

G. T. Lohmeyer

**Class I Injection Facility No. 46**

## **City of Fort Lauderdale, Florida**

**George T. Lohmeyer  
Wastewater Treatment Plant  
Mechanical Integrity Test and  
Water Quality Monitoring Report for  
Injection Well System**

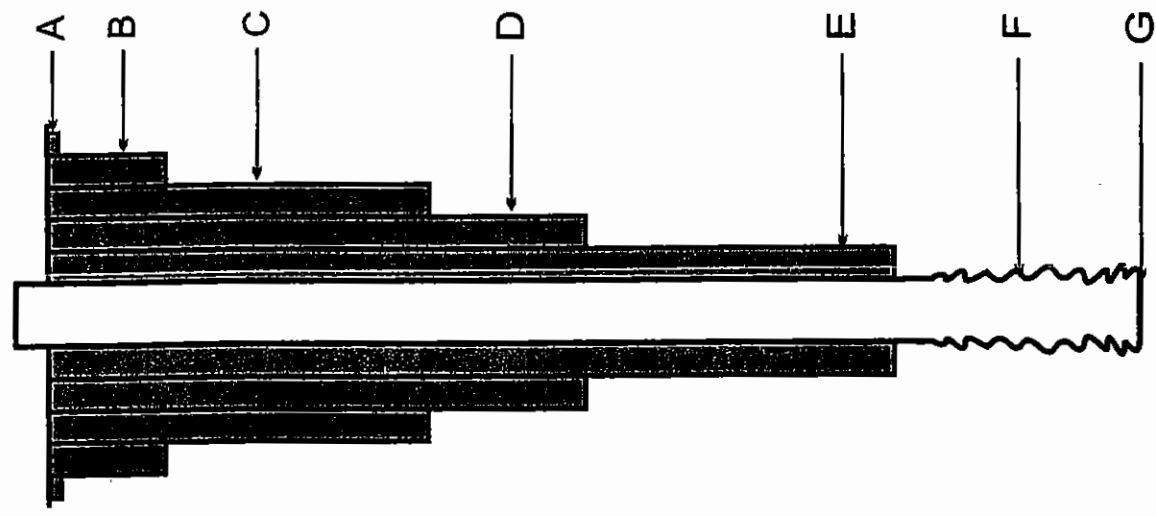
**Underground Injection Control  
Operation Permit No. 0054569-142-UO**

**March 2005**

**Prepared by Camp Dresser & McKee Inc.**

DEPTHS

EXPLANATION	IW-1	IW-2	IW-3	IW-5
A 72-inch dia. casing	5	5	5	5
B 54-inch dia. casing 0.312-inch wall	126	126	126	125
C 42-inch dia. casing 0.375-inch wall	925	925	925	950
D 34-inch dia. casing 0.500-inch wall	1,900	1,900	1,900	1,896
E 24-inch dia. casing 0.500-inch wall	2801	2800	2800	2820
F Nominal 23-inch dia. open hole	720	725	1210	680
G Total depth	3,520	3,517	3,933	3,470



LEGEND:

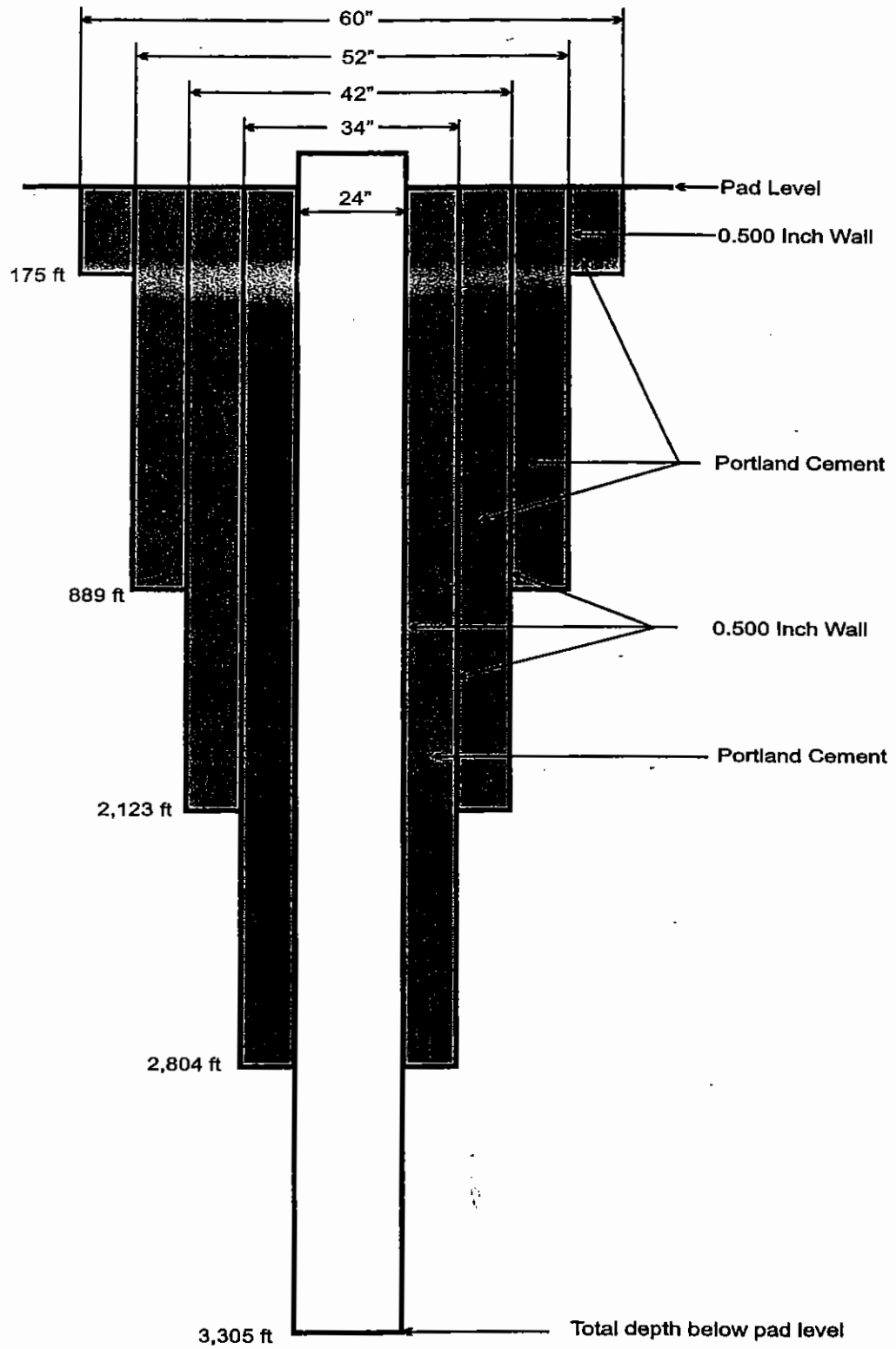
 Portland Cement  


NOTES:

All depths are in feet below pad level.  
 All casing are steel.  
 All casing diameters are Outer Diameter

Figure No.2-1  
 City of Fort Lauderdale  
 George T. Lohmeyer WWTP  
 Injection Wells IW-1, IW-2, IW-3, and IW-5

IW-4



Not to Scale

L:\60174\1836\30\REPORT\FG2-2.CDR 02/19/05 Chinnayag

Figure No. 2-2  
City of Fort Lauderdale  
George T. Lohmeyer WWTP  
Injection Well IW-4 Construction Diagram

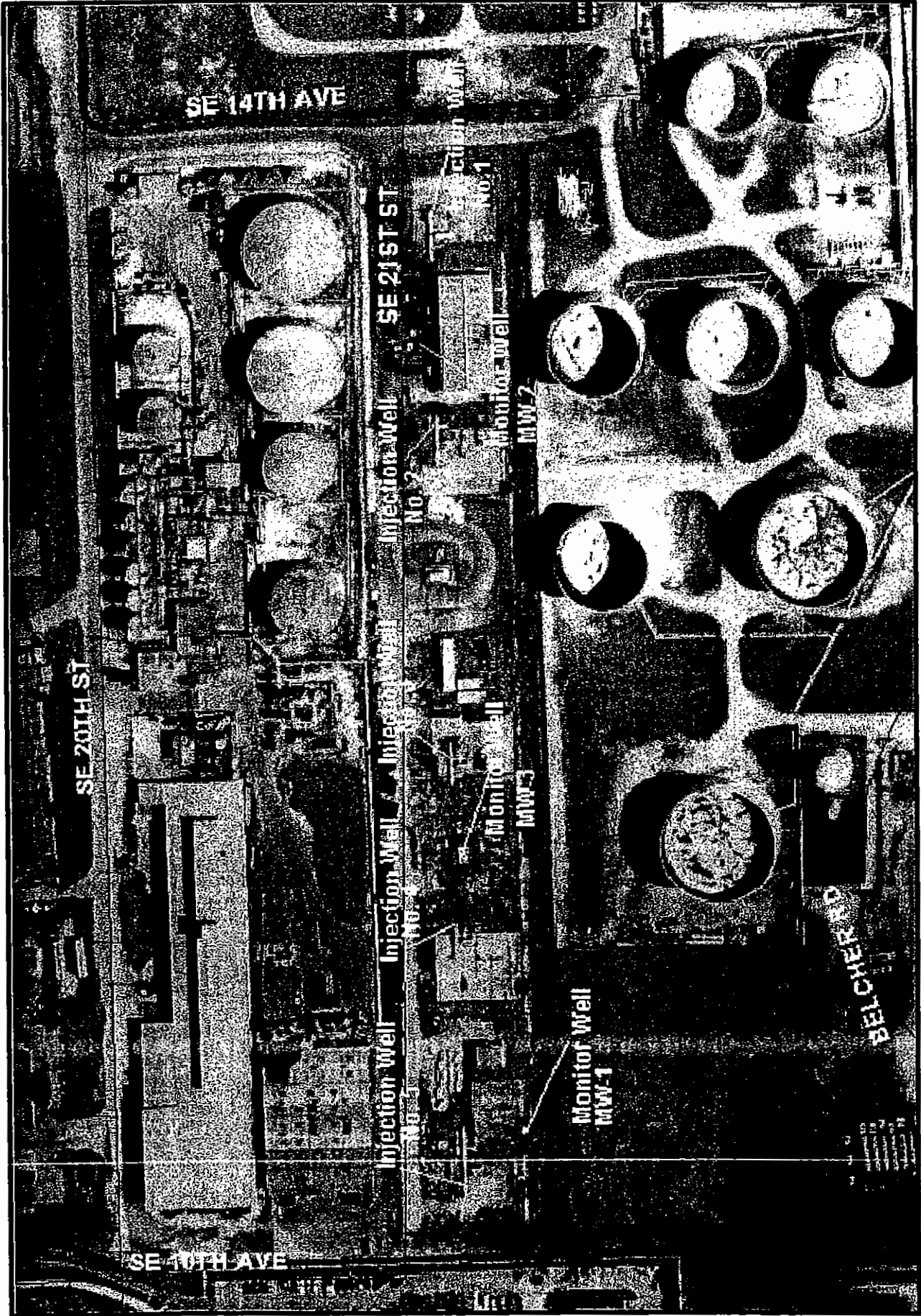



Figure No. 4-6  
 City of Fort Lauderdale  
 George T. Lohmeyer WWTP  
 Injection Facility Site Plan

**Table 4-2 Statistical Summary**

	<b>TDS</b> <b>(mg/L)</b>	<b>CHLORIDES</b> <b>(mg/L)</b>	<b>SULFATE</b> <b>(mg/L)</b>	<b>TKN</b> <b>(mg/L)</b>	<b>NH<sub>3</sub></b> <b>(mg/L)</b>
<b>MW-1 UPPER 1,290 to 1,320 feet bpl</b>					
MAX	7,980	7,150	1,200	8.78	1.31
MIN	73.21	37.5	550	0.65	0.22
Mean	7350	3828	828	1.27	0.90
Median	7368	3850	833	1.21	0.95
Mode	7330	3850	850	1.10	1.00
<b>MW-2 UPPER 1,300 to 1,344 feet bpl</b>					
MAX	31,608	18,200	2,900	2.1	8.48
MIN	6,892	3,040	500	0.52	0.20
Mean	7,319	3,807	828	1.33	0.94
Median	7,220	3,750	800	1.30	0.96
Mode	7,200	3,800	850	1.20	1.00
<b>MW-3 UPPER 1,300 to 1,349 feet bpl</b>					
MAX	72,566	18,800	2,700	2.15	1.38
MIN	6,862	3,000	100	0.69	0.19
Mean	7,319	3,785	833	1.28	0.94
Median	7,300	3,800	850	1.26	0.97
Mode	7,310	3,800	850	1.10	1.01
<b>RMW-1 UPPER 1,300 to 1,350 feet bpl</b>					
MAX	6,463	3,715	1,100	1.55	0.911
MIN	5,233	2,190	0.01	0.65	0.05
Mean	5,674	2,917	725	1.02	0.69
Median	5,651	2,900	720	1.01	0.74
Mode	5,620	2,900	750	1.07	0.58
<b>MW-1 LOWER 1,449 to 1,557 feet bpl</b>					
MAX	10,720	7,500	1,150	16.06	11.68
MIN	8,890	3,695	500	7.85	7.17
Mean	9,599	5,402	789	10.31	9.14
Median	9,550	5,300	800	10.15	9.30
Mode	9,490	5,200	750	10.00	9.49
<b>MW-2 LOWER 1,970 to 2,025 feet bpl</b>					
MAX	37,717	21,000	3,700	3.2	1.94
MIN	28,530	1,740	1,900	0.98	0.35
Mean	32,203	17,837	2,561	1.58	1.17
Median	32,170	18,000	2,600	1.56	1.17
Mode	32,050	18,000	2,600	1.60	1.05
<b>MW-3 LOWER 1,970 to 2,027 feet bpl</b>					
MAX	33,463	19,837	3,800	4.71	2.6
MIN	20,470	11,980	1,450	0.42	0.37
Mean	29,790	16,785	2,366	2.50	2.01
Median	29,950	16,800	2,400	2.30	1.99
Mode	30,480	16,800	2,300	3.20	2.20
<b>RMW-1 LOWER 1,500 to 1,600 feet bpl</b>					
MAX	28,035	17,800	2,310	1.03	0.763
MIN	22,858	12,000	550	0.30	0.05
Mean	26,071	15,206	1466	0.64	0.38
Median	26,046	15,200	1450	0.62	0.40
Mode	25,667	14,800	1450	0.64	0.40



ENGINEERING REPORT ON THE  
**Construction and Testing  
of Injection Well IW-4**  
at the  
**City of Fort Lauderdale  
G. T. Lohmeyer  
Wastewater Treatment Plant**



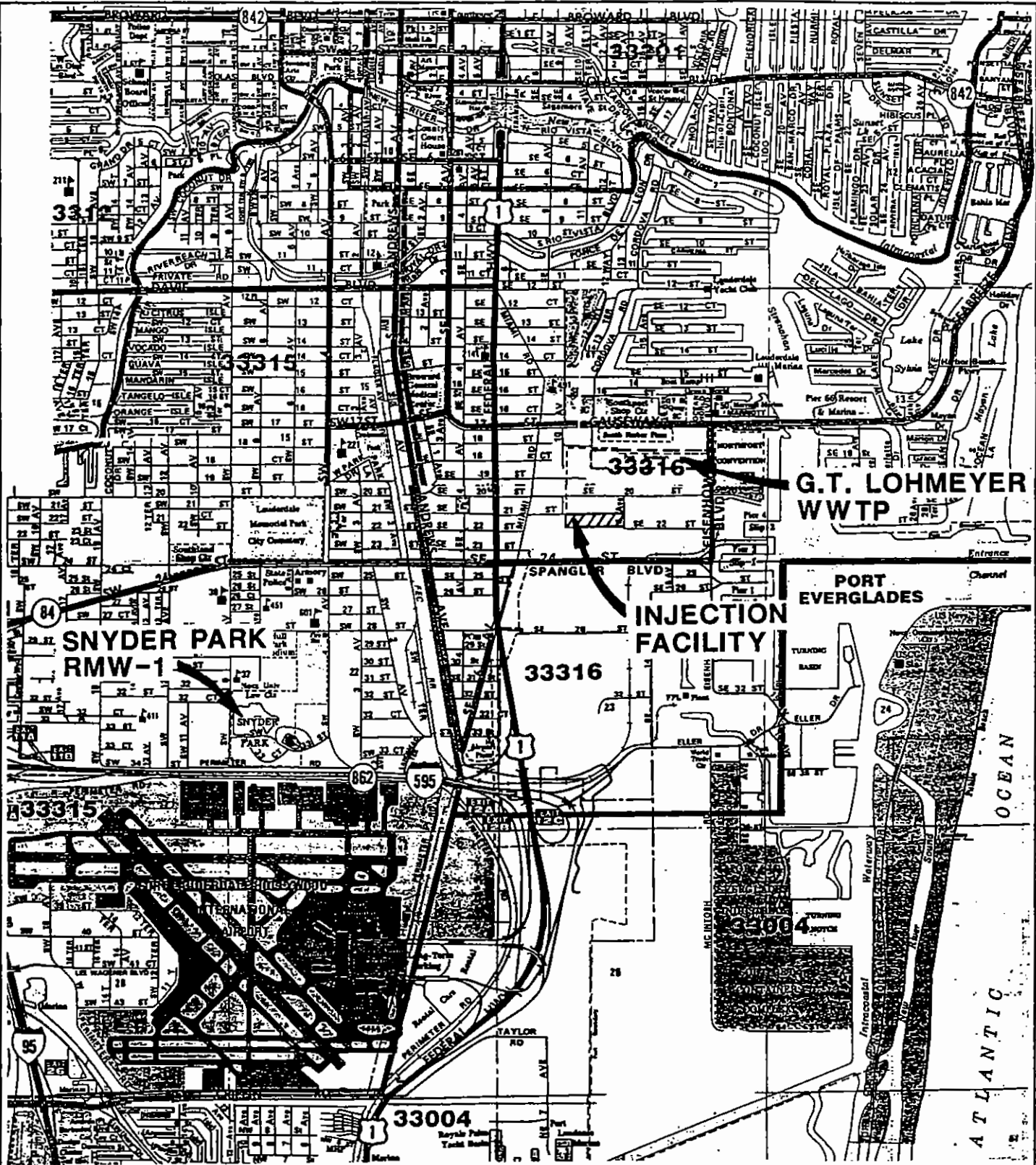
Submitted to:

City of Fort Lauderdale

Prepared by:

February 1999

Volume 1



**G.T. LOHMEYER  
WWTP**

**SNYDER PARK  
RMW-1**

**INJECTION  
FACILITY**

**PORT  
EVERGLADES**

33316

33315

33004



0 1/4 1/2  
SCALE IN MILES

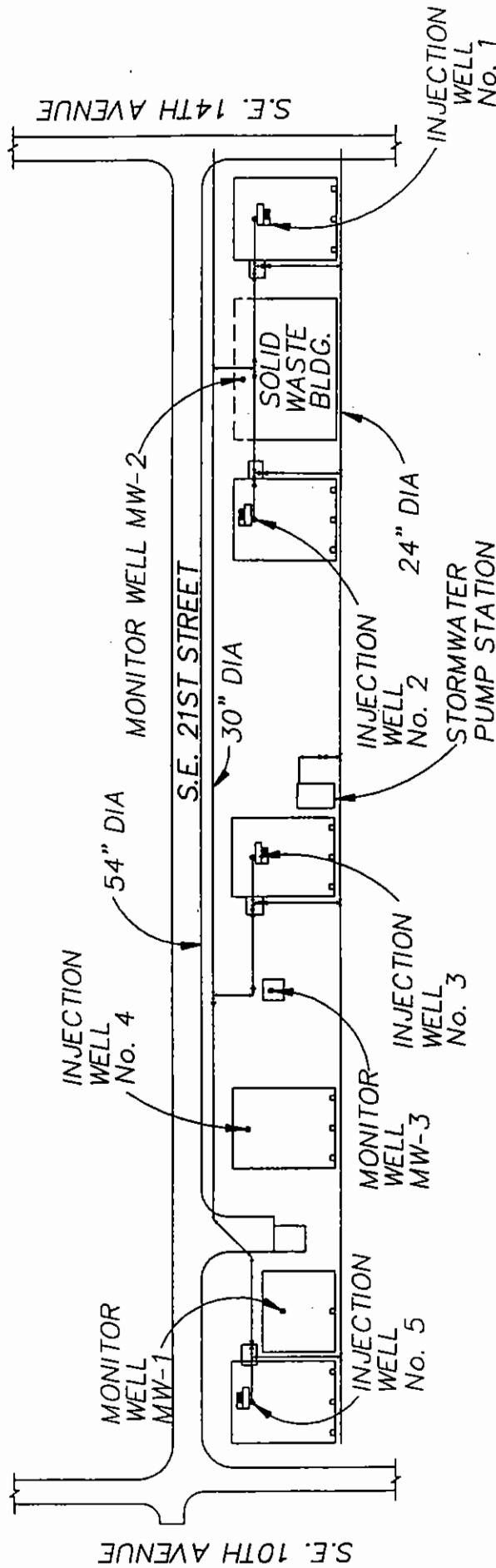
**FIGURE 1-1**  
PROJECT LOCATION MAP







0 160'  
SCALE IN FEET

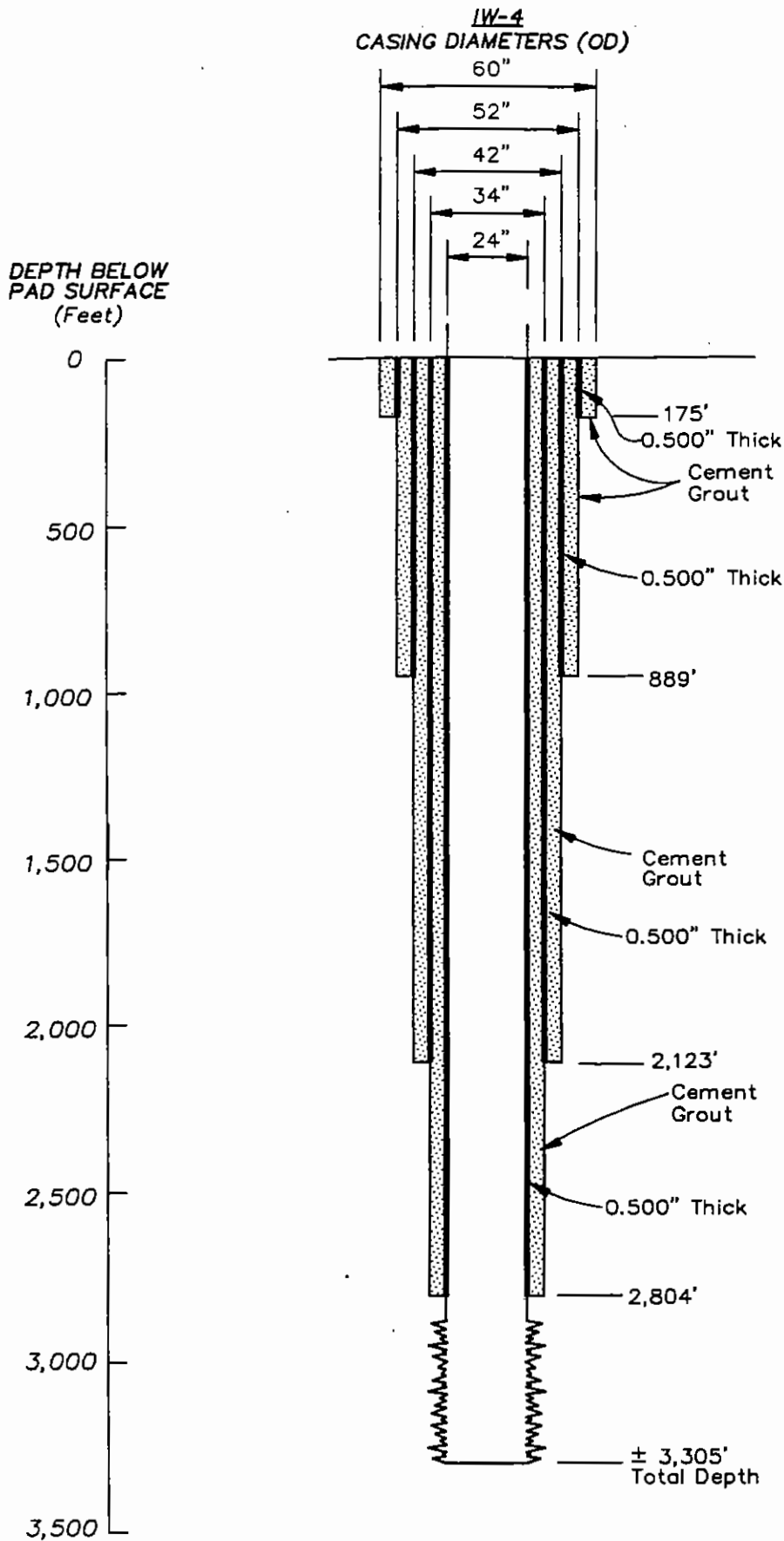


NOTE:

1. SITE PLAN GENERATED FROM AS-BUILT DRAWINGS PREPARED BY HAZEN AND SAWYER, JANUARY 20, 1982.



**FIGURE 1-2**  
INJECTION FACILITY SITE PLAN



Note: Drawing is not to Scale

**FIGURE 2-2**  
Injection Well IW-4 Completion Diagram



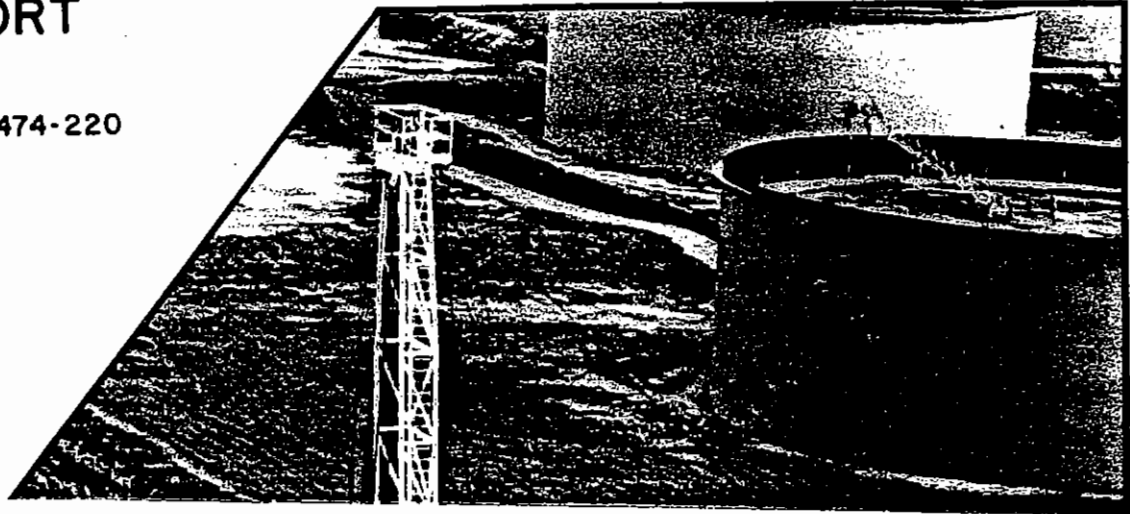
**CONSTRUCTION AND TESTING  
OF THE  
TEST INJECTION WELL  
CITY OF FORT LAUDERDALE, FLORIDA**

**FINAL REPORT**

EPA PROJECT C-120474-220

CITY PROJECT 7089

SEPTEMBER 1981



**CONSTRUCTION AND TESTING  
OF DISPOSAL WELLS 1, 2 AND 3  
AT THE  
GEORGE T. LOHMEYER PLANT  
FORT LAUDERDALE, FLORIDA**

**VOLUME I**

**FEBRUARY 1984**

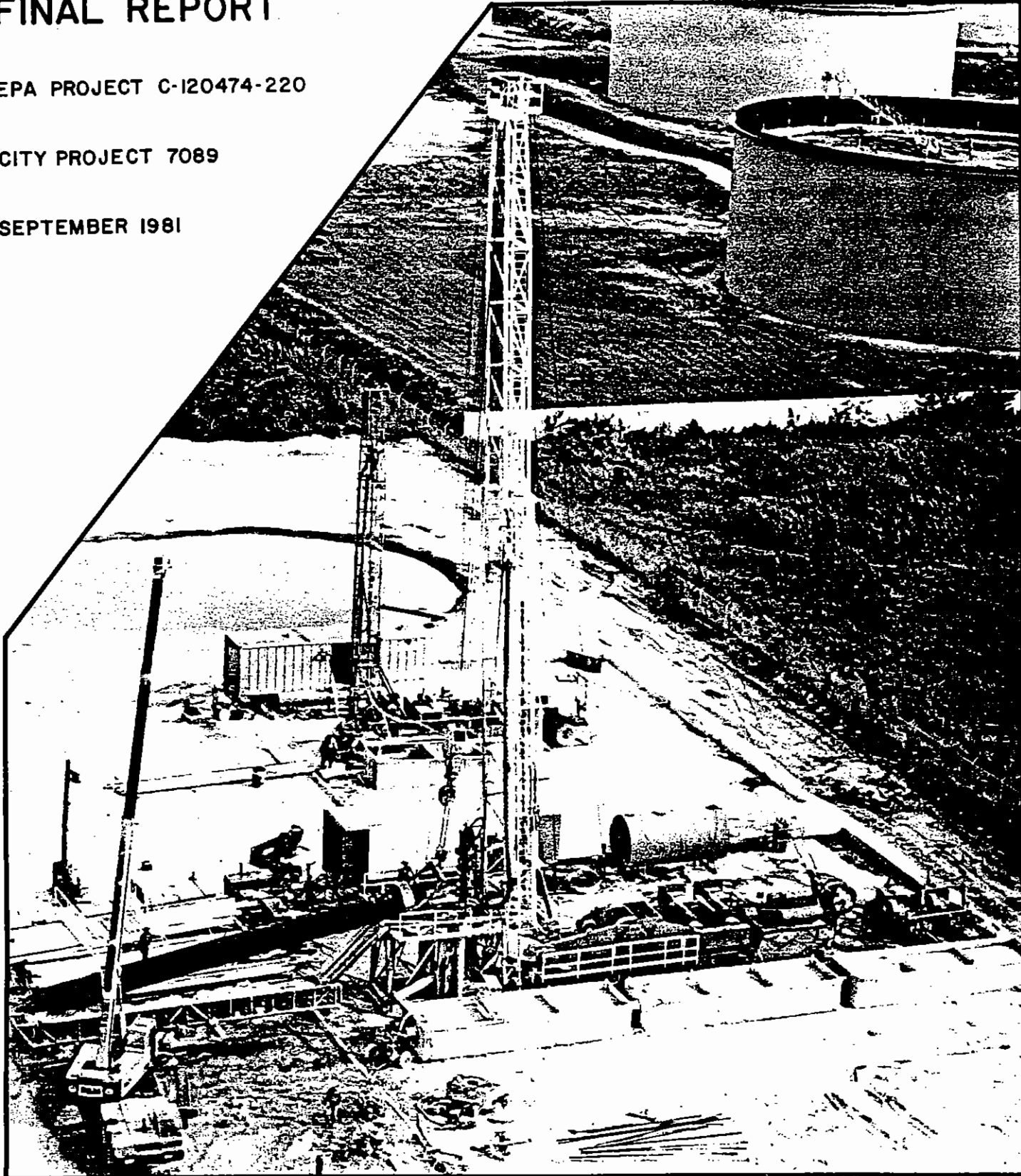
CONSTRUCTION AND TESTING  
OF THE  
**TEST INJECTION WELL**  
CITY OF FORT LAUDERDALE, FLORIDA

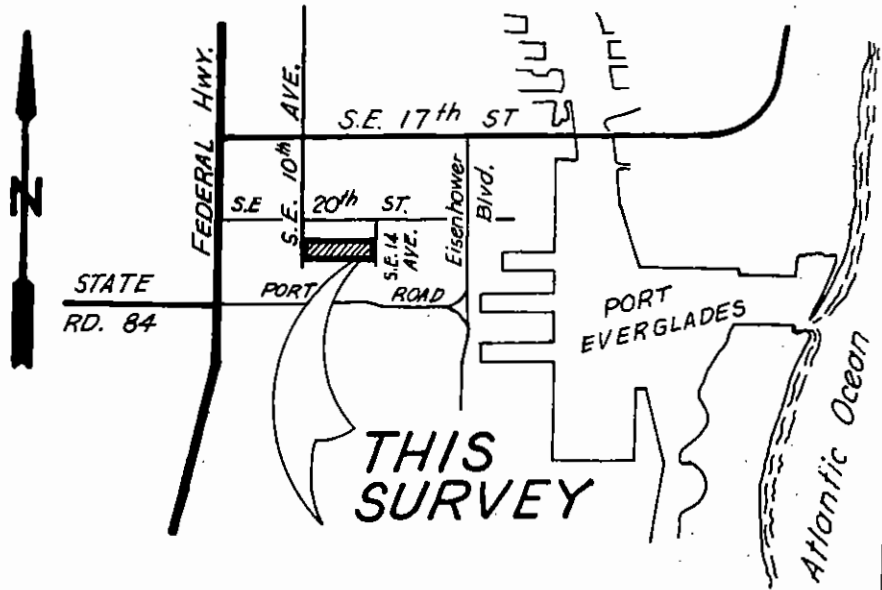
**FINAL REPORT**

EPA PROJECT C-120474-220

CITY PROJECT 7089

SEPTEMBER 1981





• **LOCATION SKETCH.**  
 N.T.S. (SEC. 14 - 50-42)

...TION IN OCTOBER, 1983. ...  
 ...AL LOCATION SURVEY MEETS THE MINIMUM TECHNICAL STANDARDS  
 ...FORTH IN RULE 21HH-6 ADOPTED BY THE FLORIDA BOARD OF LAND  
 ...VEYORS, PURSUANT TO FLORIDA STATUTES 472.027, SUBJECT TO  
 ...E QUALIFICATIONS NOTED HEREON.

KEITH AND SCHNARS, P. A.  
 ENGINEERS, PLANNERS & SURVEYORS

*Keith Schnars*  
 BY: GEEKE LOSSING, PLS  
 FLORIDA REGISTRATION NO. 2625

**PARTIAL LOCATION  
 SURVEY**

~ BLOCK 1 & BLOCK 2 ~

BASTIN-ELLERS LAKE MABEL BUS. SEC. (10-42)  
 CITY OF FORT LAUDERDALE BROWARD COUNTY, FLORIDA

**KEITH AND SCHNARS, P.A.**  
**ENGINEERS - PLANNERS - SURVEYORS**

FT. LAUDERDALE, FL.  
 (305)783-3843

GAINESVILLE, FL.  
 (804)372-3301

DEERFIELD BEACH, FL.  
 (305)421-0282

OCALA, FL.  
 (804)628-7182

DATE 10/03/83

SCALE: 1" = 30'

FIELD A-21/75-77  
 BOOK 26-33

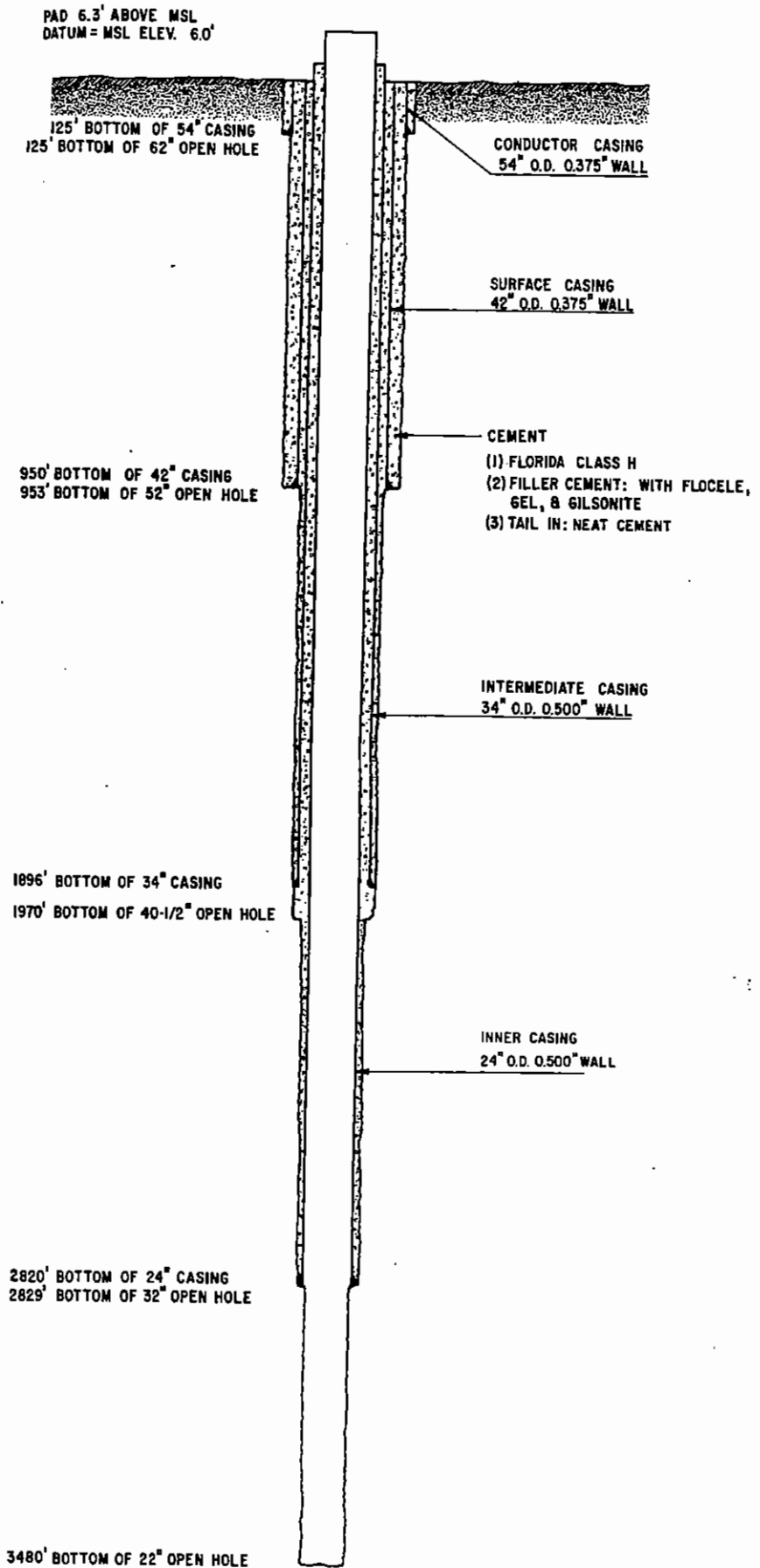
DWN.  
 BY *Jay*

CKD.  
 BY *J. M. S.*

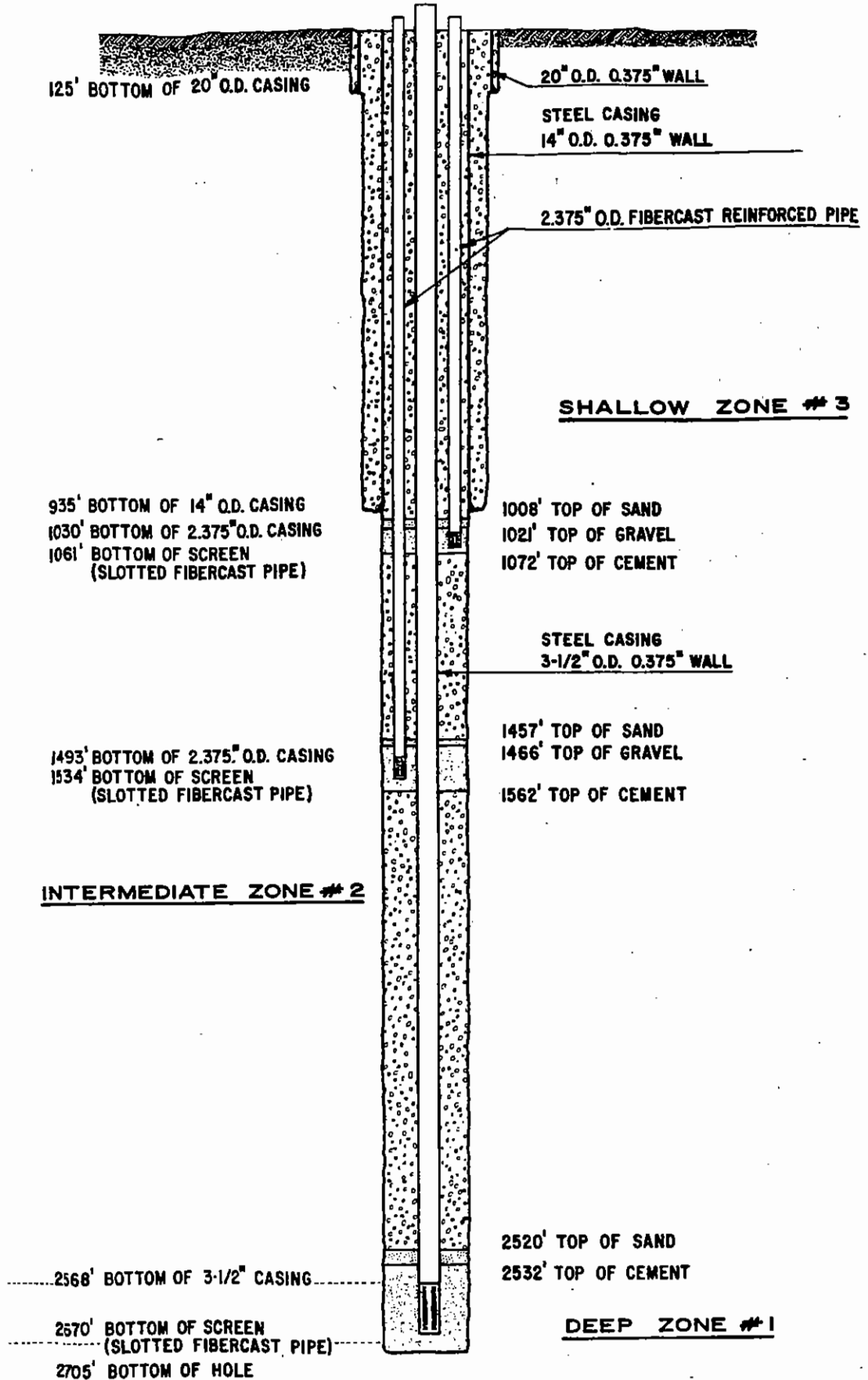
SHEET  
 NO. 1 OF 1

DWG.  
 NO. 6324C-4

# TEST INJECTION WELL



# FLORIDAN AQUIFER MONITOR WELL



**CONSTRUCTION AND TESTING  
OF DISPOSAL WELLS 1, 2 AND 3  
AT THE  
GEORGE T. LOHMEYER PLANT  
FORT LAUDERDALE, FLORIDA**

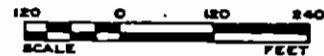
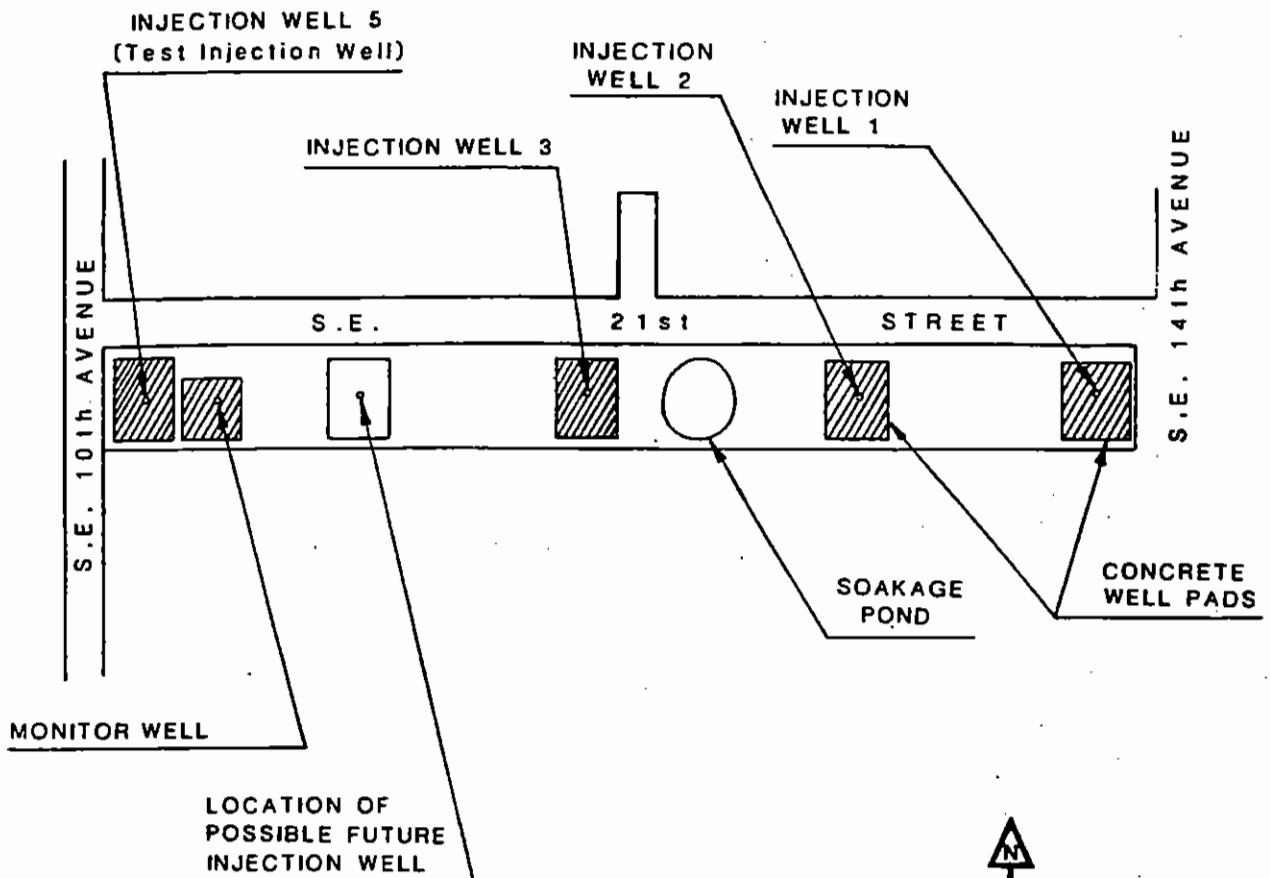
**VOLUME I**

**FEBRUARY 1984**

**PREPARED BY:**

**GERAGHTY & MILLER, INC.  
GROUND-WATER CONSULTANTS  
2700 P.G.A. BOULEVARD, SUITE 104  
PALM BEACH GARDENS, FLORIDA 33410**





PREPARED FOR		
HAZEN AND SAWYER, P.C.		
TITLE		
LOCATION OF INJECTION AND MONITOR WELLS AT THE GEORGE T. LOHMEYER WWTP FORT LAUDERDALE, FLORIDA		
COMPILED BY P.G. Jakob	Geraghty & Miller, Inc. West Palm Beach, Florida	DATE SEPT. 83
DRAWN BY P.Q. Smith		REVISED
CHECKED BY P.G. Jakob	SCALE 1" = 240'	FIGURE 1