US EPA RECORDS CENTER REGION 5
445321

FIGURES

Google maps Address Gary, IN 46406

Get Google Maps on your phone
Text the word "GMAPS" to 466453

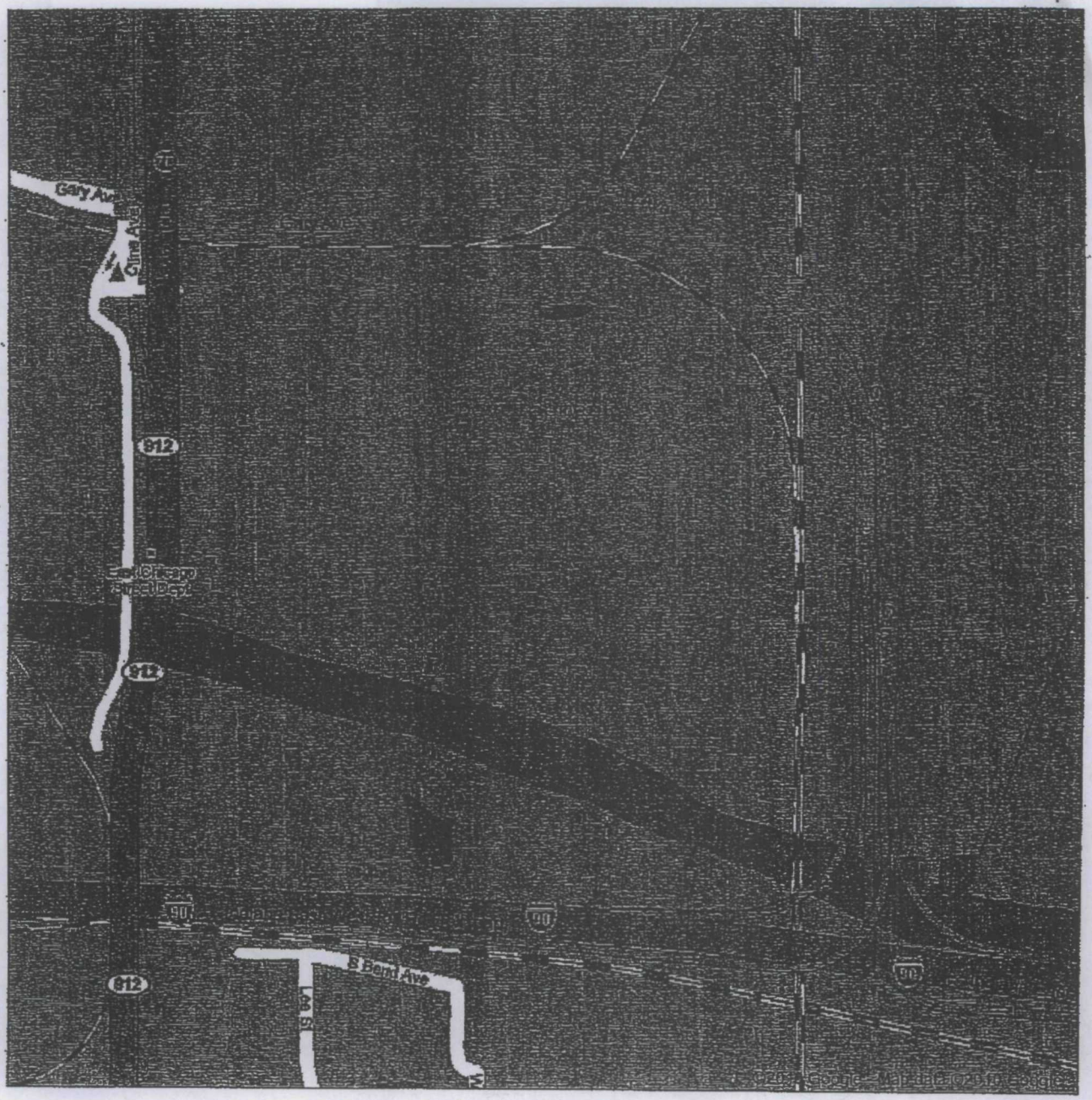
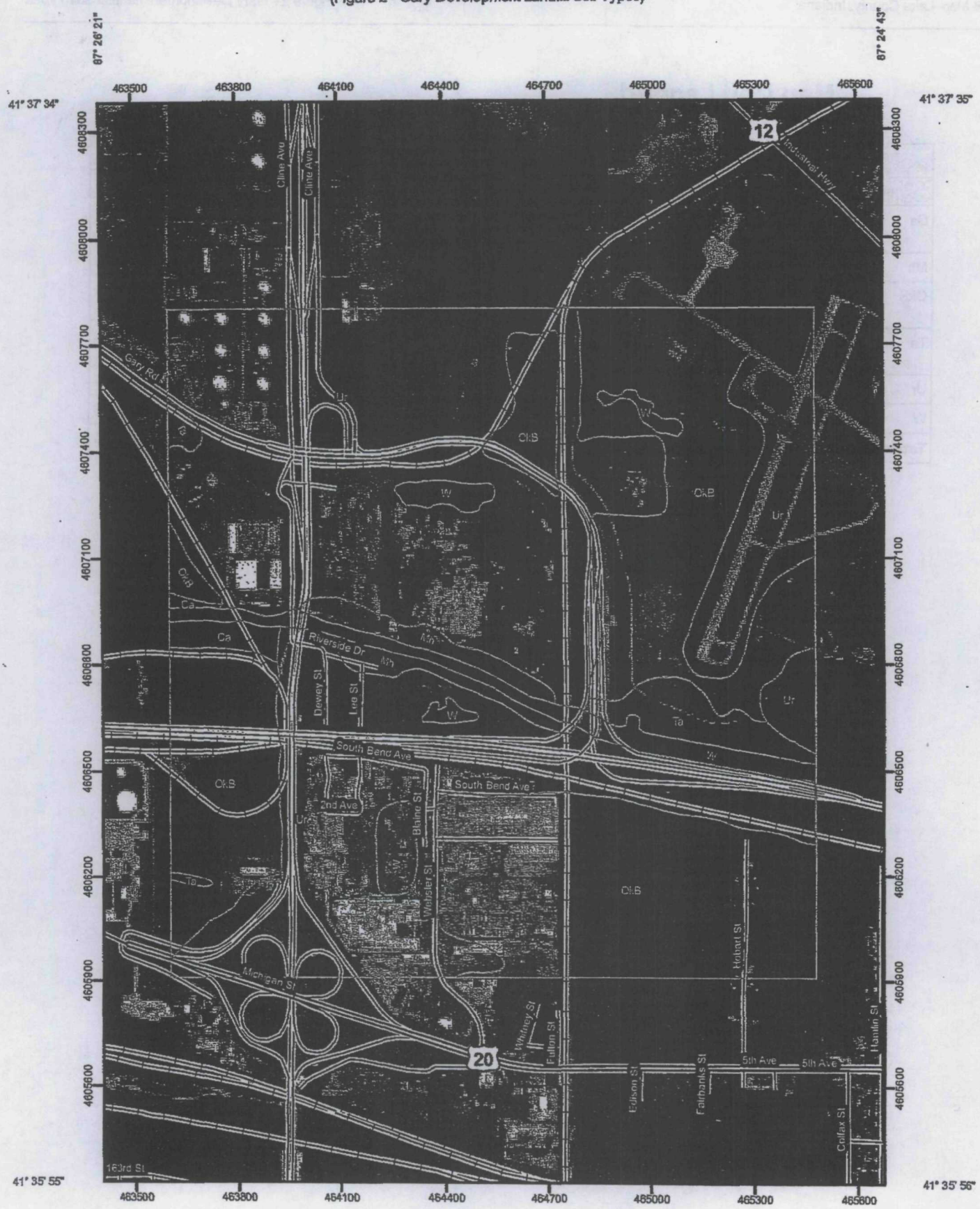


Figure 1

Soil Map—Lake County, Indiana
(Figure 2 - Gary Development Landfill Soil Types)



Map Scale: 1:14,600 if printed on A size (8.5" x 11") sheet.

N

Meters
0 100 200 400 600

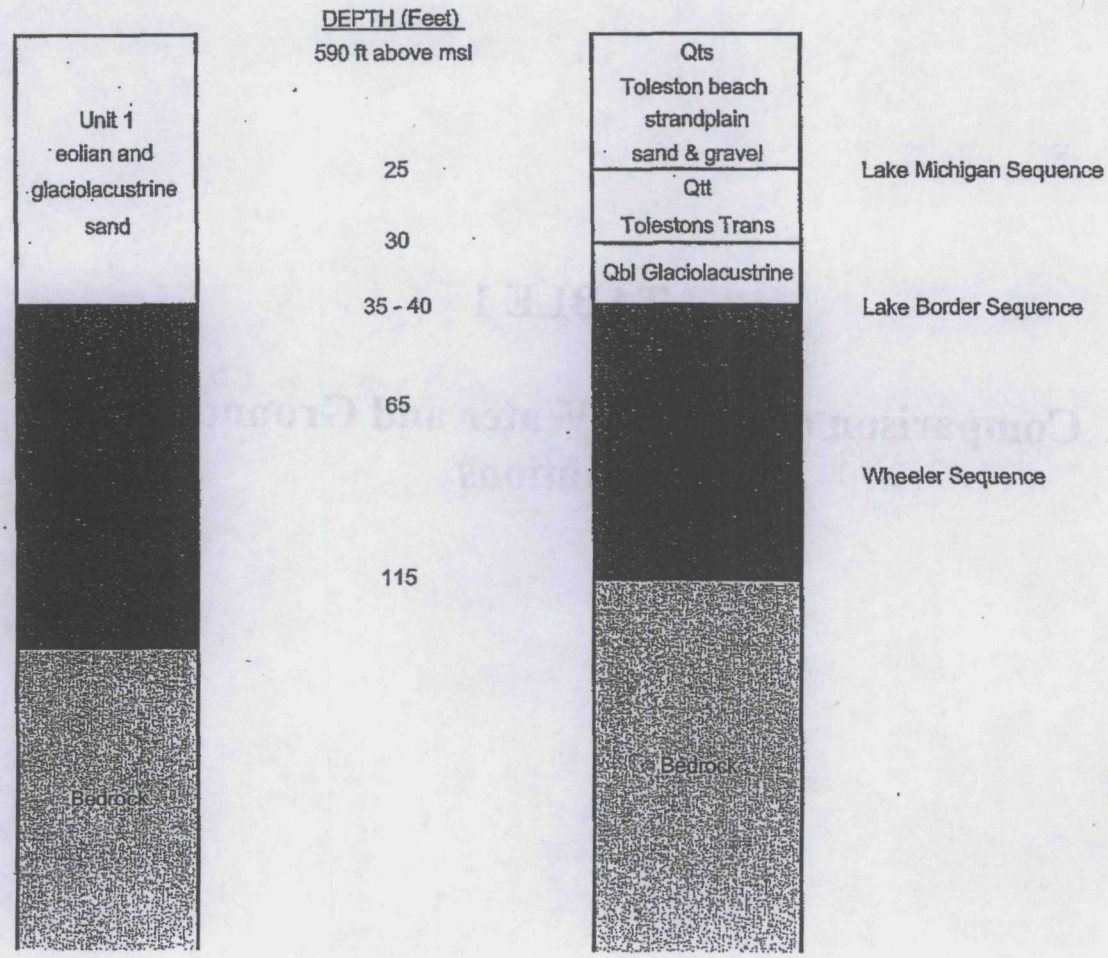
Feet
0 500 1,000 2,000 3,000

Map Unit Legend

Lake County, Indiana (IN089)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ca	Houghton muck, drained, 0 to 1 percent slopes	7.1	0.8%
Mh	Marsh	17.9	2.0%
OkB	Oakville-Adrian complex, 0 to 6 percent slopes	319.4	36.3%
Ta	Adrian muck, drained, 0 to 1 percent slopes	19.5	2.2%
Ur	Urban land	479.4	54.5%
W	Water	36.1	4.1%
Totals for Area of Interest		**879.5**	**100.0%**

FIGURE 3

STRATIGRAPHY OF UNCONSOILDATED DEPOSITS
Beneath the Gary Development Landfill - Lake County, IN



Stratigraphic Column after Rosenshein, 1962

Stratigraphic Column after Brown and Thompson, 2005

TABLE 1

Comparison of Surface Water and Ground Water Elevations

TABLE 1

GARY DEVELOPMENT LANDFILL
Comparison of Static Ground Water and Surface Water Elevations In the Grand Calumet River

Well ID	C-5	C-10	C-12	RIVER	
Well Depth (ft)	5.7'	4.3'	20.0'		
Datum Ele (ft)	585.47'	584.18'	584.23'	580.00'	
Location	3,000' west	3,000' west	3,000' west	1.5 mi east	
DATE	**WATER ELEVATION (Datum Elevation minus Height)**				**FLOW DIRECTION**
10/8/2009	585.47 - 1.0 = 584.47	584.18 - 1.61 = 582.57	584.23 - 1.72 = 585.51	580.00 - 1.99 = 581.99	To river
5/20/2009	585.47 - .82 = 586.29	584.18 - .94 = 583.24	584.23 - .89 = 583.34	580.00 - 3.58 = 583.58	To Aquifer
11/19/2008	585.47 - .04 = 585.51	584.181 - .07 = 583.11	584.23 - 1.2 = 583.03	580.00 - 1.01 = 581.01	To River
7/2/2008	585.47 - .47 = 585.00	584.18 - 2.68 = 581.15	584.23 - .97 = 583.26	580.00 - 3.38 = 583.38	Mixed

Note: during normal river stage, gw discharges to the river. During higher river (flooding) stages, flow reverses such that surface water infiltrates the aquifer. Comparison of river stage data with precip data obtained from TS480 (Chesterson) suggests river stage is primarily affected by influent than precip.

APPENDIX 1

Boring Logs