

**DRAFT  
REMEDIAL INVESTIGATION**

**BALDWIN PLACE MALL  
SOMERS, NEW YORK**

**Volume 2  
Figures**

**Prepared for  
Big V Supermarkets, Inc.  
Florida, New York**

**FEBRUARY 1994**

**VINCENT UHL ASSOCIATES  
1078 Taylorsville Road  
Washington Crossing, Pennsylvania 18977**

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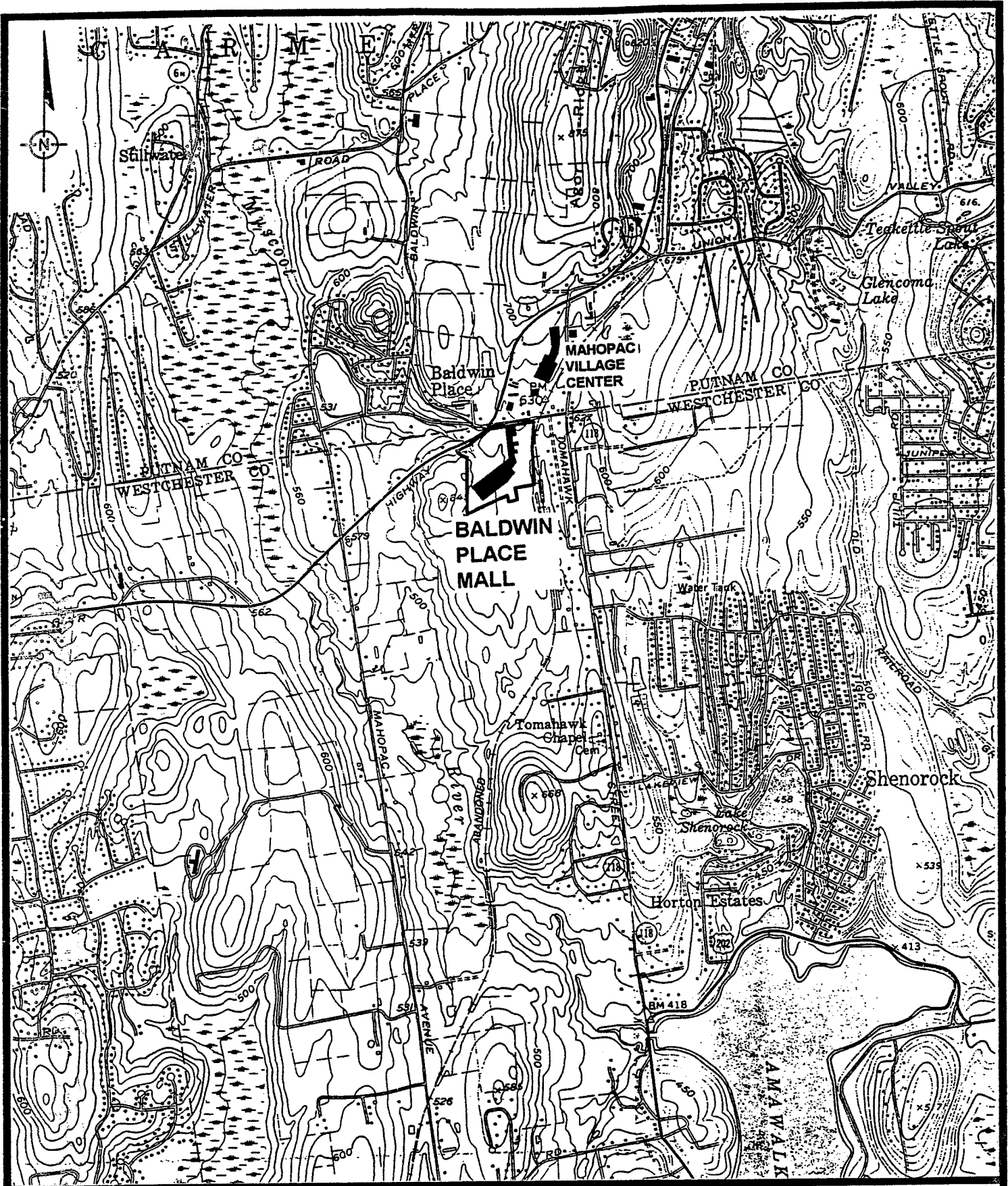


FIGURE 1-1

LOCATION OF THE BALDWIN PLACE MALL  
SOMERS, NEW YORK





LEGEND	
	STREAM
	580 TOPOGRAPHIC CONTOURS IN FEET, MSL
	PW-1 MALL PRODUCTION WELL

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 BALDWIN PLACE MALL AND VICINITY  
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PREPARED BY: JAB	JOB No.:	FIGURE
DATE: 2-9-94	SCALE: 1" = 200'	2-1

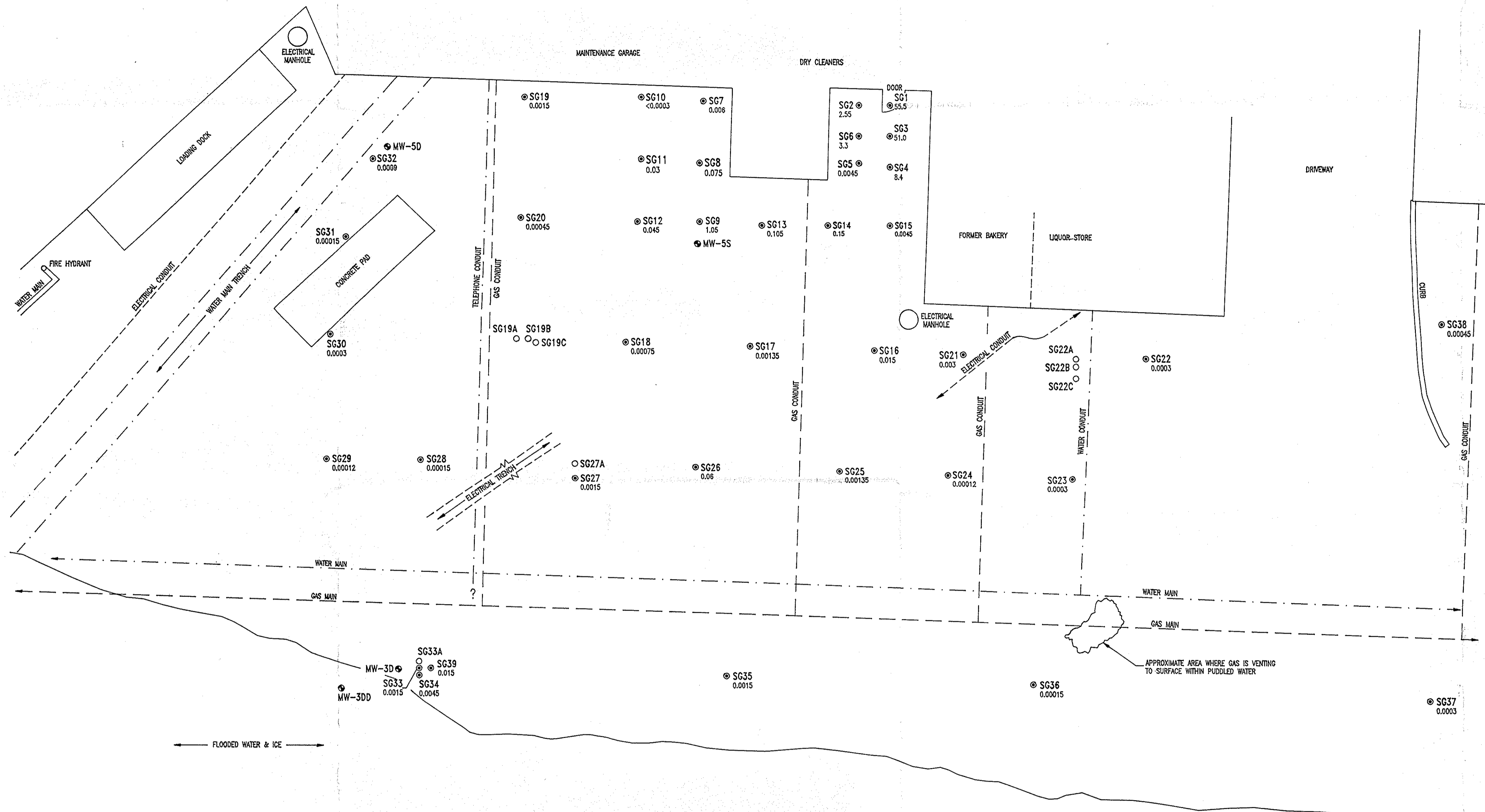
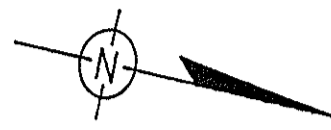
FIGURE 3-1. CHRONOLOGY OF REMEDIAL INVESTIGATION FIELD PROGRAM; BALDWIN PLACE, SOMERS, NEW YORK.

RI/FIELD ACTIVITY	PERFORMANCE DATE	1992												1993											
		JULY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC						
INSTALLATION AND DEVELOPMENT OF 13 RI MONITORING WELLS	07/27/92-08/15/92	■																							
COLLECTION OF BEDROCK CORE	08/11/92																								
SAMPLING OF RI MONITORING WELLS (FIRST ROUND)	08/31/92-09/02/92			■																					
FIELD GEOLOGIC RECONNAISSANCE	12/12/92 & 03/10/93 & 11/11/93																								
SOIL GAS SURVEY	01/20/93-01/22/93																								
SAMPLING OF MEADOW PARK ROAD RESIDENTIAL WELLS AND BPM SUPPLY WELLS	02/24/93																								
SAMPLING OF ROUTE 6 COMMERCIAL WELLS	03/11/93 & 04/22/93																								
TEST BORING/SOIL SAMPLING PROGRAM	04/12/93-04/14/93																								
INSTALLATION AND DEVELOPMENT OF 6 SUPPLEMENTAL RI MONITORING WELLS	04/12/93-04/28/93																								
SAMPLING OF RI MONITORING WELLS (SECOND ROUND)	05/18/93-05/21/93																								
SURFACE WATER AND SEDIMENT SAMPLING	06/02/93 & 10/15/93 & 12/08/93																								
AQUIFER PUMPING TEST (PW-1) AND RELATED MONITORING	06/02/93-06/30/93 (U)																								
REGIONAL WATER-LEVEL SURVEY	08/18/93																								
SOURCE AREA ADDITIONAL DATA COLLECTION PROGRAM FIELD ACTIVITY																									
TEST BORING/SOIL SAMPLING PROGRAM	11/15/93-11/19/93 & 11/29/93-12/03/93																								
INSTALLATION OF 2 SOURCE AREA MONITORING WELLS	11/15/93-11/19/93																								
SAMPLING OF SOURCE AREA MONITORING WELLS	12/22/93																								

(a) 48-Hour Pumping Test Run on 06/28 and 06/29/93.

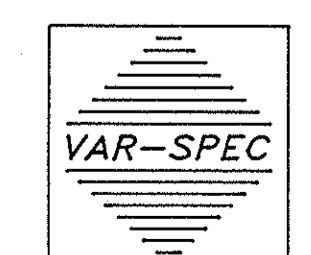
TASK ACTIVITY

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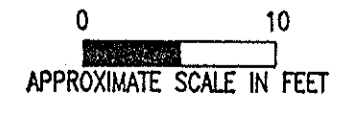


**LEGEND**

- ⊙ SG1 SOIL GAS SAMPLING LOCATION
- 56.5 INDICATES TETRACHLOROETHYLENE (PCE) CONCENTRATION IN PARTS PER MILLION BY VOLUME (PPMV)
- SG22A ABANDONED SOIL GAS SAMPLING LOCATION
- MW-3DD GROUNDWATER MONITORING WELL LOCATION
- GAS UTILITY CONDUIT
- WATER UTILITY CONDUIT
- ELECTRICAL CONDUIT
- TELEPHONE CONDUIT

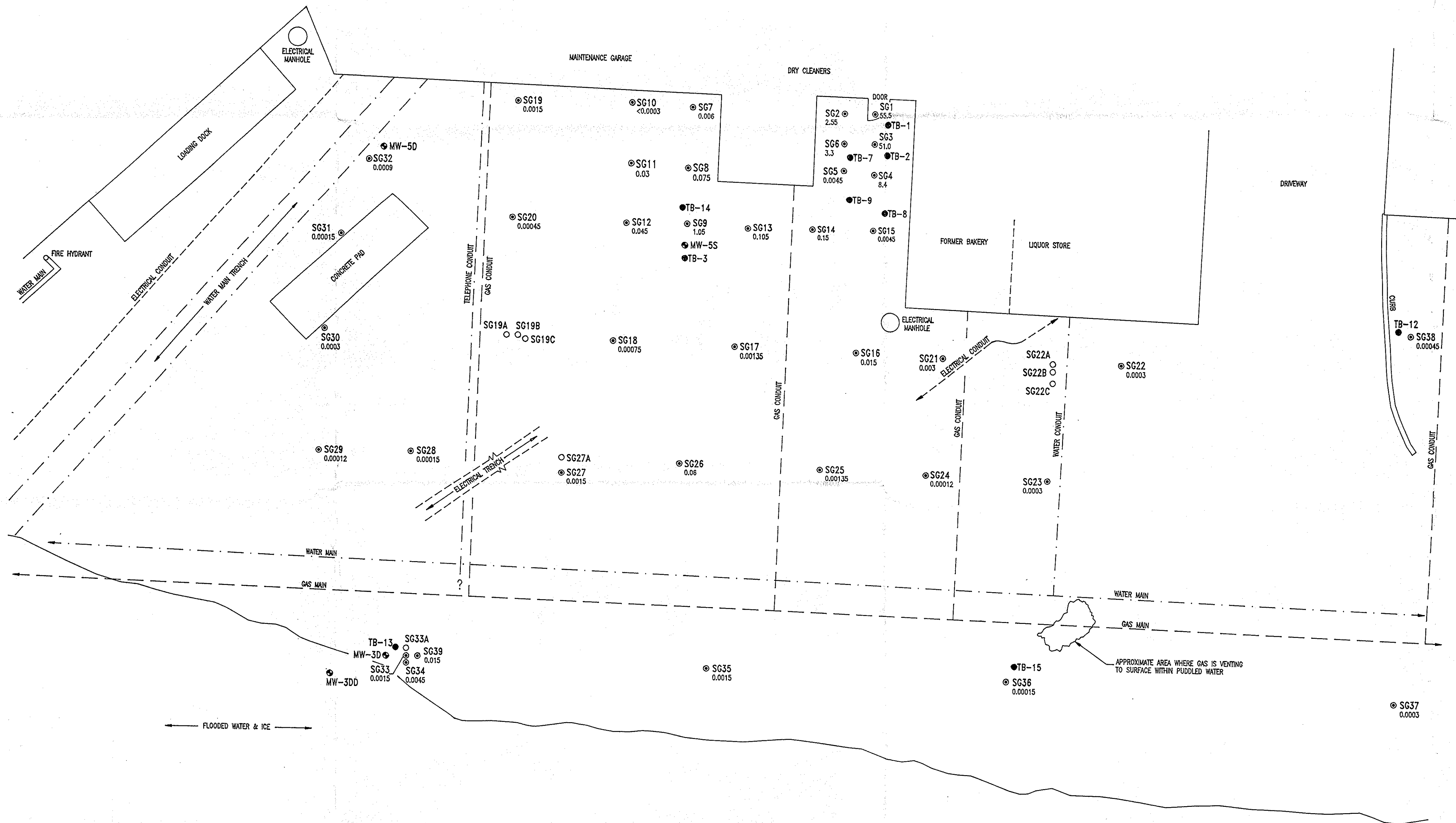
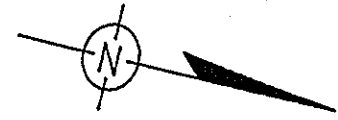


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SOIL GAS SURVEY SAMPLING LOCATIONS AND  
PCE CONCENTRATIONS IN PPMV  
BALDWIN PLACE MALL, SOMERS, NEW YORK

DATE: 2-7-94  
FIGURE  
3-2



← FLOODED WATER & ICE →



**LEGEND**

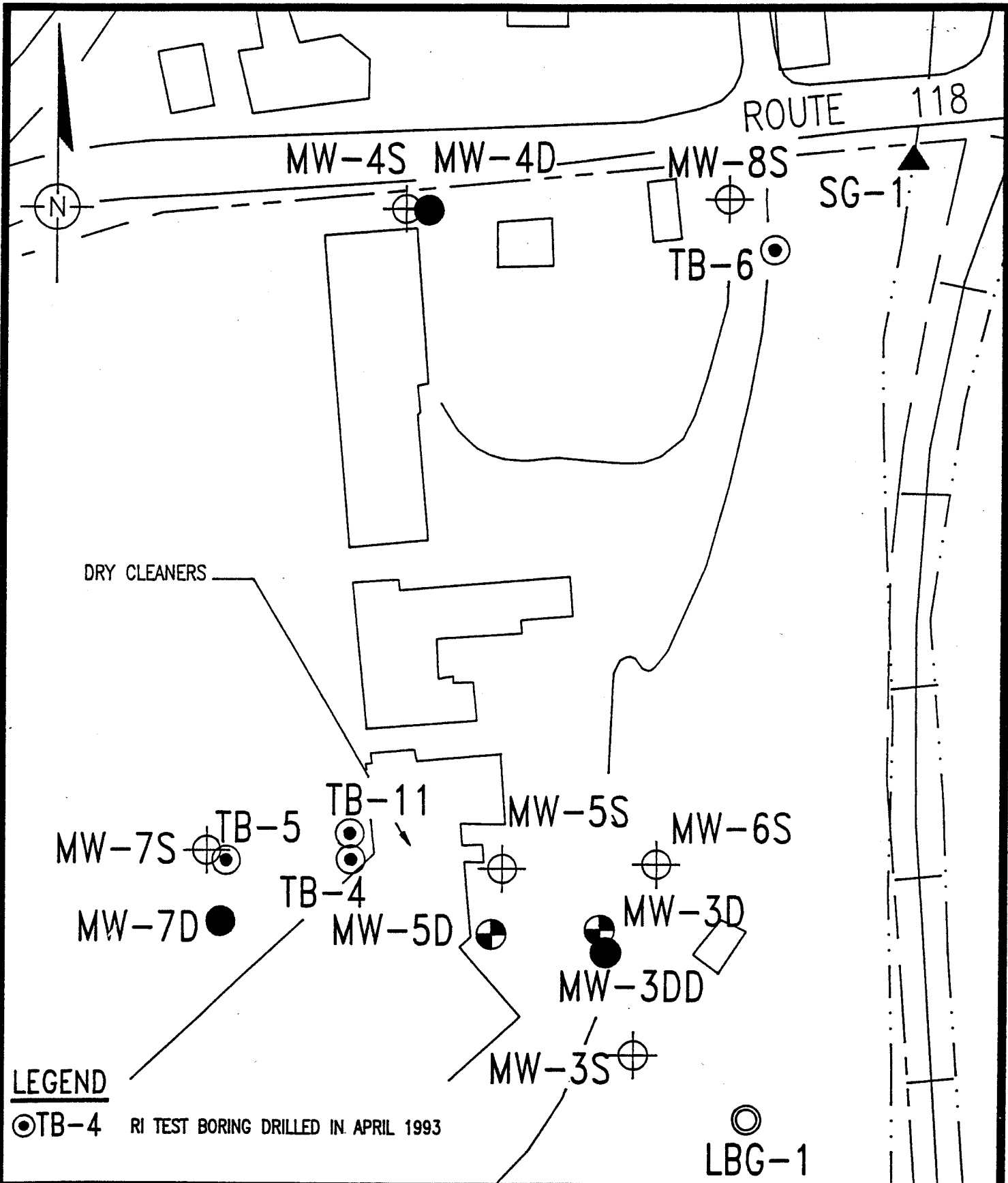
- ⊙ SG1 SOIL GAS SAMPLING LOCATION
- 55.5 INDICATES TETRACHLOROETHYLENE (PCE) CONCENTRATION IN PARTS PER MILLION BY VOLUME (PPMV)
- SG22A ABANDONED SOIL GAS SAMPLING LOCATION
- MW-3DD GROUNDWATER MONITORING WELL LOCATION
- TB-1 RI TEST BORING DRILLED IN APRIL 1993
- GAS UTILITY CONDUIT
- WATER UTILITY CONDUIT
- ELECTRICAL CONDUIT
- TELEPHONE CONDUIT



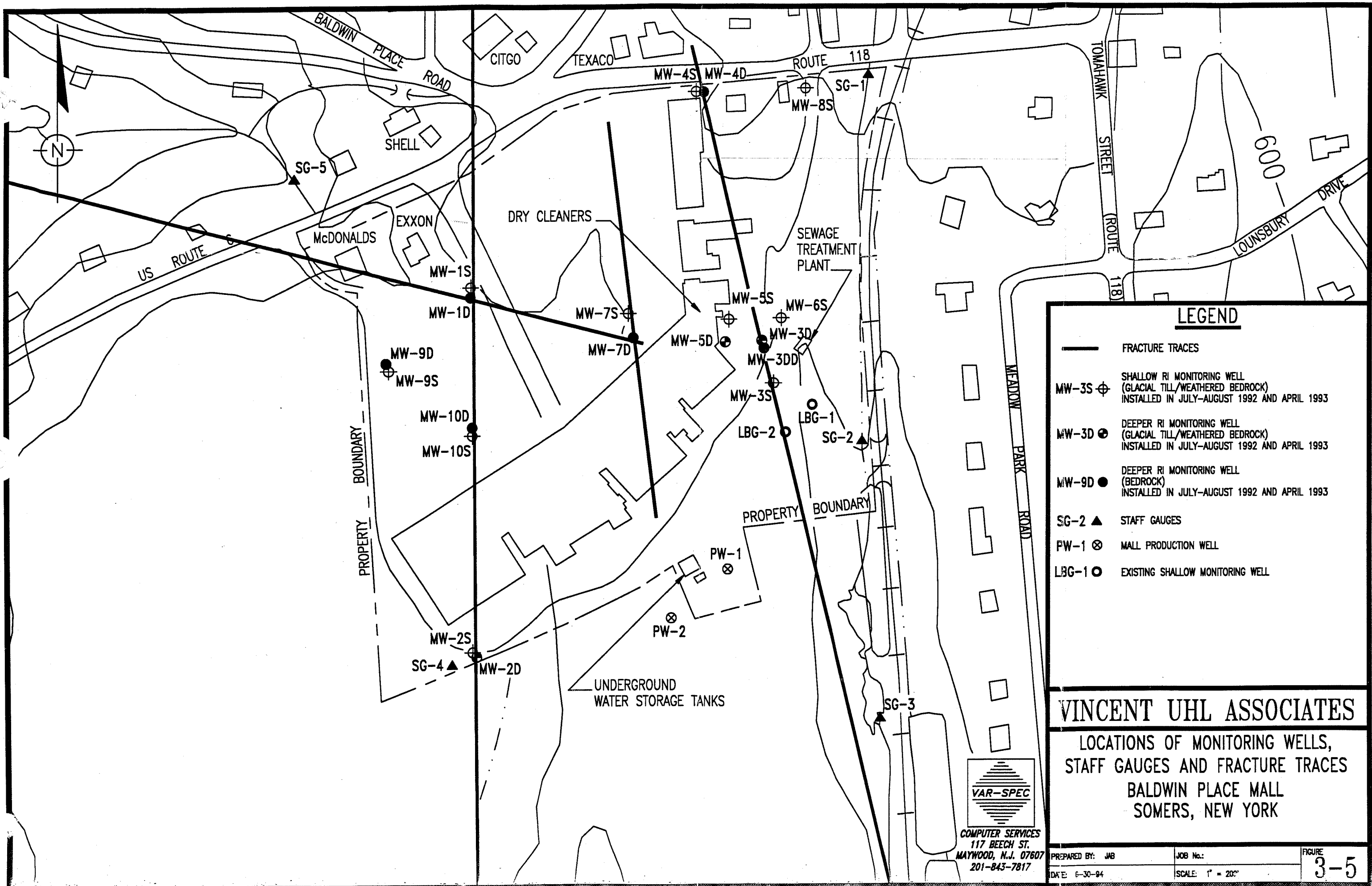
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LOCATIONS OF RI TEST BORINGS BEHIND DRY CLEANERS AND EAST OF BUILDING BALDWIN PLACE MALL, SOMERS, NEW YORK

DATE: 2-7-94  
FIGURE 3-3



**FIGURE 3-4 LOCATIONS OF RI TEST BORINGS IN FRONT OF DRY CLEANERS WEST OF BUILDING AND AT BACKGROUND LOCATION**  
 DATE: 2-9-94  
 SCALE: 1" = 100'



**LEGEND**

- FRACTURE TRACES
- MW-3S ⊕ SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-3D ● DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-9D ● DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- SG-2 ▲ STAFF GAUGES
- PW-1 ⊗ MALL PRODUCTION WELL
- LBG-1 ○ EXISTING SHALLOW MONITORING WELL

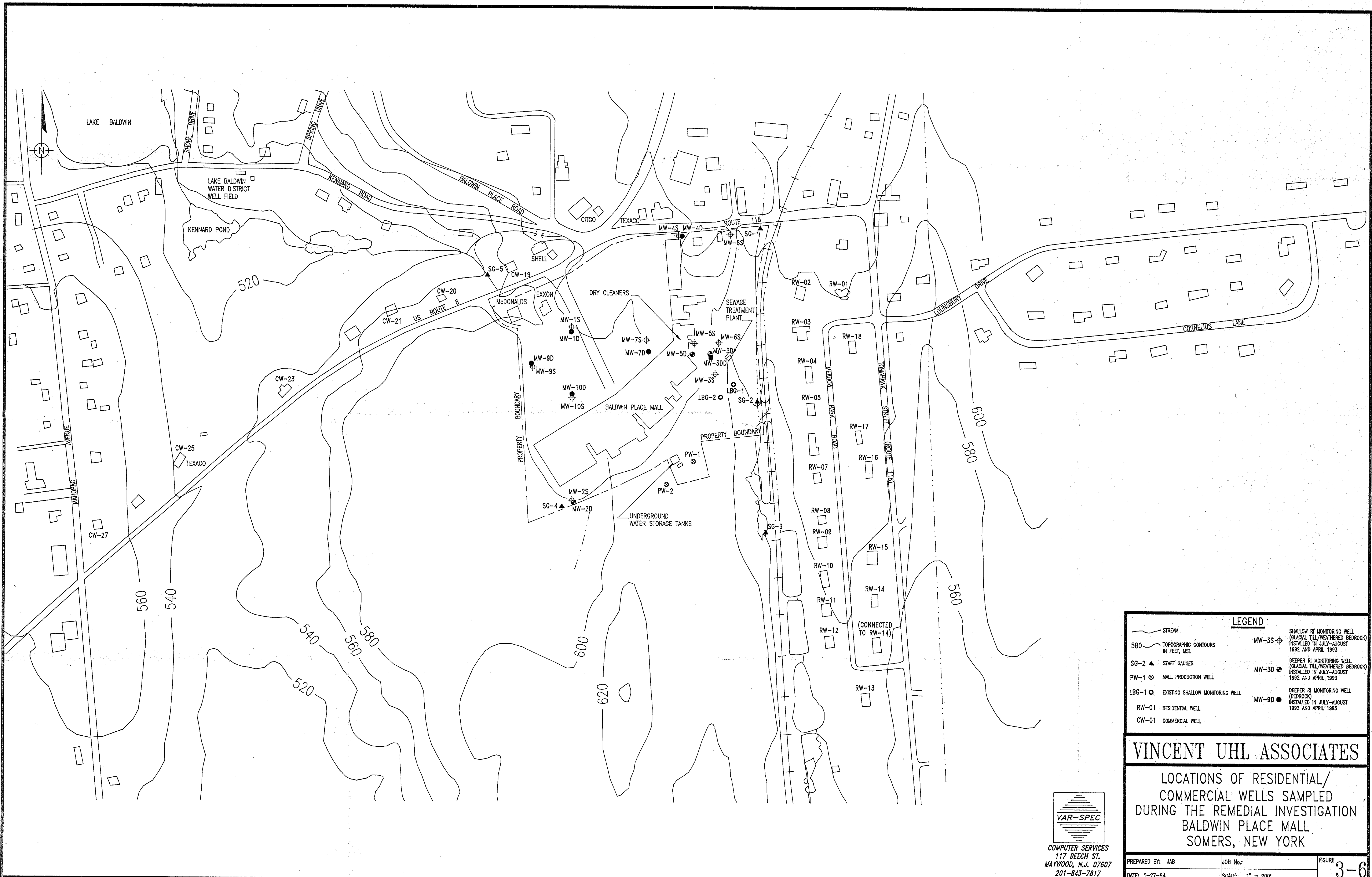
**VINCENT UHL ASSOCIATES**  
 LOCATIONS OF MONITORING WELLS,  
 STAFF GAUGES AND FRACTURE TRACES  
 BALDWIN PLACE MALL  
 SOMERS, NEW YORK



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PREPARED BY: JAB	JOB No.:	FIGURE
DATE: 6-30-94	SCALE: 1" = 200'	<b>3-5</b>





LEGEND	
—	STREAM
580	TOPOGRAPHIC CONTOURS IN FEET, MSL
SG-2 ▲	STAFF GAUGES
PW-1 ⊗	MALL PRODUCTION WELL
LBG-1 ○	EXISTING SHALLOW MONITORING WELL
RW-01	RESIDENTIAL WELL
CW-01	COMMERCIAL WELL
MW-3S ⊕	SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
MW-3D ⊕	DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
MW-9D ⊕	DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993

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LOCATIONS OF RESIDENTIAL/  
COMMERCIAL WELLS SAMPLED  
DURING THE REMEDIAL INVESTIGATION  
BALDWIN PLACE MALL  
SOMERS, NEW YORK

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PREPARED BY: JAB	JOB No.:	FIGURE
DATE: 1-27-94	SCALE: 1" = 200'	3-6





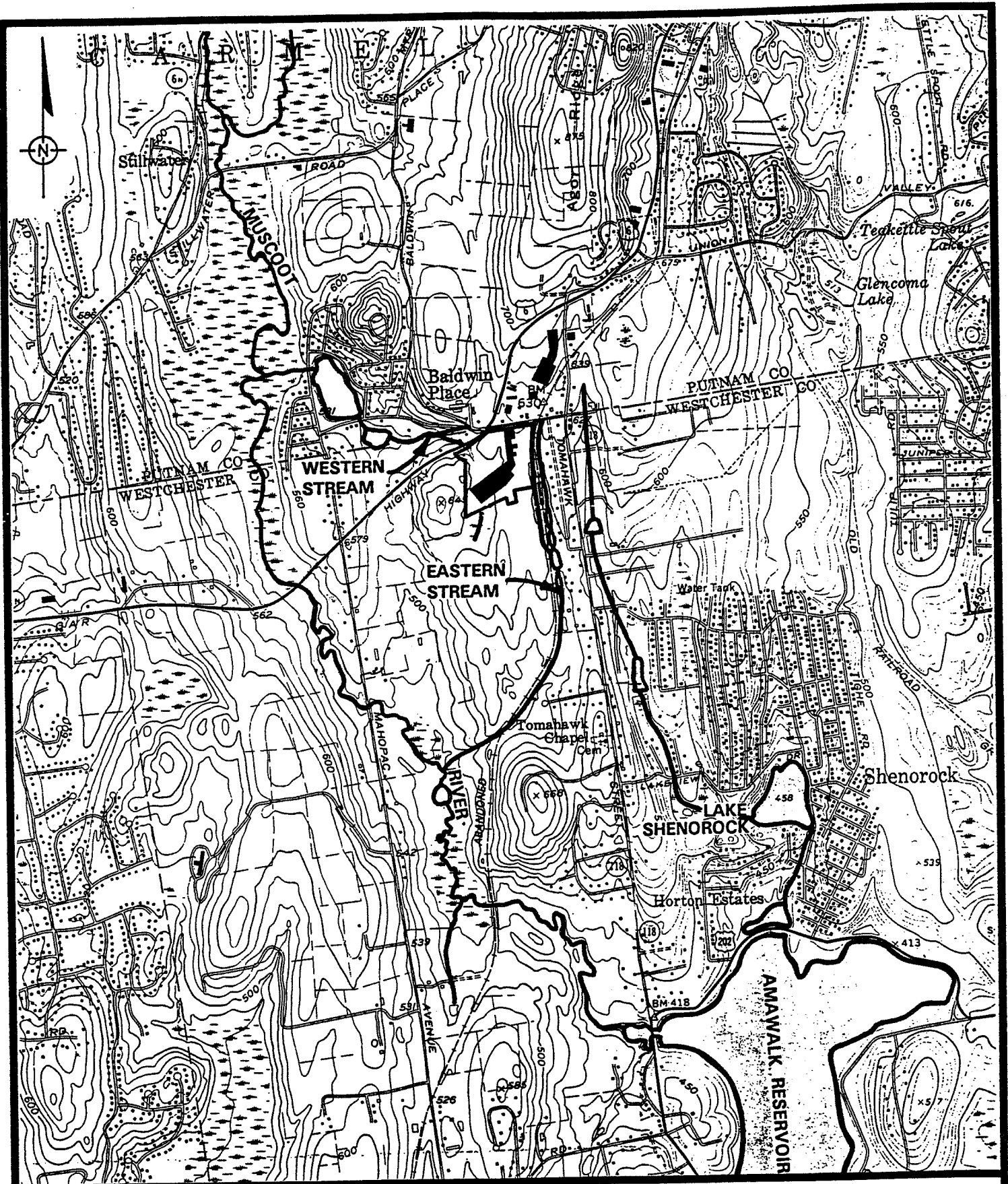
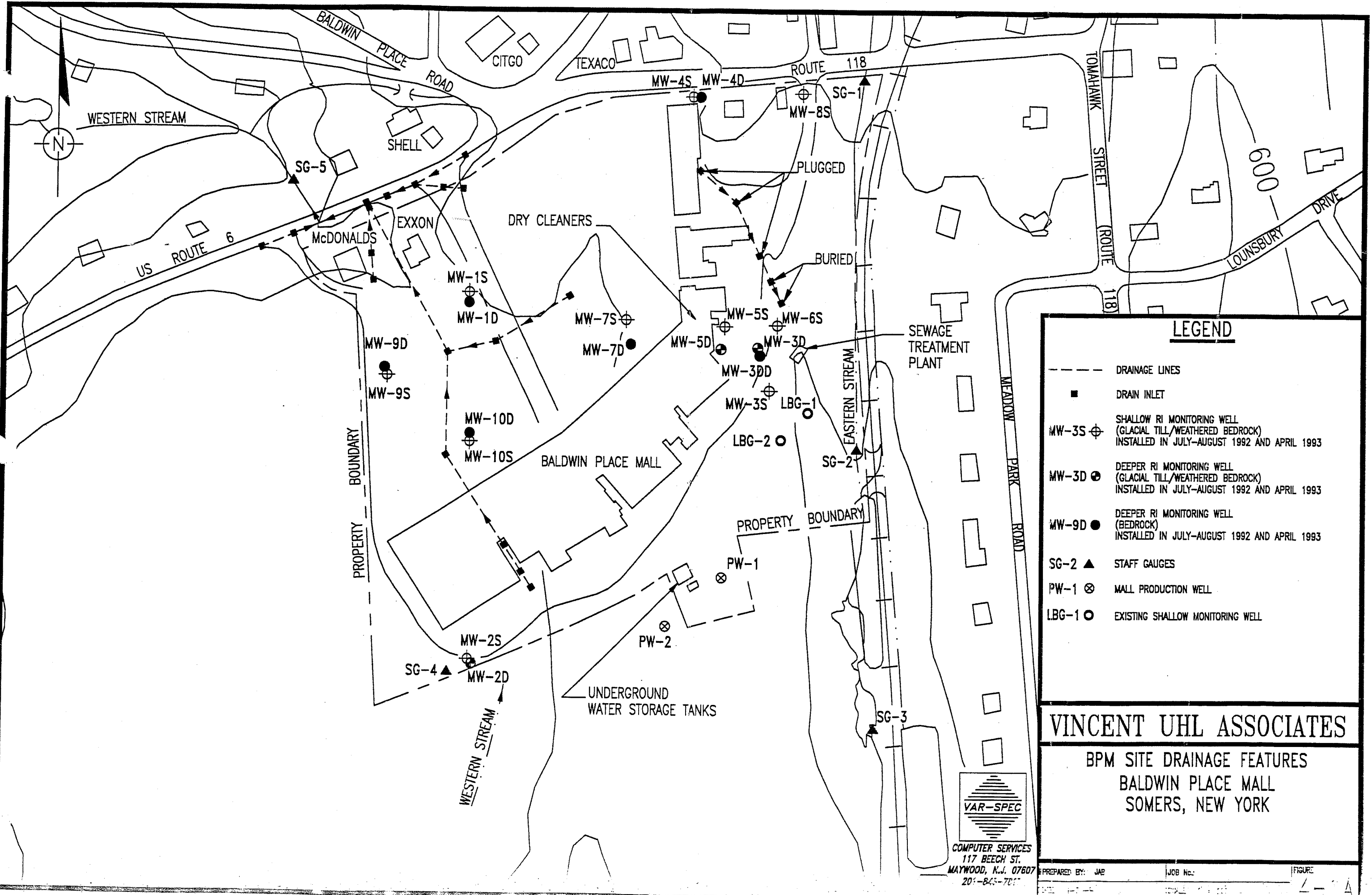


FIGURE 4-1 SURFACE WATER FEATURES IN THE BPM AREA




**LEGEND**

- DRAINAGE LINES
- DRAIN INLET
- MW-3S ⊕ SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-3D ⊕ DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-9D ● DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- SG-2 ▲ STAFF GAUGES
- PW-1 ⊗ MALL PRODUCTION WELL
- LBG-1 ○ EXISTING SHALLOW MONITORING WELL

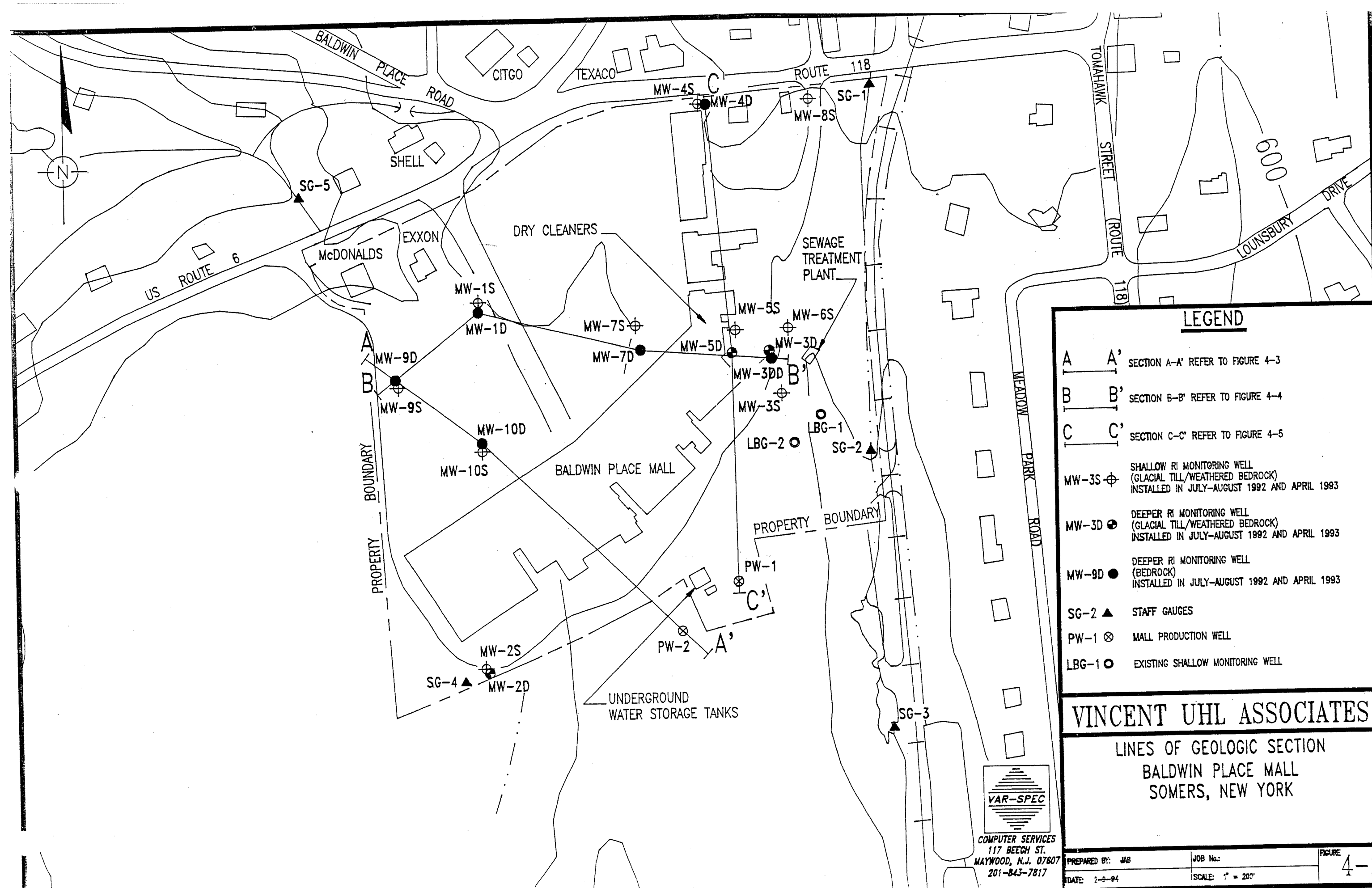
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BPM SITE DRAINAGE FEATURES  
BALDWIN PLACE MALL  
SOMERS, NEW YORK



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PREPARED BY: JAB      JOB No:      FIGURE: 1-1



**LEGEND**

- A A' SECTION A-A' REFER TO FIGURE 4-3
- B B' SECTION B-B' REFER TO FIGURE 4-4
- C C' SECTION C-C' REFER TO FIGURE 4-5
- MW-3S ⊕ SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-3D ● DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-9D ● DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- SG-2 ▲ STAFF GAUGES
- PW-1 ⊗ MALL PRODUCTION WELL
- LBG-1 ○ EXISTING SHALLOW MONITORING WELL

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LINES OF GEOLOGIC SECTION  
BALDWIN PLACE MALL  
SOMERS, NEW YORK

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PREPARED BY: JAB	JOB No.:	FIGURE <b>4-2</b>
DATE: 2-8-84	SCALE: 1" = 200'	

SOUTHEAST

A'

PW-2  
ELEV. 610.32

GROUND SURFACE

MW-100  
ELEV. 800.52

MW-99  
ELEV. 805.99

SILTY SANDY TILL  
AND  
SILTY TILL WITH SAND

PARTIALLY WEATHERED  
GRANITIC GNEISS

PRESUMED TOP OF  
PARTIALLY WEATHERED  
GRANITIC GNEISS

BOTTOM OF CASING

COMPETENT/PARTIALLY  
WEATHERED GRANITIC  
GNEISS

TOTAL BLOW OUT YIELD  
3 GPM

TOTAL BLOW OUT YIELD  
4.5 GPM

TOTAL BLOW OUT YIELD  
9 GPM

6" CASING  
SET

WET CUTTINGS

BOH

HIGHLY WEATHERED  
GNEISS

BLOW OUT YIELD  
2 GPM

TOTAL BLOW OUT YIELD  
3 GPM

TOTAL BLOW OUT YIELD  
4.5 GPM

TOTAL BLOW OUT YIELD  
8 GPM

6" CASING  
SET

BLOW OUT YIELD  
1.5 GPM

COMPETENT  
GRANITIC GNEISS

BOH

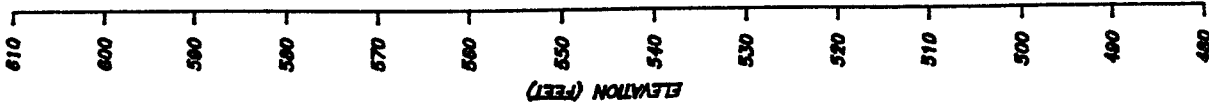
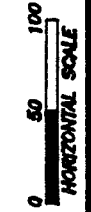
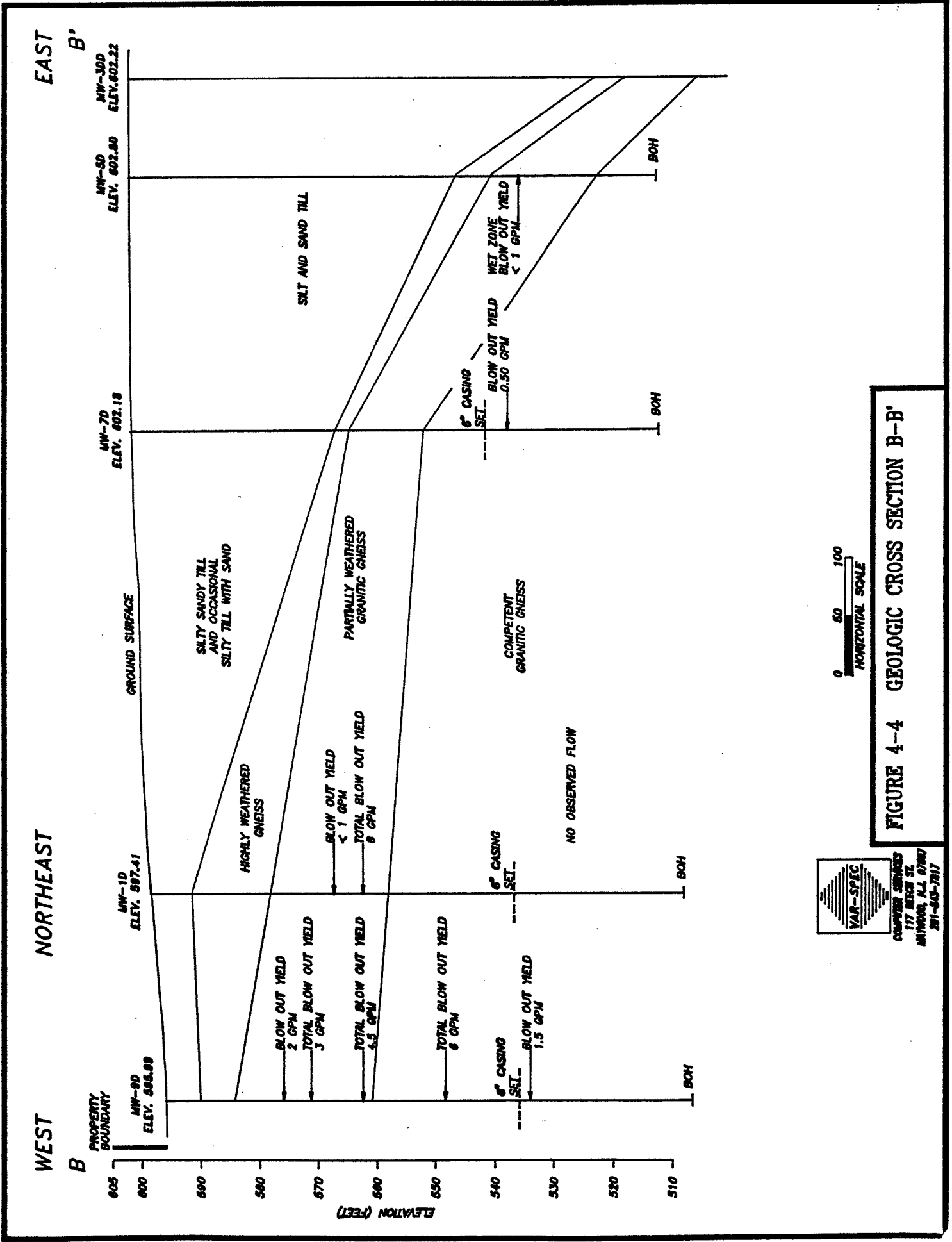


FIGURE 4-3 GEOLOGIC CROSS SECTION A-A'

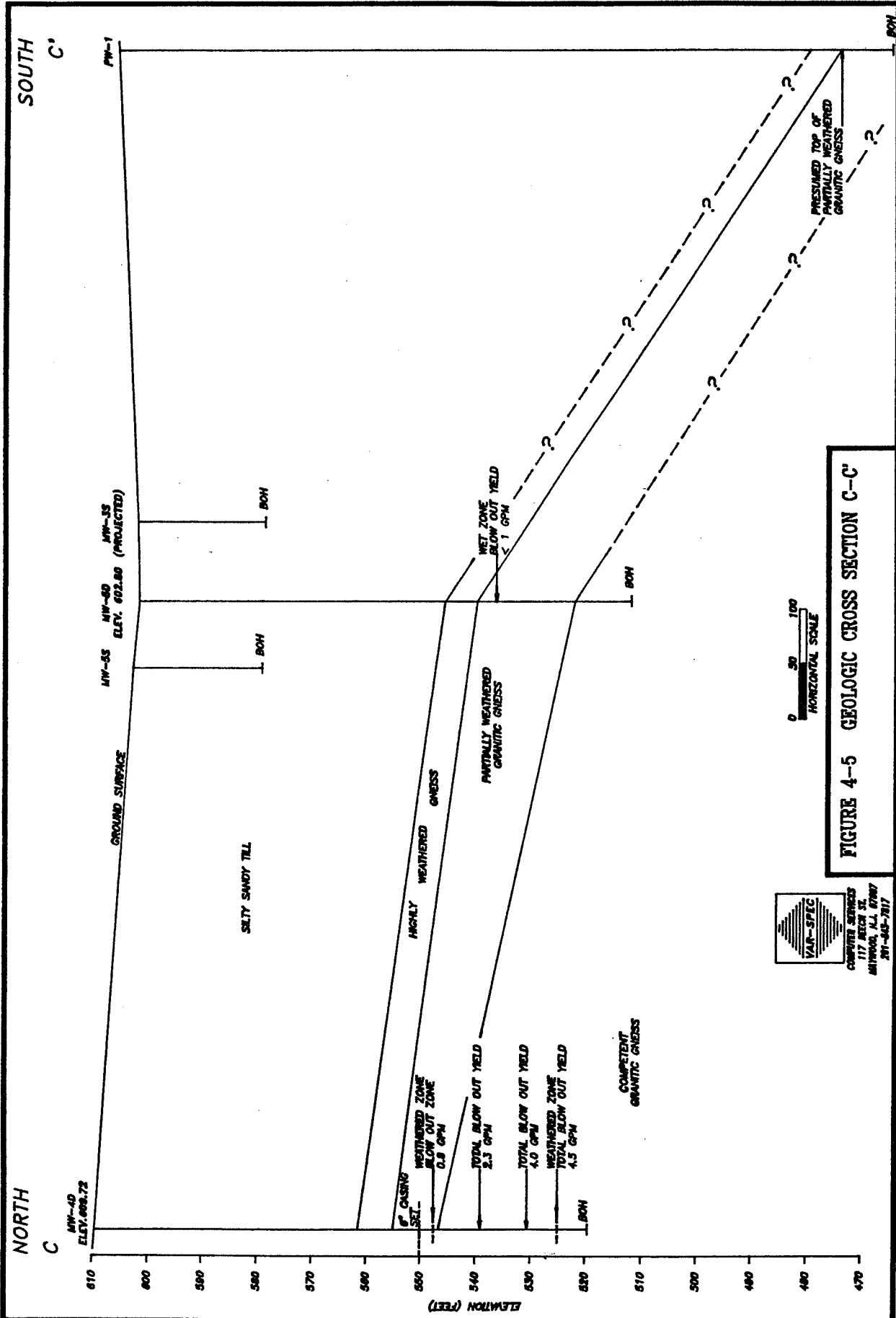


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261-50-7017

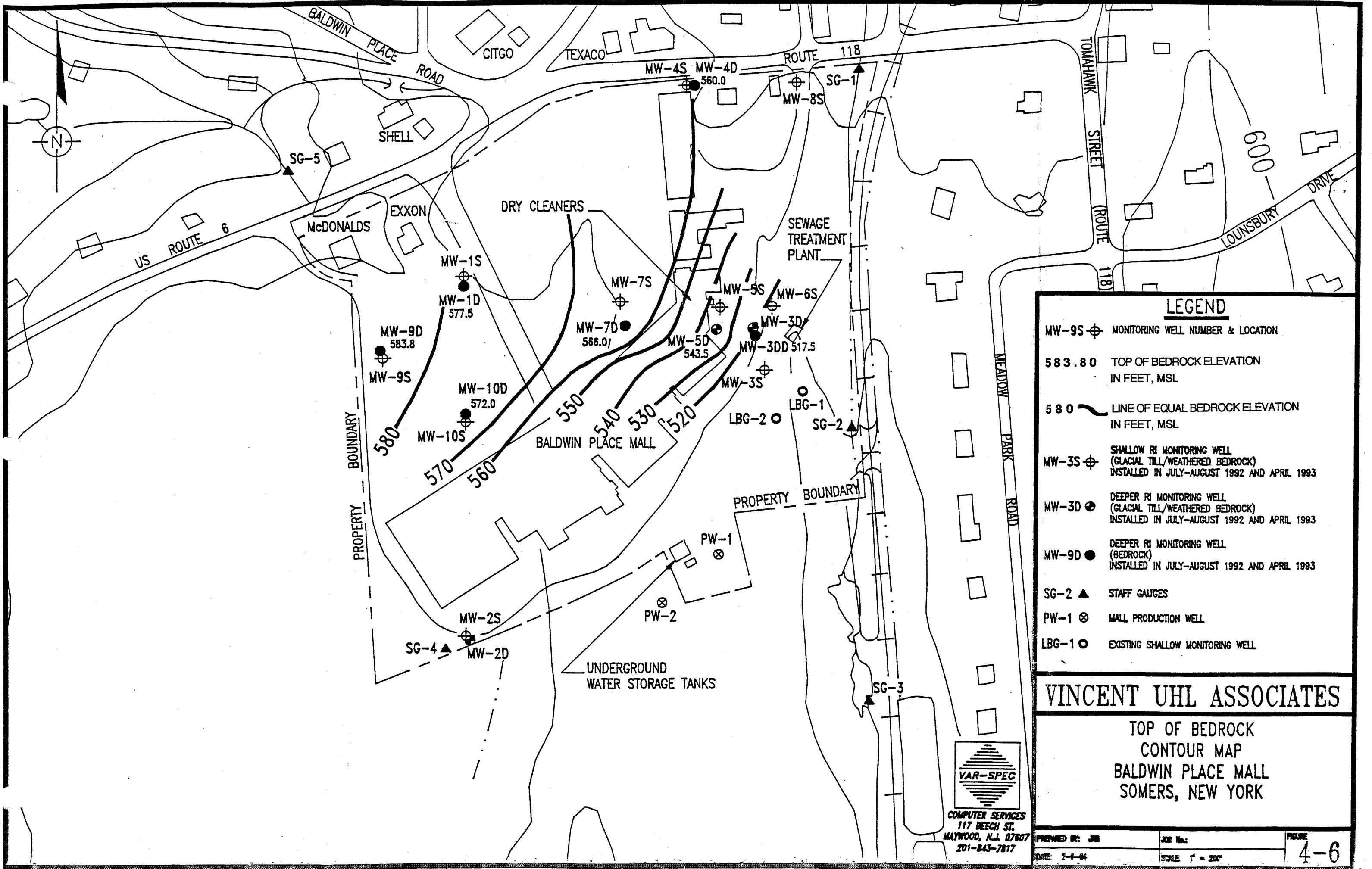
**FIGURE 4-4 GEOLOGIC CROSS SECTION B-B'**




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0 50 100  
 HORIZONTAL SCALE

FIGURE 4-5 GEOLOGIC CROSS SECTION C-C'



**LEGEND**

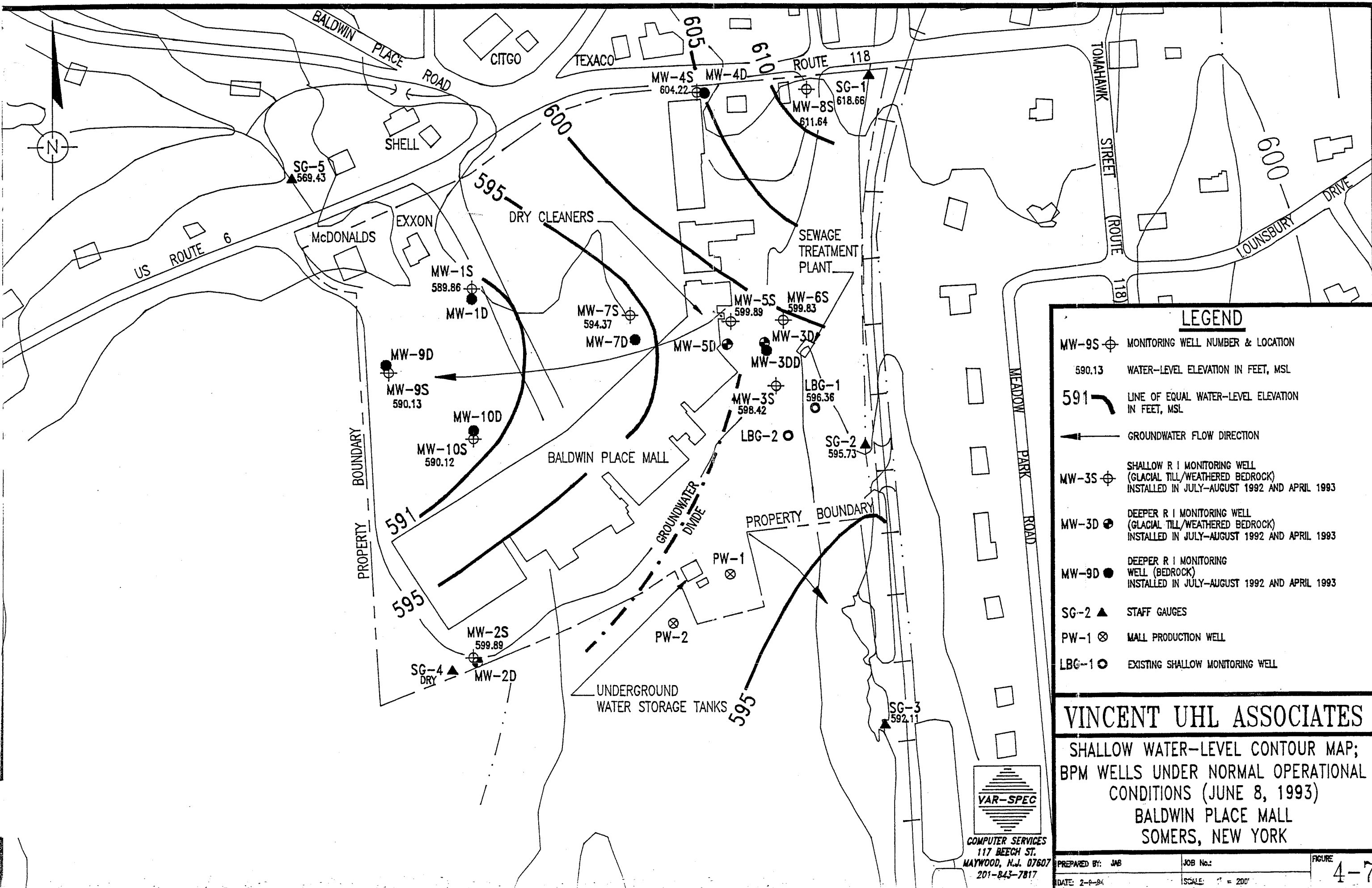
- MW-9S ⊕ MONITORING WELL NUMBER & LOCATION
- 583.80 TOP OF BEDROCK ELEVATION IN FEET, MSL
- 580 LINE OF EQUAL BEDROCK ELEVATION IN FEET, MSL
- MW-3S ⊕ SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-3D ⊕ DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-9D ● DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- SG-2 ▲ STAFF GAUGES
- PW-1 ⊗ MALL PRODUCTION WELL
- LBG-1 ○ EXISTING SHALLOW MONITORING WELL

**VINCENT UHL ASSOCIATES**

TOP OF BEDROCK  
CONTOUR MAP  
BALDWIN PLACE MALL  
SOMERS, NEW YORK

  
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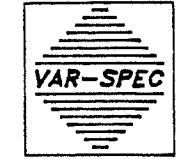
PREPARED BY: JMB	JOB No.:	FIGURE
DATE: 2-4-94	SCALE: 1" = 200'	4-6



### LEGEND

- MW-9S ⊕ MONITORING WELL NUMBER & LOCATION
- 590.13 WATER-LEVEL ELEVATION IN FEET, MSL
- 591 LINE OF EQUAL WATER-LEVEL ELEVATION IN FEET, MSL
- GROUNDWATER FLOW DIRECTION
- MW-3S ⊕ SHALLOW R I MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-3D ⊕ DEEPER R I MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-9D ● DEEPER R I MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- SG-2 ▲ STAFF GAUGES
- PW-1 ⊗ MALL PRODUCTION WELL
- LBG-1 ○ EXISTING SHALLOW MONITORING WELL

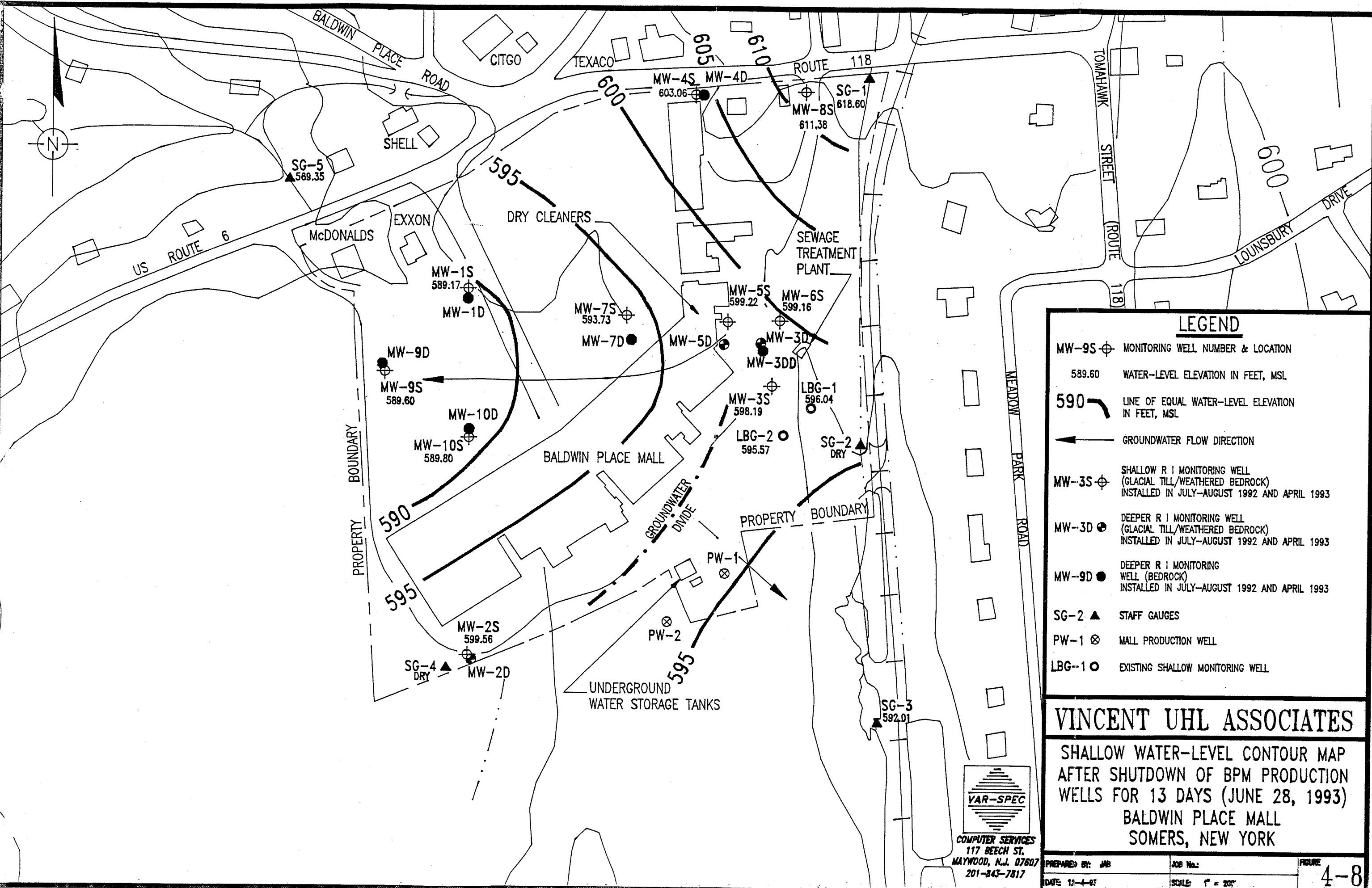
**VINCENT UHL ASSOCIATES**  
 SHALLOW WATER-LEVEL CONTOUR MAP;  
 BPM WELLS UNDER NORMAL OPERATIONAL  
 CONDITIONS (JUNE 8, 1993)  
 BALDWIN PLACE MALL  
 SOMERS, NEW YORK



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PREPARED BY: JAB	JOB No.:	FIGURE
DATE: 2-8-94	SCALE: 1" = 200'	4-7





**LEGEND**

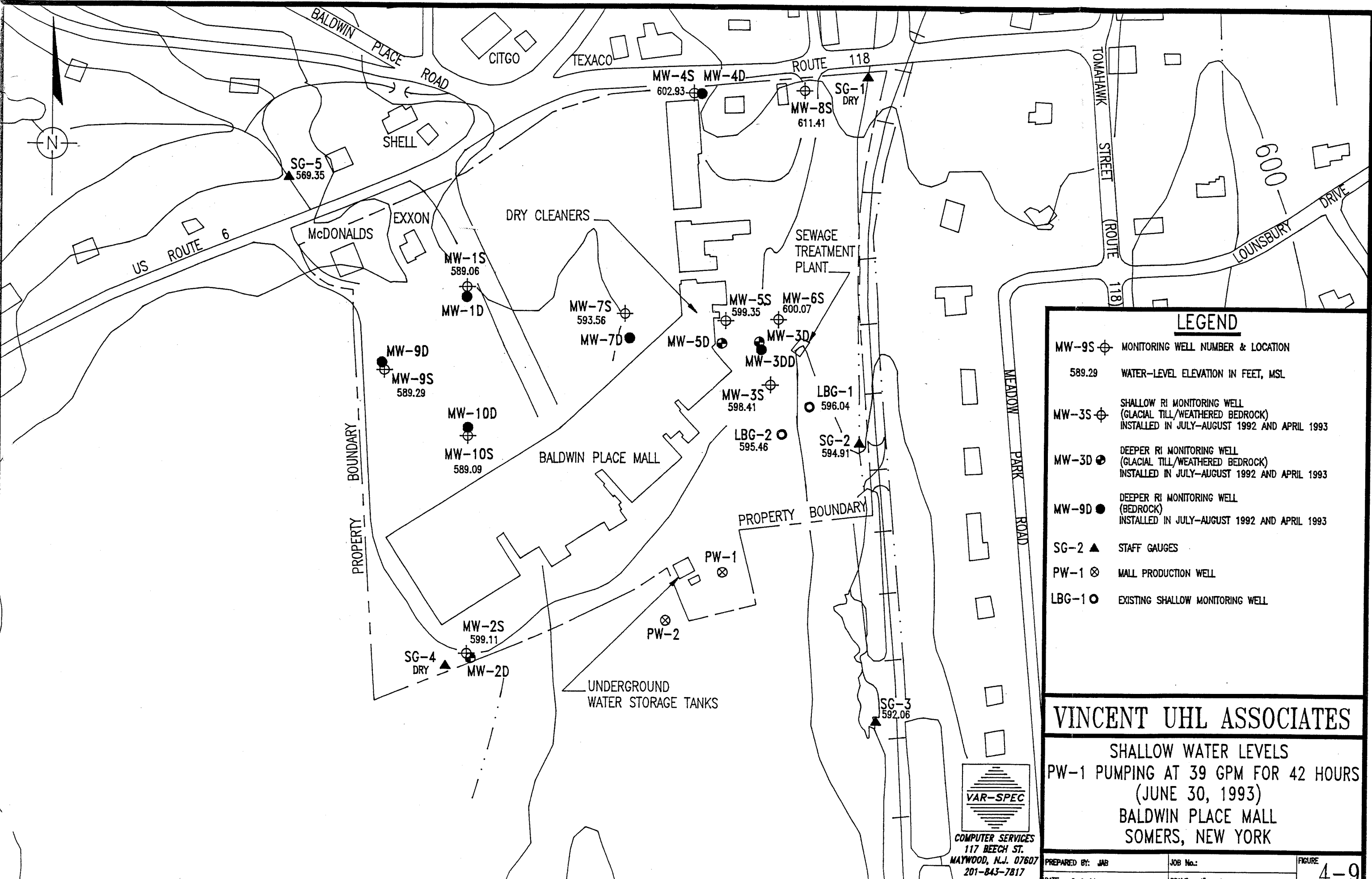
- MW-9S ⊕ MONITORING WELL NUMBER & LOCATION  
589.60 WATER-LEVEL ELEVATION IN FEET, MSL
- 590 — LINE OF EQUAL WATER-LEVEL ELEVATION IN FEET, MSL
- ← GROUNDWATER FLOW DIRECTION
- MW-3S ⊕ SHALLOW R I MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-3D ⊕ DEEPER R I MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-9D ● DEEPER R I MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- SG-2 ▲ STAFF GAUGES
- PW-1 ⊗ MALL PRODUCTION WELL
- LBG-1 ○ EXISTING SHALLOW MONITORING WELL

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SHALLOW WATER-LEVEL CONTOUR MAP  
AFTER SHUTDOWN OF BPM PRODUCTION  
WELLS FOR 13 DAYS (JUNE 28, 1993)  
BALDWIN PLACE MALL  
SOMERS, NEW YORK

  
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PREPARED BY: JMB	JOB No.:	FIGURE
DATE: 12-4-93	SCALE: 1" = 20'	4-8



**LEGEND**

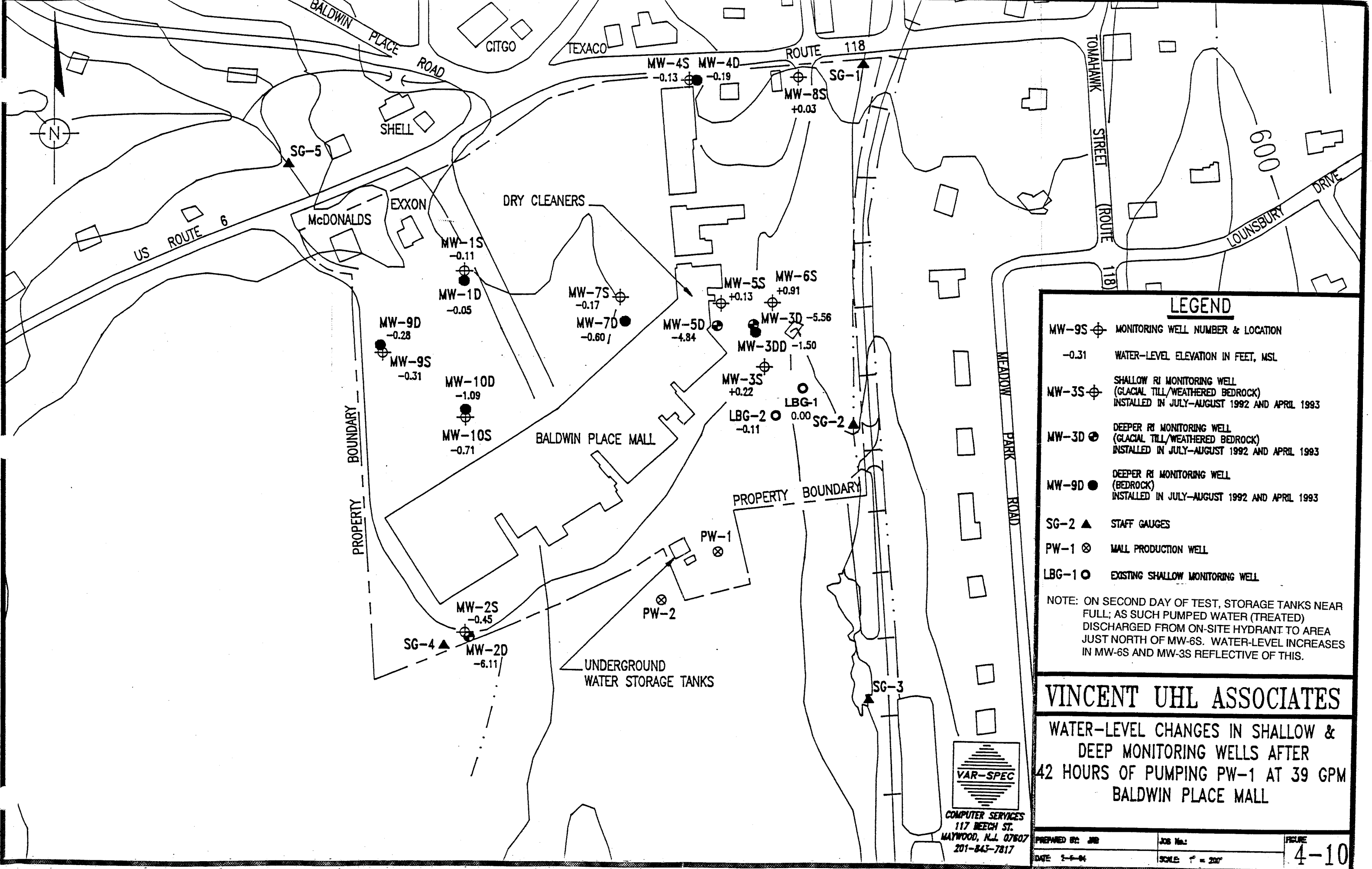
- MW-9S ⊕ MONITORING WELL NUMBER & LOCATION  
589.29 WATER-LEVEL ELEVATION IN FEET, MSL
- MW-3S ⊕ SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-3D ● DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-9D ● DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- SG-2 ▲ STAFF GAUGES
- PW-1 ⊗ MALL PRODUCTION WELL
- LBG-1 ○ EXISTING SHALLOW MONITORING WELL

**VINCENT UHL ASSOCIATES**

SHALLOW WATER LEVELS  
 PW-1 PUMPING AT 39 GPM FOR 42 HOURS  
 (JUNE 30, 1993)  
 BALDWIN PLACE MALL  
 SOMERS, NEW YORK

**VAR-SPEC**  
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PREPARED BY: JAB	JOB No.:	FIGURE
DATE: 2-8-94	SCALE: 1" = 200'	4-9



**LEGEND**

- MW-9S ⊕ MONITORING WELL NUMBER & LOCATION
- 0.31 WATER-LEVEL ELEVATION IN FEET, MSL
- MW-3S ⊕ SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-3D ⊕ DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-9D ● DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- SG-2 ▲ STAFF GAUGES
- PW-1 ⊗ MALL PRODUCTION WELL
- LBG-1 ○ EXISTING SHALLOW MONITORING WELL

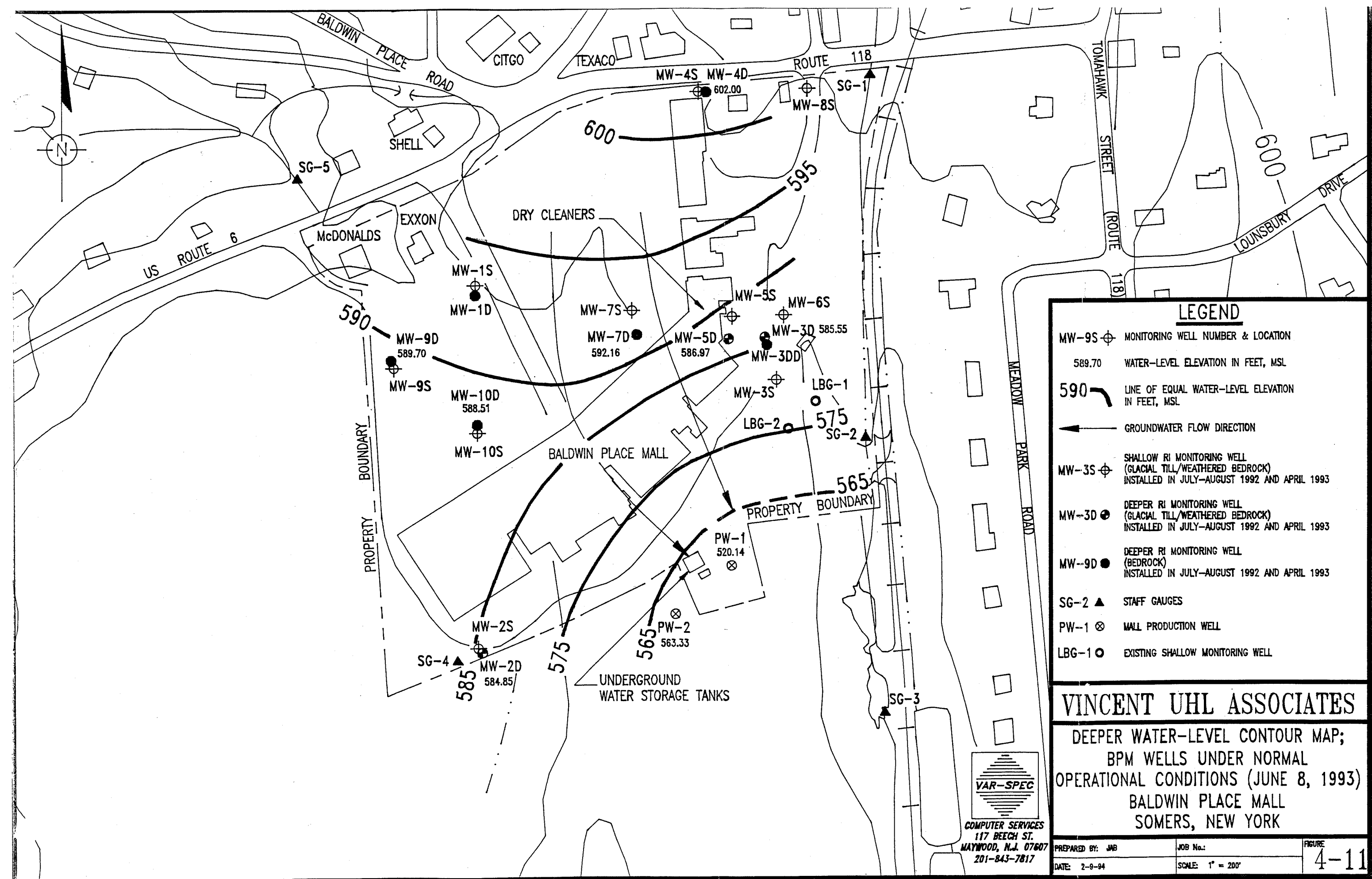
NOTE: ON SECOND DAY OF TEST, STORAGE TANKS NEAR FULL; AS SUCH PUMPED WATER (TREATED) DISCHARGED FROM ON-SITE HYDRANT TO AREA JUST NORTH OF MW-6S. WATER-LEVEL INCREASES IN MW-6S AND MW-3S REFLECTIVE OF THIS.

**VINCENT UHL ASSOCIATES**  
 WATER-LEVEL CHANGES IN SHALLOW & DEEP MONITORING WELLS AFTER 42 HOURS OF PUMPING PW-1 AT 39 GPM BALDWIN PLACE MALL



COMPUTER SERVICES  
 117 BEECH ST.  
 MAYWOOD, N.J. 07607  
 201-843-7817

PREPARED BY: JMB	JOB No.:	FIGURE
DATE: 2-6-94	SCALE: 1" = 200'	4-10



### LEGEND

- MW-9S ⊕ MONITORING WELL NUMBER & LOCATION  
589.70 WATER-LEVEL ELEVATION IN FEET, MSL
- 590 LINE OF EQUAL WATER-LEVEL ELEVATION IN FEET, MSL
- GROUNDWATER FLOW DIRECTION
- MW-3S ⊕ SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-3D ● DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-9D ● DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- SG-2 ▲ STAFF GAUGES
- PW-1 ⊗ MALL PRODUCTION WELL
- LBG-1 ○ EXISTING SHALLOW MONITORING WELL

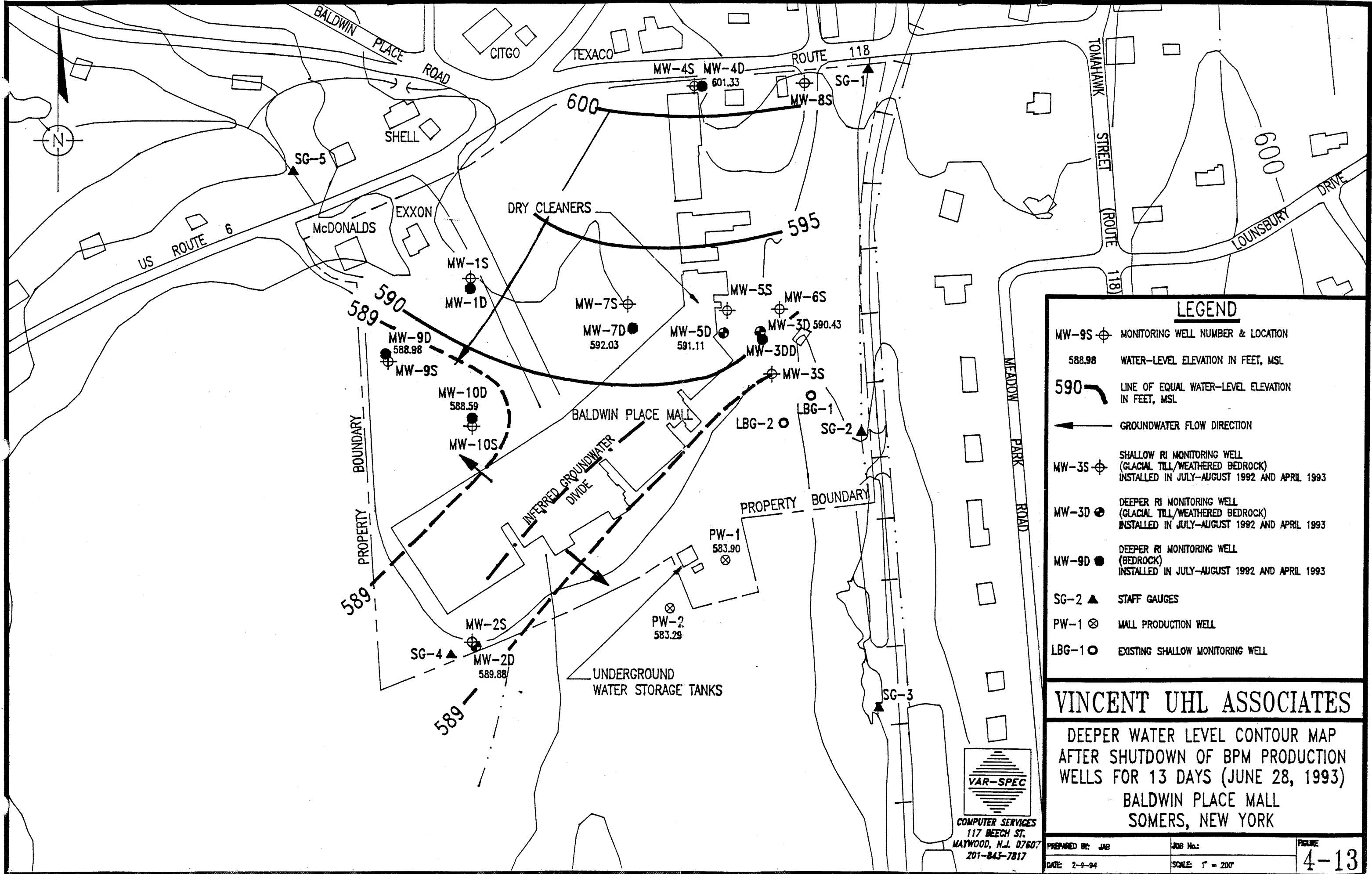
## VINCENT UHL ASSOCIATES

DEEPER WATER-LEVEL CONTOUR MAP;  
BPM WELLS UNDER NORMAL  
OPERATIONAL CONDITIONS (JUNE 8, 1993)  
BALDWIN PLACE MALL  
SOMERS, NEW YORK

**VAR-SPEC**  
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201-843-7817

PREPARED BY: JAB	JOB No.:	FIGURE
DATE: 2-9-94	SCALE: 1" = 200'	4-11





**LEGEND**

- MW-9S ⊕ MONITORING WELL NUMBER & LOCATION
- 588.98 WATER-LEVEL ELEVATION IN FEET, MSL
- 590 LINE OF EQUAL WATER-LEVEL ELEVATION IN FEET, MSL
- GROUNDWATER FLOW DIRECTION
- MW-3S ⊕ SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-3D ⊕ DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-9D ● DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- SG-2 ▲ STAFF GAUGES
- PW-1 ⊗ MALL PRODUCTION WELL
- LBG-1 ○ EXISTING SHALLOW MONITORING WELL

**VINCENT UHL ASSOCIATES**

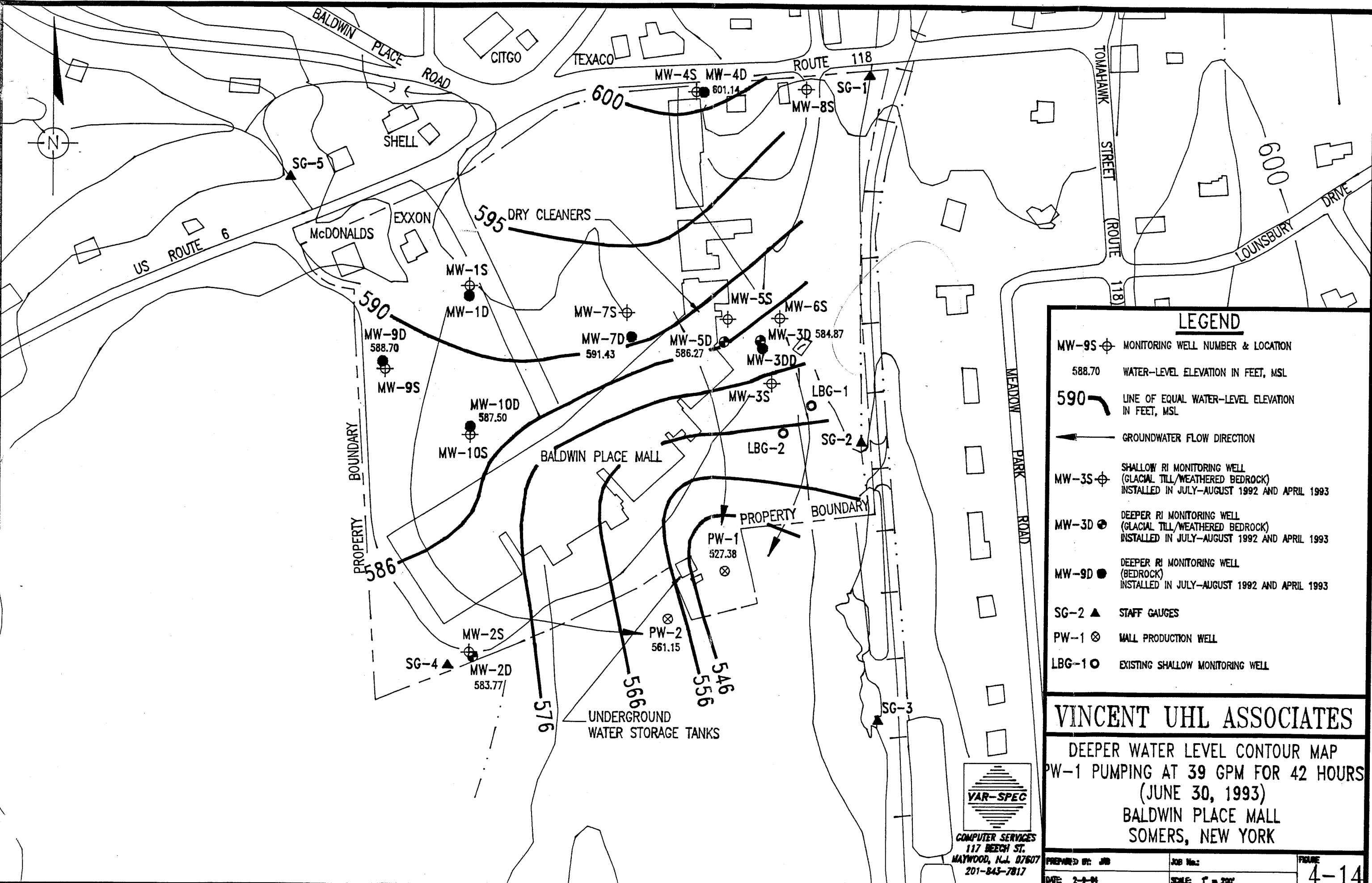
DEEPER WATER LEVEL CONTOUR MAP  
AFTER SHUTDOWN OF BPM PRODUCTION  
WELLS FOR 13 DAYS (JUNE 28, 1993)  
BALDWIN PLACE MALL  
SOMERS, NEW YORK



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201-843-7817

PREPARED BY: JAB	JOB No.:	FIGURE
DATE: 2-9-94	SCALE: 1" = 200'	<b>4-13</b>





**LEGEND**

- MW-9S ⊕ MONITORING WELL NUMBER & LOCATION
- 588.70 WATER-LEVEL ELEVATION IN FEET, MSL
- 590 — LINE OF EQUAL WATER-LEVEL ELEVATION IN FEET, MSL
- ← GROUNDWATER FLOW DIRECTION
- MW-3S ⊕ SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-3D ⊕ DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-9D ● DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- SG-2 ▲ STAFF GAUGES
- PW-1 ⊗ MALL PRODUCTION WELL
- LBG-1 ○ EXISTING SHALLOW MONITORING WELL

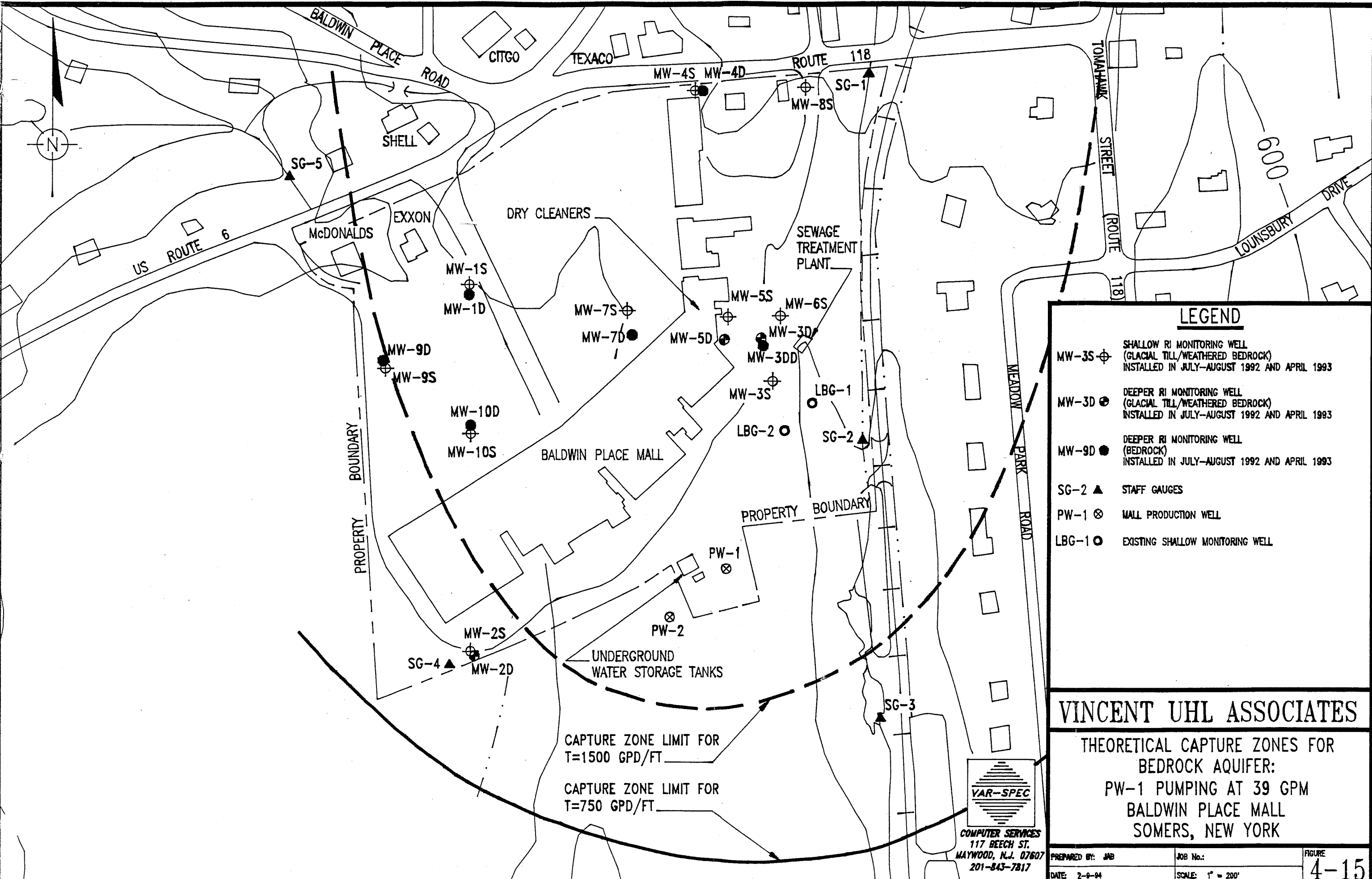
**VINCENT UHL ASSOCIATES**

DEEPER WATER LEVEL CONTOUR MAP  
 PW-1 PUMPING AT 39 GPM FOR 42 HOURS  
 (JUNE 30, 1993)  
 BALDWIN PLACE MALL  
 SOMERS, NEW YORK



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PREPARED BY: JIB	JOB No.:	FIGURE
DATE: 2-9-94	SCALE: 1" = 200'	4-14



**LEGEND**

- MW-3S ⊕ SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-3D ⊕ DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- MW-9D ● DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
- SG-2 ▲ STAFF GAUGES
- PW-1 ⊗ MALL PRODUCTION WELL
- LBG-1 ○ EXISTING SHALLOW MONITORING WELL

**VINCENT UHL ASSOCIATES**

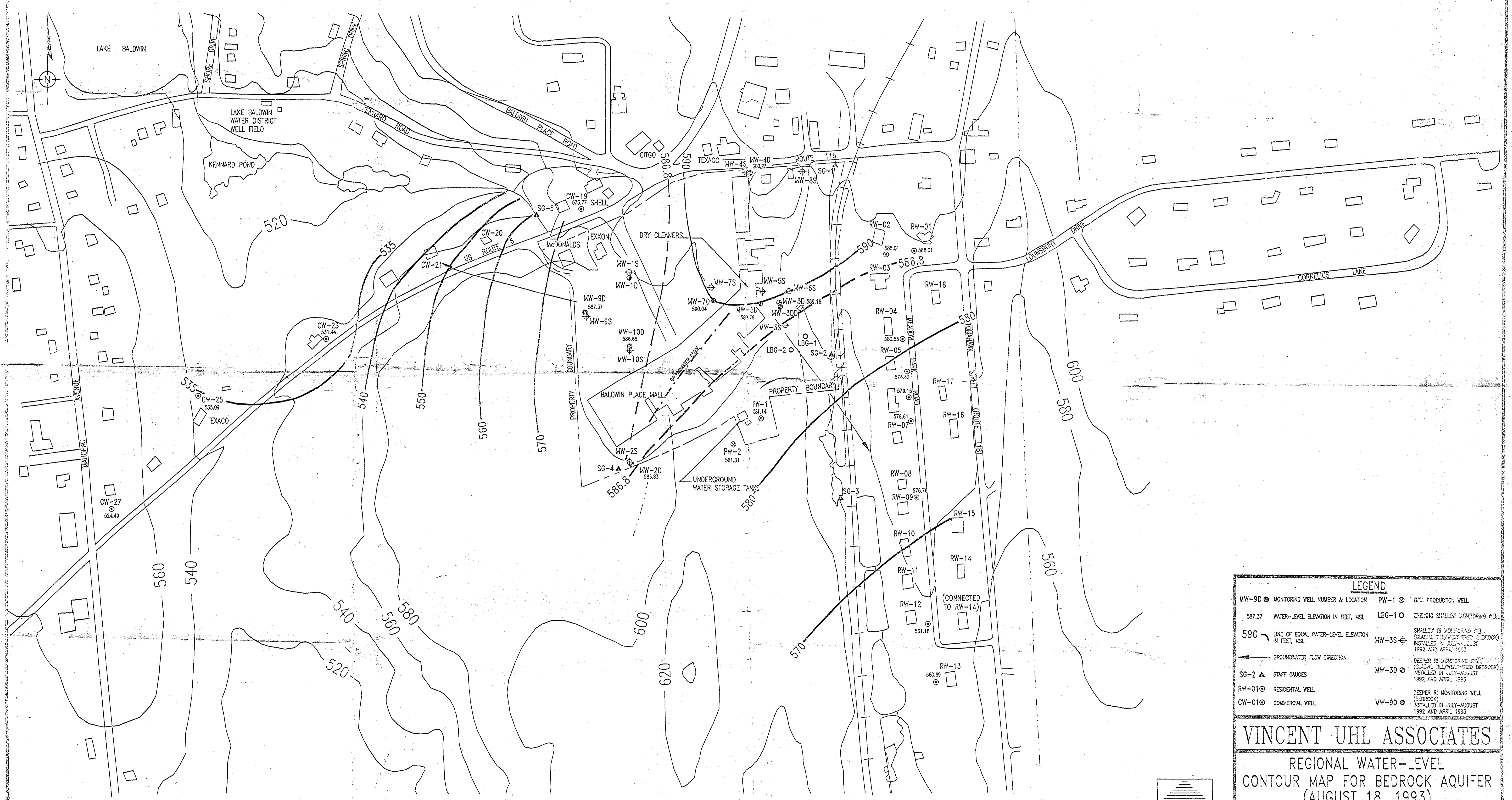
THEORETICAL CAPTURE ZONES FOR BEDROCK AQUIFER:  
 PW-1 PUMPING AT 39 GPM  
 BALDWIN PLACE MALL  
 SOMERS, NEW YORK

**VAR-SPEC**  
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CAPTURE ZONE LIMIT FOR T=1500 GPD/FT  
 CAPTURE ZONE LIMIT FOR T=750 GPD/FT

PREPARED BY: JAB	JOB No.:	FIGURE
DATE: 2-9-94	SCALE: 1" = 200'	4-15



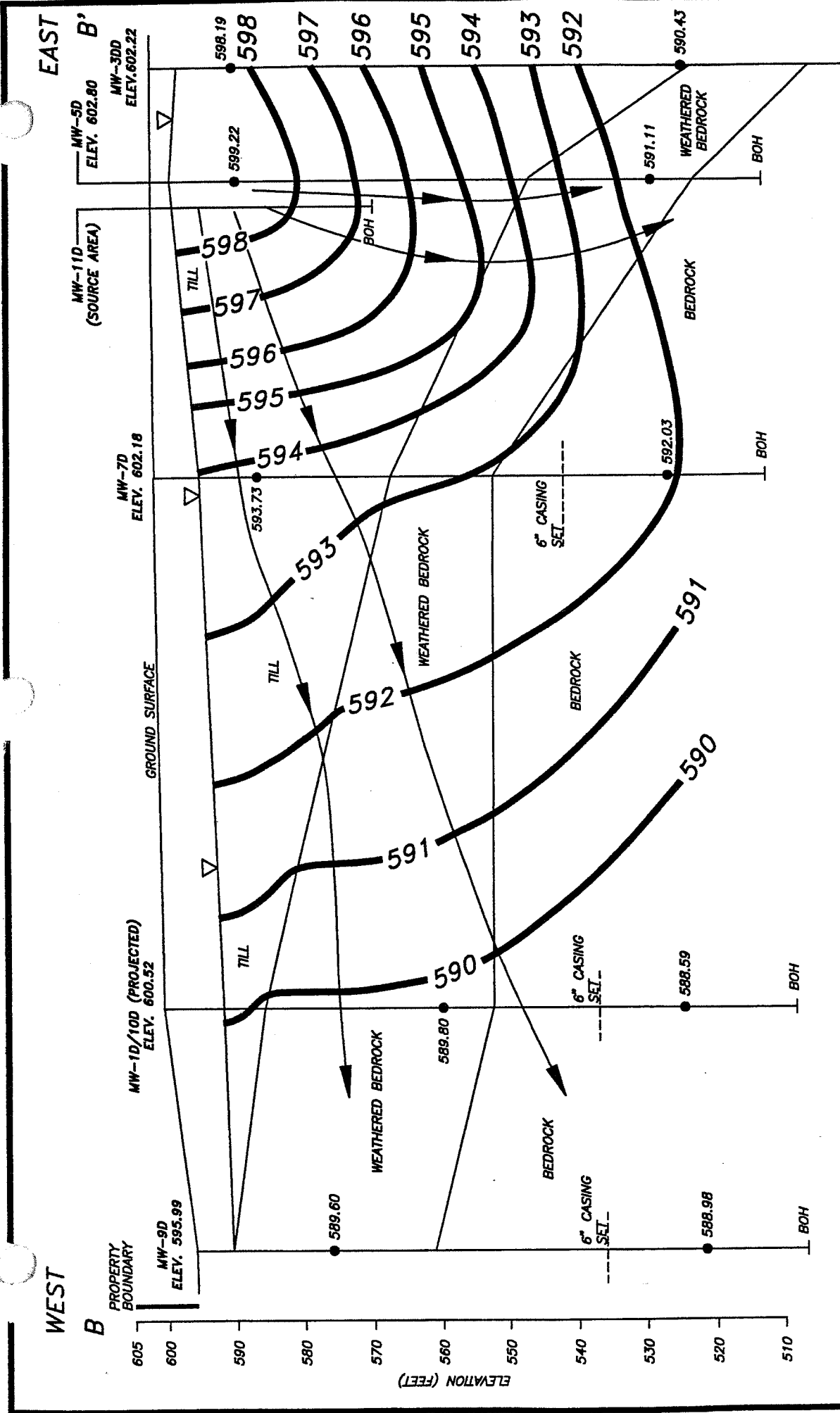


LEGEND	
MW-9D	MONITORING WELL NUMBER & LOCATION
587.37	WATER-LEVEL ELEVATION IN FEET, MSL
590	LINE OF EQUAL WATER-LEVEL ELEVATION IN FEET, MSL
←	GROUNDWATER FLOW DIRECTION
SG-2	STAFF GAUGES
RW-01	RESIDENTIAL WELL (BEDROCK)
CW-01	COMMERCIAL WELL
PW-1	DPW PRODUCTION WELL
LBG-1	EXISTING SHALLOW MONITORING WELL
MW-3S	SHALLOW RI MONITORING WELL (GLACIAL TILL WITH BEDROCK BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
MW-3D	DEEPER RI MONITORING WELL (GLACIAL TILL WITH BEDROCK BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
MW-9D	DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993

  
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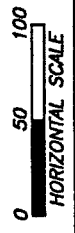
**VINCENT UHL ASSOCIATES**  
 REGIONAL WATER-LEVEL  
 CONTOUR MAP FOR BEDROCK AQUIFER  
 (AUGUST 18, 1993)  
 BALDWIN PLACE MALL  
 SOMERS, NEW YORK

PREPARED BY: JAB	JOB No.:	FIGURE
DATE: 6-30-94	SCALE: 1" = 200'	4-16



**LEGEND**

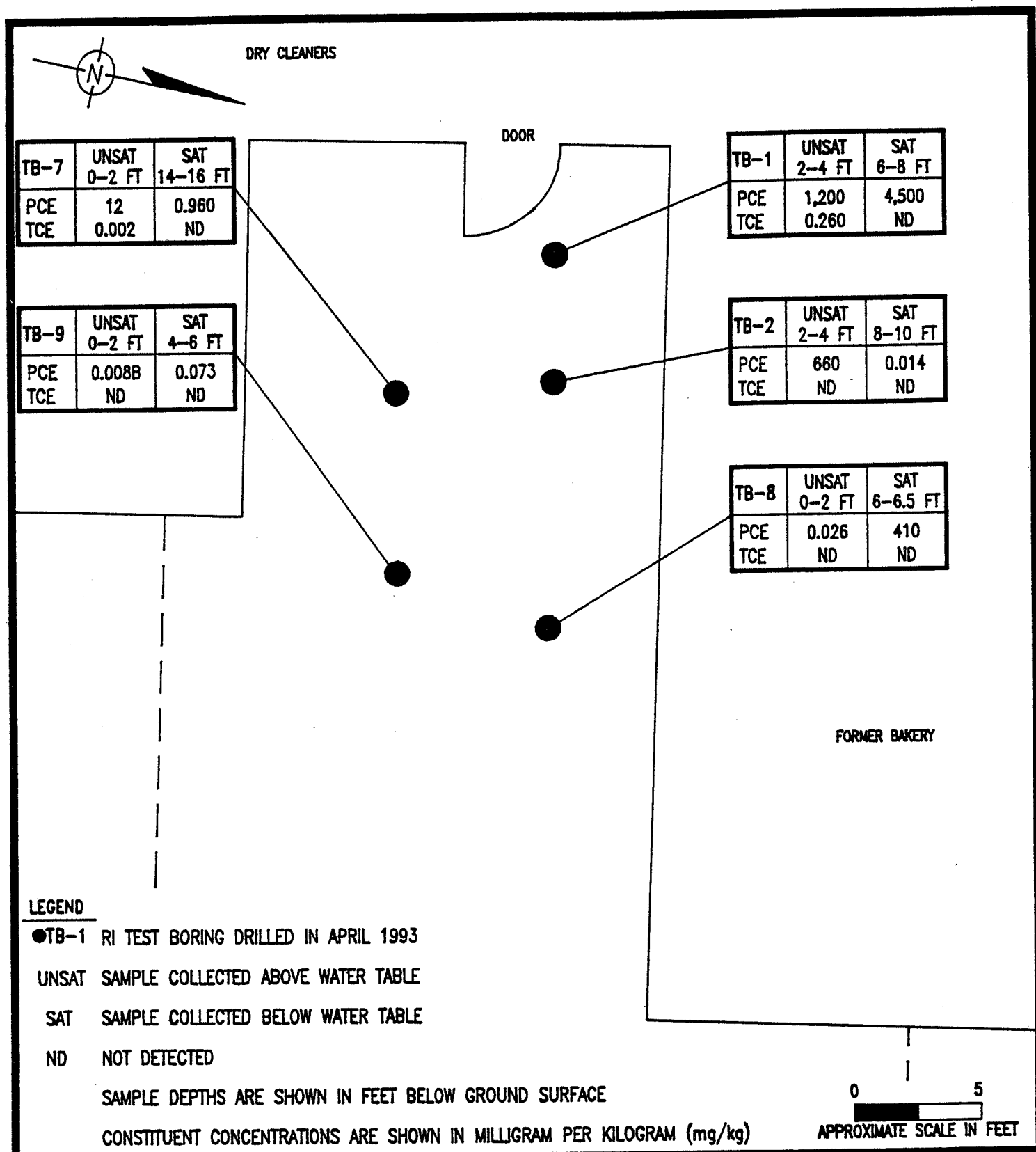
- MIDPOINT OF SCREENED OR OPEN-HOLE INTERVAL
- 589.80 WATER LEVEL ELEVATION (HEAD) IN FEET, MSL
- 590 LINE OF EQUAL HEAD
- GROUNDWATER FLOW DIRECTION



**FIGURE 4-17 VERTICAL FLOW NET;  
SOURCE AREA TO MW-9S/9D**

DATE: 7-8-94

**VAR-SPEC**  
COMPUTER SERVICES  
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201-945-7817



**FIGURE 5-1 SOIL CONCENTRATIONS IN PCE SOURCE AREA  
BEHIND DRY CLEANERS (RI PROGRAM)  
BALDWIN PLACE MALL, SOMERS, NEW YORK**



**TB-16/MW-11D**

DEPTH	PCE	TCE
6-8	130	-
8-10	0.160	0.0079
10-10.7	500	-
12-13	270	-
14-15	1,300	-
16-18	0.0031	-
18-20	0.0062	-
22-24	0.0012	-
26-28	0.0059	-
30-32	0.250	-
32-34	0.0031	-

**TB-20**

DEPTH	PCE	TCE
0-2	-	-
2-4	0.0023	-
4-6	0.0047	-
6-8	0.0082	-
8-10	0.0044	-

**TB-21**

DEPTH	PCE	TCE
0-2	-	-
2-4	-	-
4-6	-	-

**TB-22**

DEPTH	PCE	TCE
1-3	0.012	-
3-5	0.0012	-
5-7	0.003	-

**TB-7**

DEPTH	PCE	TCE
0-2	12	0.002
14-16	0.960	-

**TB-9**

DEPTH	PCE	TCE
2-4	0.008	-
4-6	0.073	-

**TB-18**

DEPTH	PCE	TCE
0-2	-	-
6-8	0.0018	-
10-12	-	-
12-14	0.0022	-
14-16	0.0072	-
16-18	0.034	-
20-22	0.0066	-

**TB-19**

DEPTH	PCE	TCE
1-3	-	-
7-9	0.0021	-
13-15	-	-
19-21	-	-
23-25	-	-

**TB-1**

DEPTH	PCE	TCE
2-4	1,200	0.260
6-8	4,500	-

**TB-2**

DEPTH	PCE	TCE
2-4	660	-
8-10	0.014	-

**TB-8**

DEPTH	PCE	TCE
0-2	0.026	-
6-6.5	410	-

**TB-17**

DEPTH	PCE	TCE
1-2	0.130	0.0011
2-4	0.160	-
8-10	43	-
14-16	0.190	-
16-18	2.2	-
18-20	1.7	-
20-22	6.1	-
24-26	0.040	-
28-30	0.040	-

MAINTENANCE GARAGE

DRY CLEANERS

DOOR

FORMER BAKERY

LIQUOR STORE

DRIVEWAY



**LEGEND**

- TB-1 RI TEST BORING LOCATION DRILLED IN APRIL, 1993
- ⊙ TB-17 SUPPLEMENTAL TEST BORING LOCATION DRILLED IN NOVEMBER, 1993
- NOT DETECTED
- ⊙ MW-11S SOURCE AREA MONITORING WELL

SAMPLE DEPTHS ARE SHOWN IN FEET BELOW GROUND SURFACE

CONSTITUENT CONCENTRATIONS ARE SHOWN IN MILLIGRAM PER KILOGRAM (mg/kg)

**VINCENT UHL ASSOCIATES**

SOIL CONCENTRATIONS IN PCE  
SOURCE AREA BEHIND DRY CLEANERS  
(RI AND ADDITIONAL DATA COLLECTION PROGRAM)  
BALDWIN PLACE MALL  
SOMERS, NEW YORK

**VAR-SPEC**

COMPUTER SERVICES  
117 BEECH ST.  
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201-843-7817

PREPARED BY: JAB	JOB No.:	FIGURE
DATE: 2-9-84	SCALE: AS SHOWN	5-2

TELEPHONE CONDUIT  
GAS CONDUIT

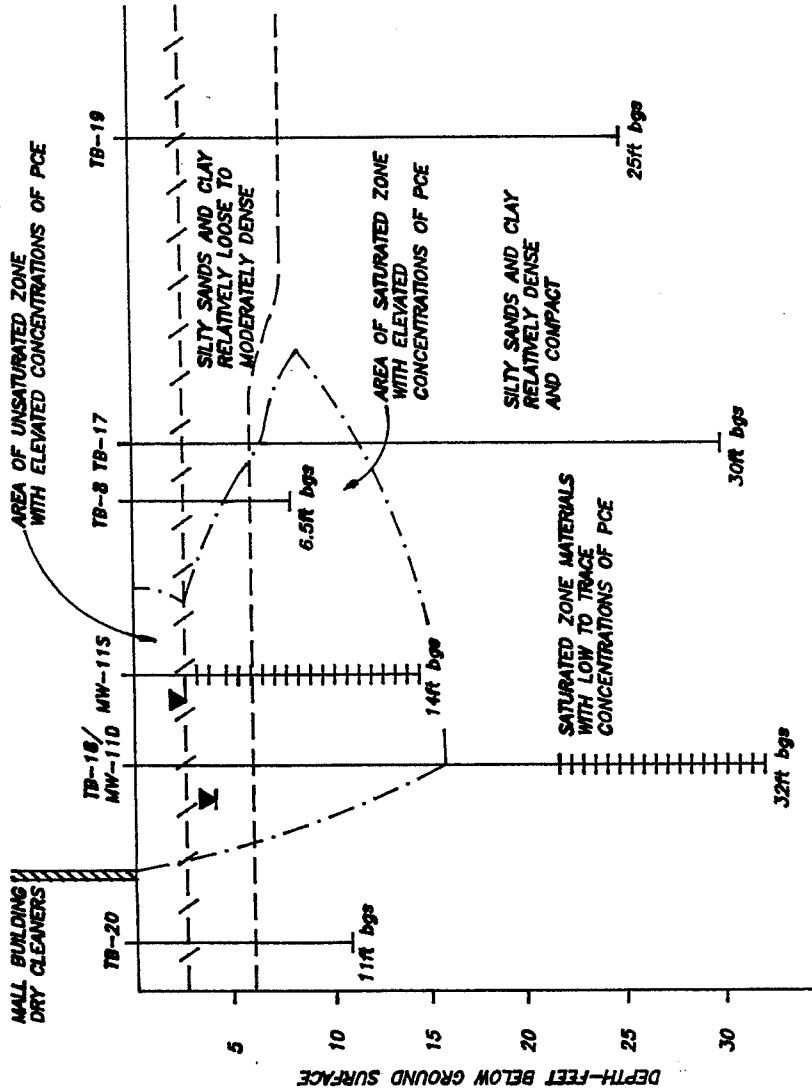
GAS CONDUIT

ELECTRICAL CONDUIT

GAS CONDUIT

ELECTRICAL TRENCH

EAST



**LEGEND**

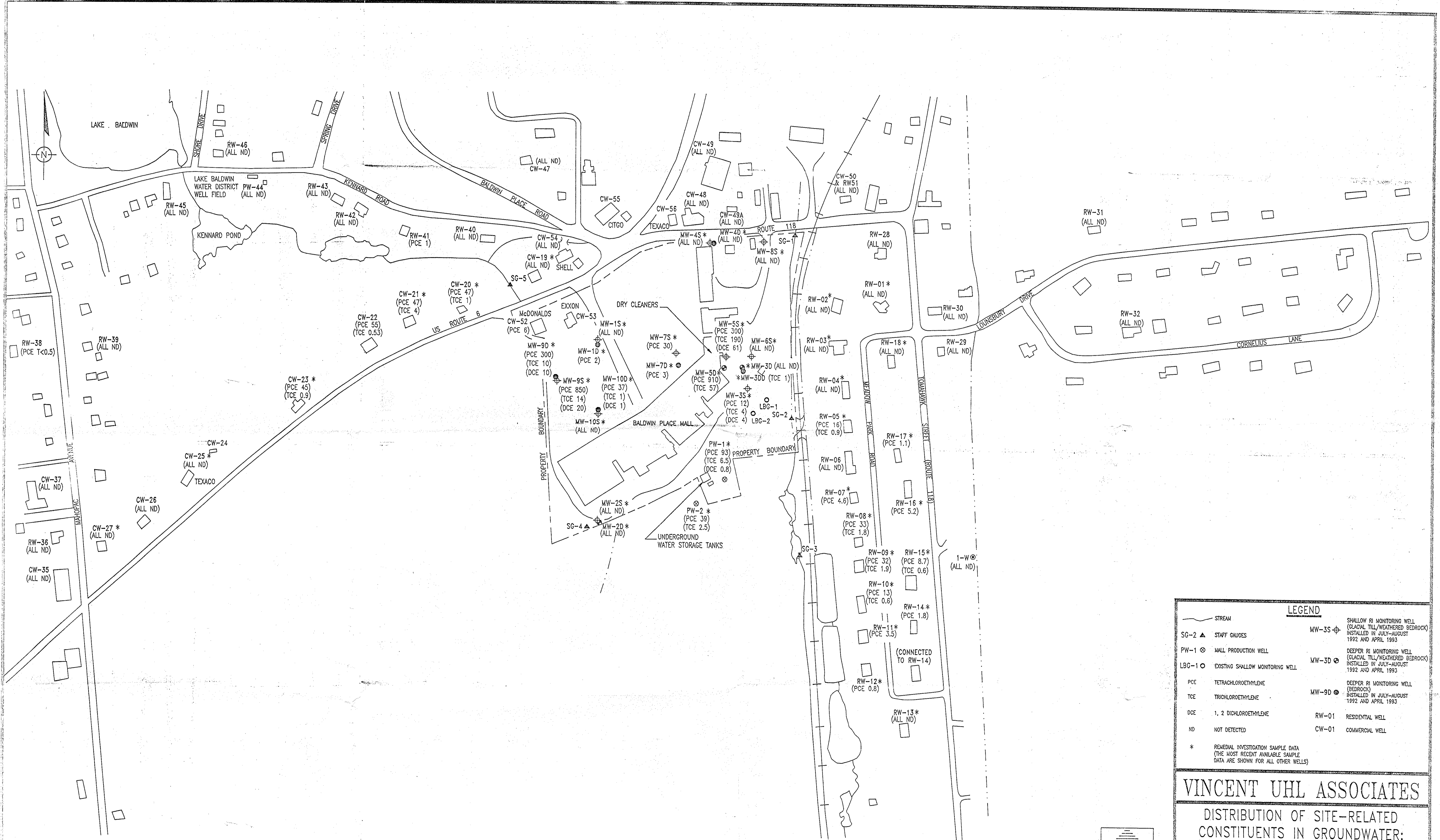
- ▼ DEPTH TO WATER MEASURED IN MONITORING WELLS ON 12-22-83
- - - - - INFERRED TOP OF SATURATED ZONE
- - - - - TOP OF RELATIVELY DENSE TILL MATERIALS
- · - · - · AREA OF ELEVATED PCE CONCENTRATIONS IN UNSATURATED AND SATURATED SOILS
- TB-8 TEST BORING AND NUMBER

**FIGURE 5-3 PROFILE OF PCE SOURCE AREA BEHIND DRY CLEANERS**  
BALDWIN PLACE MALL  
SOMERS, NEW YORK

DATE: 2-10-84







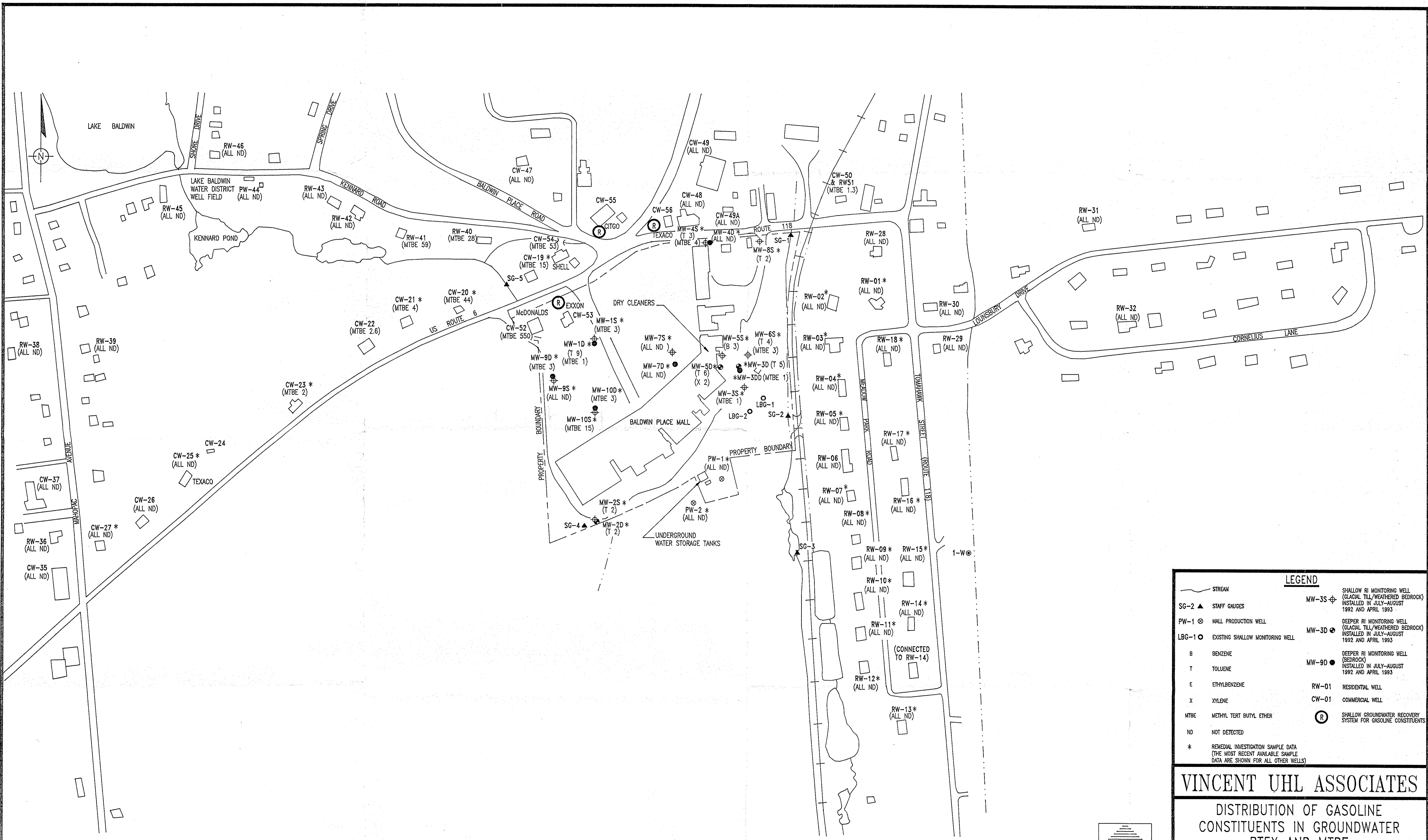
LEGEND	
—	STREAM
SG-2 ▲	STAFF GAUGES
PW-1 ⊗	MALL PRODUCTION WELL
LBG-1 ⊙	EXISTING SHALLOW MONITORING WELL
PCE	TETRACHLOROETHYLENE
TCE	TRICHLOROETHYLENE
DCE	1, 2 DICHLOROETHYLENE
ND	NOT DETECTED
*	REMEDIAL INVESTIGATION SAMPLE DATA (THE MOST RECENT AVAILABLE SAMPLE DATA ARE SHOWN FOR ALL OTHER WELLS)
MW-3S ⊕	SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
MW-3D ⊕	DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
MW-9D ⊕	DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
RW-01	RESIDENTIAL WELL
CW-01	COMMERCIAL WELL

**VINCENT UHL ASSOCIATES**

DISTRIBUTION OF SITE-RELATED  
CONSTITUENTS IN GROUNDWATER:  
PCE, TCE & 1,2-DCE  
BALDWIN PLACE MALL  
SOMERS, NEW YORK

**VAR-SPEC**

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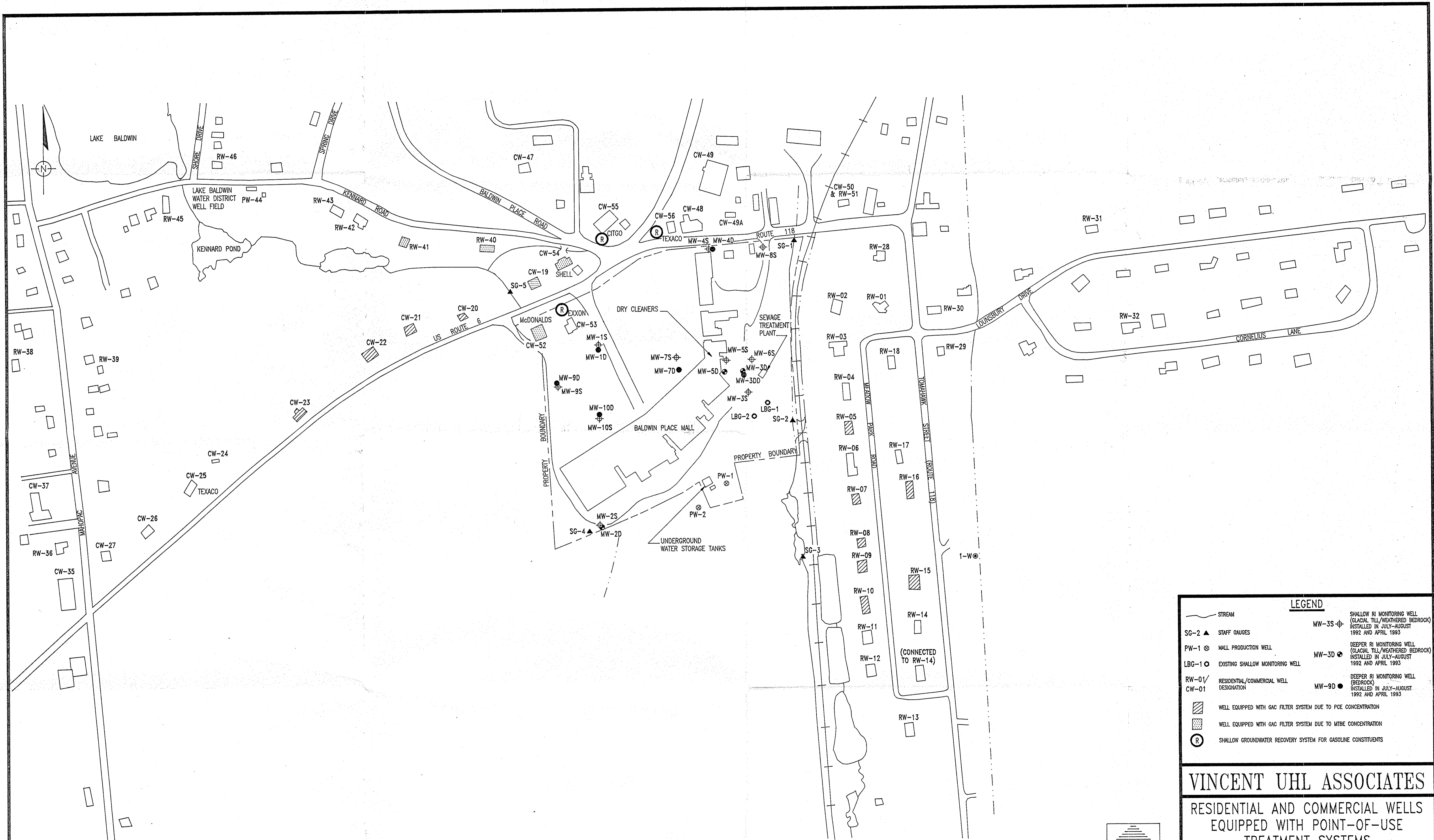


LEGEND	
—	STREAM
SG-2 ▲	STAFF GAUGES
PW-1 ⊗	MILL PRODUCTION WELL
LBG-1 ⊙	EXISTING SHALLOW MONITORING WELL
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	XYLENE
MTBE	METHYL TERT BUTYL ETHER
ND	NOT DETECTED
*	REMEDIAL INVESTIGATION SAMPLE DATA (THE MOST RECENT AVAILABLE SAMPLE DATA ARE SHOWN FOR ALL OTHER WELLS)
MW-3S ⊕	SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
MW-3D ⊕	DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
MW-9D ●	DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
RW-01	RESIDENTIAL WELL
CW-01	COMMERCIAL WELL
Ⓡ	SHALLOW GROUNDWATER RECOVERY SYSTEM FOR GASOLINE CONSTITUENTS

**VINCENT UHL ASSOCIATES**  
 DISTRIBUTION OF GASOLINE  
 CONSTITUENTS IN GROUNDWATER  
 BTEX AND MTBE  
 BALDWIN PLACE MALL  
 SOMERS, NEW YORK

**VAR-SPEC**  
 COMPUTER SERVICES  
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LEGEND	
	STREAM
	SG-2 ▲ STAFF GAUGES
	PW-1 ⊗ MALL PRODUCTION WELL
	LBG-1 ○ EXISTING SHALLOW MONITORING WELL
	RW-01/ CW-01 RESIDENTIAL/COMMERCIAL WELL DESIGNATION
	WELL EQUIPPED WITH GAC FILTER SYSTEM DUE TO PCE CONCENTRATION
	WELL EQUIPPED WITH GAC FILTER SYSTEM DUE TO MTBE CONCENTRATION
	SHALLOW GROUNDWATER RECOVERY SYSTEM FOR GASOLINE CONSTITUENTS
	SHALLOW RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
	DEEPER RI MONITORING WELL (GLACIAL TILL/WEATHERED BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993
	DEEPER RI MONITORING WELL (BEDROCK) INSTALLED IN JULY-AUGUST 1992 AND APRIL 1993

**VINCENT UHL ASSOCIATES**  
 RESIDENTIAL AND COMMERCIAL WELLS  
 EQUIPPED WITH POINT-OF-USE  
 TREATMENT SYSTEMS  
 BALDWIN PLACE MALL  
 SOMERS, NEW YORK

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