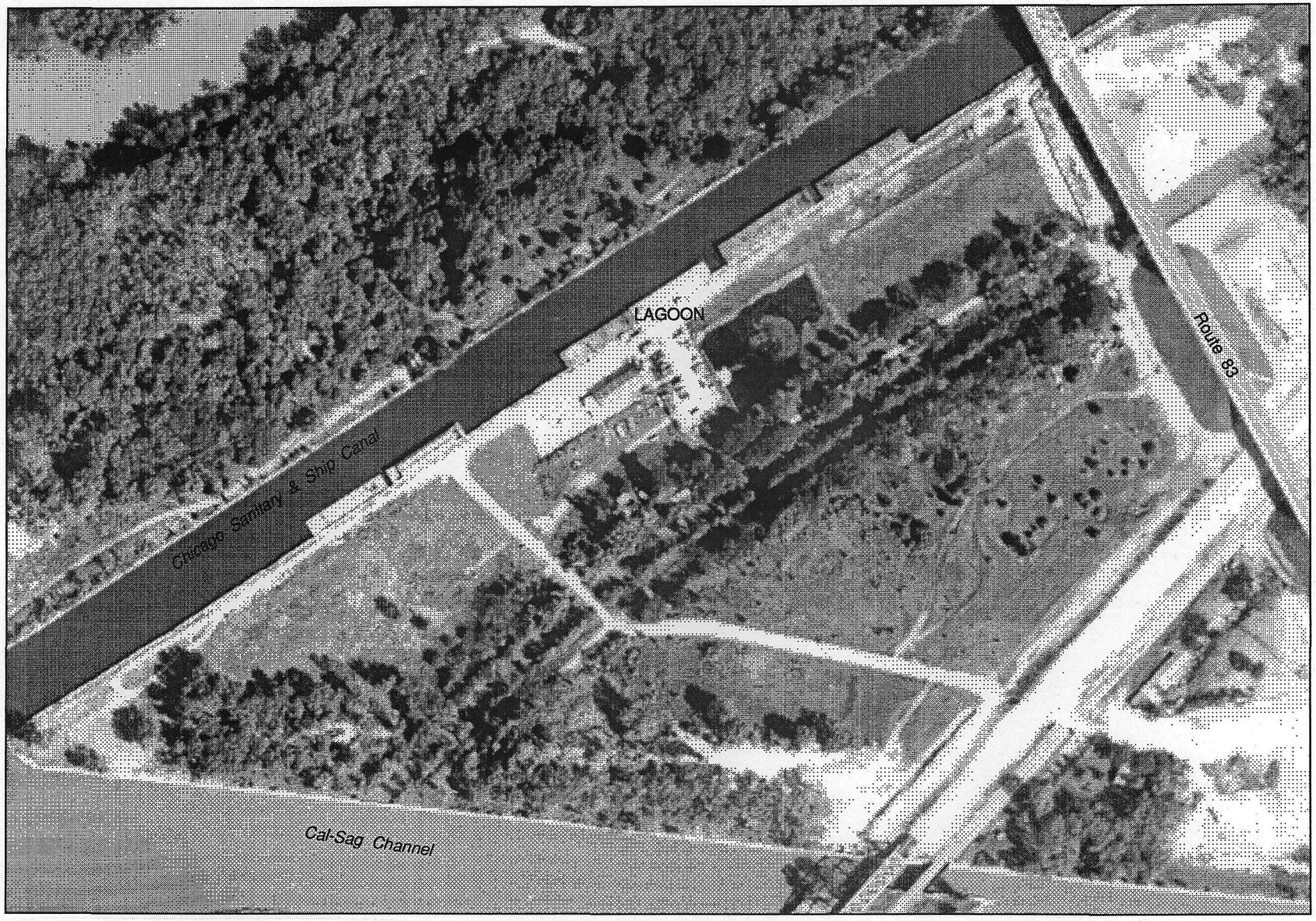


SOURCE: USDA Aerial Photograph, 9/16/61.

EPA Region 5 Records Ctr.
311139

FIGURE 2-3 SITE CONDITIONS, 1961

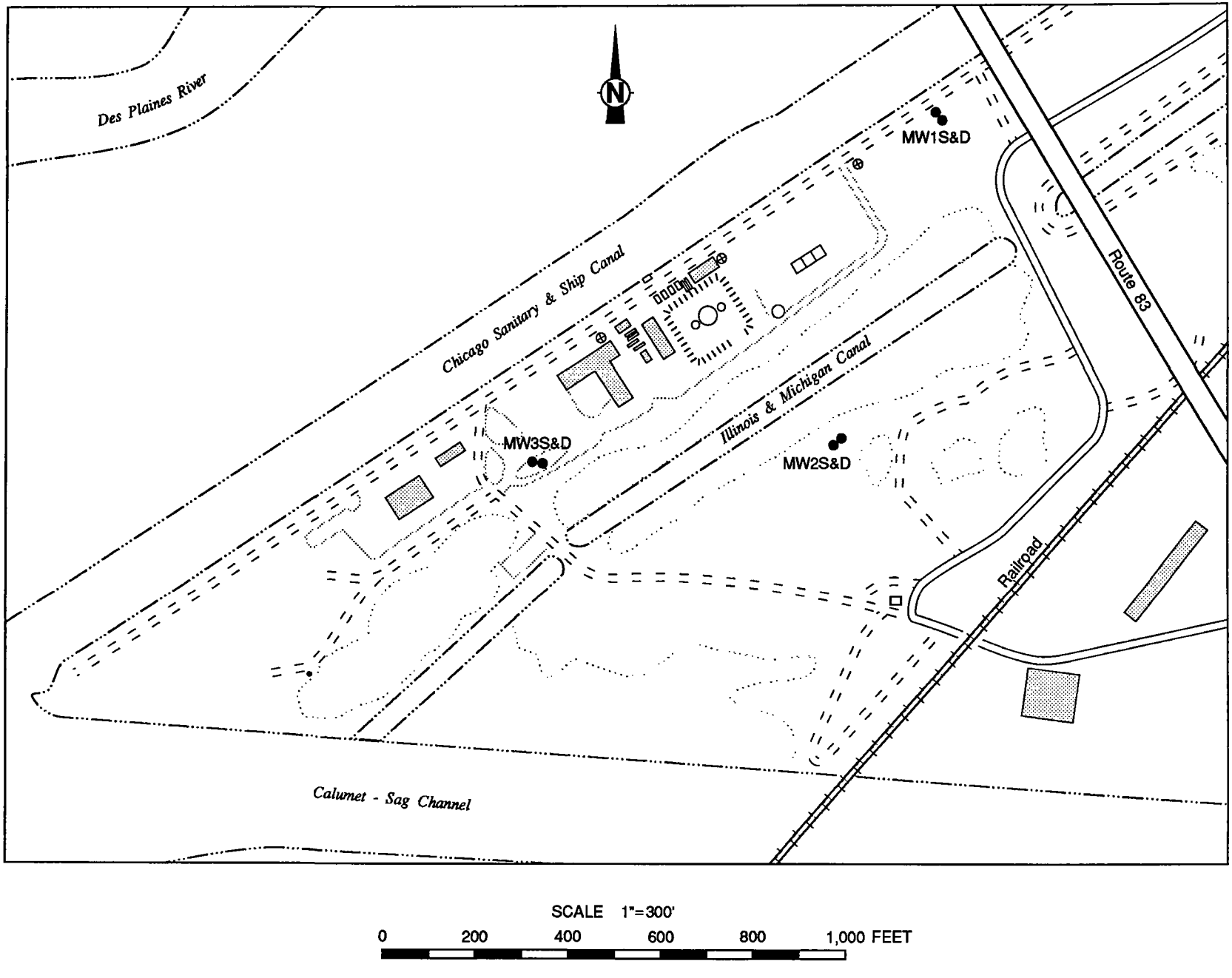
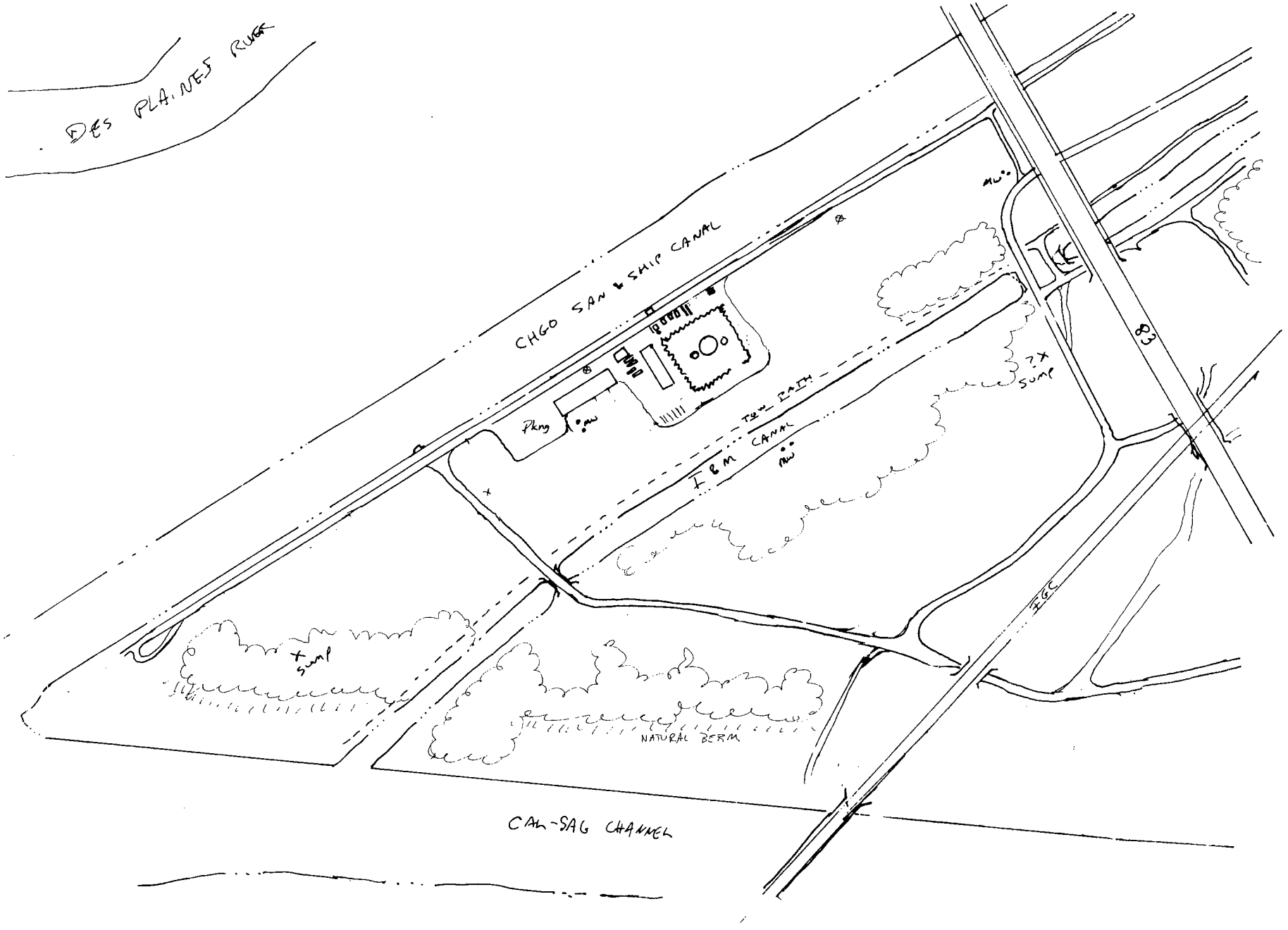
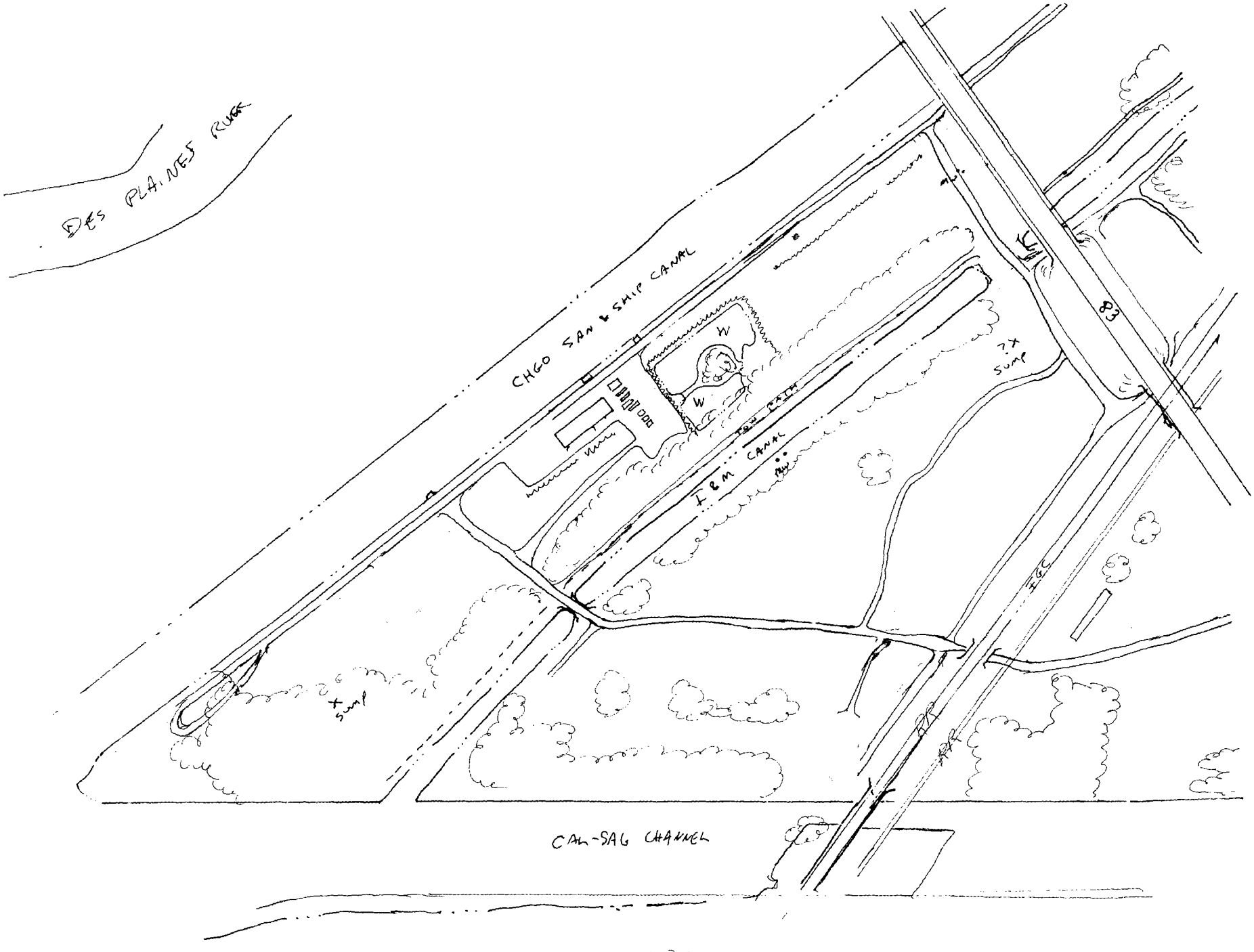


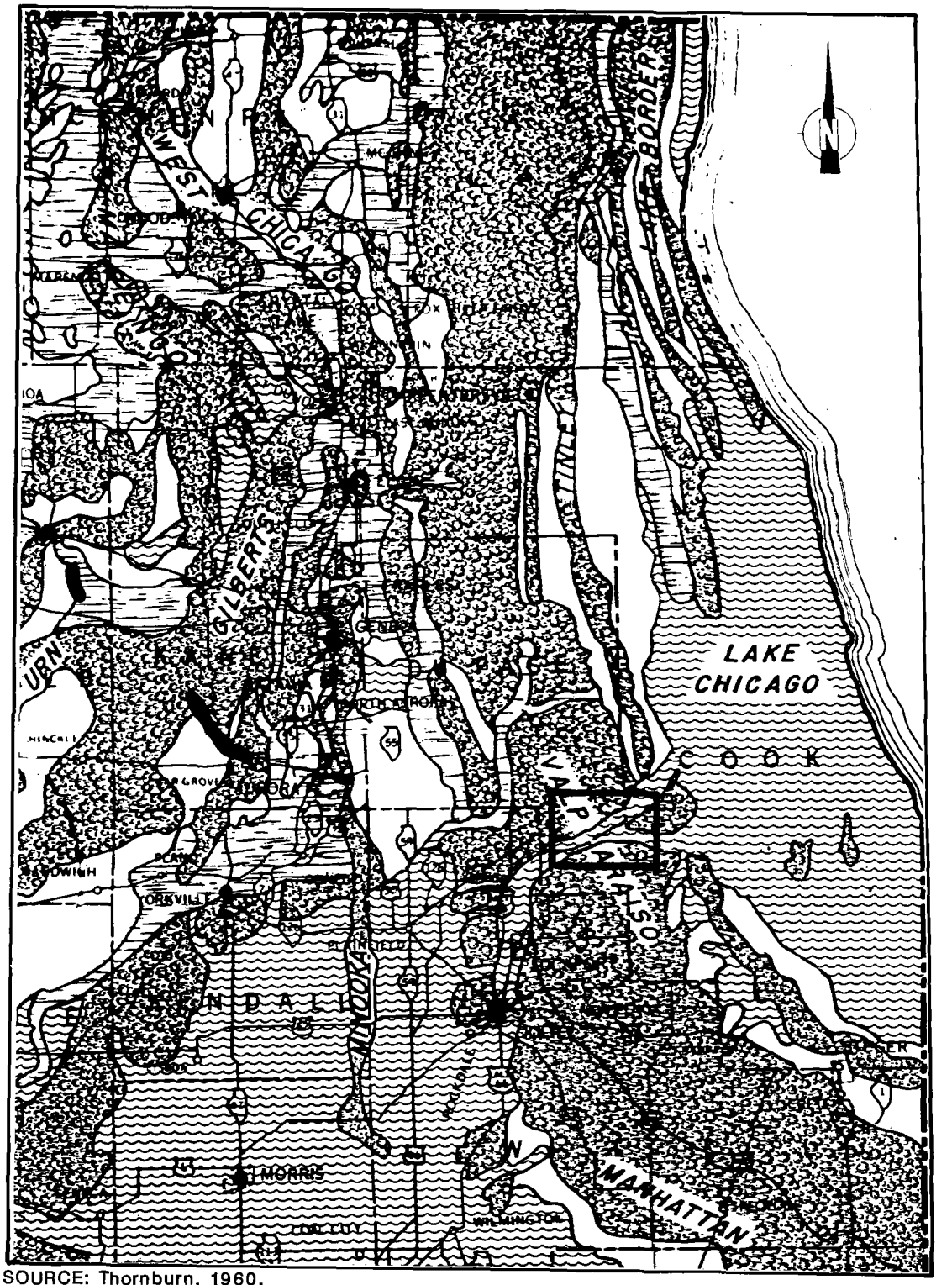
FIGURE 3-2 MONITORING WELL LOCATIONS


DES PLAINES RIVER
CHGO SAN & SHIP CANAL
Pkng
I & M CANAL
MW
MW
MW
83
IGC
sump
?x sump
NATURAL BERM
CAL-SAG CHANNEL

1974


DES PLAINES RIVER
CHGO SAN & SHIP CANAL
W
W
TOW PATH
I&M CANAL
83
?X
SUMP
X
SUMP
CAL-SAG CHANNEL

1961



SOURCE: Thornburn, 1960.

SCALE

0 10 20 30 MILES

LEGEND

MORAINIC RIDGES

ALLUVIATED VALLEYS AND OUTWASH PLAINS

LAKEBED SEDIMENTS

GROUND MORAINE

ICE-CONTACT STRATIFIED DRIFT

FIGURE 2-6 REGIONAL SURFACE GEOLOGY OF THE SITE AREA

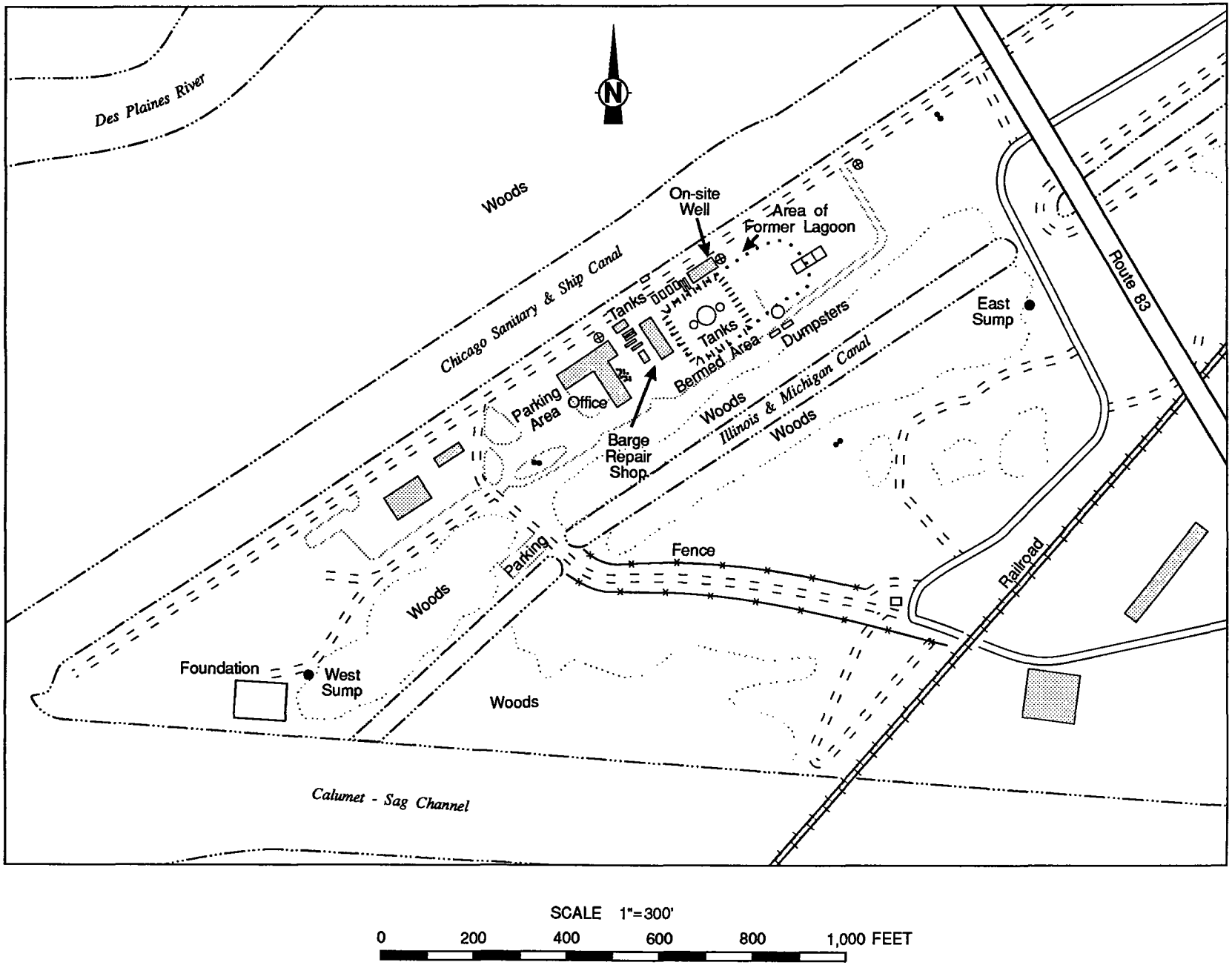


FIGURE 2-2 SITE FEATURES

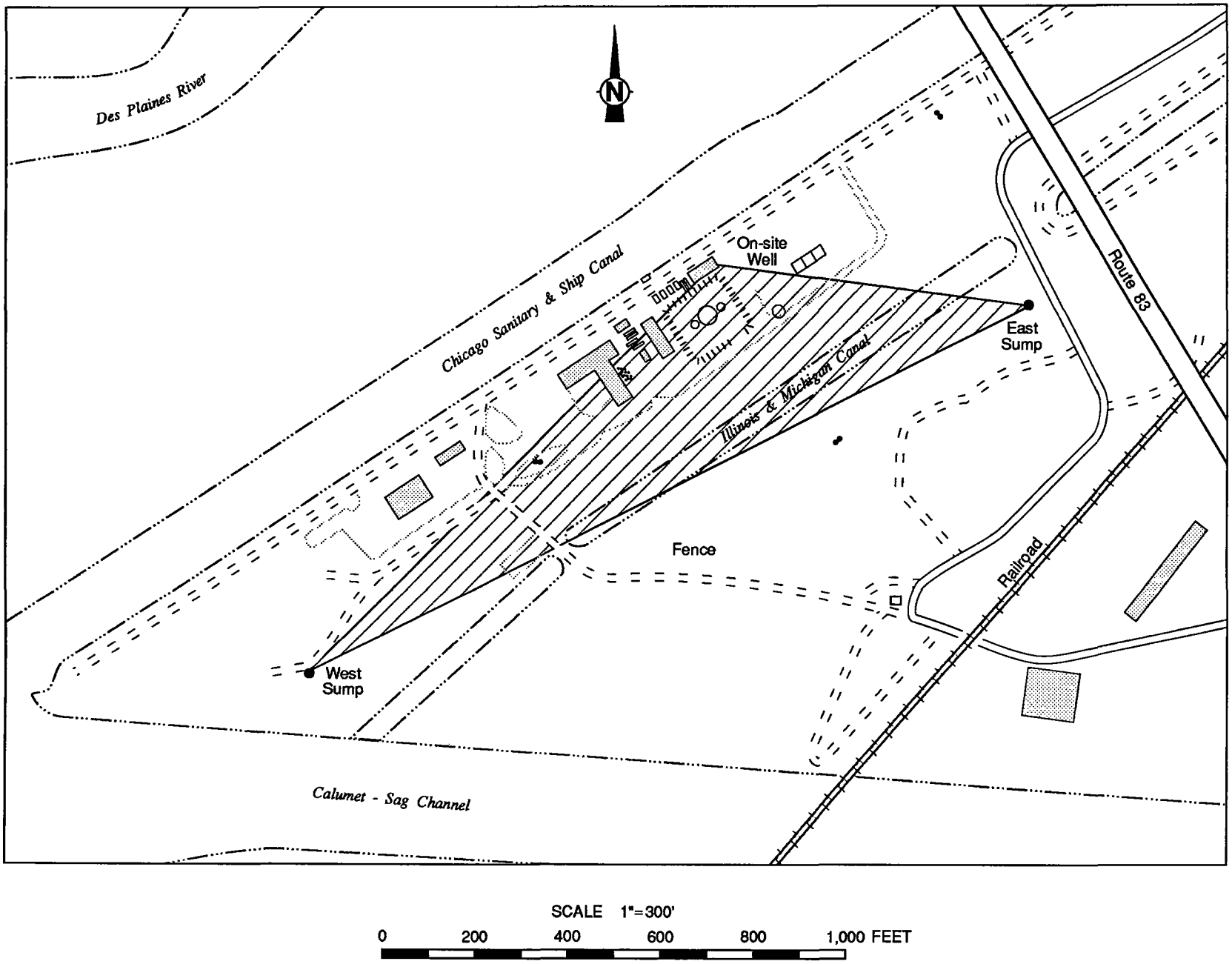
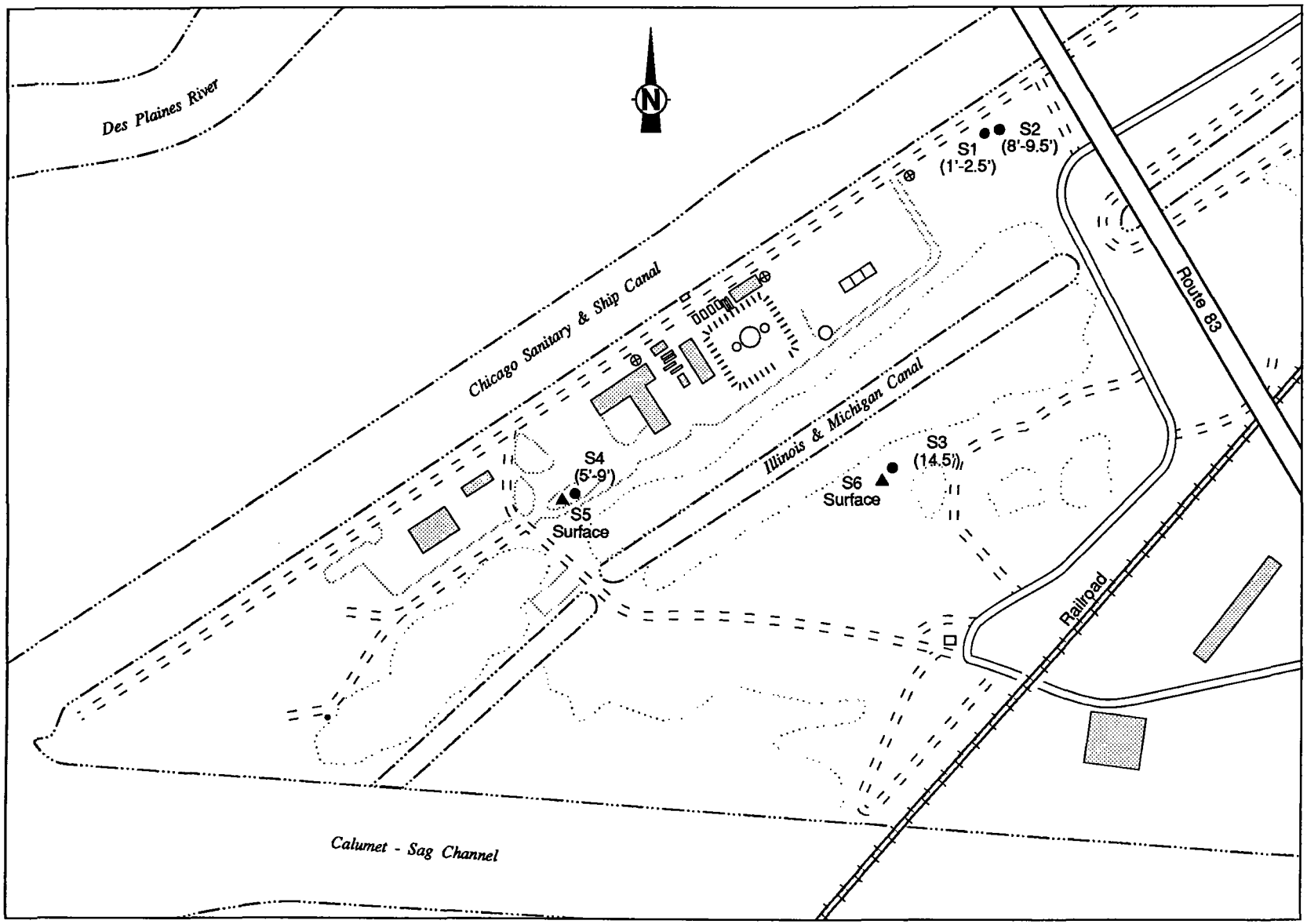


FIGURE 2-5 AREAS OF CONTAMINATION IDENTIFIED DURING PREVIOUS INVESTIGATIONS



SCALE 1"=300'

0 200 400 600 800 1,000 FEET

LEGEND

▲ SURFACE SAMPLE

● SUBSURFACE SAMPLE

FIGURE 3-1 SOIL SAMPLING LOCATIONS

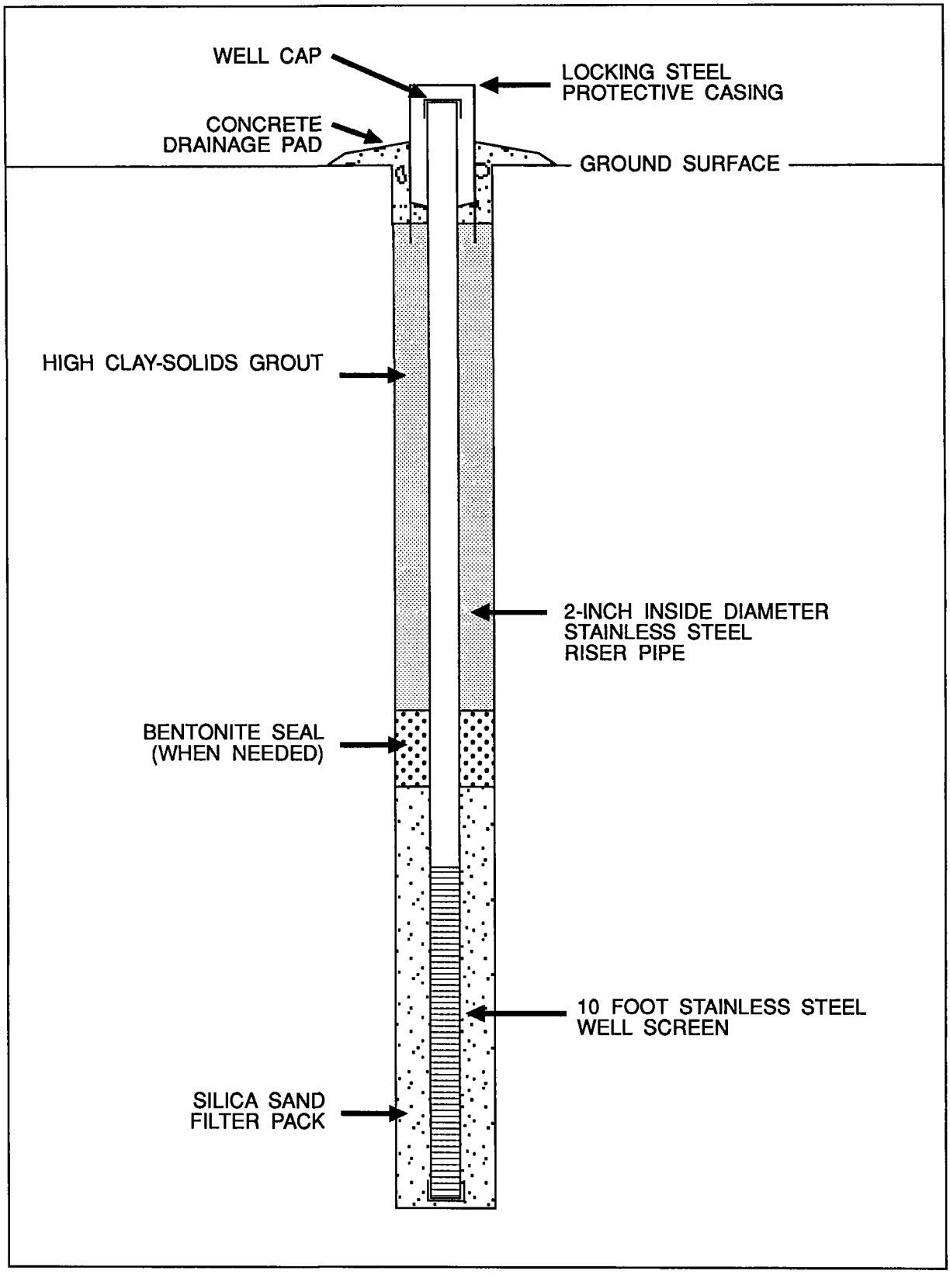


Figure 3-3 TYPICAL MONITORING WELL CONSTRUCTION

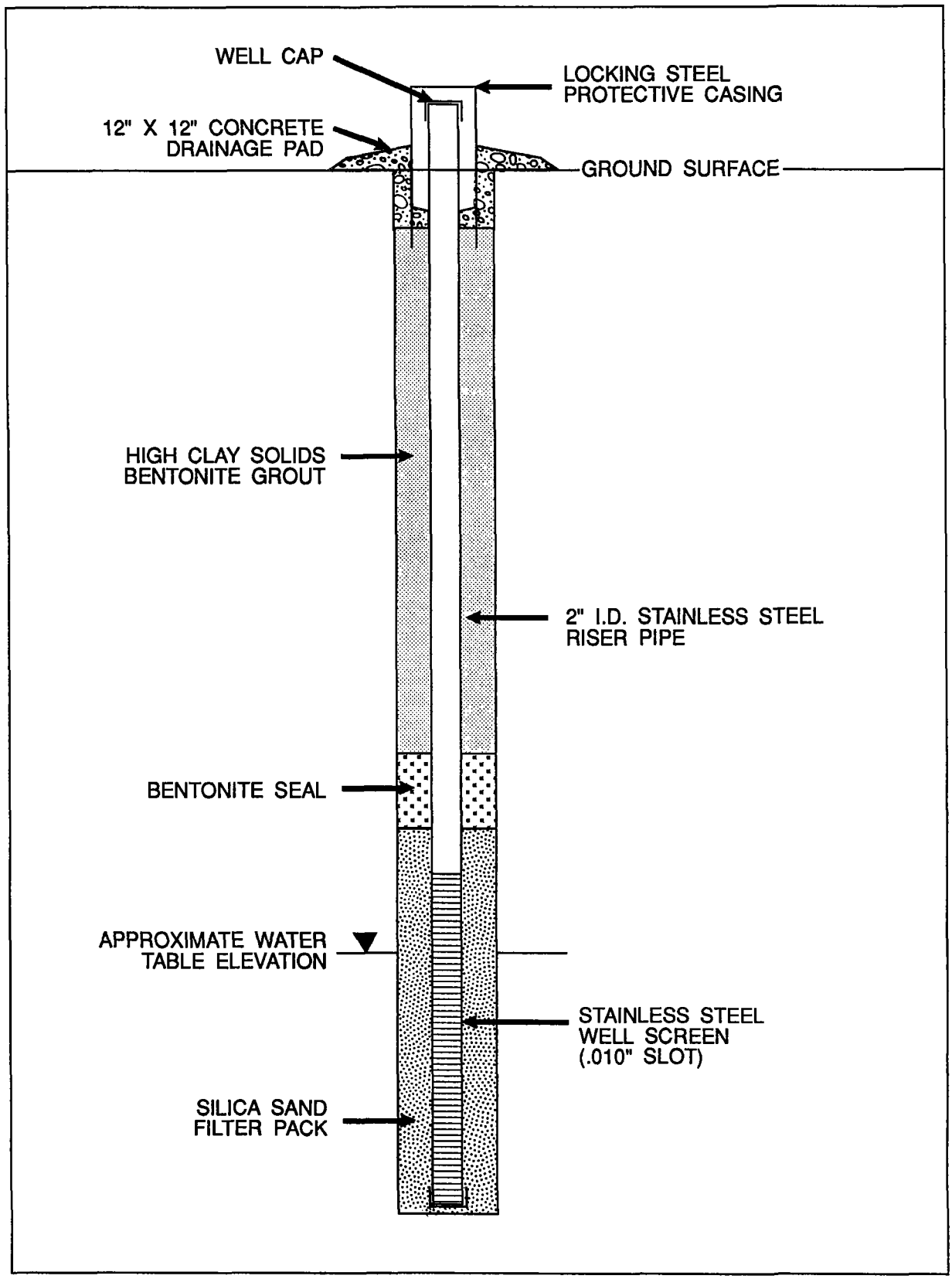
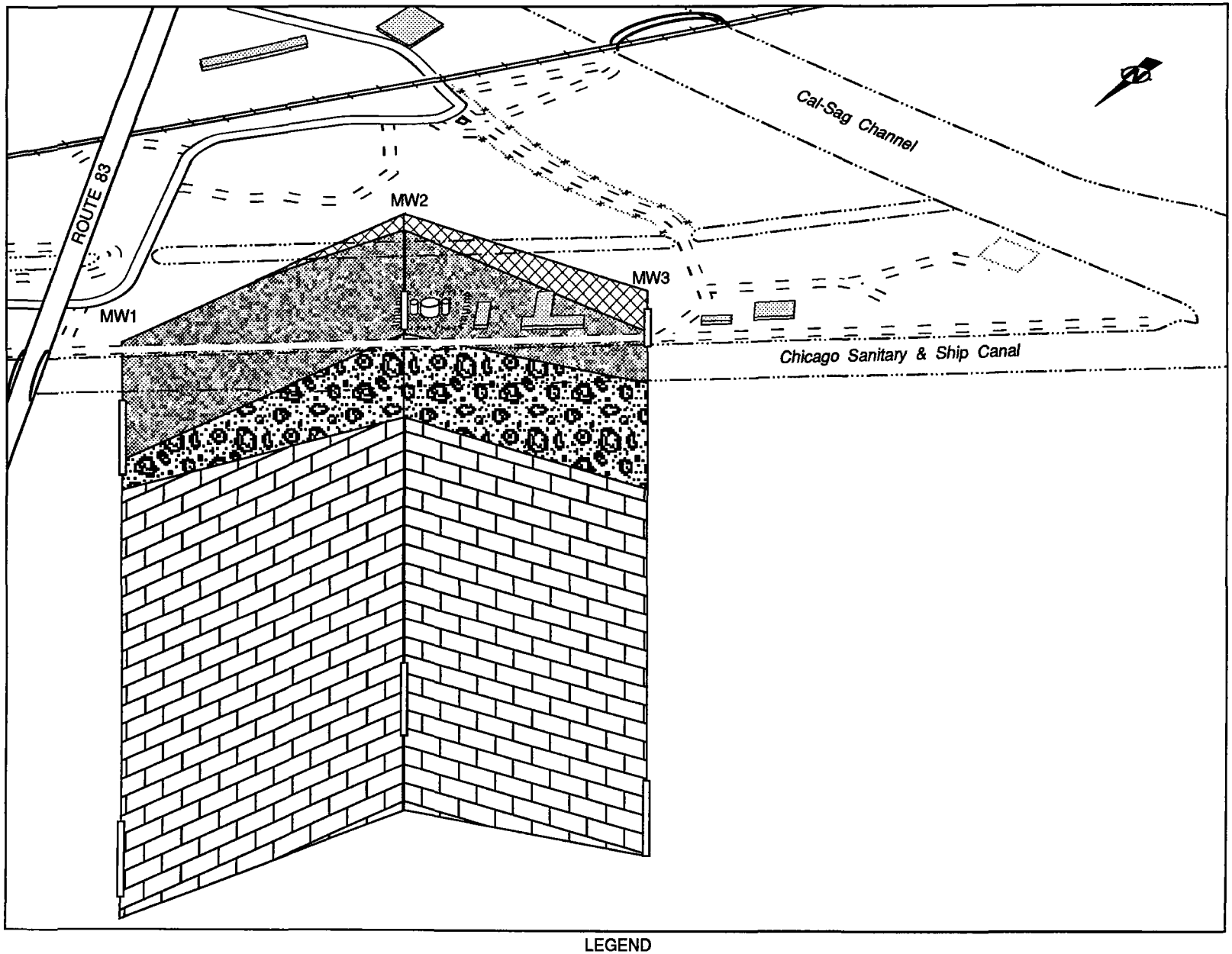


FIGURE 6 TYPICAL MONITORING WELL CONSTRUCTION



LEGEND

FILL

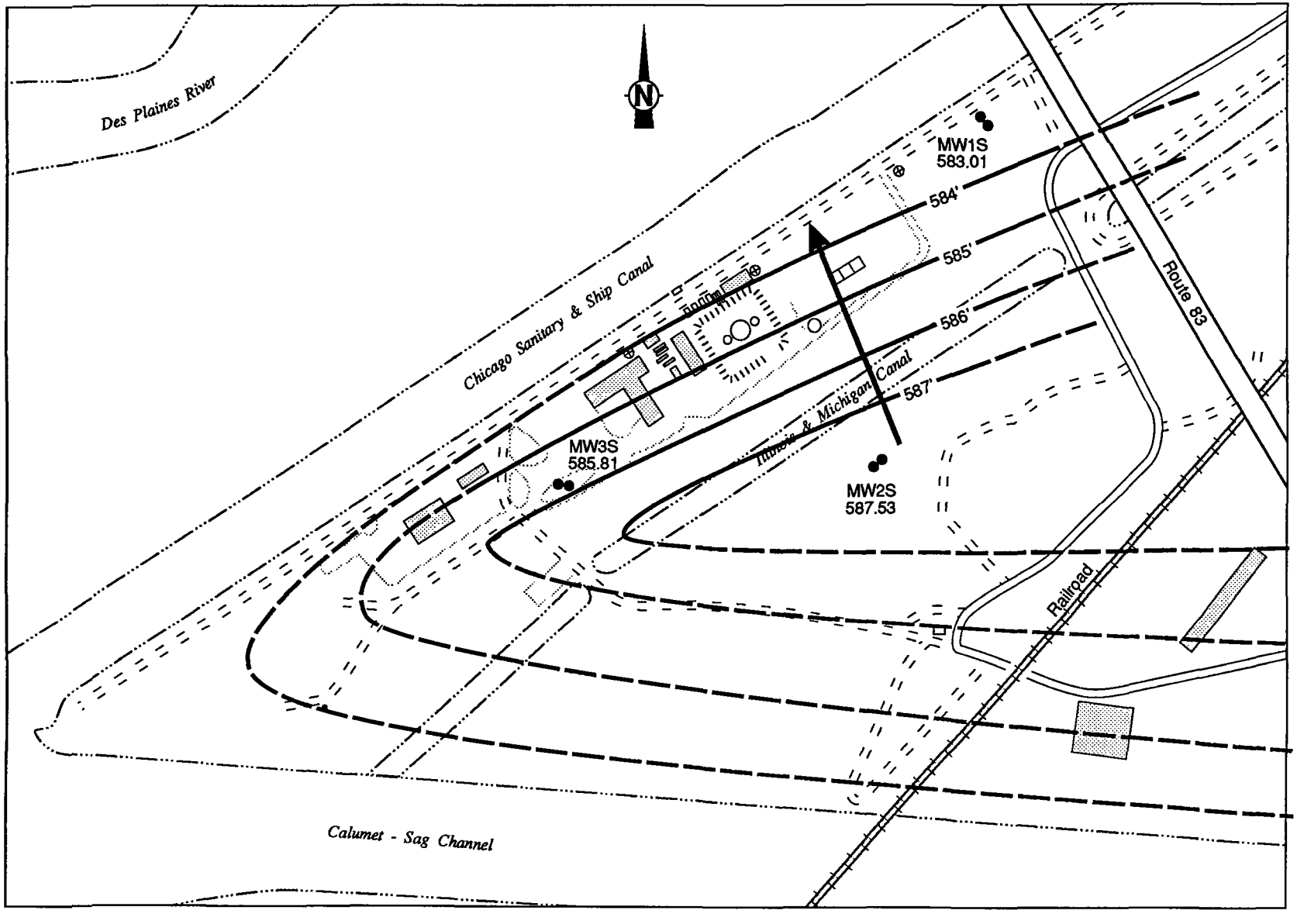
GLACIAL BOULDERS

FLUVIAL DEPOSITS

JOLIET DOLOMITE

NOTE: Vertical scale is exaggerated.

FIGURE 4-1 GEOLOGIC FENCE DIAGRAM

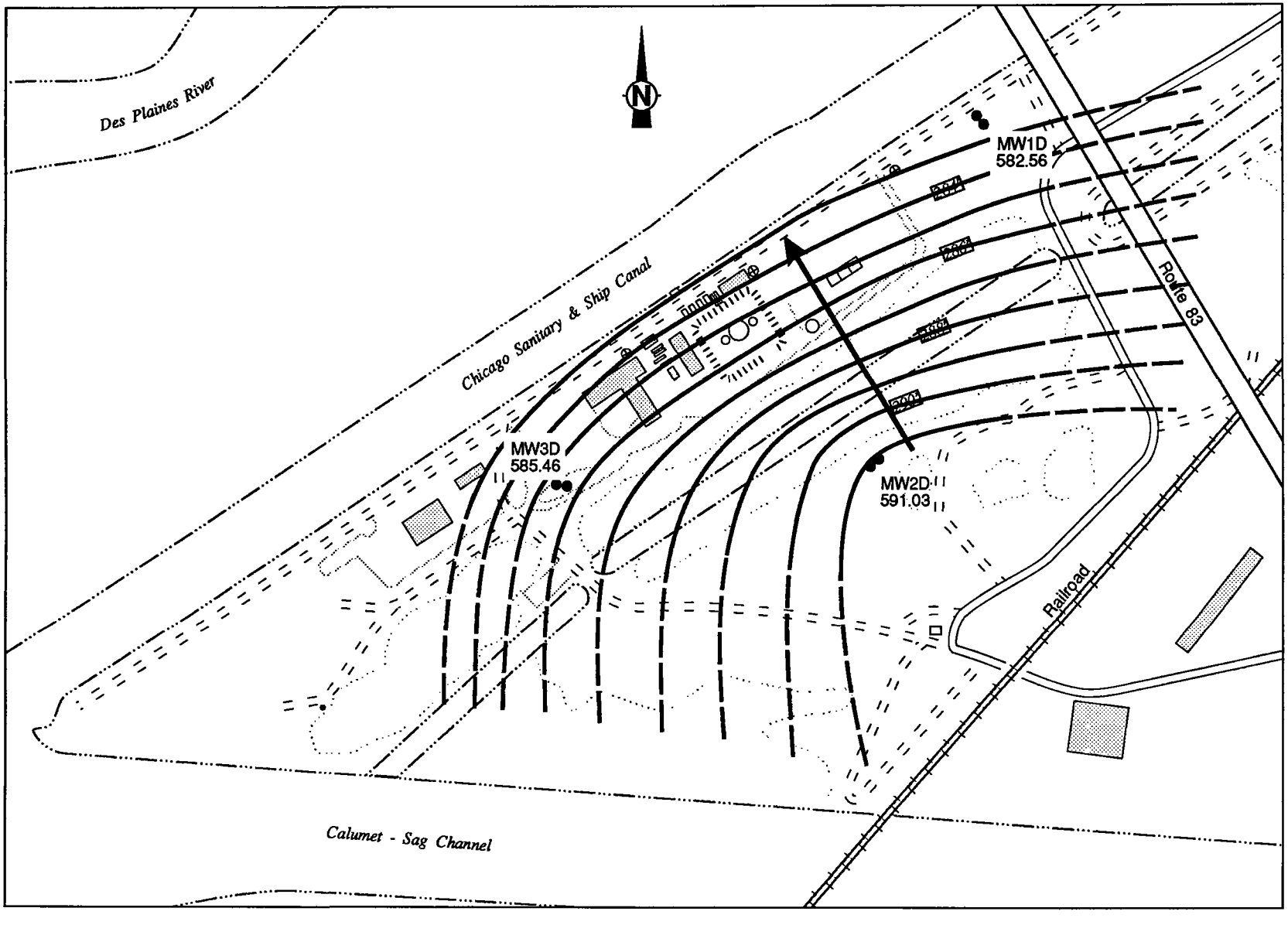


SCALE 1"=300'

0 200 400 600 800 1,000 FEET

CONTOUR INTERVAL 1 FOOT, DATUM MSL.

FIGURE 4-2 PIEZOMETRIC SURFACE MAP, SHALLOW WELLS

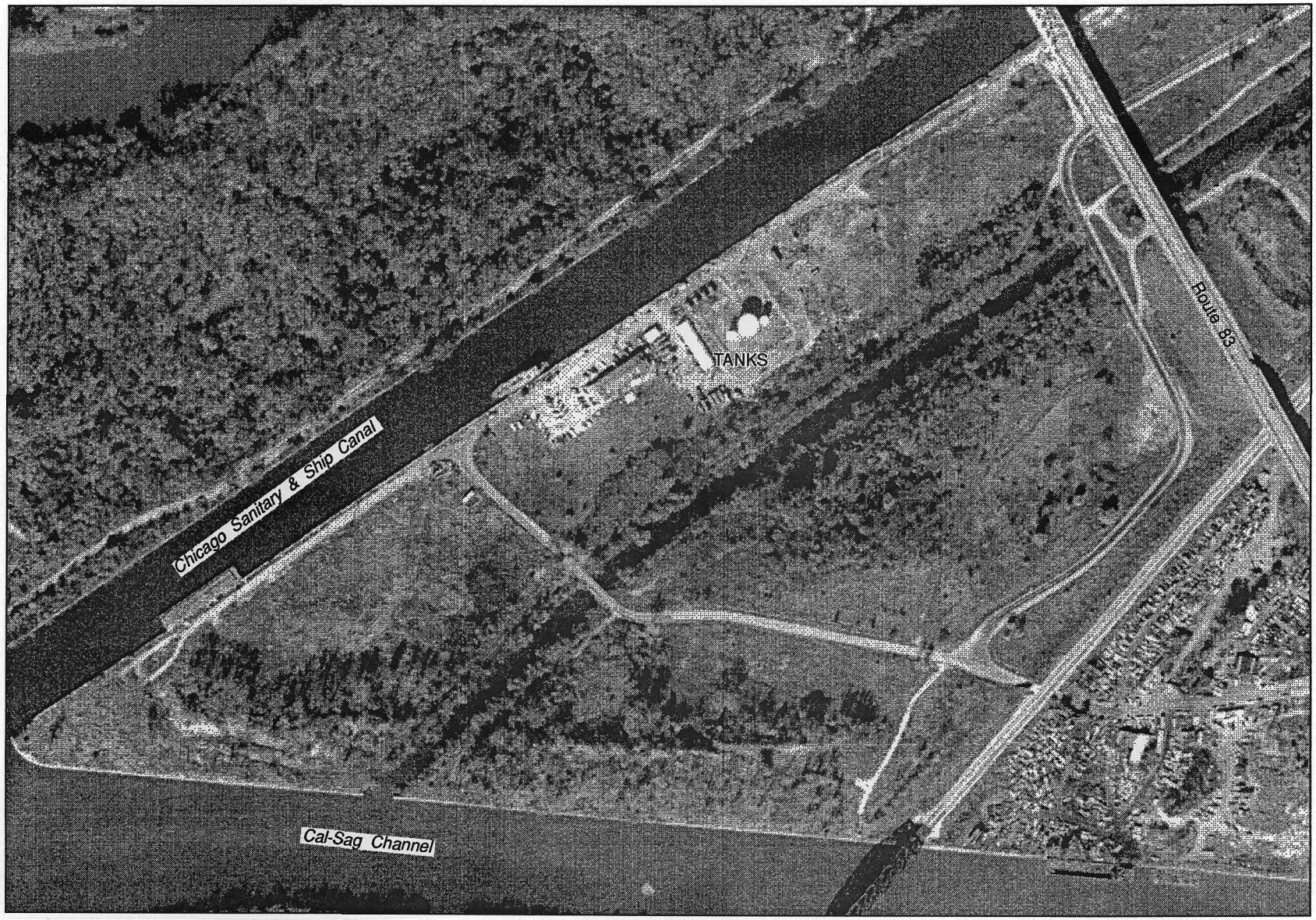


SCALE 1"=300'

0 200 400 600 800 1,000 FEET

CONTOUR INTERVAL 1 FOOT, DATUM MSL.

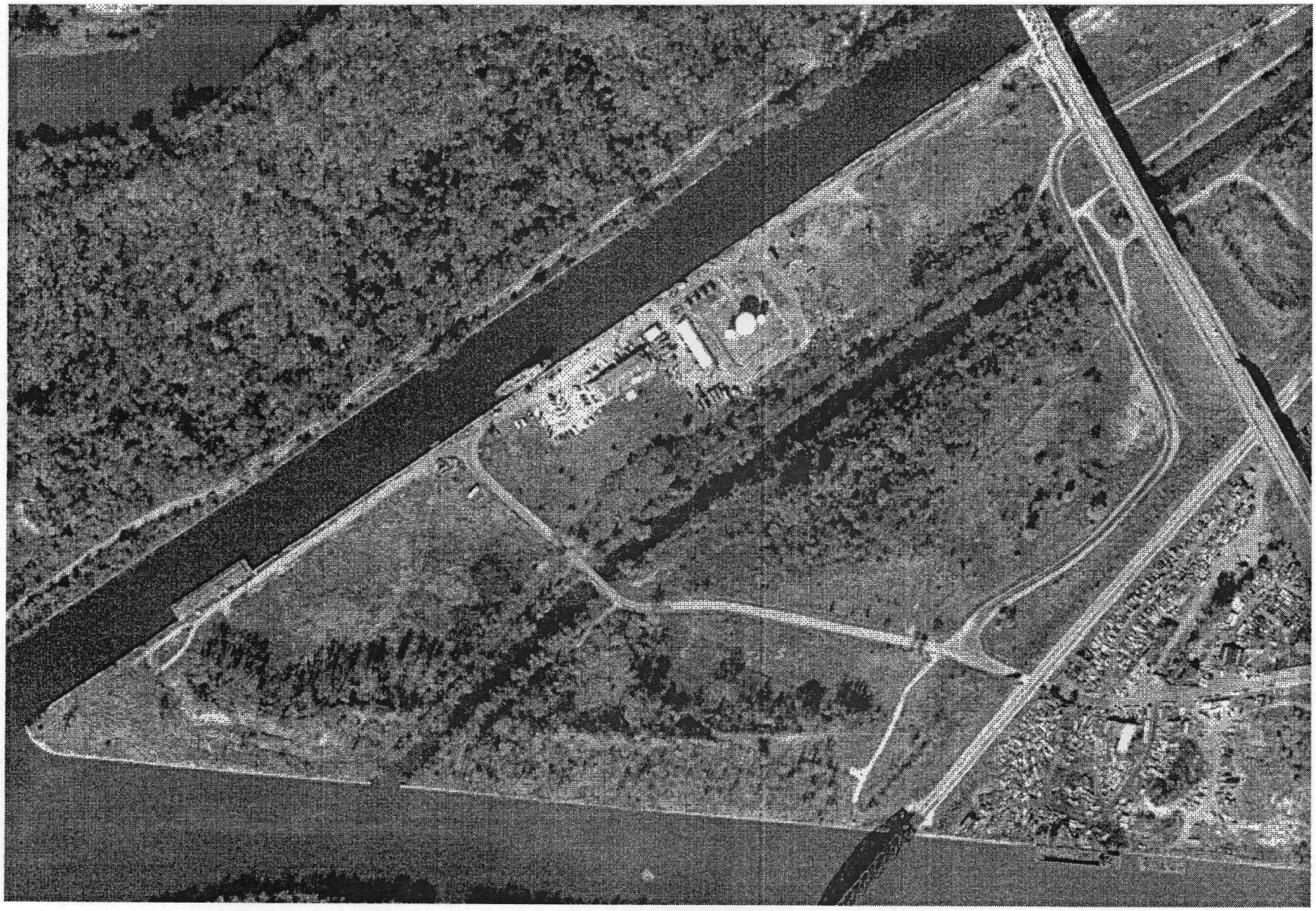
FIGURE 4-3 PIEZOMETRIC SURFACE MAP, DEEP WELLS



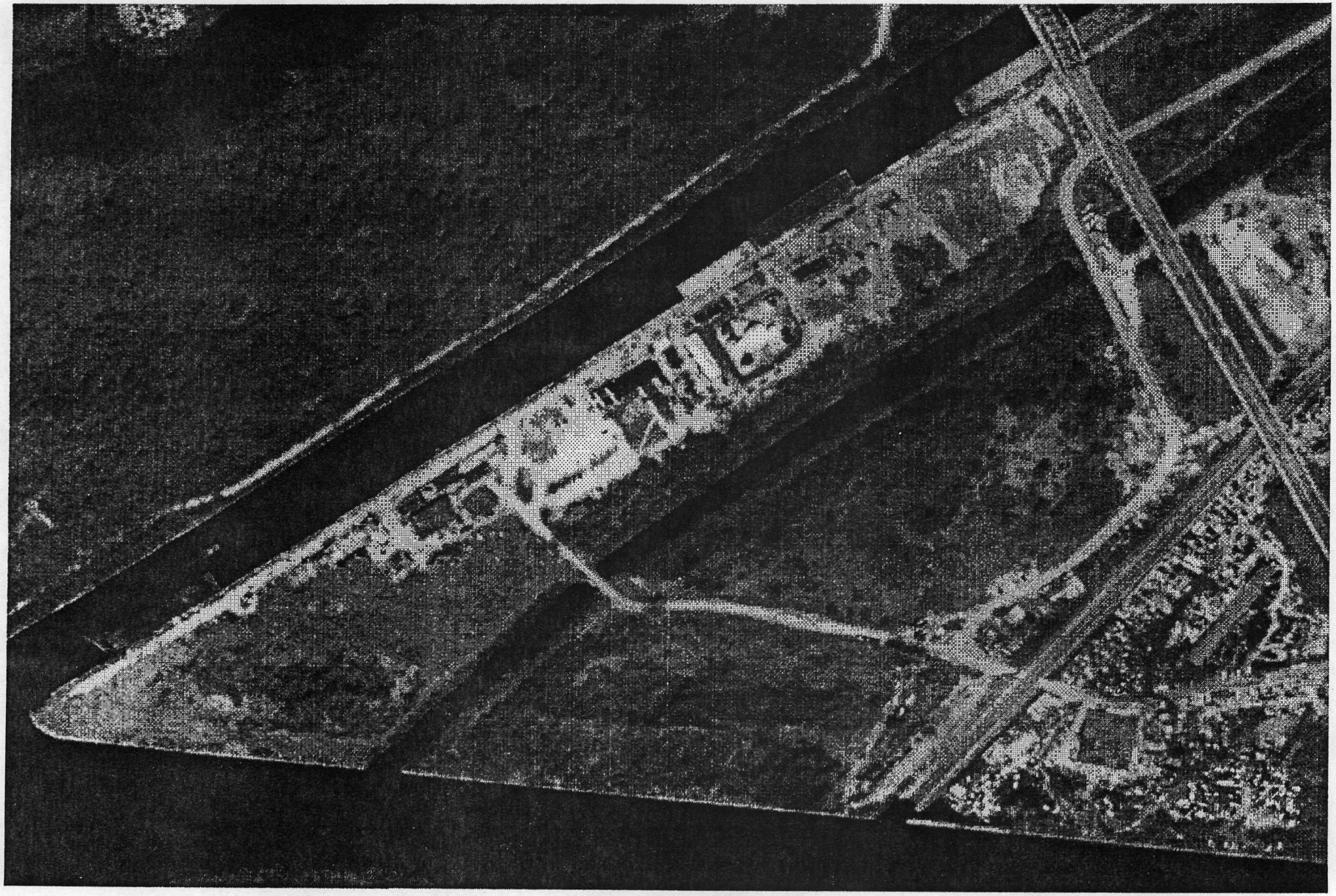
SOURCE: USDA Aerial Photograph, 10/10/74.

FIGURE 2-4 SITE CONDITIONS, 1974

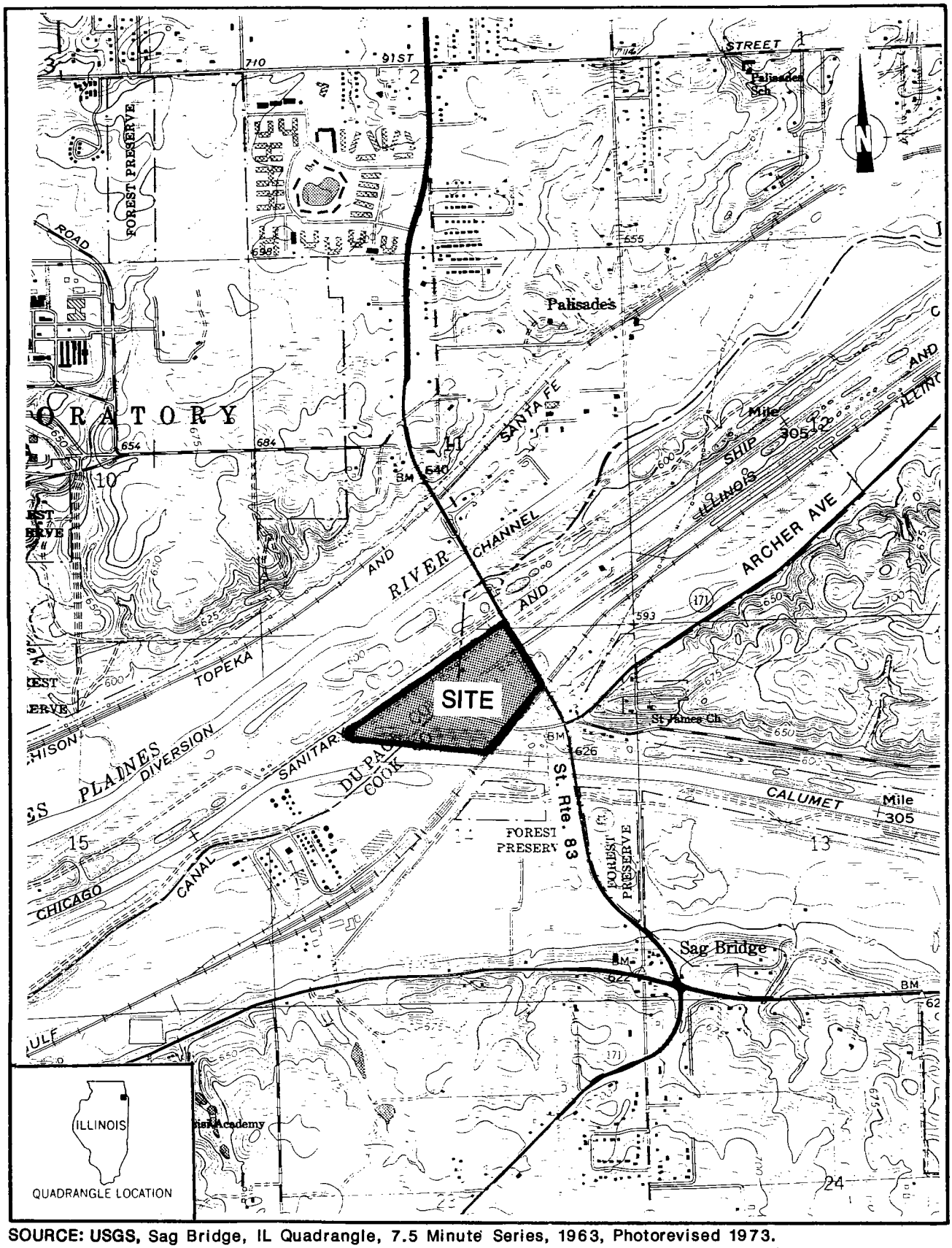
HANNA MARINE 9/16/61



HANNA MARINE 10/10/74



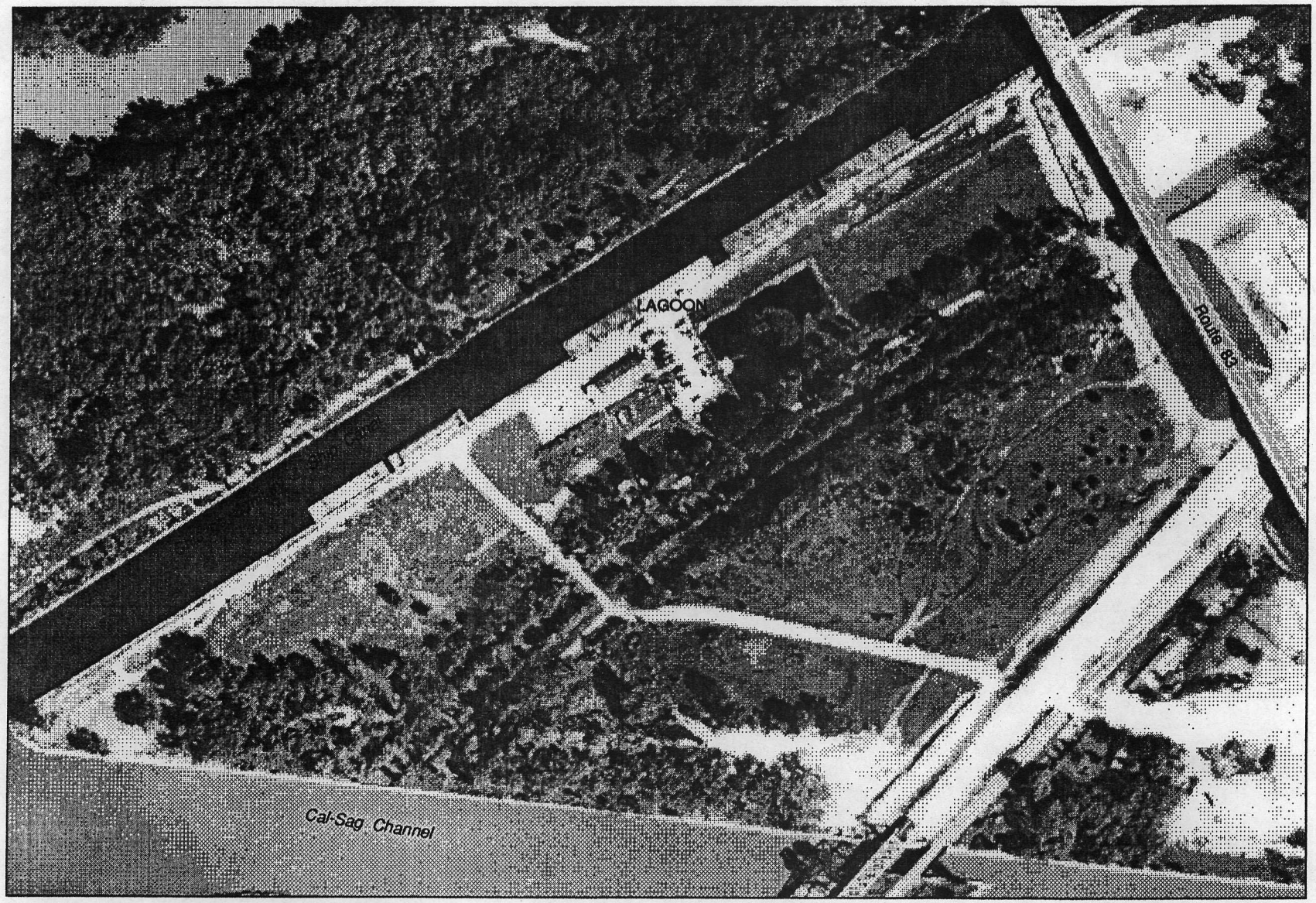
HANNA MARINE 1988



SOURCE: USGS, Sag Bridge, IL Quadrangle, 7.5 Minute Series, 1963, Photorevised 1973.

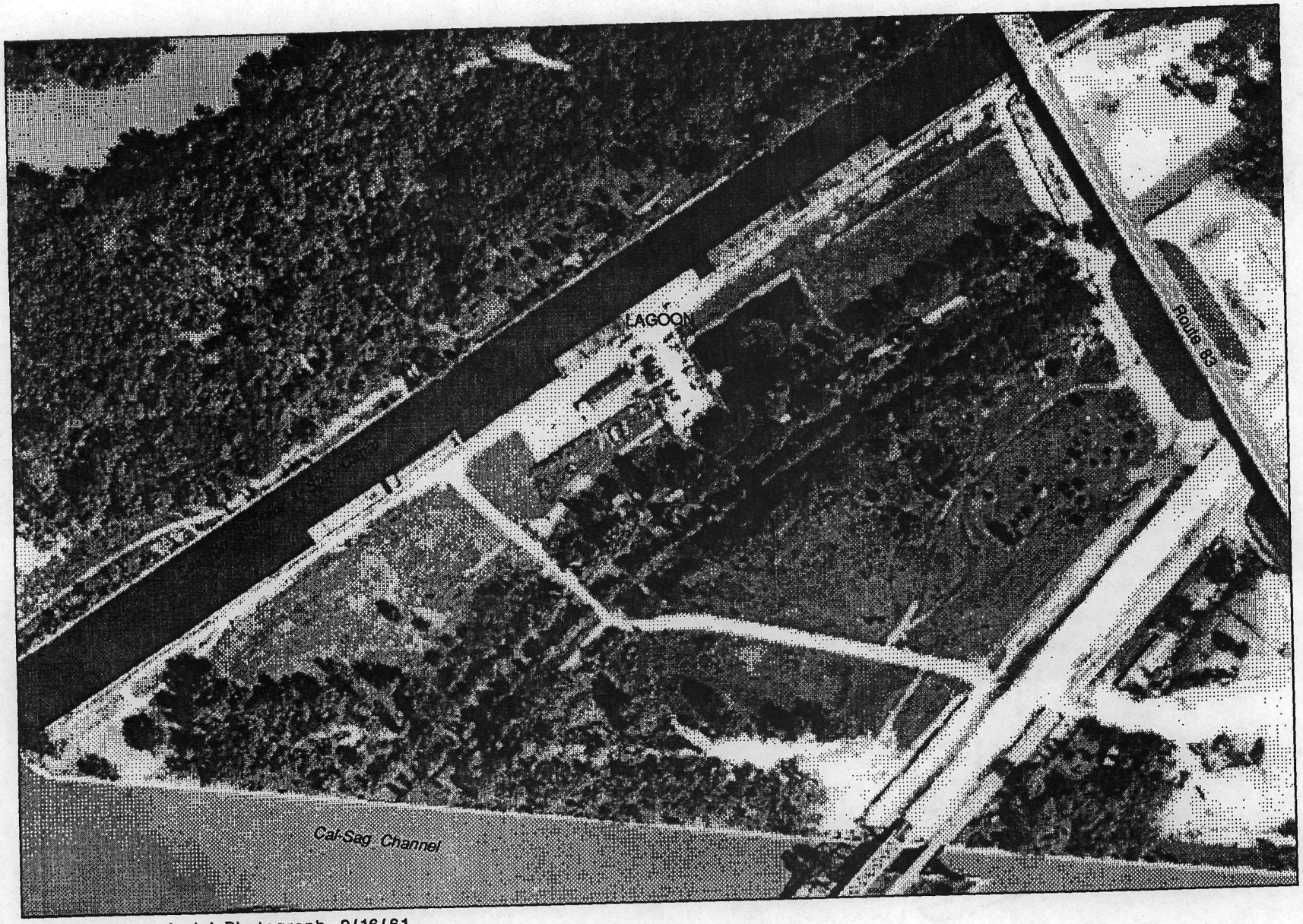
SCALE
0 0.5 1 MILE

FIGURE 2-1 SITE LOCATION



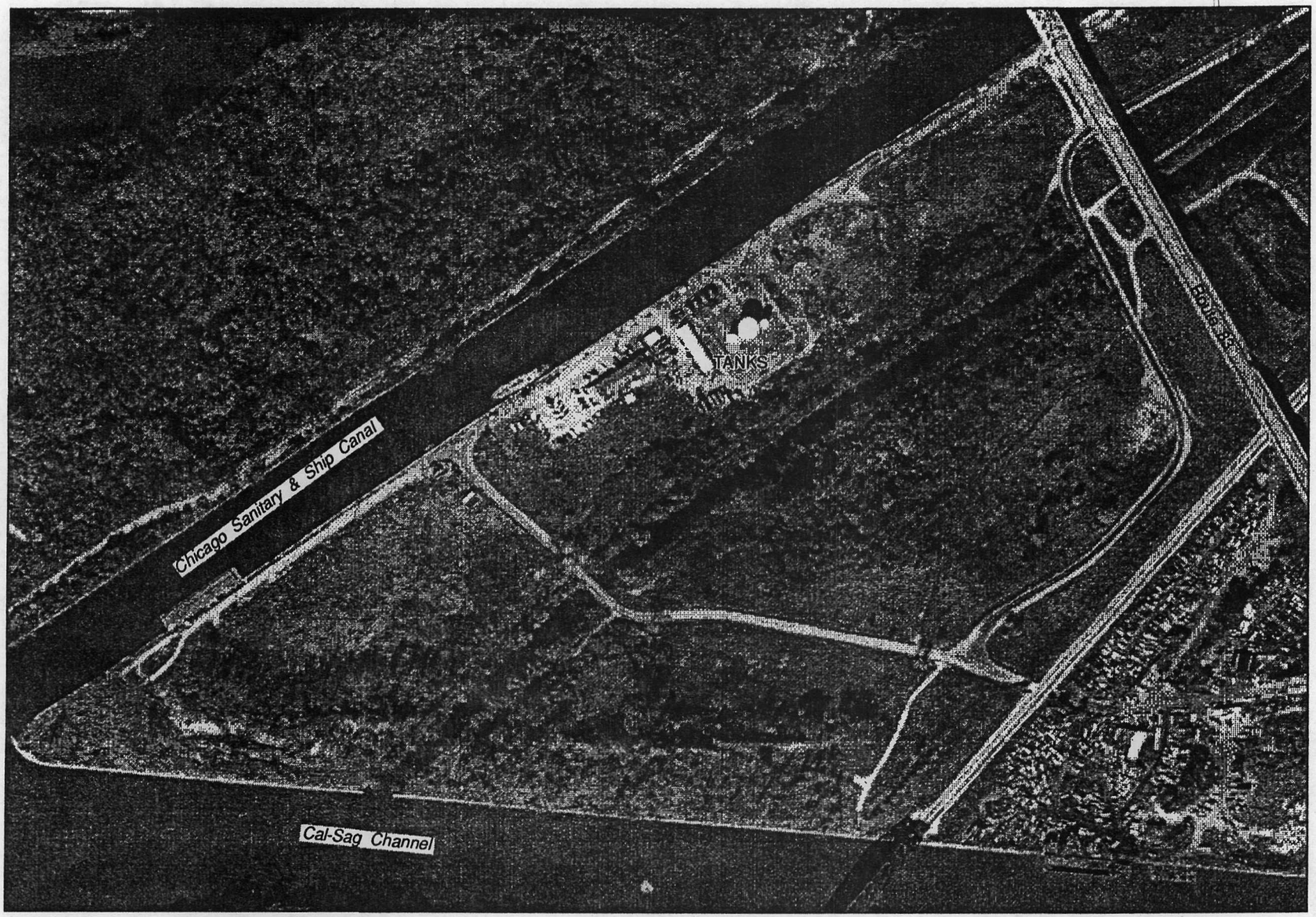
SOURCE: USDA Aerial Photograph, 9/16/61.

FIGURE X-X SITE CONDITIONS, 1961



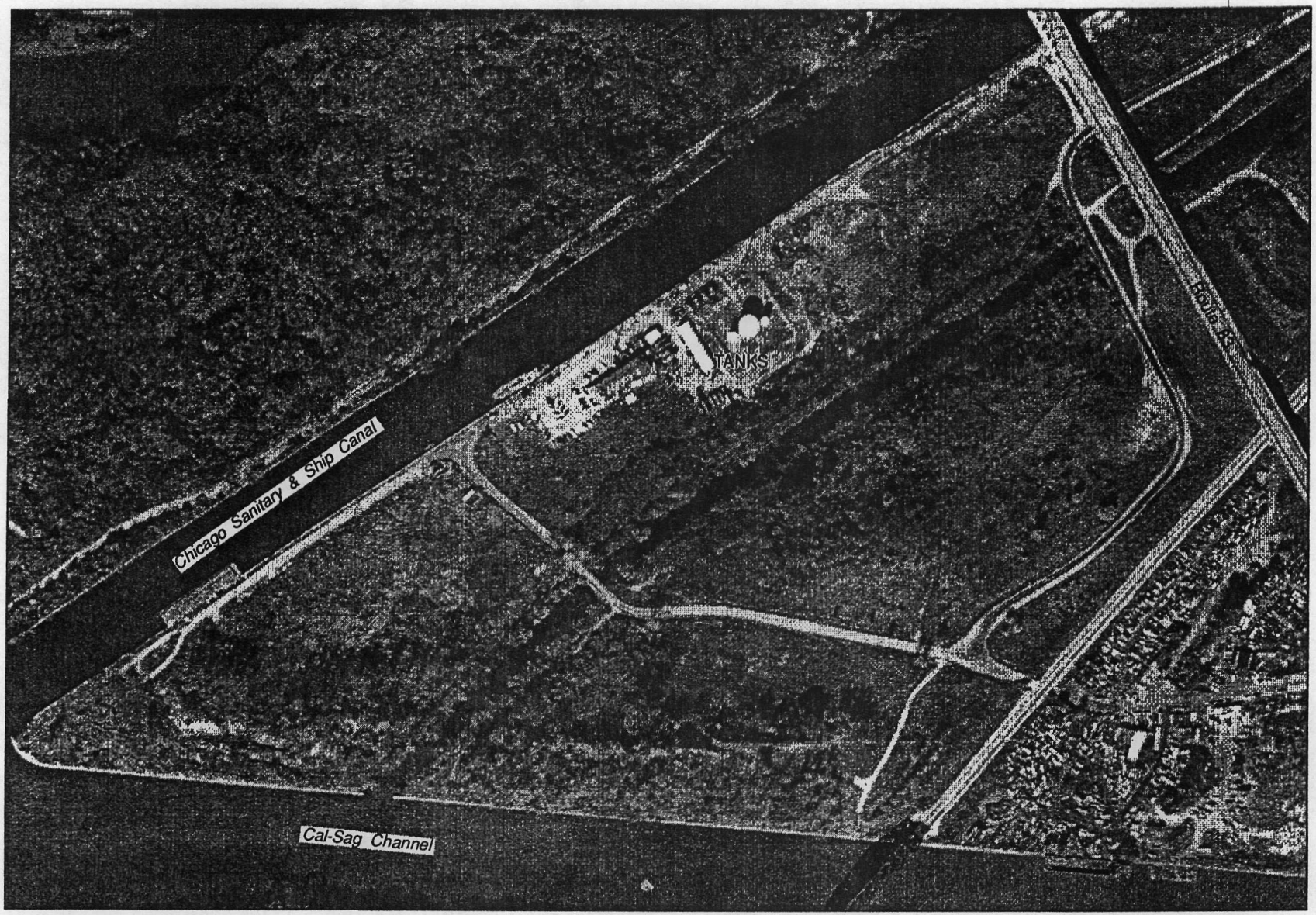
SOURCE: USDA Aerial Photograph, 9/16/61.

FIGURE X-X SITE CONDITIONS, 1961



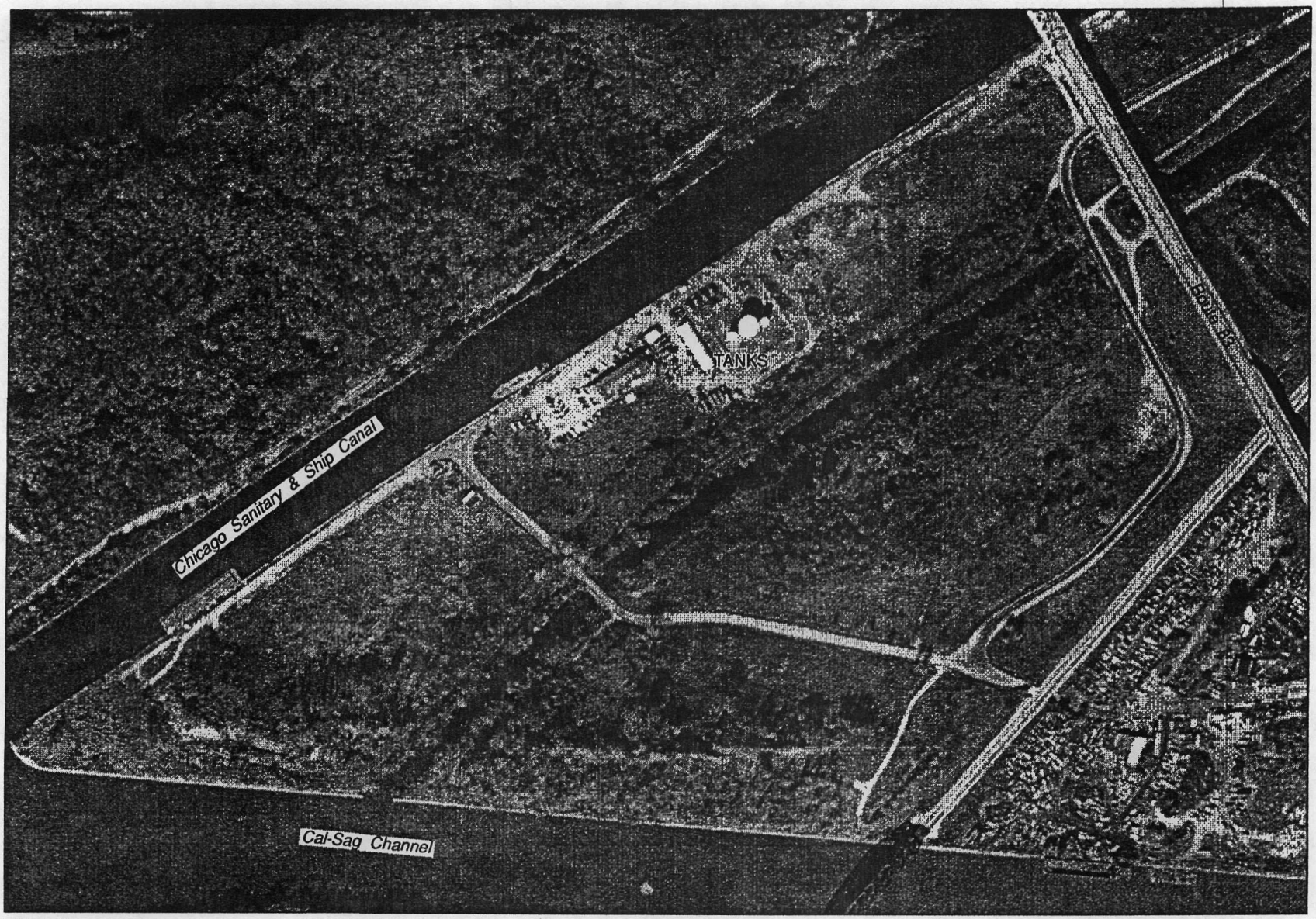
SOURCE: USDA Aerial Photograph, 10/10/74.

FIGURE X-X SITE CONDITIONS, 1974



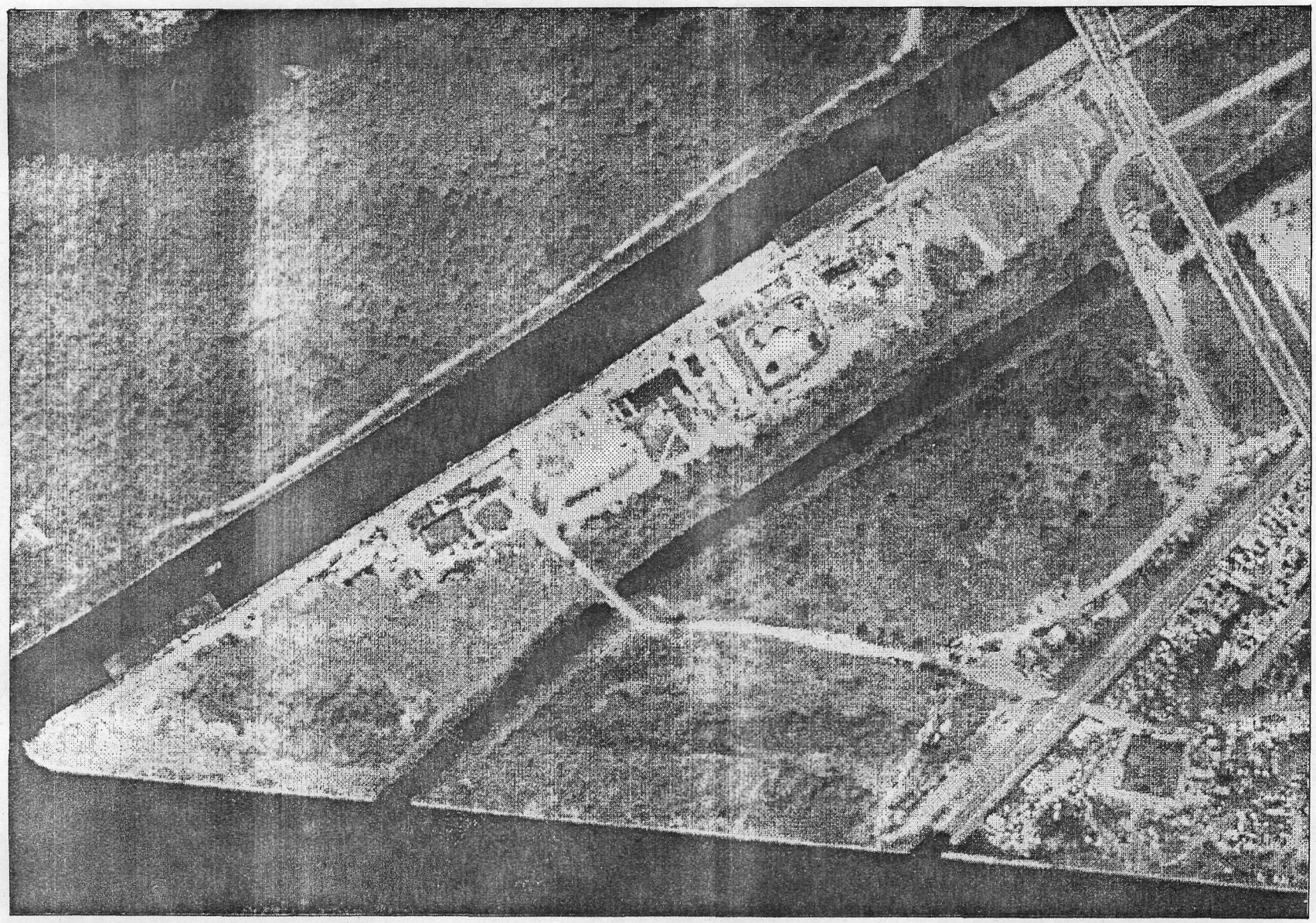
SOURCE: USDA Aerial Photograph, 10/10/74.

FIGURE X-X SITE CONDITIONS, 1974



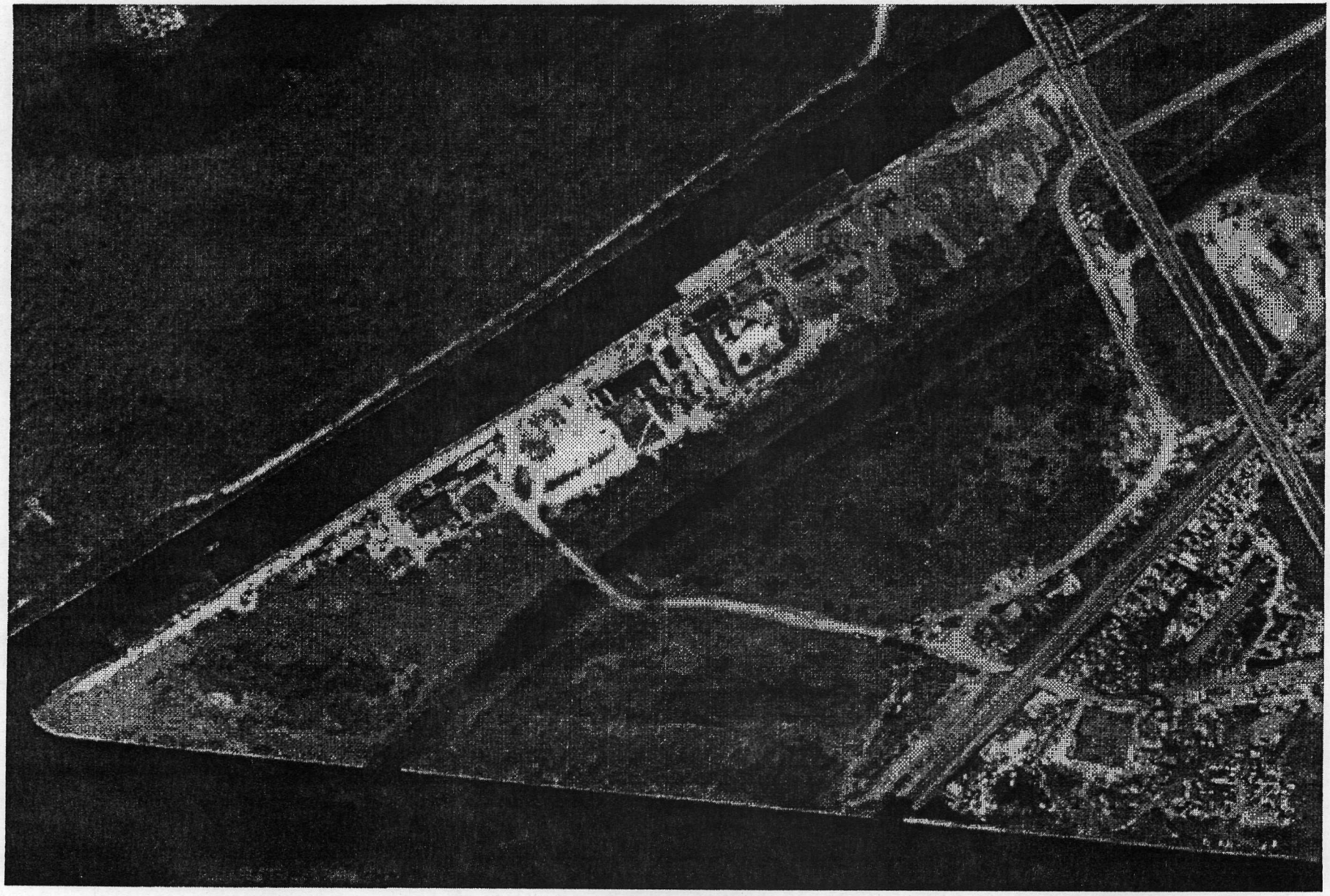
SOURCE: USDA Aerial Photograph, 10/10/74.

FIGURE X-X SITE CONDITIONS, 1974

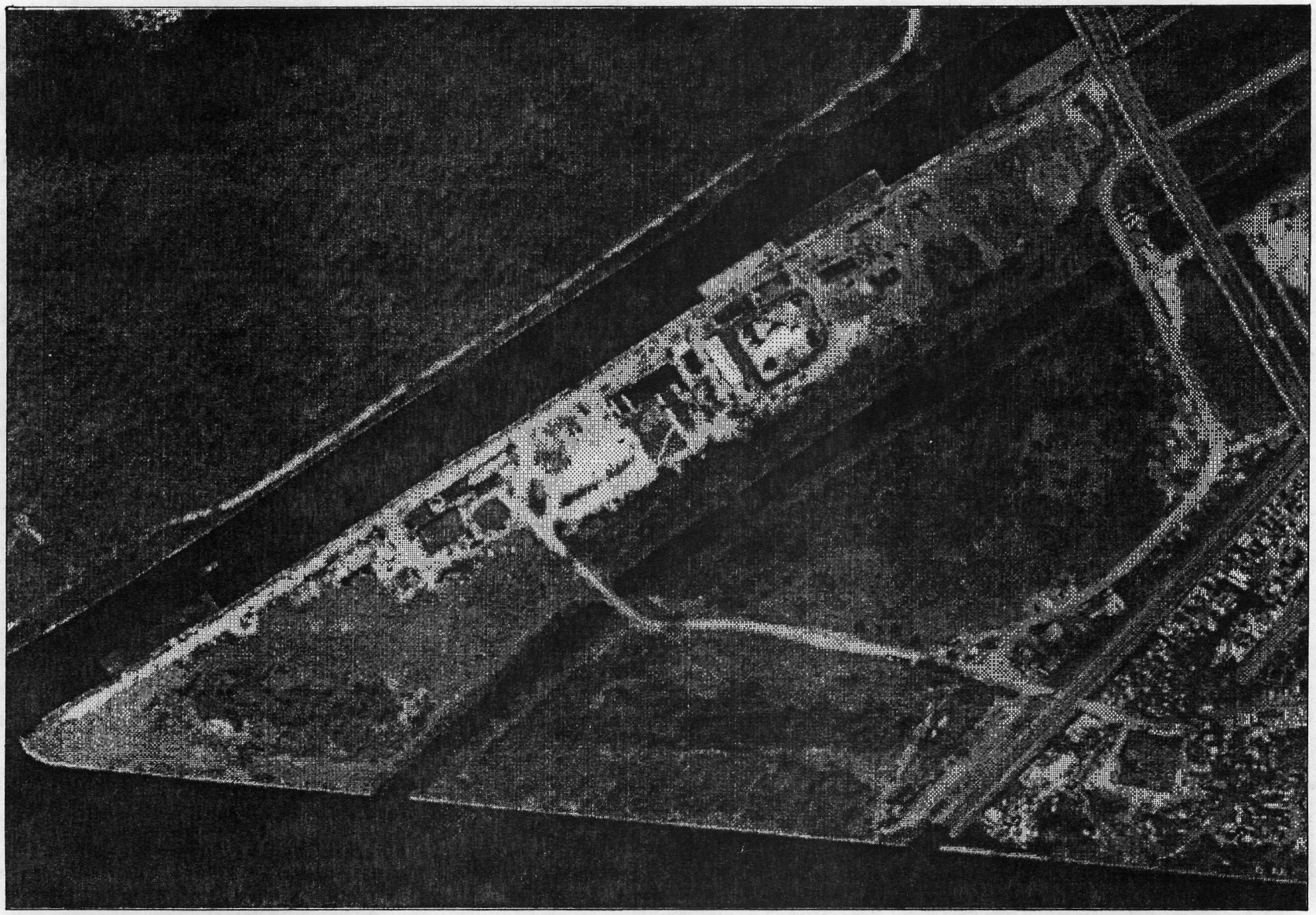


SOURCE: USDA Aerial Photograph, 1988.

FIGURE X-X SITE CONDITIONS, 1988

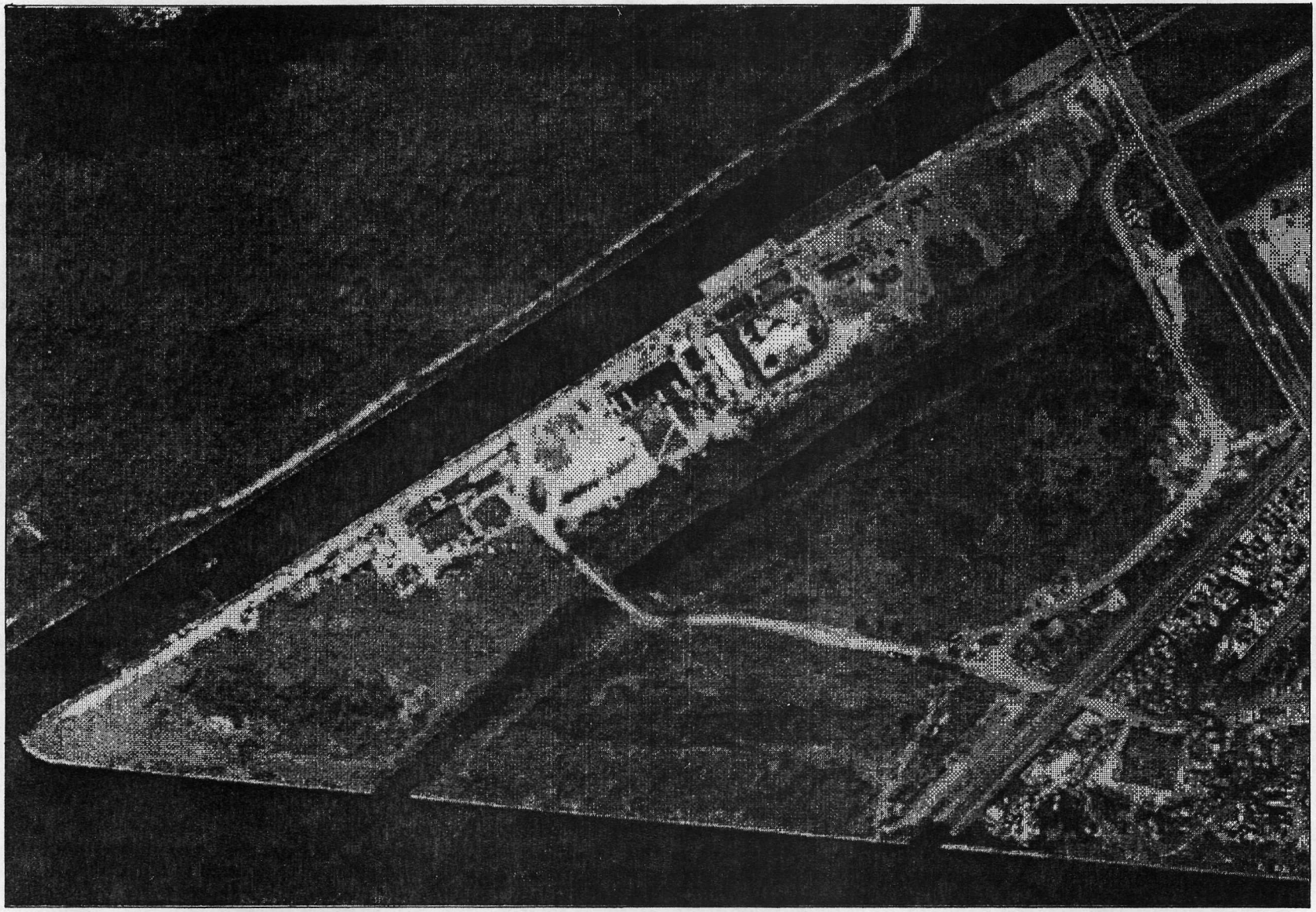


HANNA MARINE 1988



SOURCE: USDA Aerial Photograph, 1988.

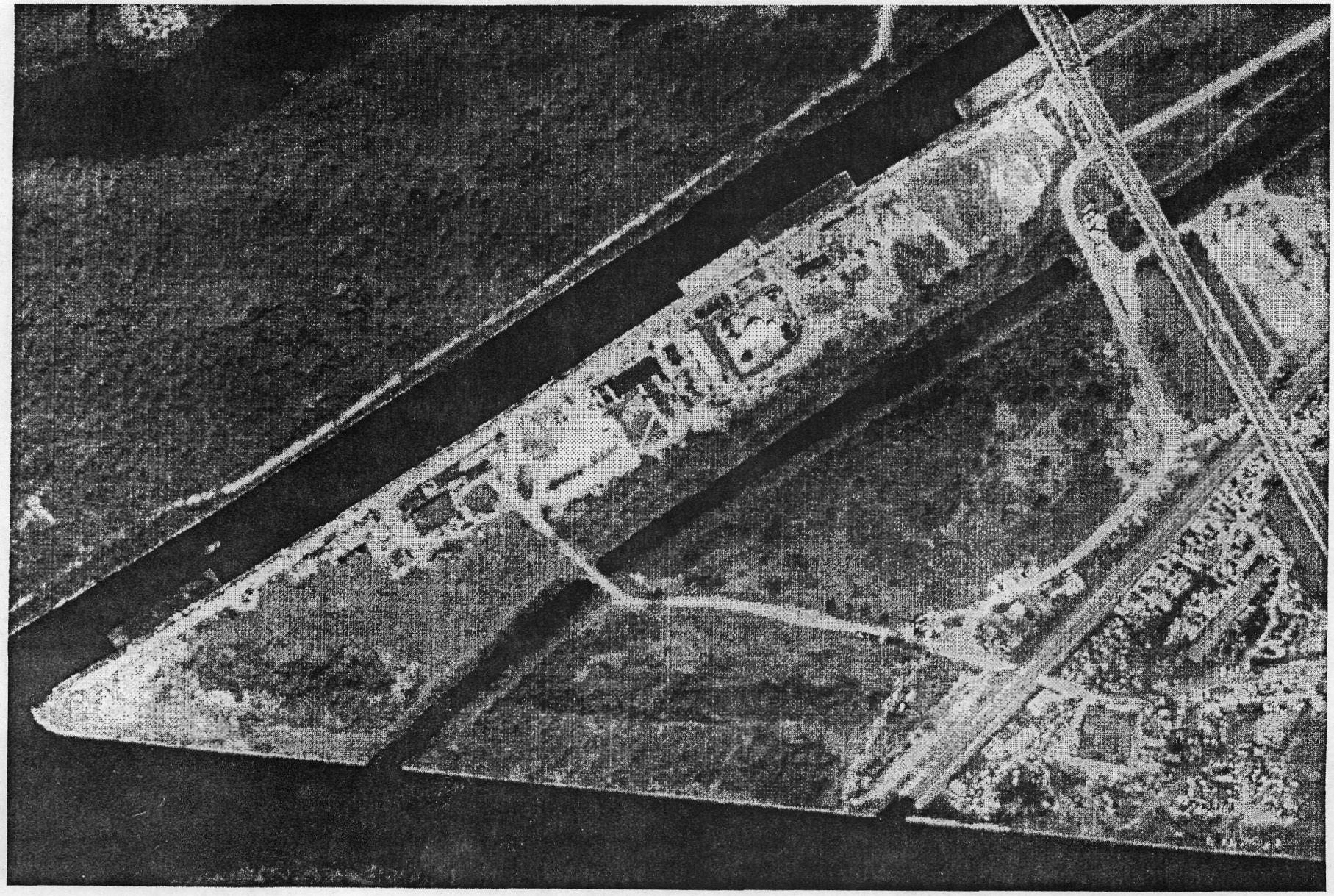
FIGURE X-X SITE CONDITIONS, 1988



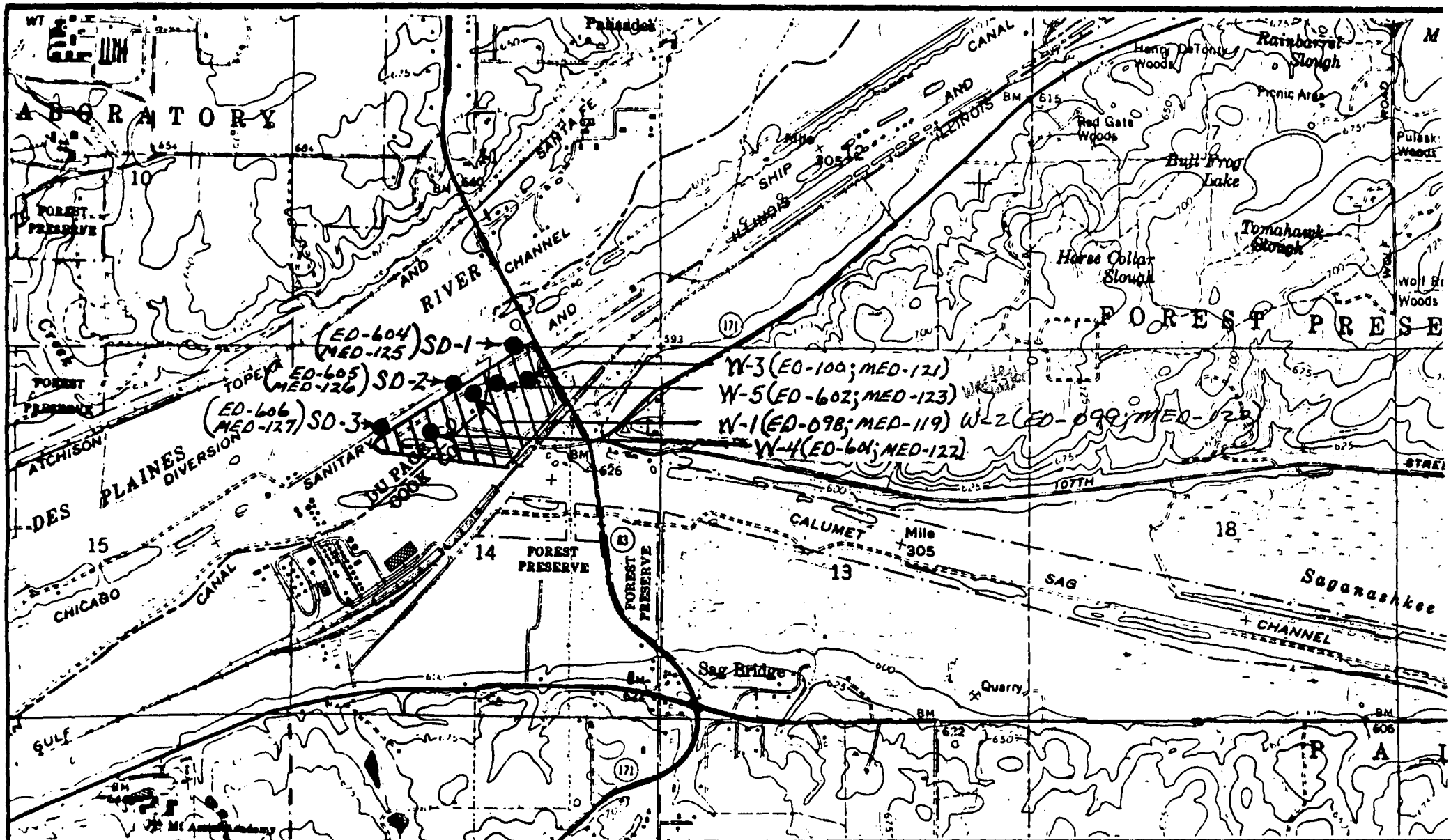
SOURCE: USDA Aerial Photograph, 1988.

FIGURE X-X SITE CONDITIONS, 1988

LABORATORY
TION
FOREST PRESERVE
FOREST PRESERVE
ROAD
Palisades
SANTA FE
RIVER
CHANNEL
AND
ILLINOIS
SHIP
CANAL
Mile 305
TOPEKA
ATCHISON
DES PLAINES
DIVERSION
SANITARY
DU PAGE CO
COOK CO
St James Ch
CALUMET
Mile 305
FOREST PRESERVE
FOREST PRESERVE
Sag Bridge
Quarry
CHICAGO
CANAL
MICHIGAN
GULF
Mt Assisi Academy
Hastings
St Marys Seminary
Cog Hill Country Club
Camp Palos
Victory
WALKER
MOUNT VERNON MEMORIAL PARK
(CEMETER
ROAD
LEMONT
Gleneagles Country Club
590'
575'
700'

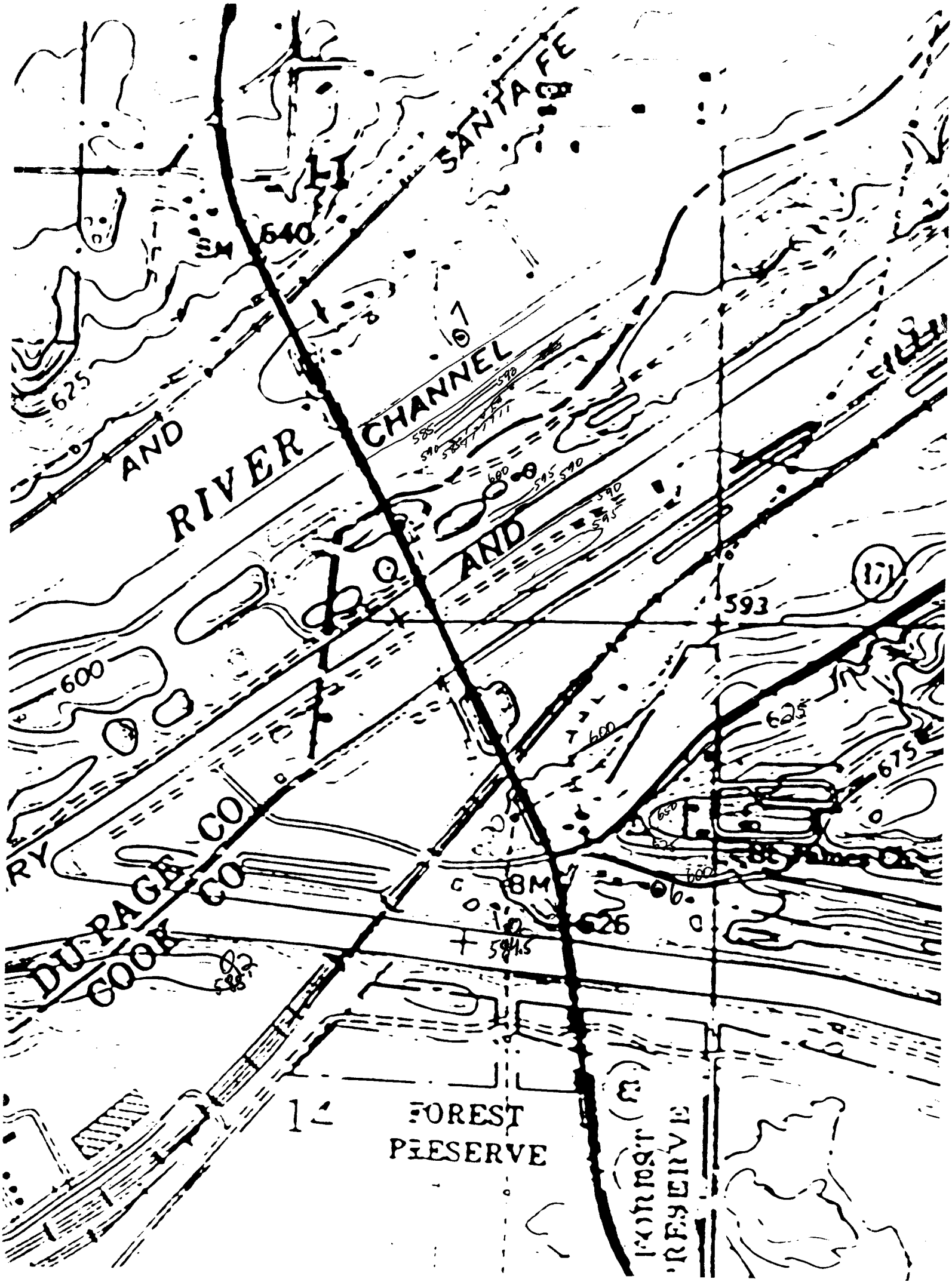


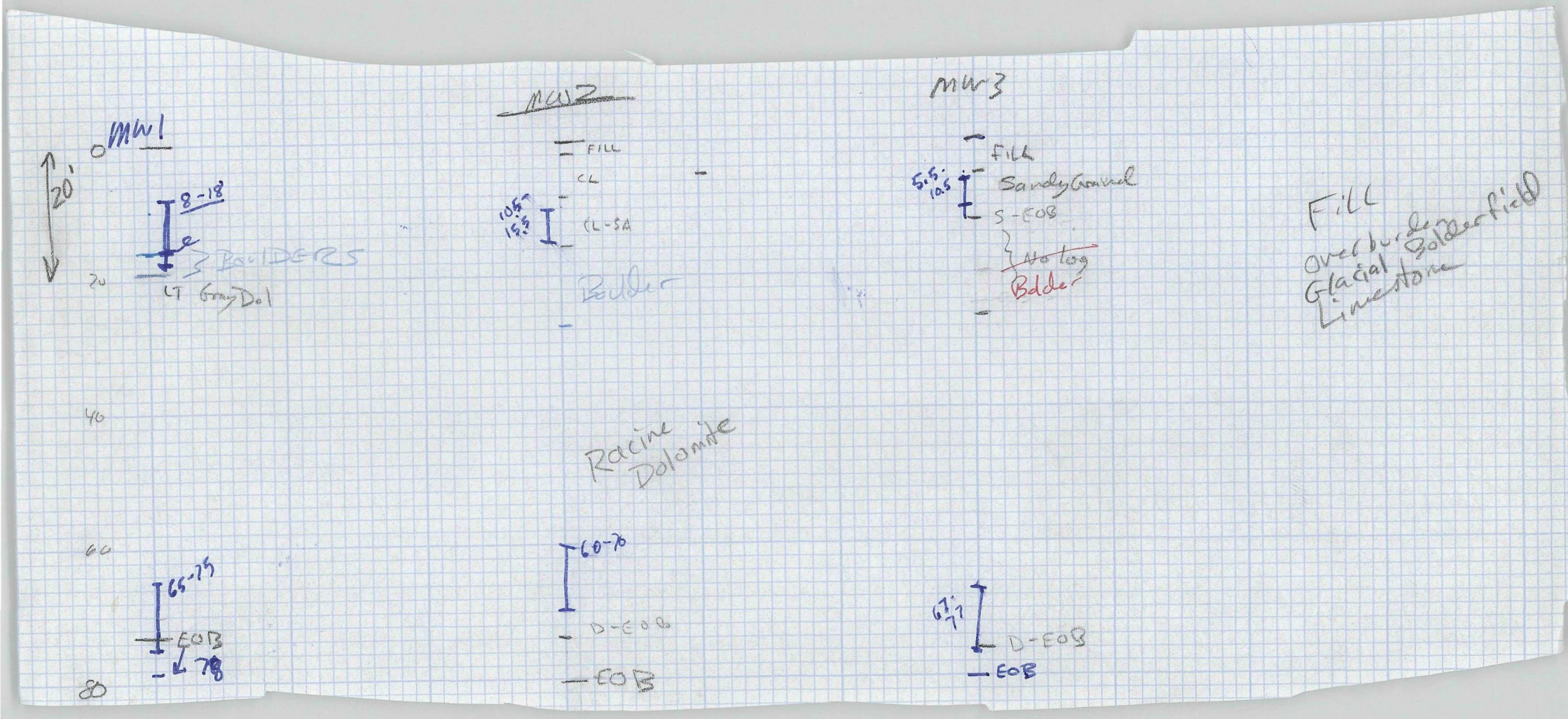
HANNA MARINE 1988



ecology and environment, inc.
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

SCALE: 1" ≈ 2,000'	HANNAH MARINE	DRAWN BY P. HESS
DATE: 1-30-86		REVISED N/A
SAMPL LOCATION MAP	LEMONT, IL.	
R05-8303-01F	IL-0277	DRAWING NUMBER 1


SANTA FE
640
625
AND
RIVER
CHANNEL
AND
593
600
625
675
DU PAGE CO
COOK CO
8M
626
584.5
FOREST
PRESERVE
FOREST
PRESERVE


MW1
20'
0
8-18
BOULDERS
20
LT Gray Dol
40
60
65-75
EOB
78
80
MW2
FILL
CL
10.5-15.5
CL-SA
Boulder
Racine Dolomite
60-70
D-EOB
EOB
MW3
FILL
5.5-10.5
Sandy Gravel
S-EOB
~~No log~~
Bdder
67-77
D-EOB
EOB
Fill
Overburden
Glacial Boulder field
Limestone

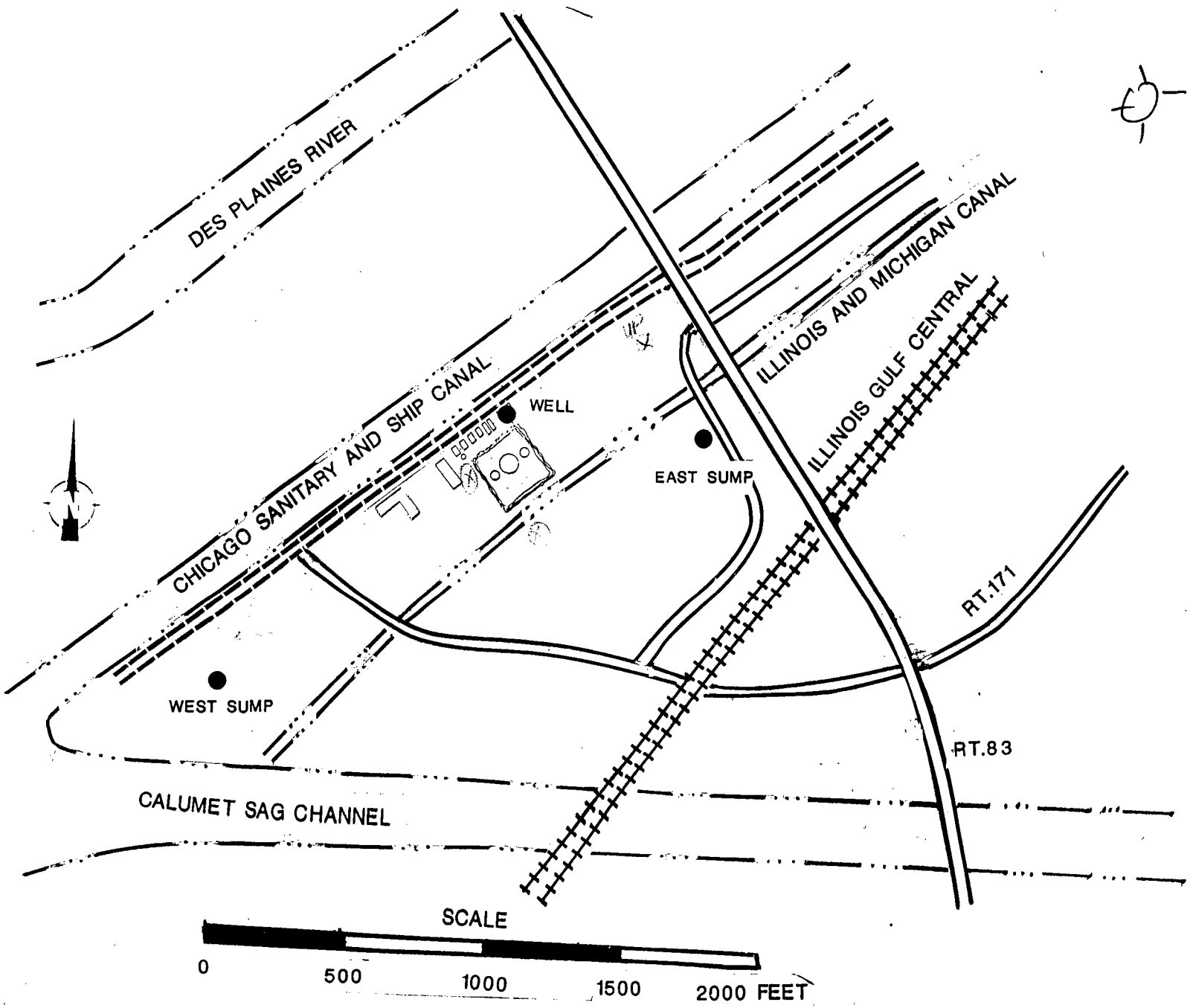


FIGURE WELL LOCATION MAP

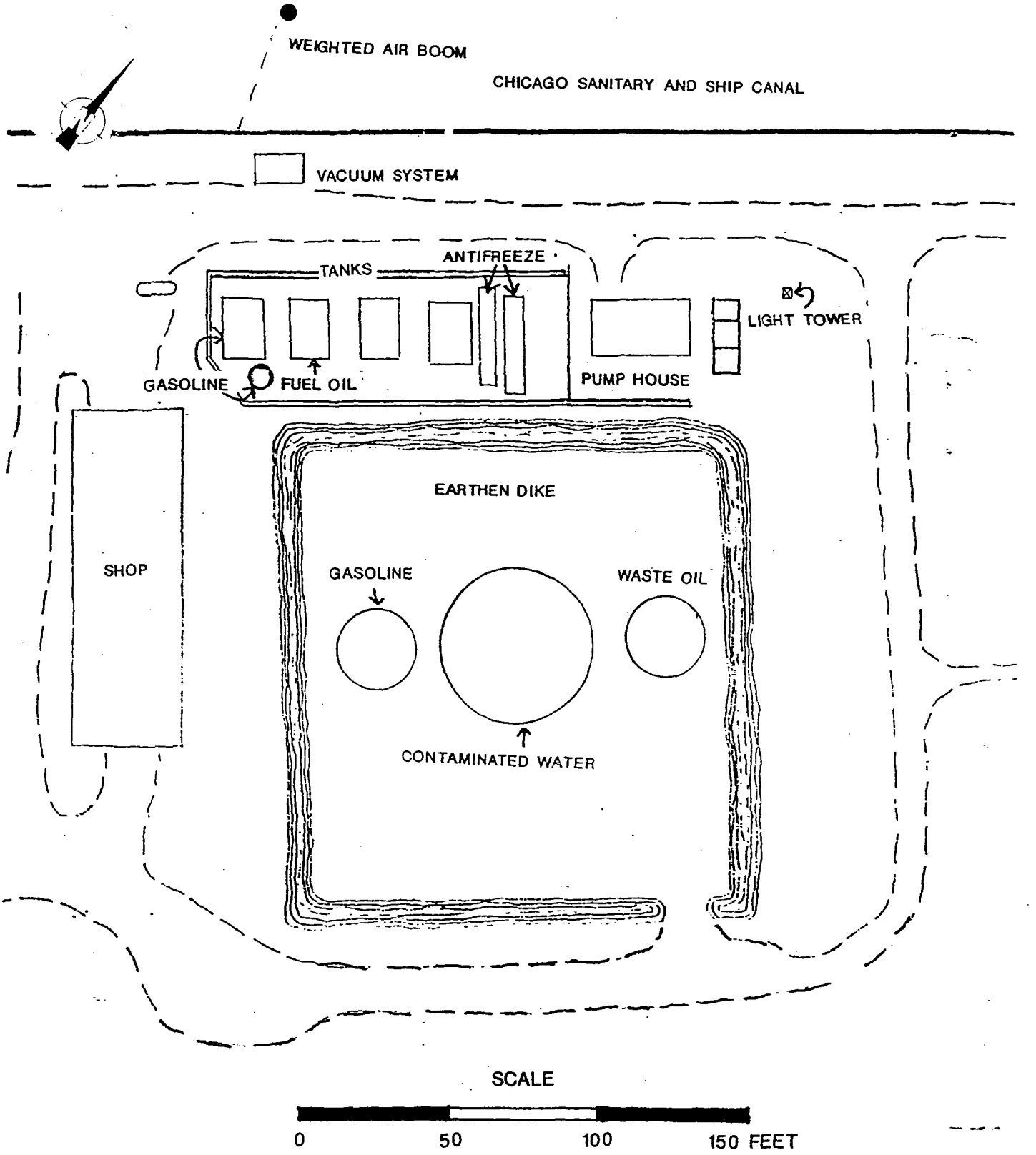


FIGURE 2 SITE FEATURES MAP

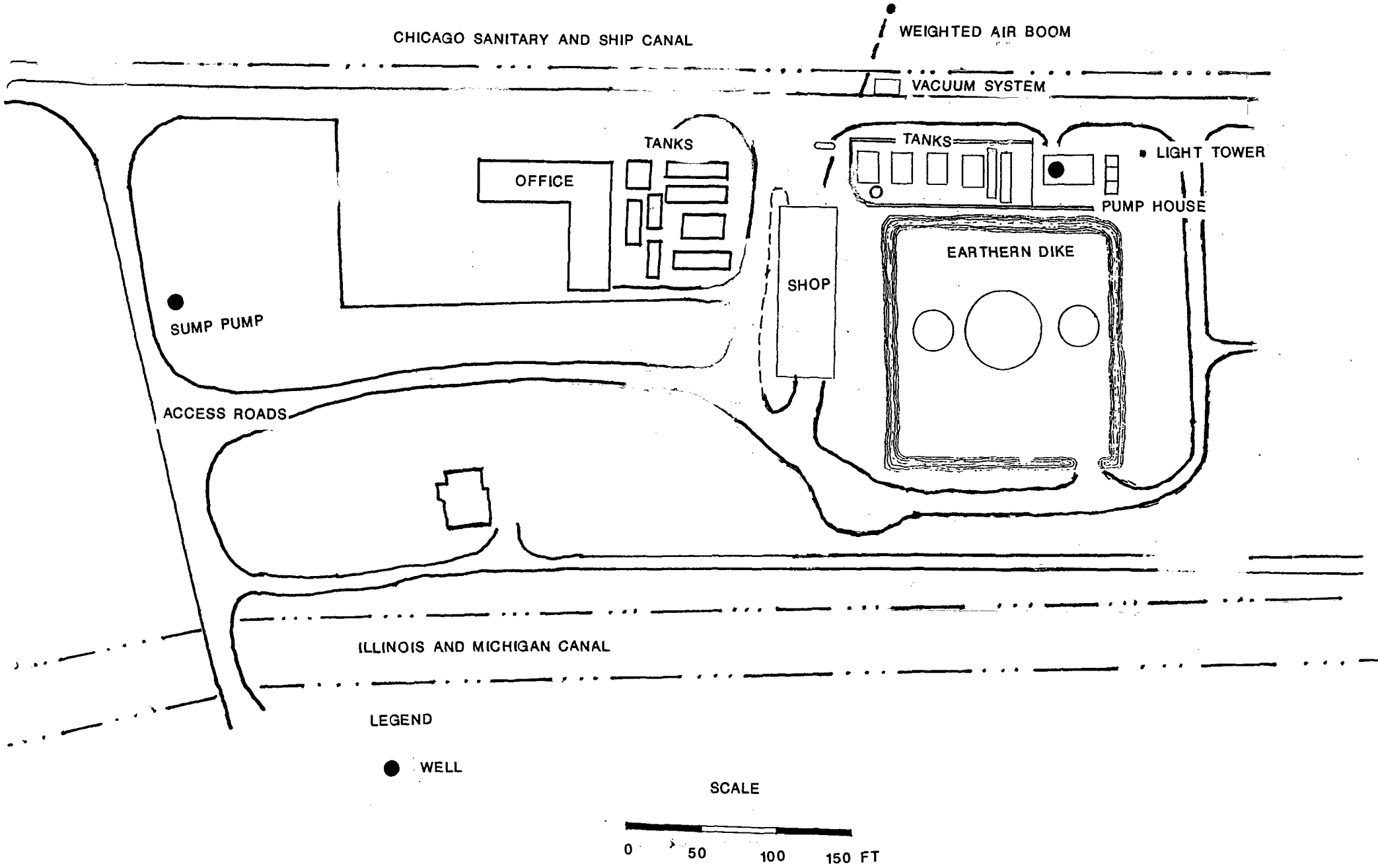


FIGURE 2 SITE FEATURES MAP

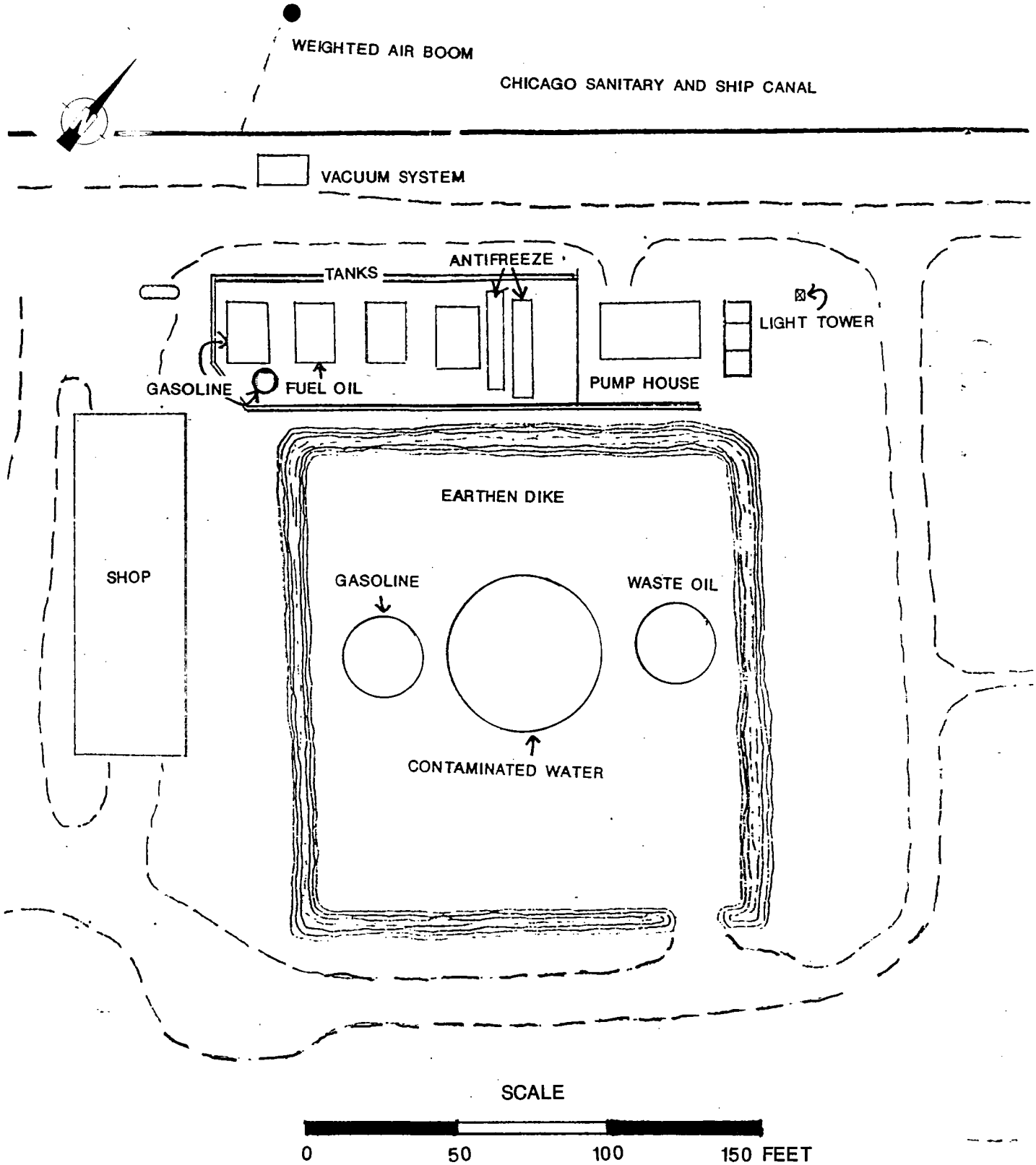
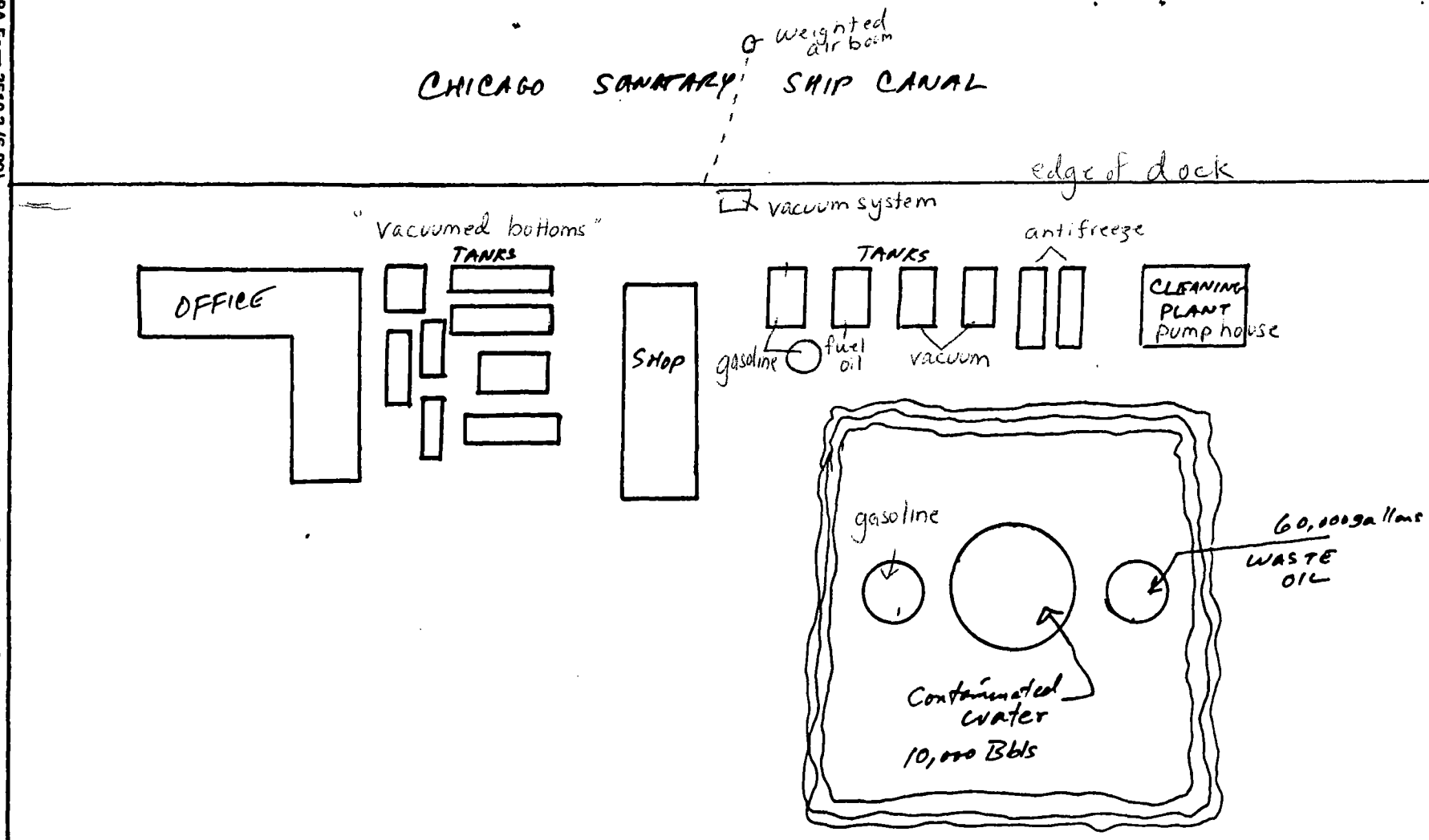


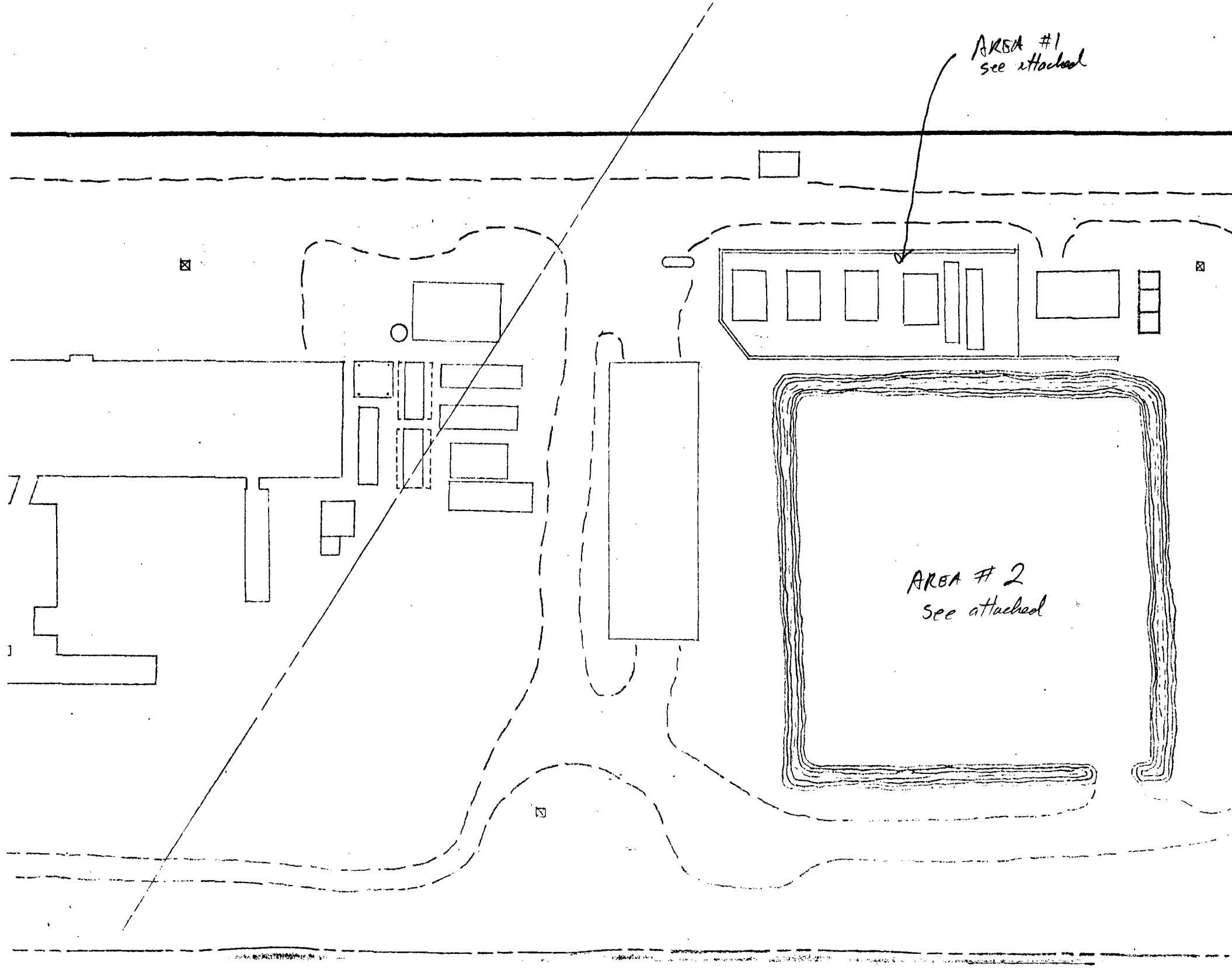
FIGURE 2 SITE FEATURES MAP

V. FACILITY DRAWING (see page 4)



Site Features Map.

738


AREA #1
see attached
AREA # 2
See attached

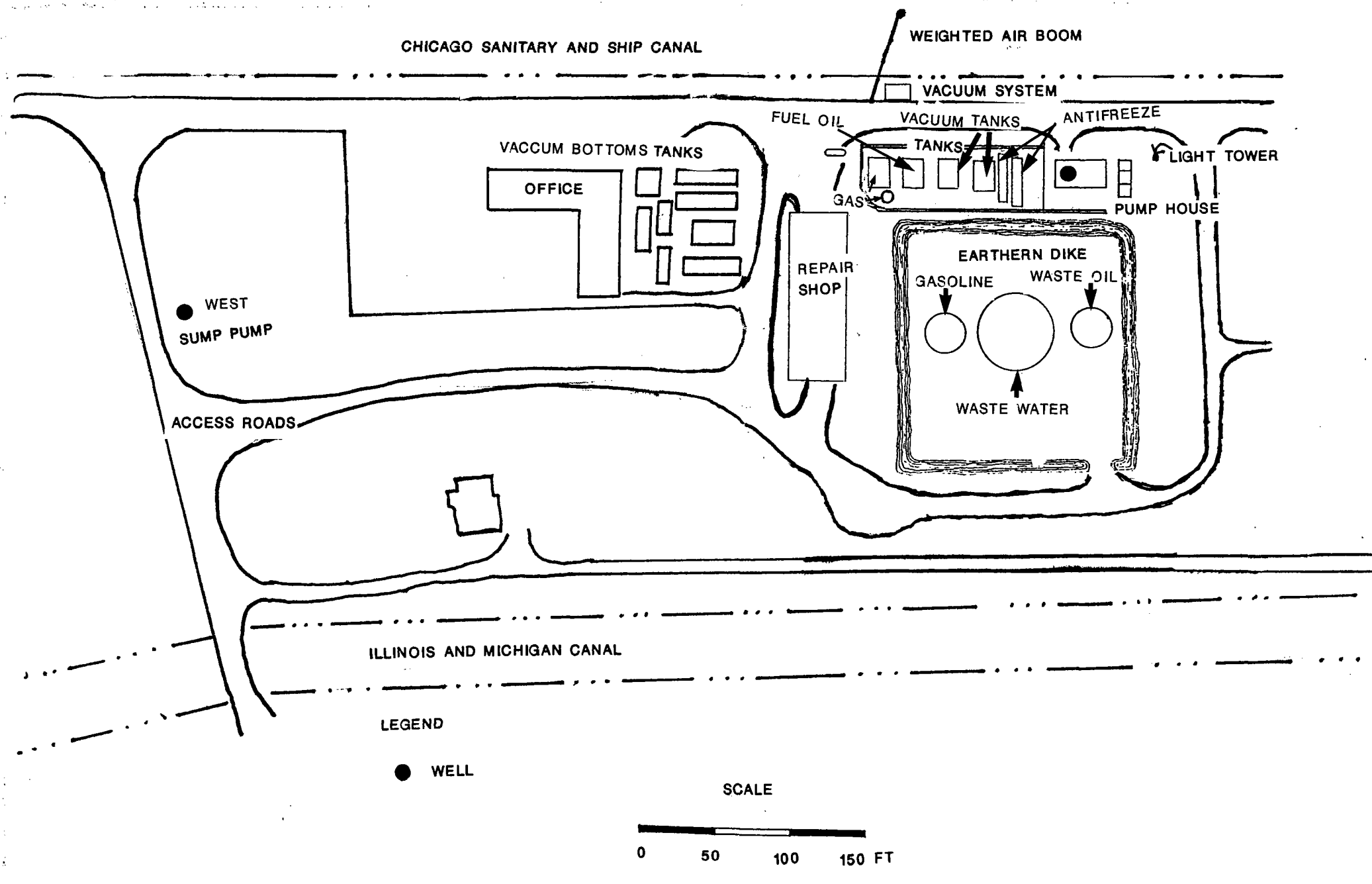


FIGURE 2 SITE FEATURES MAP

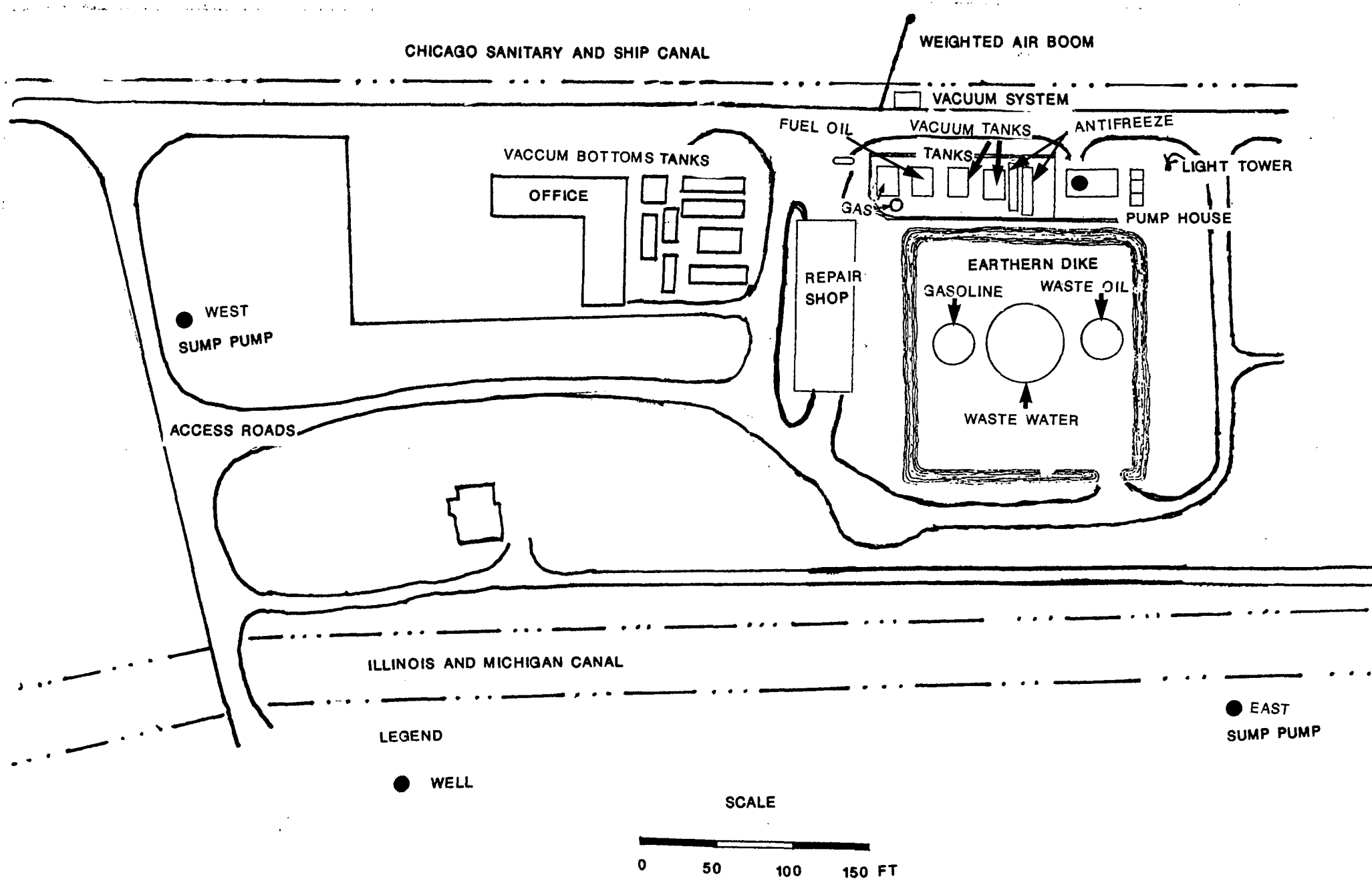


FIGURE 2 SITE FEATURES MAP

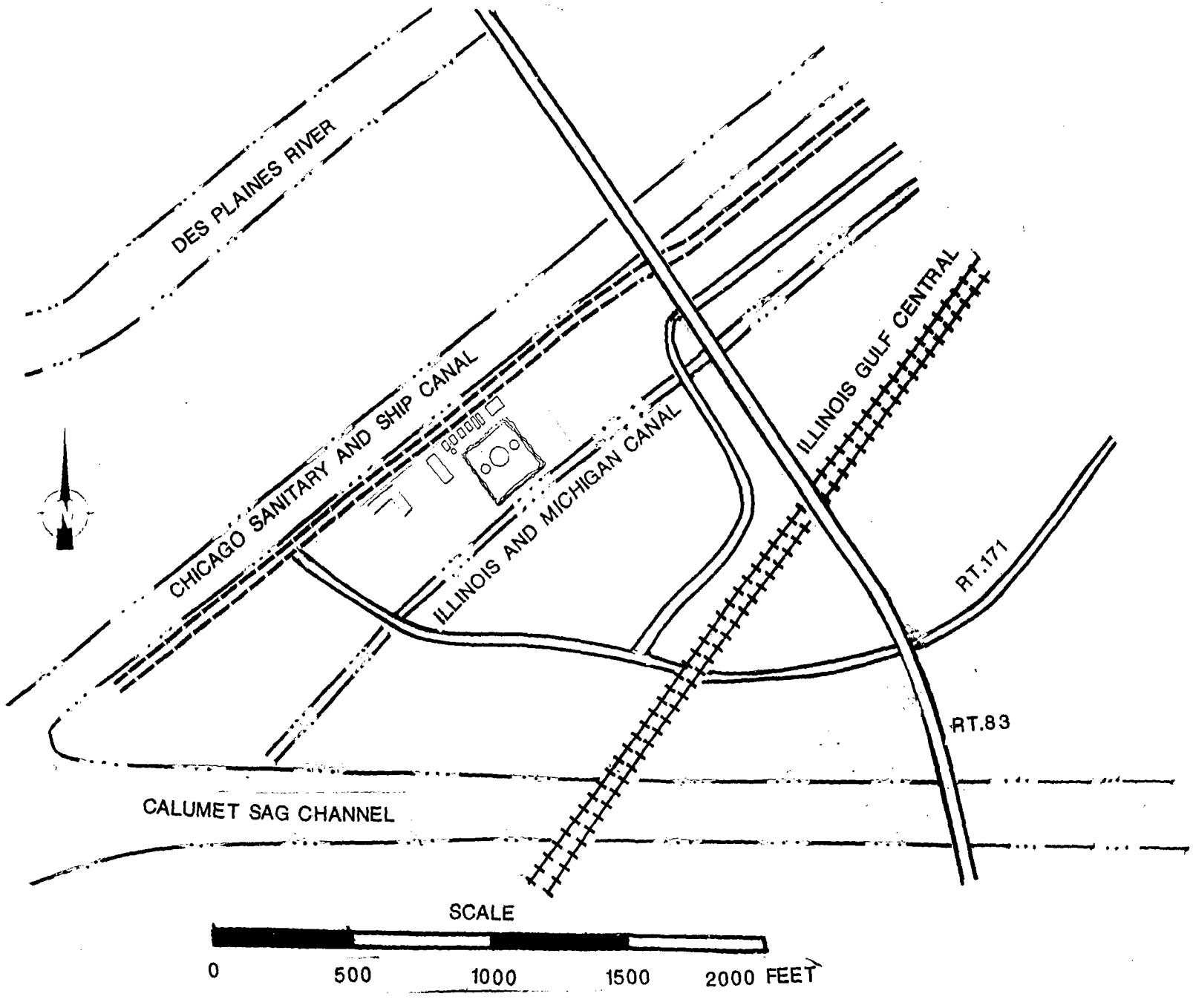


FIGURE WELL LOCATION MAP

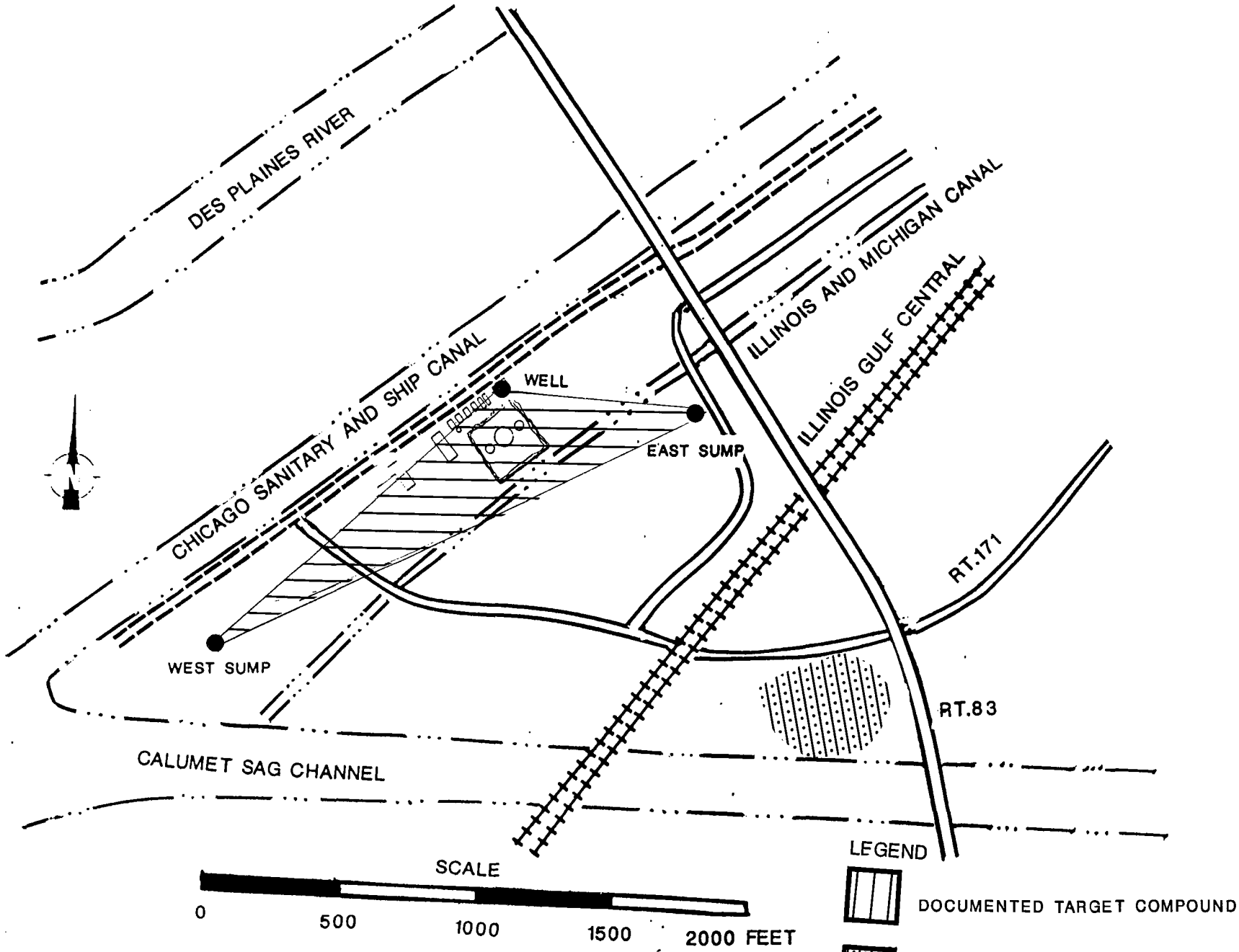


FIGURE 3 DOCUMENTED/ALLEGED TARGET COMPOUND MAP

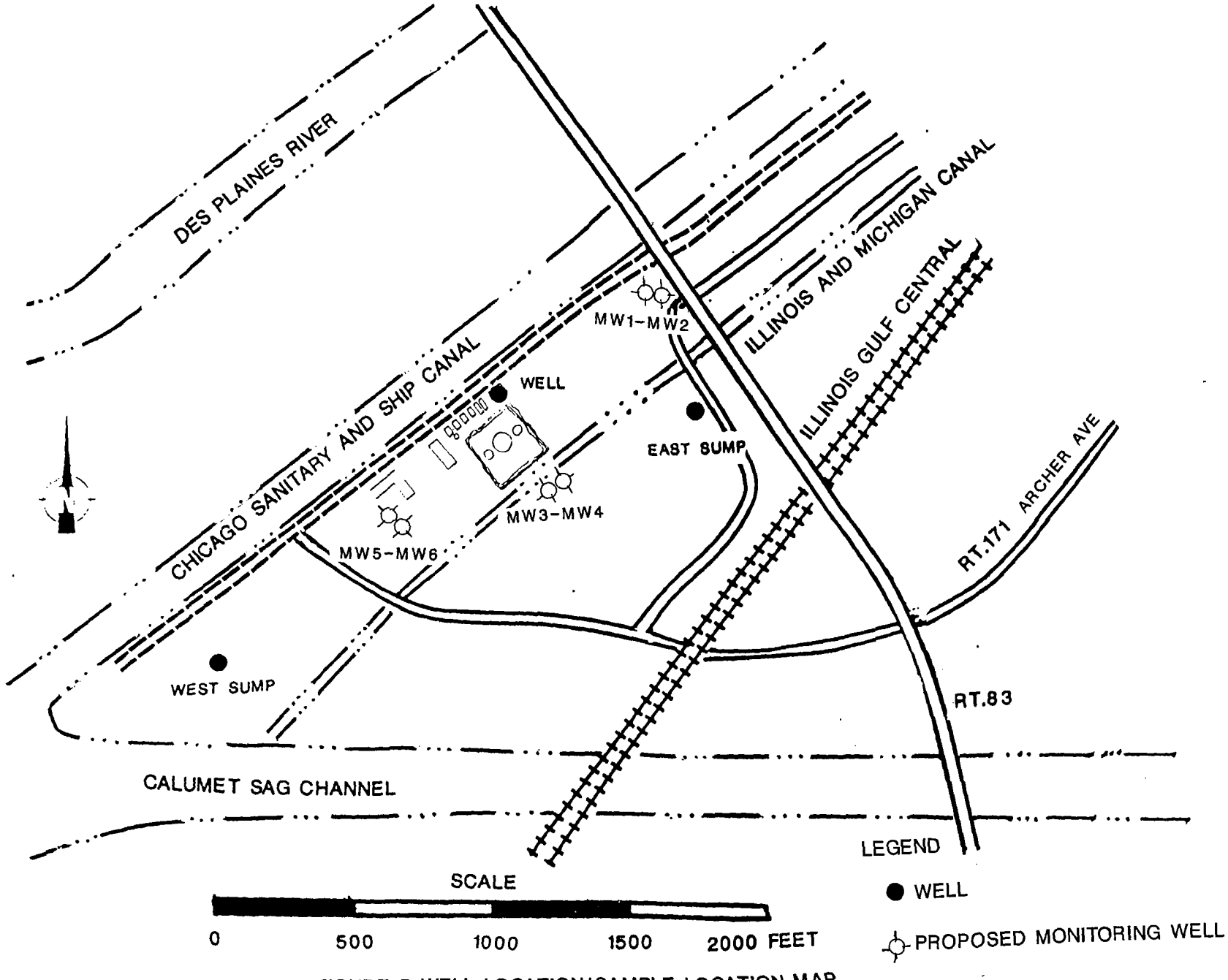
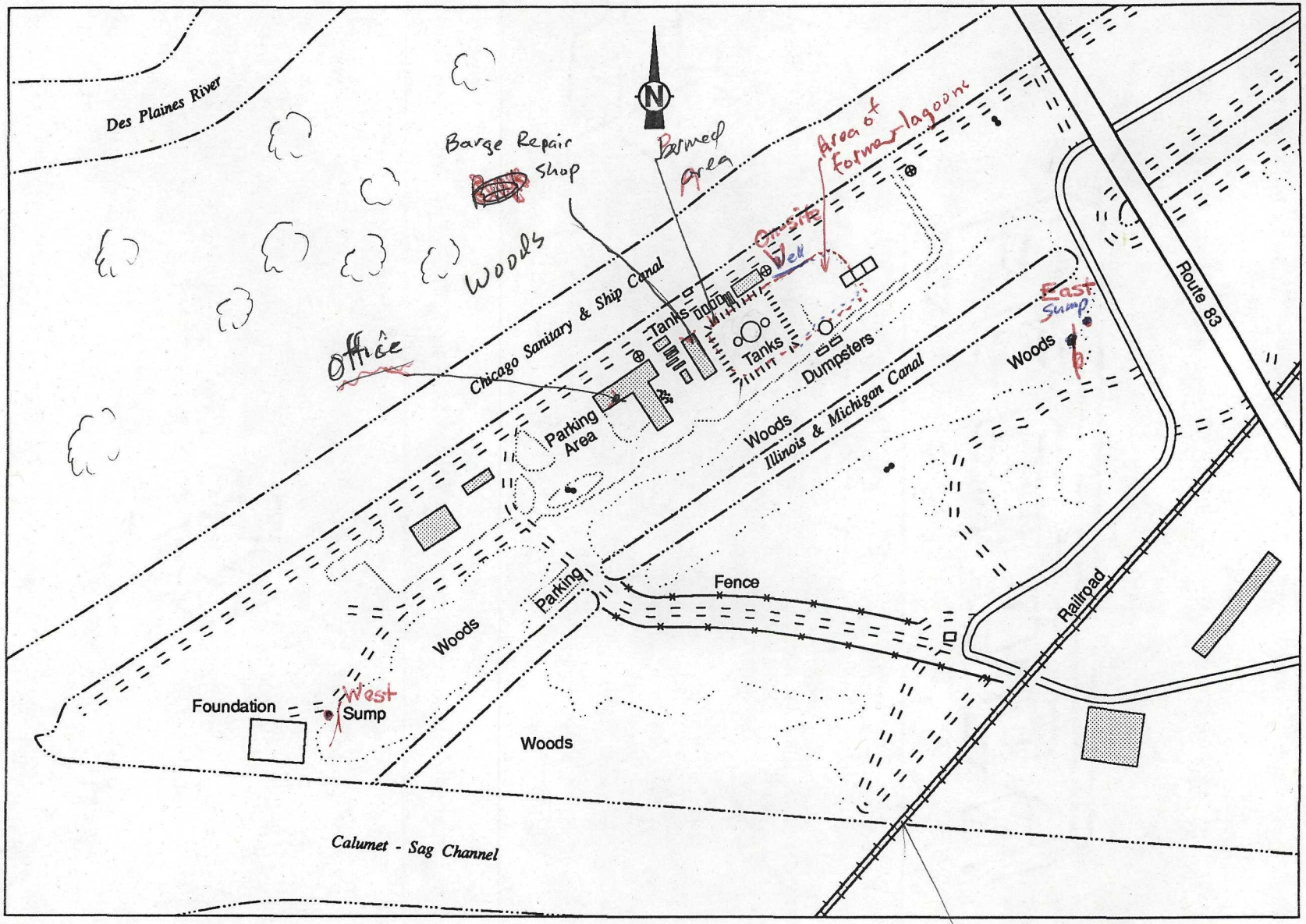


FIGURE 5 WELL LOCATION/SAMPLE LOCATION MAP



SCALE 1"=300'

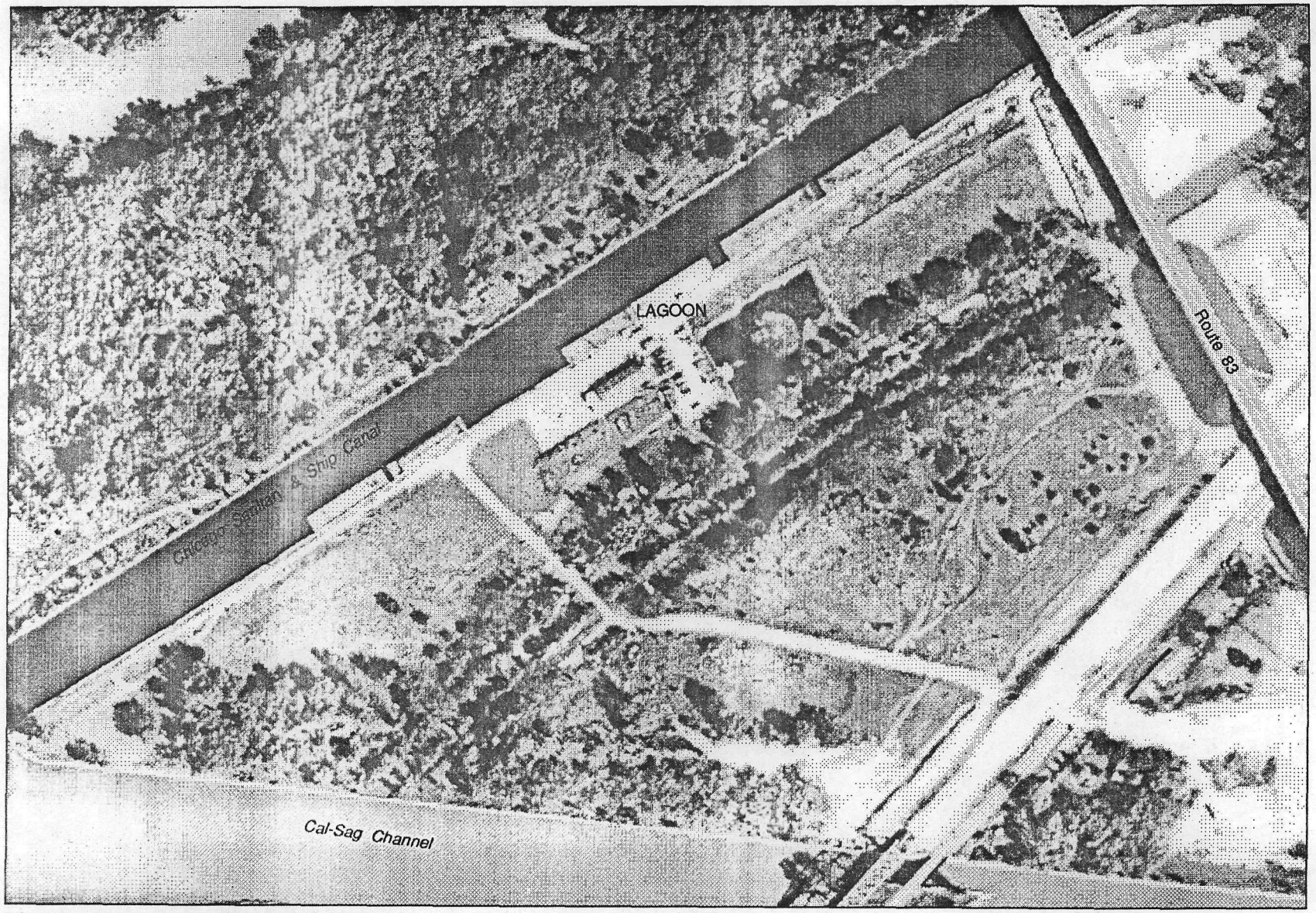
0 200 400 600 800 1,000 FEET

FIGURE ~~2-1~~ 2-2 SITE FEATURES

~~site boundary~~

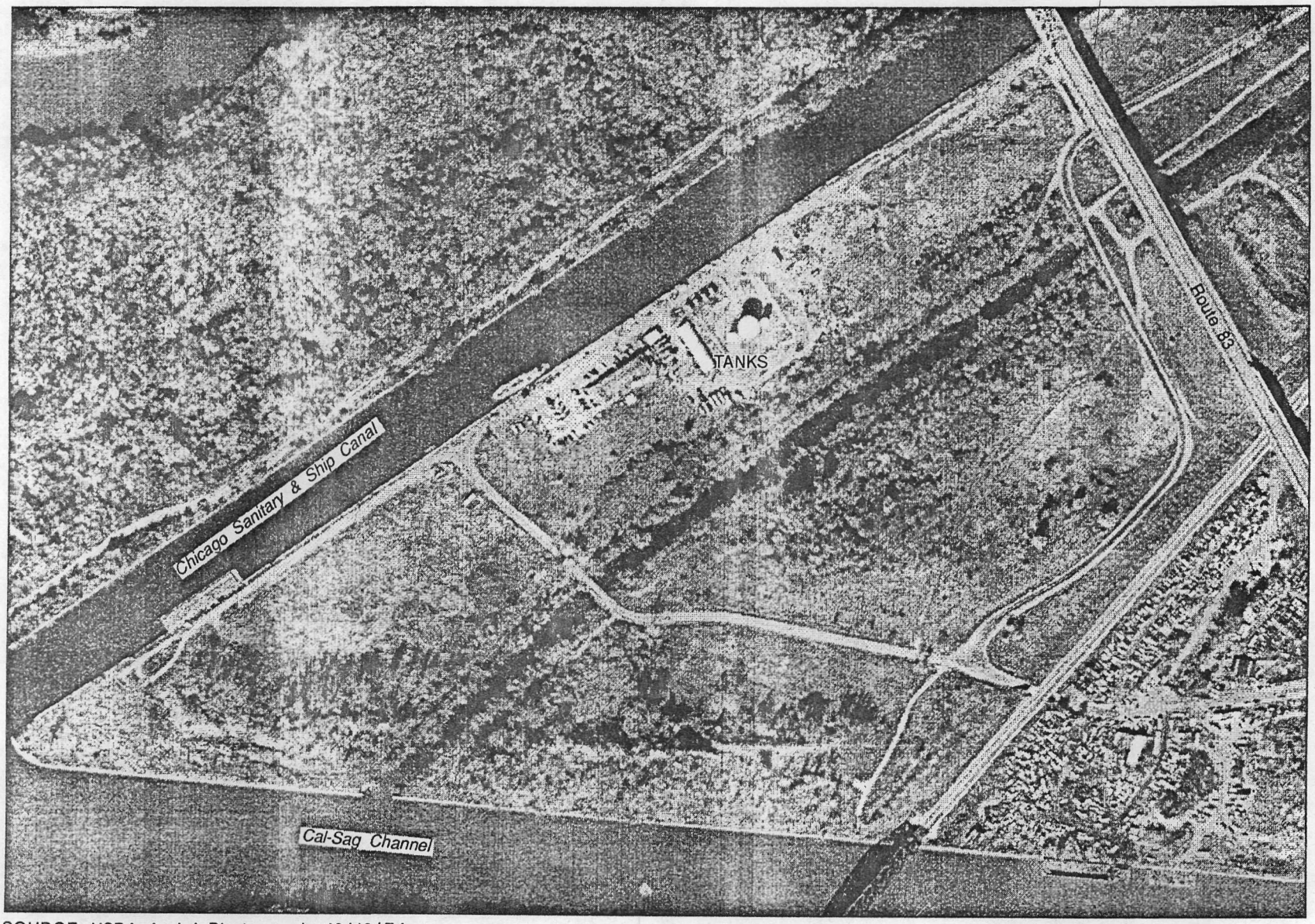
2-3

2-3



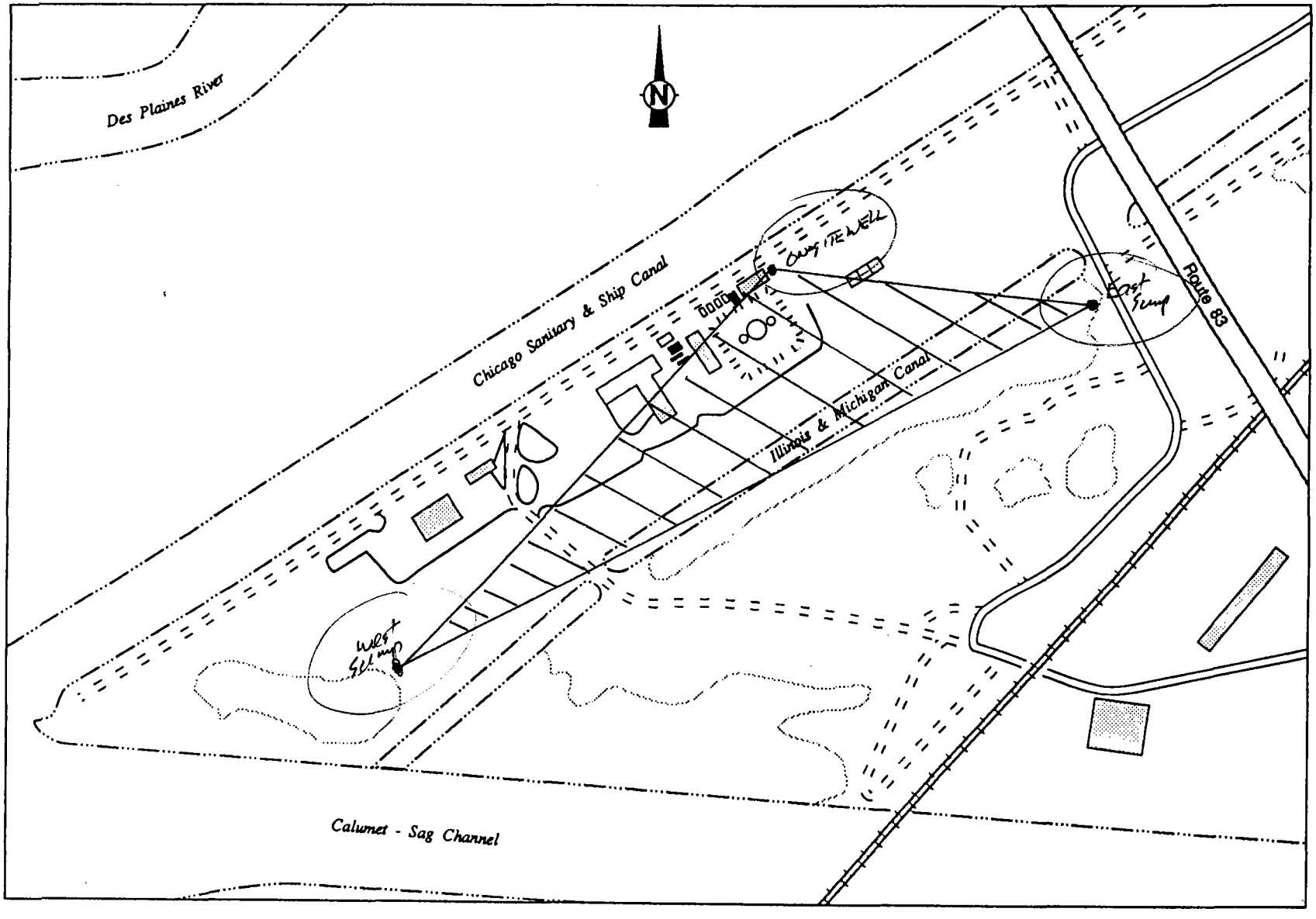
SOURCE: USDA Aerial Photograph, 9/16/61.

FIGURE ~~X-X~~ 2-3 SITE CONDITIONS, 1961



SOURCE: USDA Aerial Photograph, 10/10/74.

FIGURE ~~X-X~~ 2-4 SITE CONDITIONS, 1974



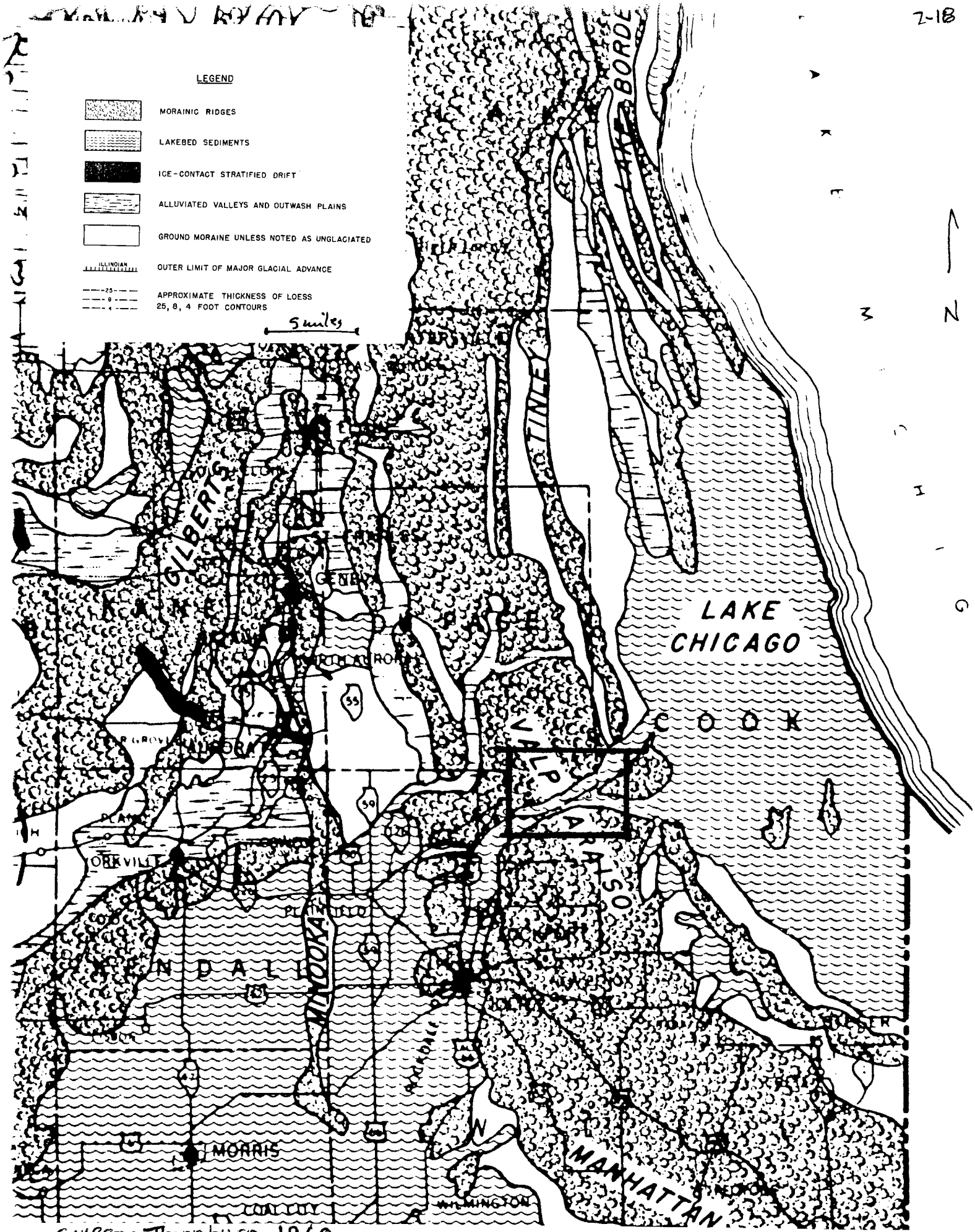
SCALE 1"=300'

0 200 400 600 800 1,000 FEET

AREAS OF CONTAMINATION IDENTIFIED DURING PREVIOUS INVESTIGATIONS

FIGURE 2-5

ecology and environment
recycled paper



SOURCE: Thornburn 1960.

Figure 2-6 Regional Surface Geology of the site area.

(After Thornburn (1960))

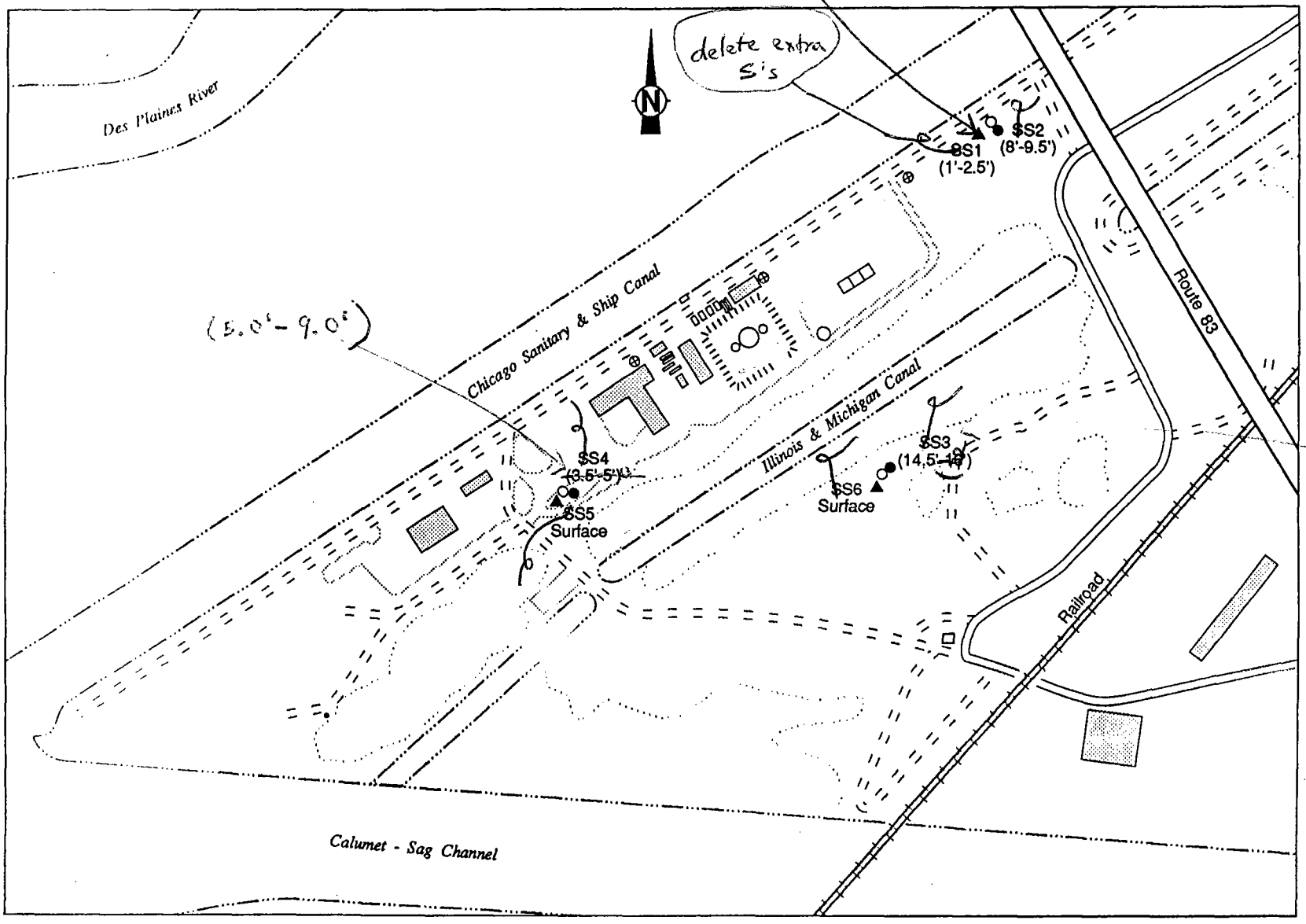
SYSTEM	SERIES	GROUP OR FORMATION	GEOHYDROLOGIC UNITS		LOG	THICKNESS (FT)	DESCRIPTION
QUATERNARY	PLEISTOCENE		Glacial drift aquifers			0-200±	Unconsolidated glacial deposits-pebbly clay (till), silt, sand and gravel Alluvial silts and sands along streams
DEVONIAN						Fissure Fillings	Shale, sandy, brown to black
SILURIAN	NIAGARAN	Racine Waukesha Joliet	Niagaran aquifer	Silurian dol. aquifer		0-170	Dolomite, very pure to highly argillaceous, silty, cherty; reefs in upper part Dolomite, shaly, and shale, dolomitic; maroon, green, pink
	ALEXANDRIAN	Kankakee Edgewood	Alexandrian aquifer			0-90	Dolomite, glauc.; thin grn. shale partings Dolomite, argillaceous, silty and/or sandy, cherty
ORDOVICIAN	CINCINNATIAN	Neda	Confining beds of the Maquoketa Formation			0-20	Shale, red; oolites
		Maquoketa				85-230	Shale, silty, dolomitic, greenish gray, weak (Upper unit) Dolomite and limestone, white, light gray, interbedded shale (Middle unit) Shale, dolomitic, brown, gray (Lower unit)
	MOHAWKIAN	Galena Decorah Platteville	Galena-Platteville	Cambrian-Ordovician aquifer		300-350	Dolomite, and/or limestone, cherty Dolomite, shale partings, speckled Dolomite and/or limestone, cherty, sandy at base
		Glenwood	Glenwood-St. Peter			200-375	Sandstone, fine and coarse grained; little dolomite; shale at top Sandstone, fine to medium grained; locally cherty red shale at base
	CHAZYAN	St. Peter					
	PRAIRIE DU CHIEN	Shakopee New Richmond Oneota	Prairie du Chien			0-200	Dolomite, sandy, cherty (oolitic); sandstone Sandstone interbedded with dolomite Dolomite, white to pink, coarse grained cherty (oolitic), sandy at base
CAMBRIAN	CROIXAN	Trempealeau	Trempealeau			80-190	Dolomite, white, fine grained; geodic quartz; sandy at base
		Franconia	Franconia			70-100	Dolomite, sandstone and shale, glauconitic, green to red, micaceous
		Ironton Galesville	Ironton-Galesville			175-200	Sandstone, fine to coarse grained, well sorted; upper part dolomitic
		Eau Claire	Confining beds of the Eau Claire Formation (upper and middle beds)			300-400	Shale and siltstone, dolomitic, glauconitic; sandstone, dolomitic, glauconitic
		Mt. Simon	Eau Claire (lower beds) and Mt. Simon Formations	Mt. Simon aquifer		2,000±	Sandstone, coarse grained, white, red in lower half; lenses of shale and siltstone, red, micaceous
							Precambrian

SOURCE: Zeizel et al. 1962.

FIGURE

2-7 Area Stratigraphy (After Zeizel et al 1962)

this should be a ● (subsurface), not ▲



SCALE 1"=300'

0 200 400 600 800 1,000 FEET

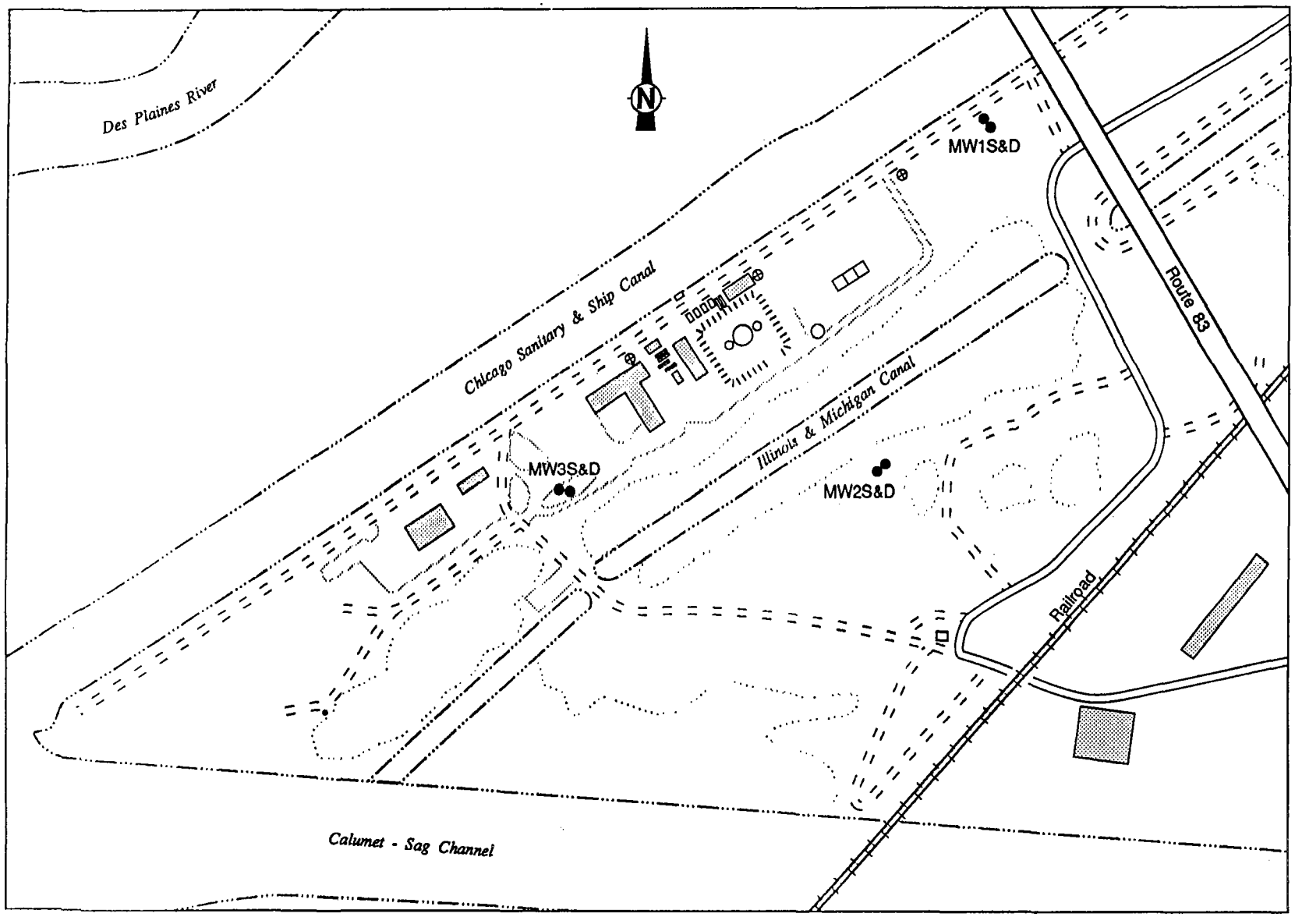
▲ SURFACE SAMPLE

● SUBSURFACE SAMPLE

FIGURE ~~XX~~ SOIL SAMPLING LOCATIONS

3-1

3-2

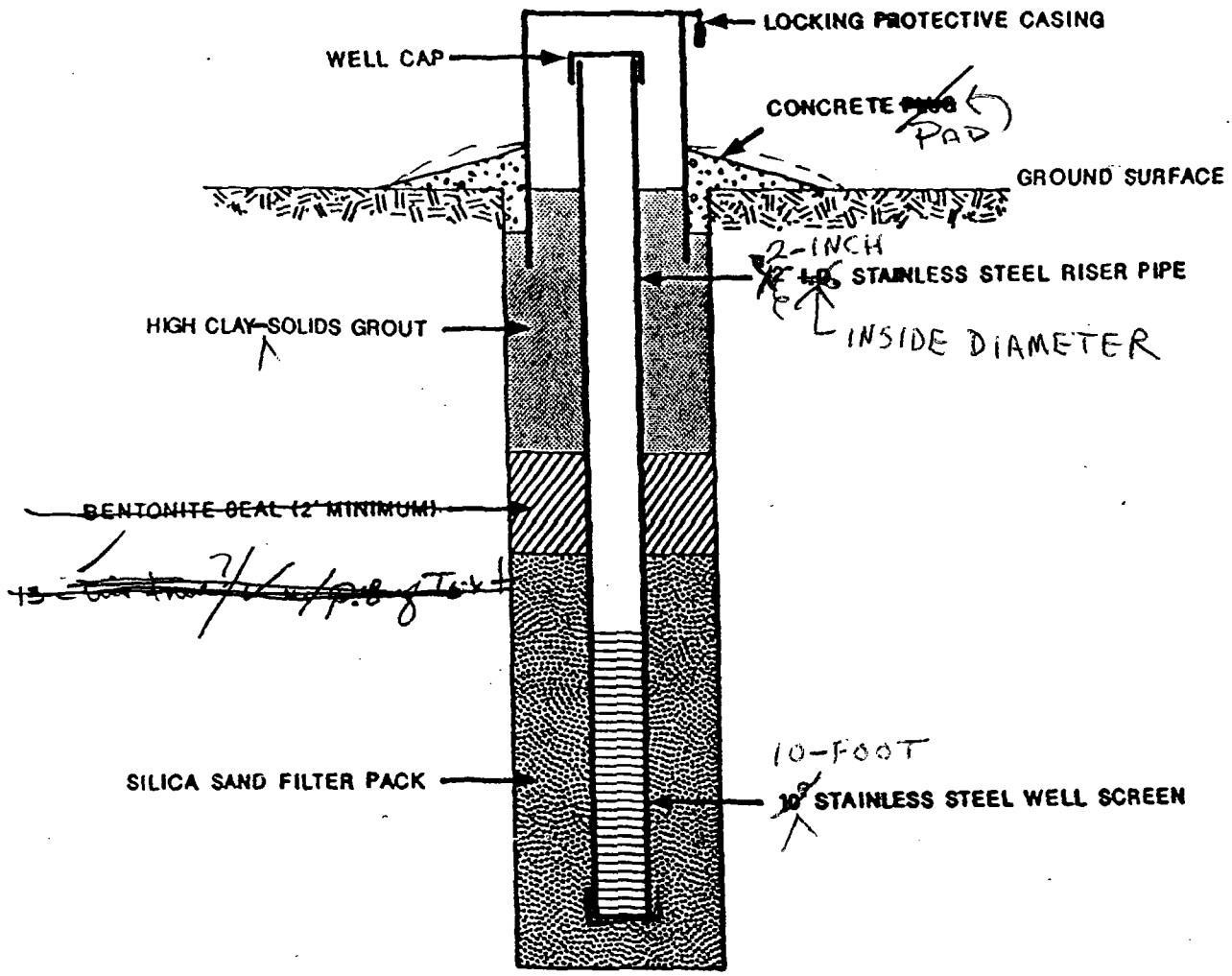


SCALE 1"=300'

0 200 400 600 800 1,000 FEET

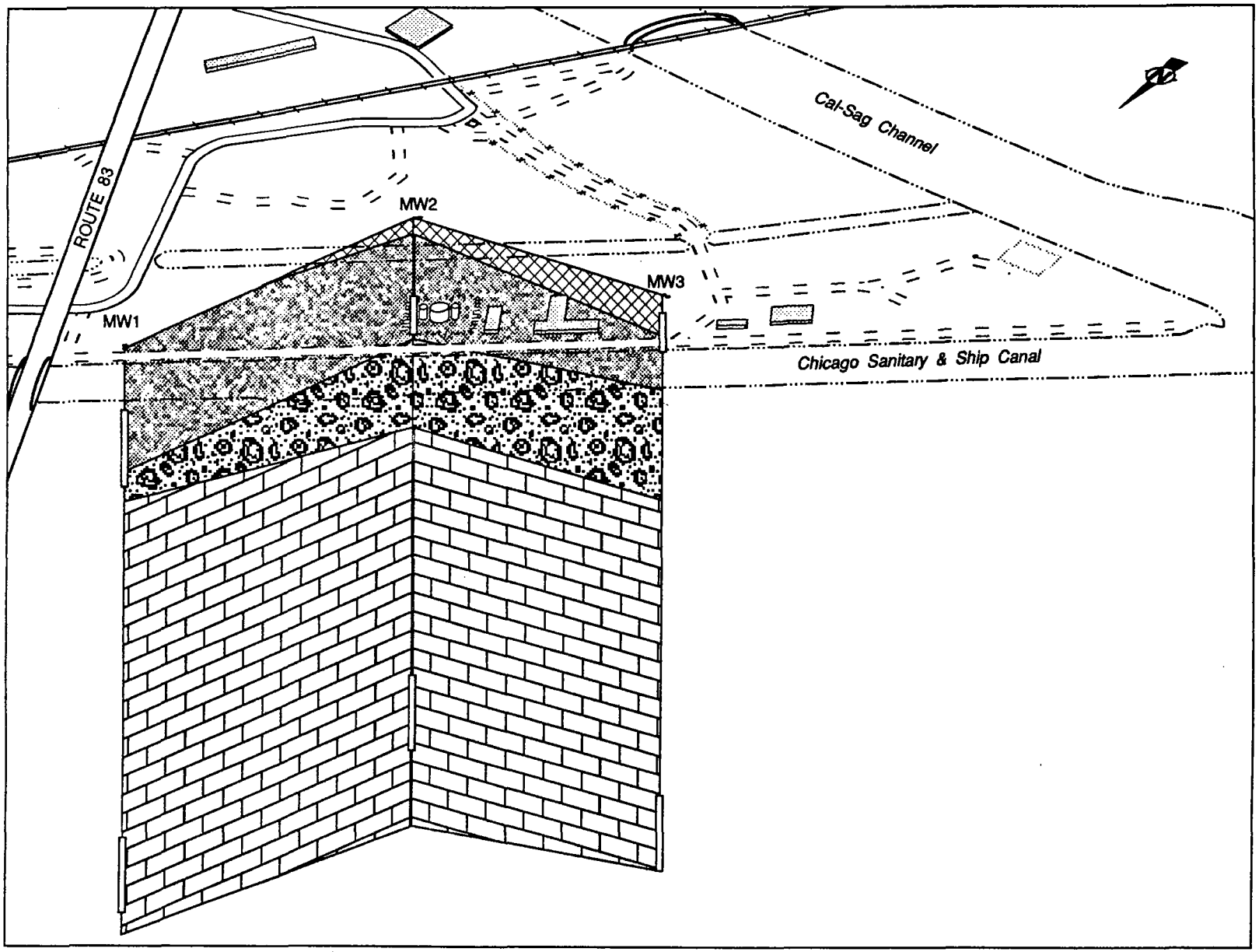
FIGURE ~~XX~~ MONITORING WELL ~~SAMPLING~~ LOCATIONS

3-32



~~SOURCE: Ecology & Environment, Inc. 1991.~~

FIGURE 3-3 TYPICAL MONITORING WELL CONSTRUCTION



LEGEND

FILL

GLACIAL BOULDERS

FLUVIAL DEPOSITS

~~RACINE~~ JOLIET DOLOMITE

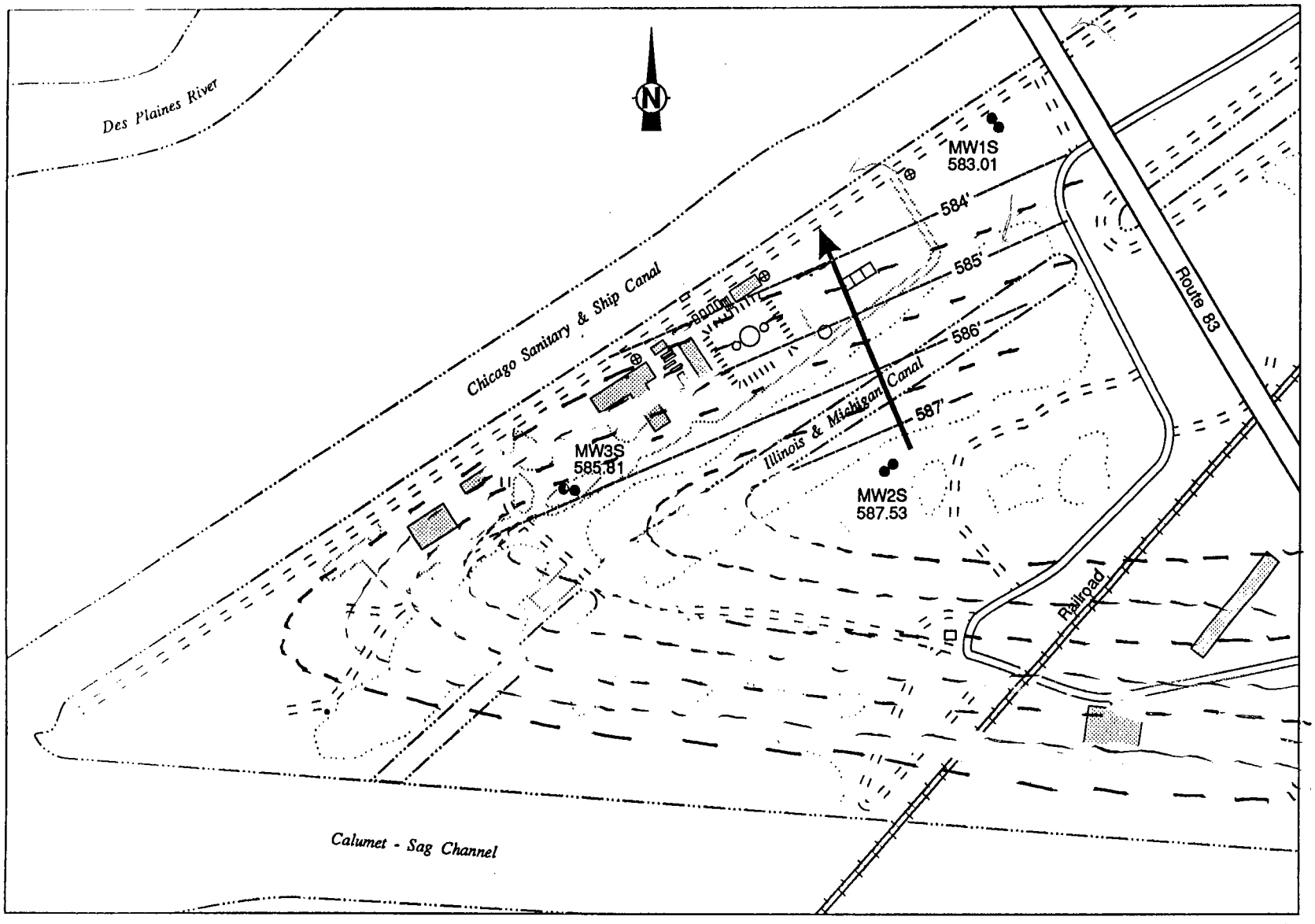
EXAGGERATION VERTICAL ~~EXAGGERATION~~ = 15X

FIGURE ~~XX~~ 4-1 Geologic FENCE DIAGRAM

SCALE 1"=300'

0 200 400 600 800 1,000 FEET

4-5



SCALE 1"=300'

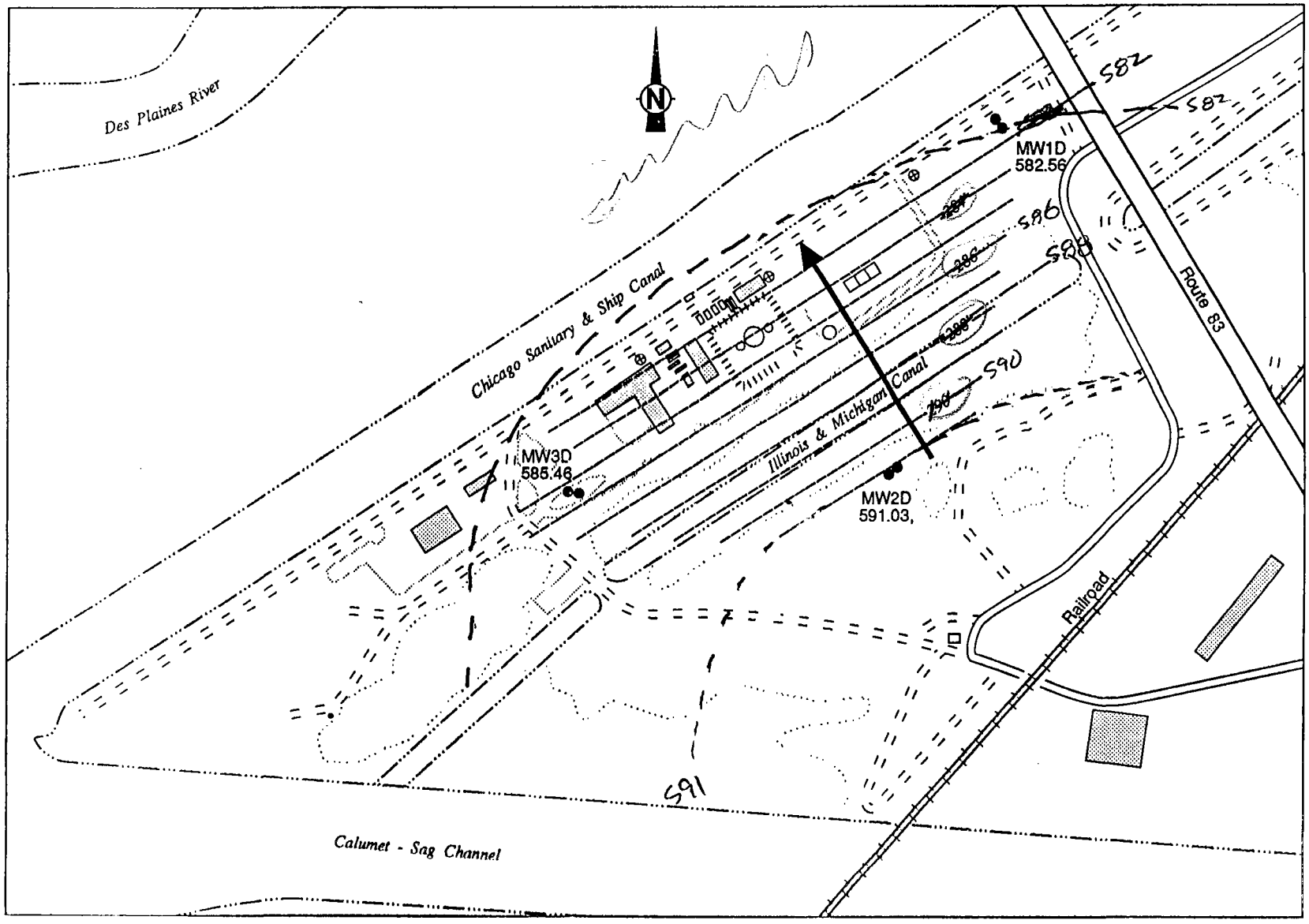
0 200 400 600 800 1,000 FEET

— — — — inferred

FIGURE ~~3~~ 4-2 PIEZOMETRIC SURFACE MAP, SHALLOW WELLS

Contour interval = 0.5 feet

4-3



SCALE 1"=300'

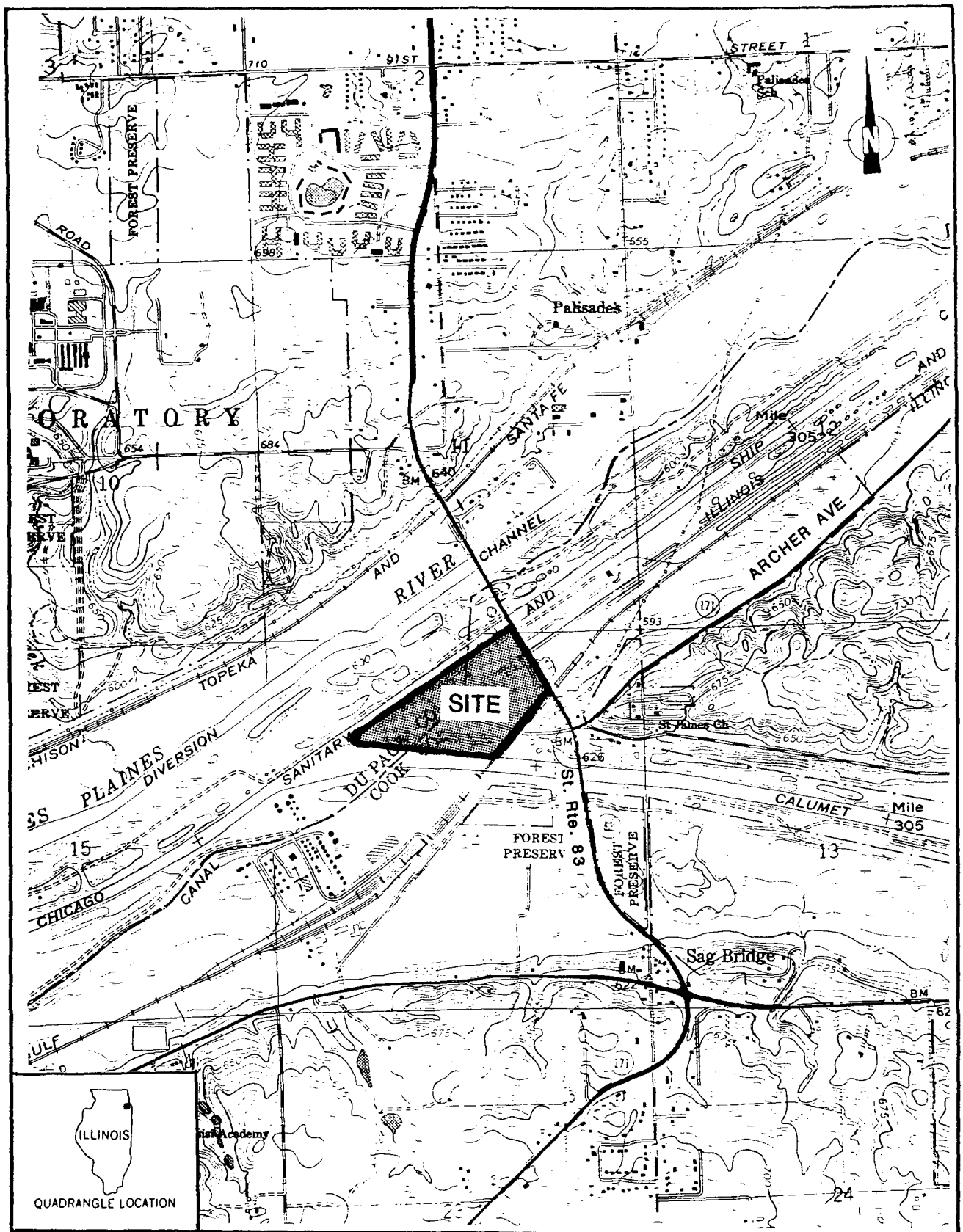
0 200 400 600 800 1,000 FEET

Contour interval = 1 feet

4-3

FIGURE ~~2~~ PIEZOMETRIC SURFACE MAP, DEEP WELLS

4-109



SOURCE: USGS, Sag Bridge, IL Quadrangle, 7.5 Minute Series, 1963, Photorevised 1973.

SCALE
0 0.5 1 MILE

FIGURE Z-1 SITE LOCATION