 was probed at the northeast corner of the tank. |
| UST #2                      | 0.4 | 0-4 feet | Water was encountered approximately 1 foot below ground surface. Overlying layers consisted of tight clayey silts and topsoil.   |

| <b>WEYBRIDGE SCHOOL</b>        |                    |            |   |                      |  |   |
|--------------------------------|--------------------|------------|---|----------------------|--|---|
| <b>Monitory Well Test Data</b> |                    |            |   |                      |  |   |
| <b>MW #</b>                    | <b>Sample Time</b> | <b>PID</b> | <b>Water level below ground surface</b> | <b>Volume Purged</b> | <b>Notes</b>   | <b>Total depth below ground surface</b> |
| 1                              | 15:15              | 0.4        | 1.2 feet                                | 2 gals               | 6" brown soil with tight silty clays. Coarse sands, sewer odor                           | 3 feet                                  |
| 2                              | 15:30              | 0.6        | 0.9 feet                                | 1 gl                 | 6" brown soil with tight clays, light brown silt in water sample                         | 4 feet                                  |
| 3                              | 15:45              | 0.6        | 2.8 feet                                | None                 | 6" of brown soil with tight silty clays. Enough water for sample only, light brown silt. | 3 feet                                  |

[U:\DREES\WPDOCS\WEYBR.M2]



**ENDYNE, INC.**

**Laboratory Services**

32 James Brown Drive  
Williston, Vermont 05495  
(802) 879-4333  
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: Nelson, Heindel & Noyes  
PROJECT NAME: Weybridge Elem. School  
DATE REPORTED: June 5, 1996  
DATE SAMPLED: May 15, 1996

PROJECT CODE: NHWE1824  
REF. #: 89,213 - 89,214

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody record.

Chain of custody indicated sample preservation with Sodium Azide.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

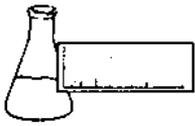
Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Reviewed by,

Harry B. Locker, Ph.D.  
Laboratory Director

enclosures



**ENDYNE, INC.**

Laboratory Services

32 James Brown Drive  
Williston, Vermont 05495  
(802) 879-4333  
FAX 879-7103

LABORATORY REPORT

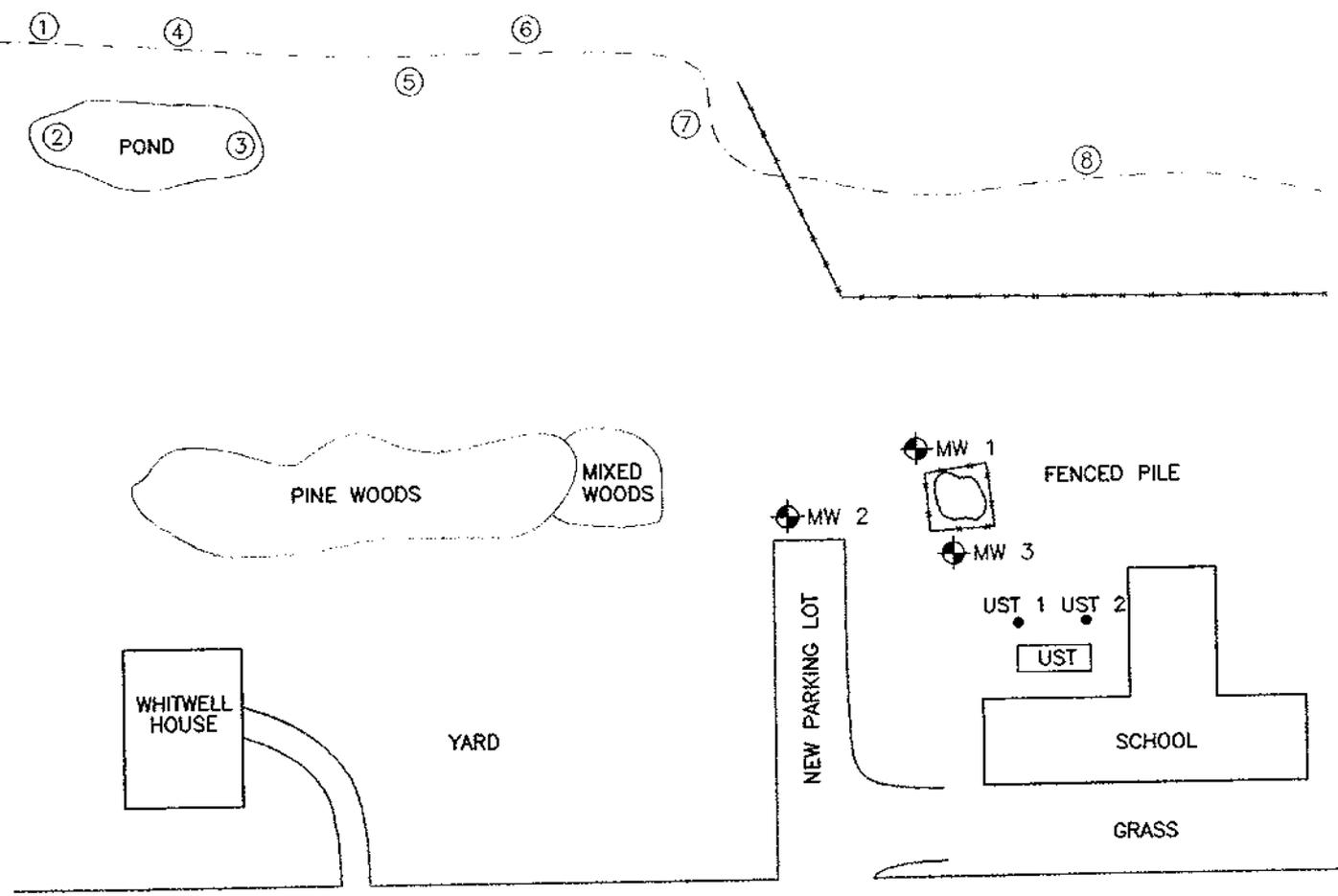
TOTAL PETROLEUM HYDROCARBONS (TPH) BY MODIFIED EPA METHOD 8100

DATE: June 5, 1996  
CLIENT: Nelson, Heindel & Noyes  
PROJECT: Weybridge Elem. School  
PROJECT CODE: NHWE1824  
COLLECTED BY: D. Reese  
DATE SAMPLED: May 15, 1996  
DATE RECEIVED: May 21, 1996

| <u>Reference #</u> | <u>Sample ID</u> | <u>Concentration<br/>(mg/L as received)<sup>1</sup></u> |
|--------------------|------------------|---|
| 89,213             | Pond Outflow     | ND <sup>2</sup>   |
| 89,214             | Pond Inflow      | ND  |

Notes:

- 1 Method detection limit is 1.0 mg/L.
- 2 None detected



LEGEND:

-  MW 1 MONITOR WELL
-  UST 1 SOIL SAMPLE
-  ① SURFACE WATER SAMPLE

**WEYBRIDGE ELEMENTARY UST**  
 WEYBRIDGE, VERMONT  
**SITE MAP**  
 SCALE: NOT TO SCALE      FILE: C:\WEYBRID\SITEMAP

DATE: JUNE 14, 1996  
 PROJECT NO. 96118  
 DRAWN BY: C. Hardy  
 PROJ. MGR: J. Noyes  
 APPROVED: J. Noyes  
 DRAFT       FINAL

**Nelson, Heindel, and Noyes**  
 • Hydrogeology • Ecology •  
 • Environmental Engineering •  
 CONSULTING SCIENTISTS AND ENGINEERS  
 P.O. BOX 64709  
 BURLINGTON, VERMONT 05406-4709  
 Prepared By:  
 Information & Visualization Services



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 207 KING STREET  
 BURLINGTON, VERMONT 05401  
 802-658-1953

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**STRUCTURAL**  
 Lows Consulting Engineers  
 Williston, Vermont  
 (802) 878-8897

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 Shelburne, Vermont  
 (802) 985-8861

**ELECTRICAL**  
 William Bissell  
 Underhill, Vermont  
 (802) 899-4619

**REVISIONS**

**PROJECT**  
**WEYBRIDGE ELEMENTARY SCHOOL**  
 WEYBRIDGE VERMONT

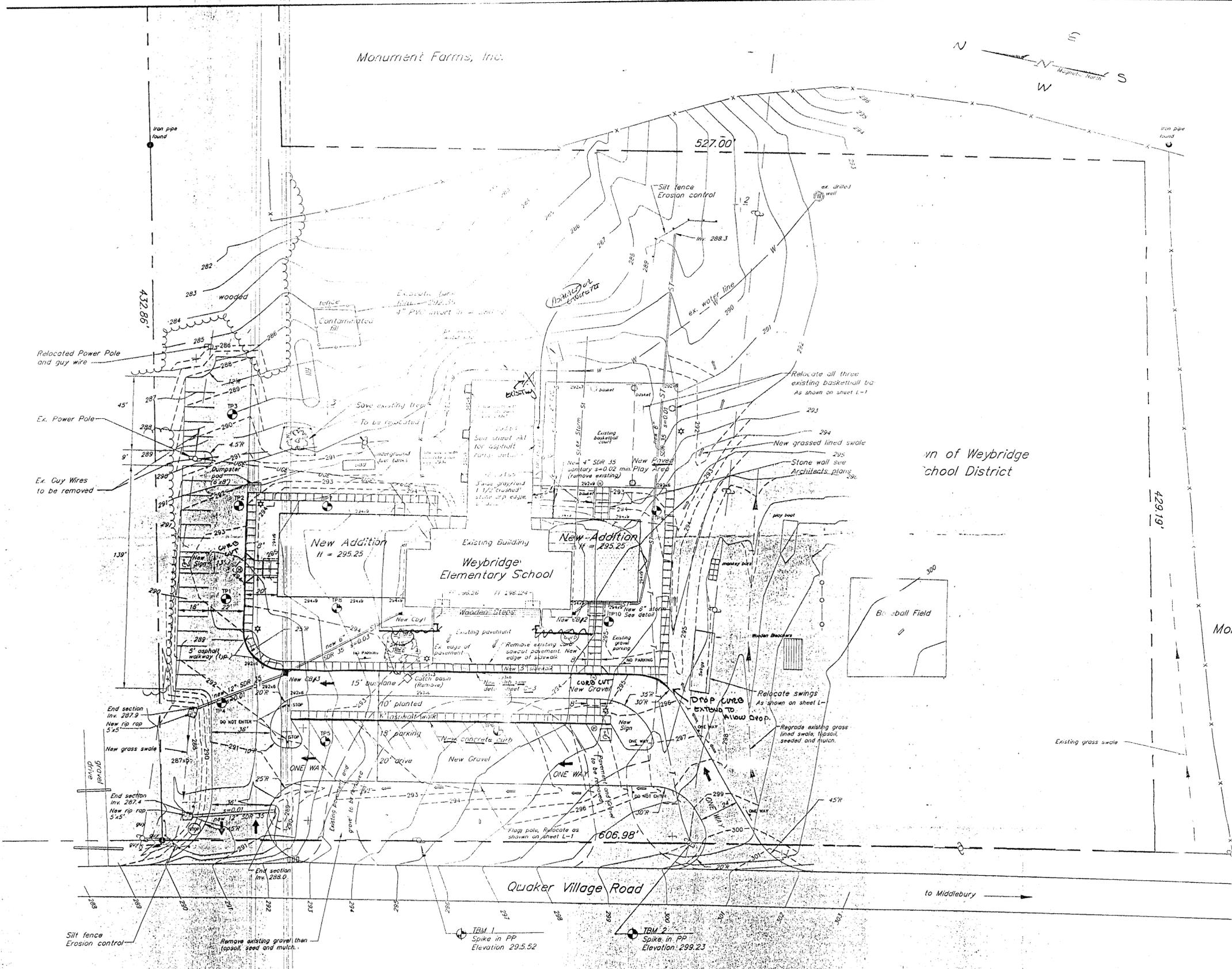
**RENOVATIONS AND ADDITIONS**

DATE: 12/15/95  
 SCALE: 1" = 30'  
 DRAWN: MRT/WHN  
 CHECKED: WHN  
 PROJECT NO.: 95148  
SCHOOL 30 DWG

**SITE PLAN & DETAILS**

**C-1**

Monument Farms, Inc.



**Legend**

- concrete monument found
- iron pipe found
- utility pole
- water shut off
- water line gate valve
- survey control point
- sign
- handicap parking space with new sign
- new concrete curb with handicap curb cut
- new bituminous sidewalk
- underground telephone line
- drainage way
- approx. property line / right of way
- ex. contour interval
- new finish contour
- temporary bench mark
- existing sanitary sewer
- new sanitary sewer
- existing water line
- new water line
- existing storm line
- new storm line
- new utility
- new underground electrical

**Notes**

1. Elevations are based on an assumed datum.
2. The pavement in the existing entrance roads to the school is in very bad repair. It is difficult to distinguish between pavement and gravel in those areas.
3. The location of underground utilities is not warranted to be exact or complete. The underground telephone line to the south side of the building is shown as marked by Dig Safe. No other Dig Safe markings were found on the site. There is a sign on PPS9 indicating that an underground fiber optics cable runs along the existing Quaker Village Road.
4. The boundary lines shown were taken from a plat entitled Plan of Land owned by Monument Farms, Inc. by Donald B. Burchard dated August 16, 1991.
5. Some existing utility information obtained from a plat entitled Site Plan, sheet 1 of 1, prepared by Phelps Engineering, Inc. last revised 9/20/93.
6. See detail sheet for sign details.
7. See Architect drawings for site lighting base detail.

**New Catch Basin Schedule**

| NEW CB#1             | NEW CB#2             | NEW CB#3              |
|----------------------|----------------------|-----------------------|
| rim 294.30           | rim 294.30           | rim 292.40            |
| inv. out 291.00 (6") | inv. out 291.00 (6") | inv. in 288.60 (6")   |
|                      |                      | inv. out 288.50 (12") |



BAR SCALE 1" = 30'