



WATER-RIGHT DOCKET

Fire Island National Seashore

Docket No: 2

SAILORS HAVEN WELL

Supporting Hydro Data

11-08-1967: memo: fire island national seashore; well yield.

L54 WSC-OLW

November 8, 1967

11-8-67
11/3
MR

Memorandum

To: Chief, Development Planning and Project Control, PSC
Attention: Mr. Jack Longworth

From: Chief, Office of Land and Water Rights, WSC

Subject: Fire Island National Seashore

Following through on Mr. Moore's telephone conversation with Mr. Longworth November 8 the information on Sailor's Haven is enclosed. For your information this well yields about 100 gpm.

Additional wells are being drilled at the present time at Talisman and Whale House Point areas. The Talisman area well is producing about 100 gpm.

Richard L. Stanton

Richard L. Stanton

Enclosure

cc:
Regional Director, Northeast
Superintendent, Fire Island
/VASO - Mr. Reed
Chief, PSC - D&C



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON PLANNING AND SERVICE CENTER
1730 NORTH LYNN STREET
ARLINGTON, VIRGINIA 22209

9/11

IN REPLY REFER TO:

L54 WSC-OLW

September 8, 1967

Memorandum

To: Chief, Branch of Water Resources, WASO
From: Chief, Office of Land and Water Rights, WSC
Subject: Sailor's Haven Well, Contract No. 14-10-5-615-86

Enclosed are a copy of a memorandum and letter transmitting the driller log giving formation data and final well construction depth, etc. for your files.

Richard L. Stants

Enclosures 3



IN REPLY REFER TO:

D52 FIIS

UNITED STATES
DEPARTMENT OF THE INTERIOR

SEP 7 1967

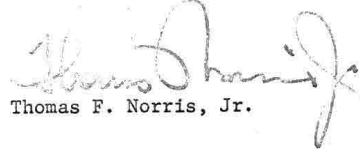
NATIONAL PARK SERVICE
Fire Island National Seashore
Box 229
Patchogue, New York 11772

September 5, 1967

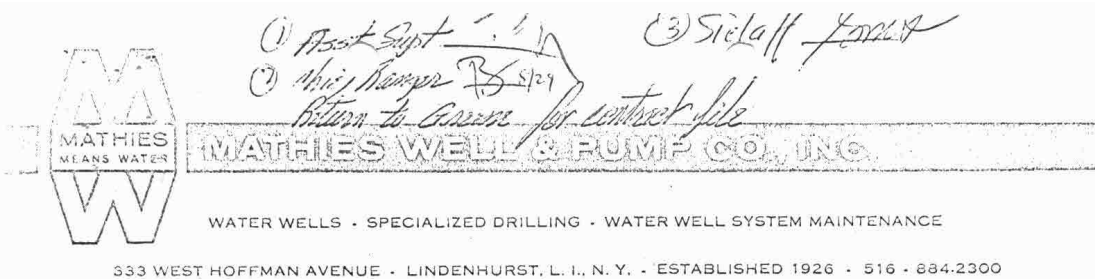
Memorandum

To: Supervisory Hydraulic Engineer, WP&SC
From: Assistant Superintendent, Fire Island
Subject: Sailor's Haven Well, Contract No. 14-10-5-615-86

Enclosed is a copy of the drillers log concerning subject
well contract for your information and files.


Thomas F. Norris, Jr.

Enclosure



August 25, 1967

U. S. Geological Survey
1505 Kellum Place
Mineola, L.I., New York

ATTN: Mr. William Miller
SUBJ: CONTRACT NO. 14-10-5-615-86
SAILORS HAVEN - FIRE ISLAND

Gentlemen:

Enclosed please find six (6) copies of the Drillers Log giving the formation data and final well construction depth, etc.

If there are any questions concerning the enclosed, please contact the writer.

Very truly yours,

MATHIES WELL & PUMP CO., INC.

Richard L. Shockley
Richard L. Shockley

RLS:cll
Enclosures: (6)
cc: ✓ Fire Island National Seashore

WELL LOG

MATHIES WELL & PUMP CO., INC.
LINDENHURST, N. Y.

WRC #B-30550

Sailors Haven

Address Fire Island

Started

Completed

Driller

W. Siebert

Motor 16" In.

Measured from Grade ☒ Yes ☐ No

507' Ft. In.

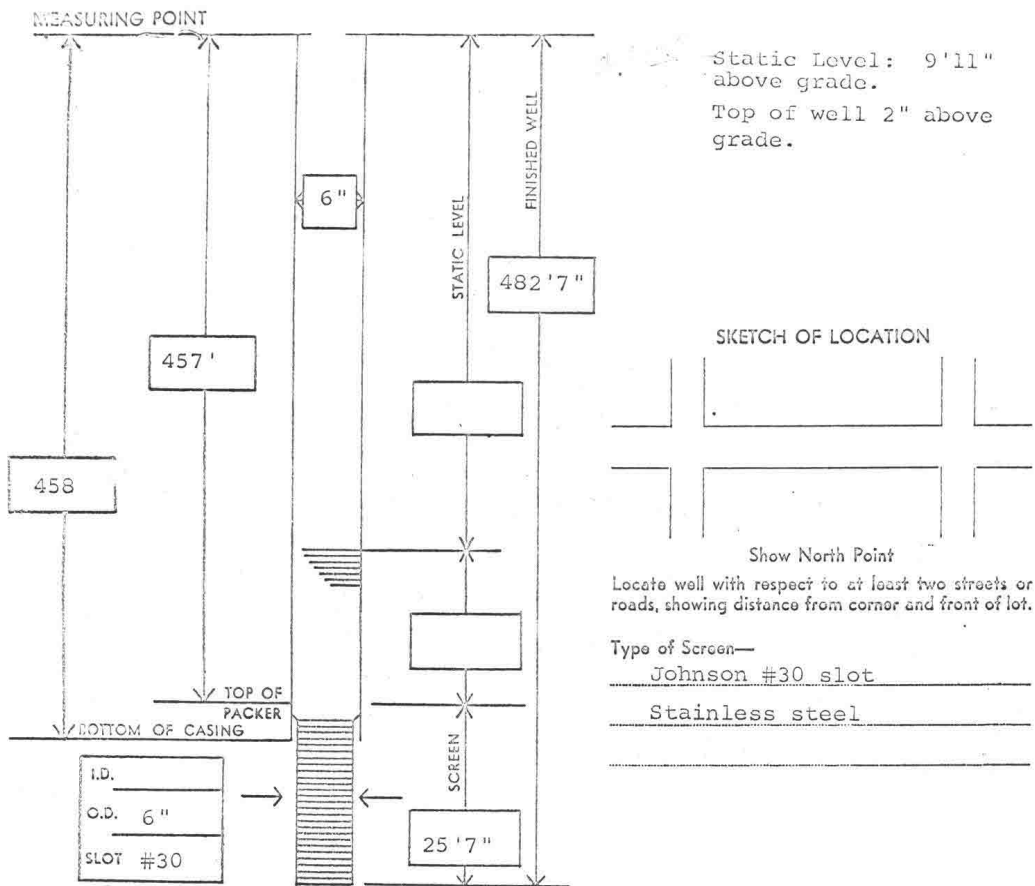
Above Ft. In. Below Ft. In.

Static Level 9' Ft. 11" In.

Elevation Ft.

Above grade

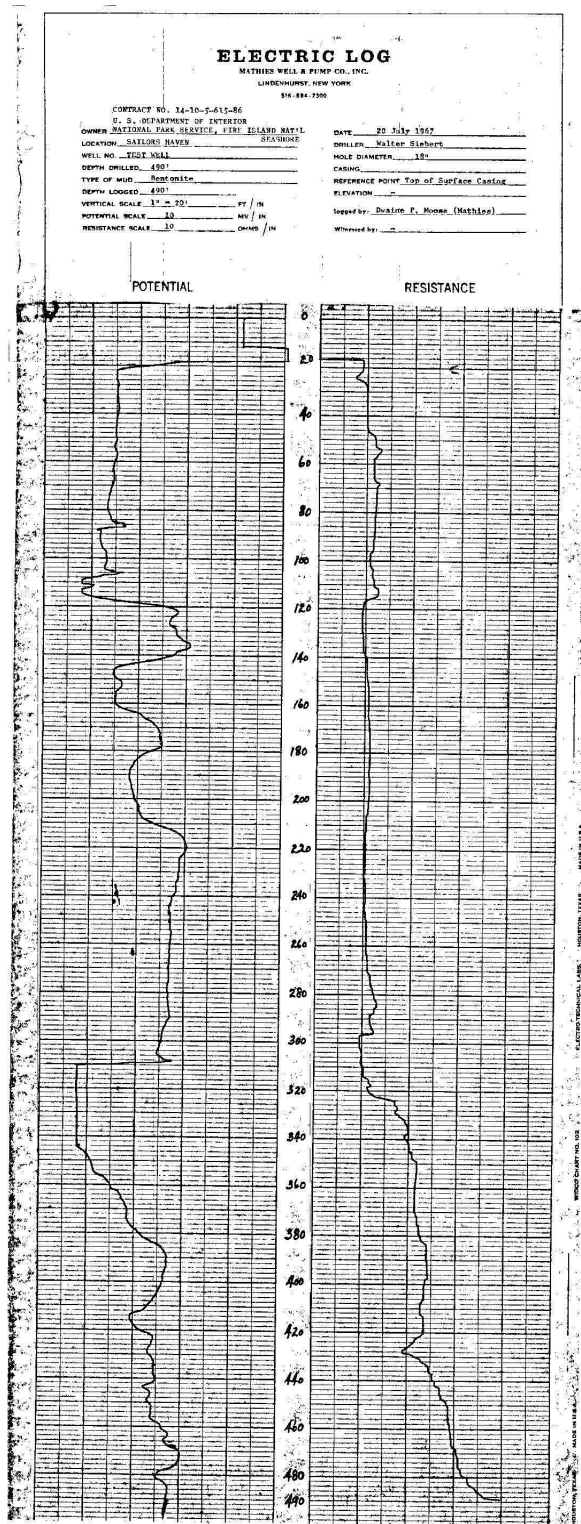
	STRATUM		TEMPERATURE	
	THICKNESS	DEPTH	SAND	WATER
Coarse sand	2	2		
Sand and gravel	6	8		
Coarse sand, grits, gravel and shells	77	85		
Coarse sand, streaks of gravel and shells	31	116		
Green clay, sand and grits	24	140		
Gray clay and fine sand	8	148		
Black clay and fine sand	18	166		
Solid black clay	12	178		
Black clay and fine sand	38	216		
Solid black clay	74	290		
Sand, lignite, mica and clay	7	297		
Solid clay, lignite, mica and sand streaks	23	320		
Fine sand, lignite, mica and clay streaks	17	337		
Fine sand	8	345		
Fine sand, mica and clay streaks	13	358		
Fine sand, lignite and mica	35	393		
Fine sand, clay streaks, lignite and mica	8	401		
Fine sand, mica and lignite streaks	18	419		
Fine sand, lignite and clay streaks	8	427		
Fine sand, silt, mica and lignite	24	451		
Lignite layers, fine sand and mica	9	460		
Coarse sand, mica and some lignite	22	482		
Fine sand, mica, clay and lignite	25	507		



NOTE—If outer casings are used state diameter length and whether or not left in the ground.

NOTE—If screen is finished off with riser, give exact description of top of riser—(size and male or female thread.)

REMARKS—



Other Supporting Information

Sailors Haven -- Well S30550

The Sailors Haven site is located on Fire Island, about 0.5 miles west of the community of Cherry Grove (enclosure 5). Well S30550 is situated on a relatively flat portion of the interdunal area at the Sailors Haven site, about 300 feet south of Great South Bay and 500 feet north of the Atlantic Ocean. Land-surface altitude at the well site is about 5 feet above msl.

The first step in the construction of well S30550 was the drilling of a 16-inch diameter, 500-foot-deep test hole by the hydraulic-rotary method. Ground water that is high in dissolved-iron and chloride content is common in the aquifers beneath Fire Island. Therefore, in order to evaluate the water quality before installing a permanent well screen, it was necessary to collect water samples from three temporary screen settings in the test hole. The first two settings, which were at depths of 390-395 feet and 432-435 feet below land surface, consisted of well points that were driven and jetted into water-bearing, sandy silt and clay formations. Since the temporary screens did not respond properly to development, the water samples collected from these zones were not considered representative of the water in the aquifer at the designated depths; therefore, the chemical analyses for these samples are not included in enclosure 4. The water-bearing material at the depth of the third temporary screen setting (477-480 feet below land surface) is fairly clean, fine-to-medium sand. This setting was installed by emplacing a 5-foot layer of gravel at the desired depth and jetting a well point into the gravel. The results of a chemical analysis performed on a water sample collected from this zone (enclosure 4) indicate that the water is of good chemical quality.

Core and flume (mud-ditch) samples were collected during drilling, and a single-point electric resistivity log was made in the hole. The description of the cores, driller's log, geologist's log, and the electric log are shown in enclosures 7-10, respectively. The hole was cased with six-inch-diameter steel pipe to a depth of 455 feet below land surface (enclosure 6). The screen zone and the screen-slot and gravel-pack sizes were selected on the basis of an examination of core samples, mechanical analyses of selected cores (enclosures 11 and 12), and the electric log. A six-inch (nominal), by 25-foot, number 304 stainless-steel, 30-slot, wire-wound screen was attached to the bottom of the casing from 455-480 feet below land surface.

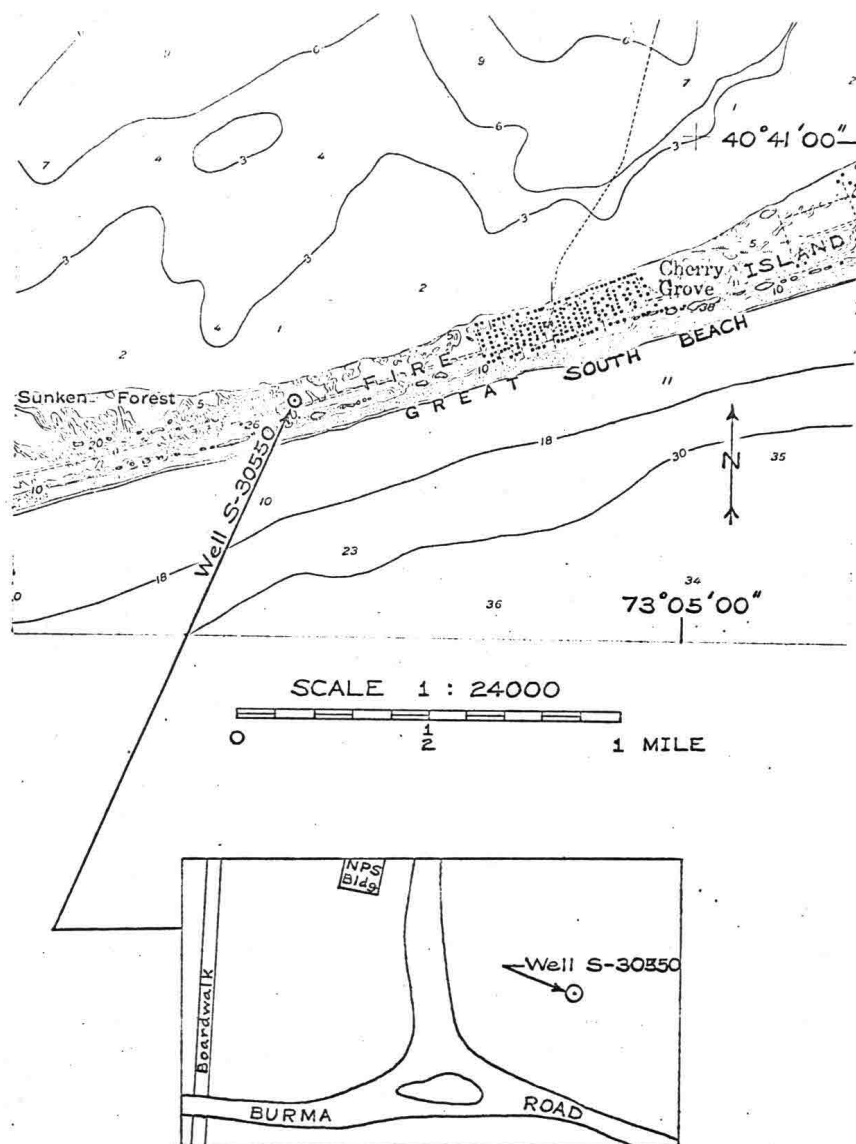
After development with air by surging, the well was test-pumped for 8 hours. For the first $5\frac{1}{2}$ hours, the well was pumped at a rate of 100 gpm and the total drawdown was about 100 feet (enclosure 13). Accordingly, the specific capacity of the well was about 1 gpm per foot of drawdown. The results of a chemical analysis of a water sample collected during the pumping test are given in enclosure 4.

The well at Sailors Haven, when equipped with the proper pump, should be adequate to meet the water demands of an installation requiring up to 100,000 gpd. If requirements at this site increase substantially above this figure, it will be necessary to investigate the availability of fresh water in the aquifers below a depth of 500 feet.

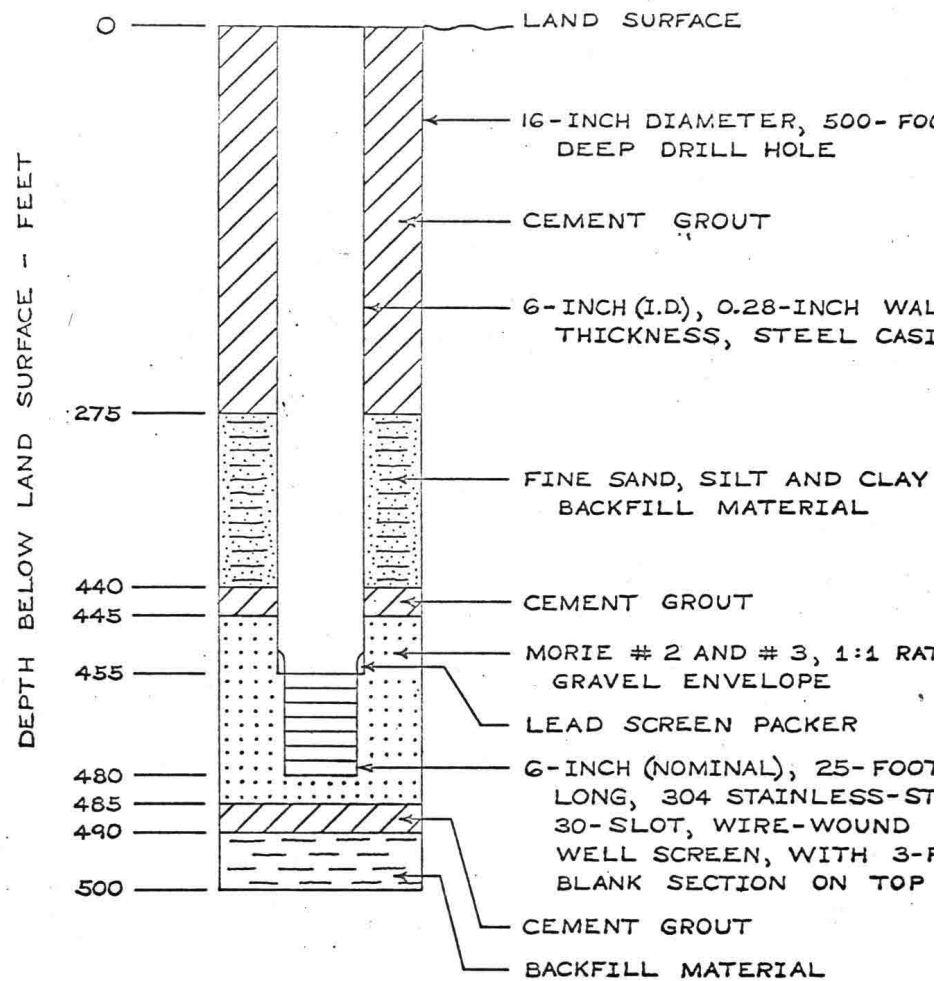
Enclosure 4.--Chemical analyses of ground water from wells S3636 and S30550.

(Results given in parts per million, except as indicated; analyses conducted by Suffolk County Water Author

	Well number and screen interval in feet below land surface				
	S3636 <i>(Annis Pond)</i>		S30550 <i>(Annis Pond)</i>		
	Permanent screen (360-374)	Permanent screen (360-374)	Temporary screen (477-480)	Permanent screen (455-480)	Permanent screen (455-480)
Date sampled	12-7-66	1-6-67	7-17-67	8-1-67	8-14-67
Yield of well, in gpm (pump or flow)	3 (flow)	60 (pump)	12 (pump)	100 (pump)	40 (pump)
Color	yellow	yellow	brown	gray	-
Odor	none	none	none	none	-
Turbidity (SiO_2)	3.9	8.5	3.1	20	10.5
pH	6.1	5.9	6.4	6.5	-
Iron (Fe)	1.6	2.1	0.3	0.3	-
Manganese (Mn)	<0.05	<0.05	<0.05	<0.05	-
Chloride (Cl)	12	7	8	12.5	6
Total hardness (CaCO_3)	24	18	0	2	-
Alkalinity (CaCO_3)	34	18	20	22	-
Carbon dioxide (CO_2)	41	36	12.6	-	-
Fluoride (F)	<0.1	<0.1	-	-	-
Nitrate (NO_3 as N)	<0.02	<0.02	0.32	-	-
Dissolved solids (residue on evaporation)	54	74	-	-	-
Specific conductance, in micromhos at 25°C	74	72	72	88	54



ENCLOSURE 5.-- LOCATION OF WELL S-30550



ENCLOSURE G. -- DIAGRAM OF WELL S-30550

Enclosure 7.--Description of cores of well S30550

Core Number	Depth (feet)	Lithologic Description
1	150	Sand, very fine to fine, olive green; muscovite and black minerals; some silt
2	200	Sand, very fine to fine, dark grayish-green; trace of silt
3	250	Clay, gray
4	300	Clay, dark olive green
5	310	Clay, grayish-green
6	330	Clay, dark gray
7	335	Clay, dark gray
8	340	Silt, micaceous, light and dark gray; very fine sand
9	345	Silt, micaceous, light grayish-white; very fine sand
10	350	Silt, micaceous, light grayish-white; very fine sand
11	355	Sand, very fine to fine, medium gray; 15% clay and silt
12	360	Sand, medium, gray; 30% clay
13	365	Sand, very fine to medium, gray
14	370	Sand, medium, light gray; 30% clay
15	375	Sand, fine to medium, dark gray; 20% clay & silt
16	380	Sand, very fine to medium, light greenish-gray; some clay and silt

Enclosure 7.--Description of cores of well S305550--continued

Core Number	Depth (feet)	Lithologic Description
17	385	Sand, very fine to medium, greenish-gray; silty
18	390	Sand, very fine to medium, dark greenish-gray; silty
19	395	Sand, micaceous, very fine to medium, light greenish-gray; silty
20	400	Sand, very fine to medium, greenish-gray; silty
21	405	Sand, very fine to medium, greenish-gray; silty
22	410	Sand, very fine to medium, greenish-gray; silty
23	415	Sand, very fine to medium, gray; silty
24	420	Sand, micaceous, very fine to medium, dark greenish-gray; silty
25	425	Sand, micaceous, very fine to medium, greenish-gray; silty
26	430	Sand, very fine to medium, greenish-gray; silty
27	435	Sand, medium to coarse, gray; trace of clay and silt
28	440	Sand, fine to medium, gray; some coarse sand; trace of clay and silt
29	445	Sand, micaceous, very fine to fine, gray; silty trace of clay; some coarse sand
30	450	Sand, fine to medium, gray; some coarse sand; trace of clay and silt
31	455	Sand, fine to medium, gray; some coarse sand; trace of clay
32	460	Sand, fine to medium, gray; some coarse sand; trace of clay
33	465	Sand, fine to medium, gray; trace of silt
34	470	Sand, micaceous, fine to medium, gray
35	475	Sand, micaceous, fine to medium, gray; trace of coarse sand; slightly silty

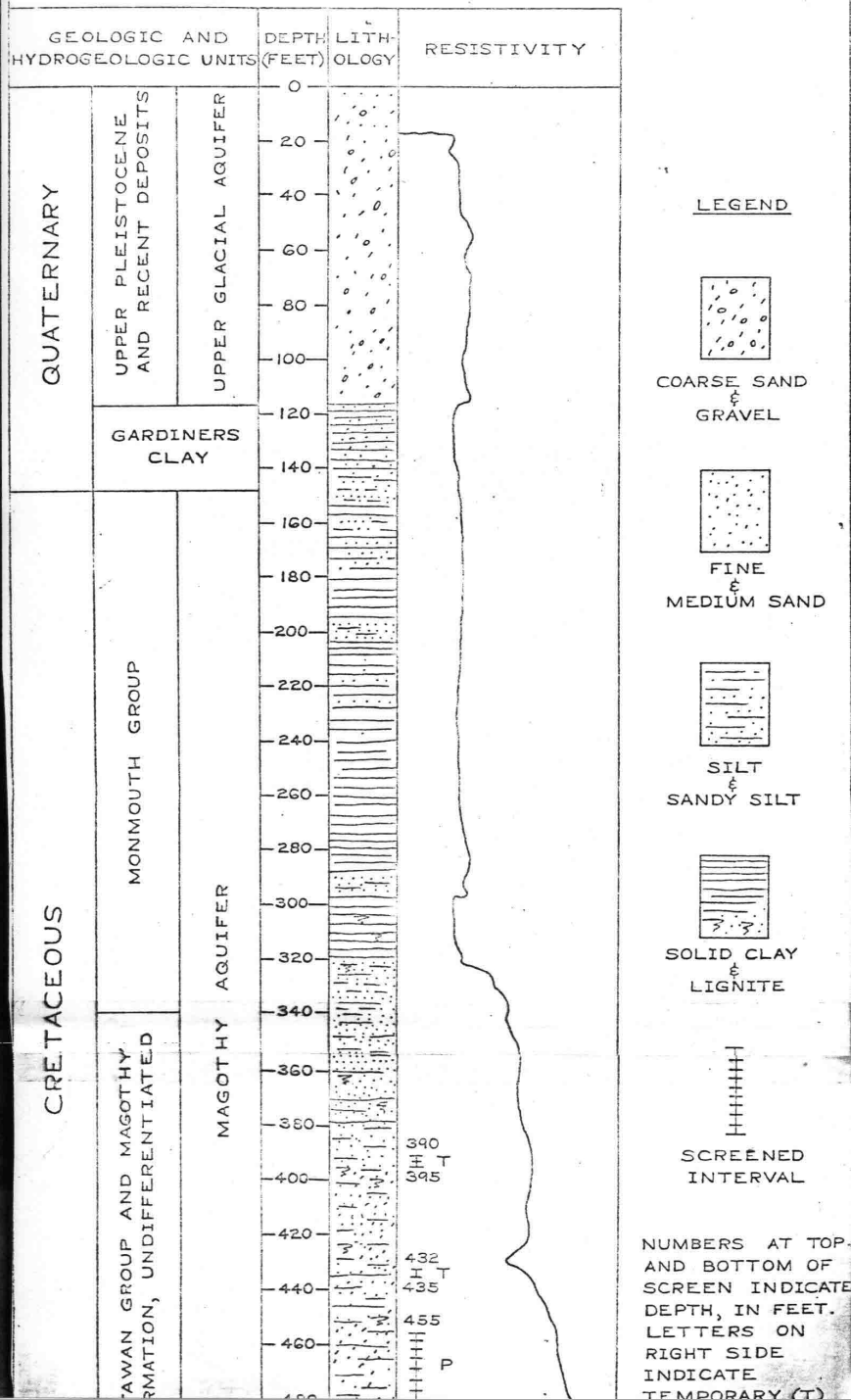
Enclosure 7.--Description of cores of well S30550--continued

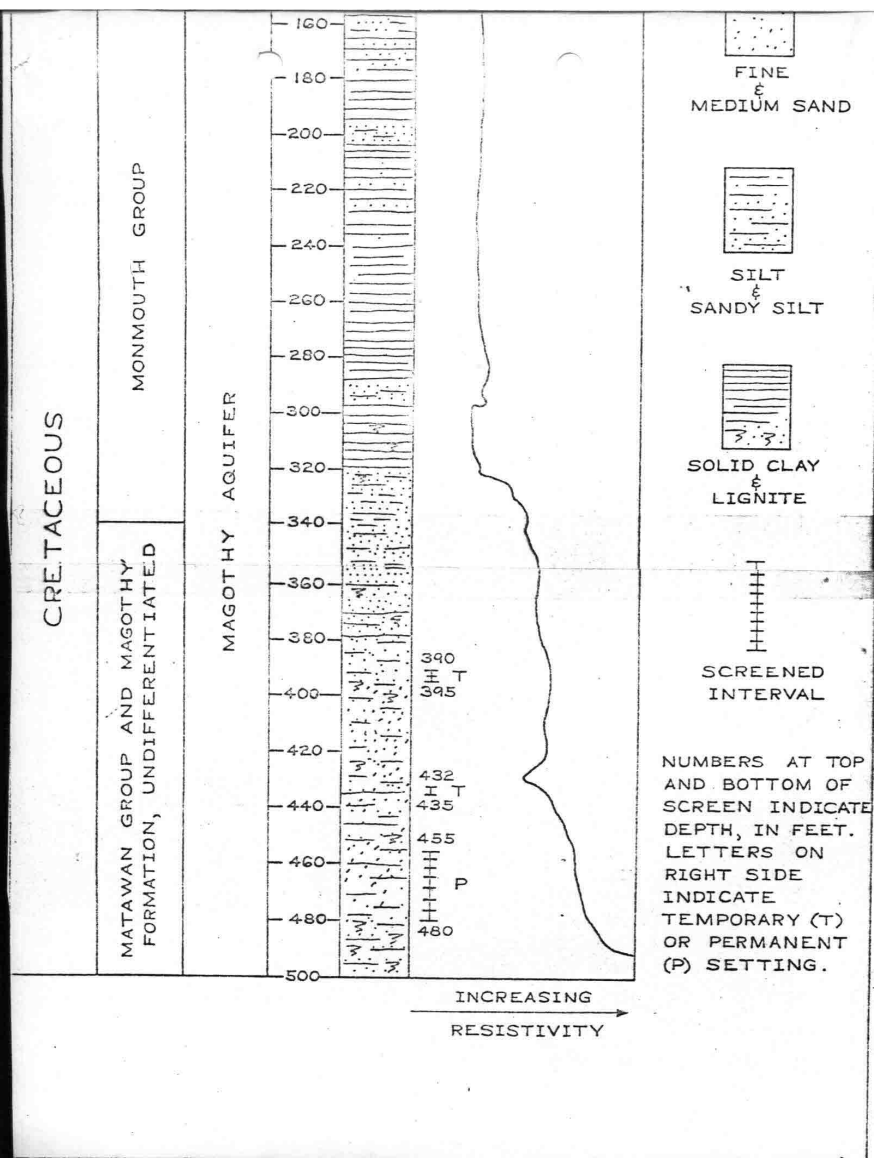
Core Number	Depth (feet)	Lithologic Description
36	480	Sand, micaceous, fine to medium, gray, slightly silty; lignite
37	485	Sand, micaceous, fine to coarse, gray, slightly silty; lignite
38	490	Sand, micaceous, fine to coarse, gray; slightly silty; layers of lignite and sandy silt
39	495	Sand, micaceous, fine to coarse, gray, slightly silty; layers of lignite and sandy silt
40	500	Sand, micaceous, fine to medium, dark gray, slightly silty; layers of lignite and sandy silt

Enclosure 8.--Driller's log of well S30550.

<u>Lithologic Description</u>	<u>Thickness</u>	<u>Depth</u>
Sand, coarse.....	2	2
Sand; gravel.....	6	8
Sand, coarse; grits; gravel; shells.....	77	85
Sand, coarse; streaks of gravel; shells.....	31	116
Clay, green; sand; grits.....	24	140
Clay, gray; fine sand.....	8	148
Clay, black; fine sand.....	18	166
Clay, solid, black.....	12	178
Clay, black; fine sand.....	38	216
Clay, solid, black.....	74	290
Sand; lignite; mica; clay.....	7	297
Clay, solid; lignite; mica; sand streaks.....	23	320
Sand, fine; lignite; mica; clay streaks.....	17	337
Sand, fine.....	8	345
Sand, fine; mica; clay streaks.....	13	358
Sand, fine; lignite; mica.....	35	393
Sand, fine; clay streaks; lignite; mica.....	8	401
Sand, fine; mica; lignite streaks.....	18	419
Sand, fine; lignite; clay streaks	8	427
Sand, fine; silt; mica; lignite.....	24	451
Lignite, layers; fine sand; mica.....	9	460
Sand, coarse; mica; lignite.....	22	482
Sand, fine, mica; lignite.....	25	507

ENCLOSURE 8- GEOLOGIC AND RESISTIVITY LOGS OF WELL S-30550





Enclosure 9.--Geologist's log of well s30550.

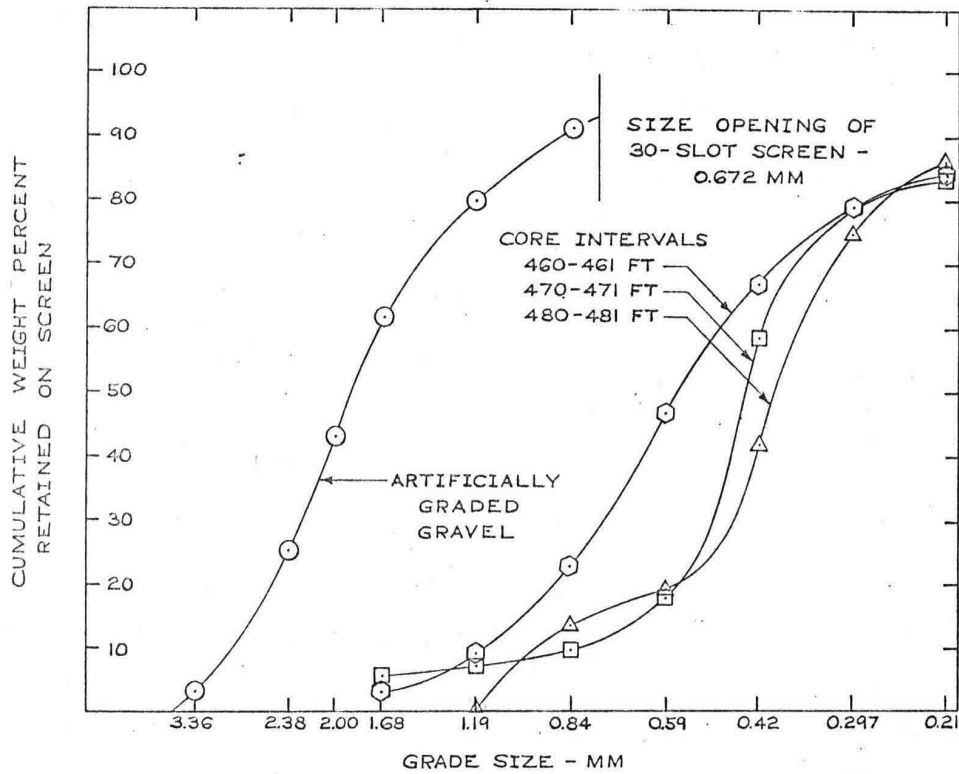
<u>Hydrogeologic Units and Description</u>	<u>Thickness (feet)</u>	<u>Depth (feet)</u>
Upper glacial aquifer:		
Sand, fine to coarse, tan; grits.....	8	8
Sand, fine to coarse, gray and tan; grits; gravel; shells.....	77	85
Sand, coarse, gray and tan; layers of gravel; shells.....	31	116
Gardiners Clay:		
Clay, solid, green; layers of fine to coarse sand; grits.....	24	140
Clay, solid, sandy, gray; layers of fine sand.....	8	148
Magothy aquifer:		
Clay, solid, black; layers of solid, dark green to gray clay; layers of very fine to fine, silty to clayey, gray to green, glauconitic sand.....	142	290
Clay, solid, green to dark gray; layers of fine to medium, green to dark gray, silty sand; layers and fragments of lignite.....	30	320
Clay, solid to sandy, gray; layers of very fine to fine, gray, silty sand; lignite; micaceous; trace of green and dark gray clay.....	20	340
Sand, very fine to medium, silty to clayey, gray; layers of gray sandy silt and clay; layers of solid gray clay; micaceous lignite.....	70	420
Sand, fine to coarse, gray, silty; traces of clean to slightly silty, fine to coarse gray sand; layers of solid gray clay; lignite; micaceous.....	30	450
Sand, fine to coarse, clean to slightly silty, gray; layers of gray sandy silt and silty sand; layers of lignite; micaceous.....	50	500

Enclosure 11.--Results of mechanical analyses of artificially graded gravel envelope and selected cores from well S30550 1/

Sieve opening (inches) (mm)	Cumulative weight percent of samples retained by indicated sieve opening <u>2/</u>										
	Artificially graded gravel	Depth of cores below land surface (feet)									
		440-441	445-446	450-451	455-456	460-461	465-466	470-471	475-476	480-481	485-486
0.132 3.36	3.4										
0.0937 2.38	25.4										
0.0787 2.00	43.1										
0.0661 1.68	62.0	4.0	2.8	-	-	2.6	-	5.4	-	-	3.3
0.0469 1.19	80.2	11.1	9.3	4.8	5.0	8.6	3.6	6.9	9.0	-	6.5
0.331 0.84	90.8	19.2	15.7	10.8	14.0	23.0	11.2	9.8	18.6	13.9	9.8
0. (2 0.59	-	32.3	23.2	21.5	35.0	46.6	20.2	18.0	35.2	18.6	14.1
0.0165 0.42	-	64.7	59.7	52.7	67.5	67.1	37.0	59.0	66.9	41.9	26.1
0.0117 0.297	-	91.4	87.0	82.8	86.0	79.2	74.0	79.3	80.9	74.4	71.7
0.0083 0.210	-	94.4	89.8	87.6	91.0	84.0	83.3	83.5	86.2	86.1	78.3
Retained in pan	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Mechanical analyses conducted by Mathies Well and Pump Co., Inc.

2/ Expressed as percent of total weight of sample.



ENCLOSURE 12.-- CUMULATIVE FREQUENCY CURVES OF
ARTIFICIALLY GRADED GRAVEL ENVELOPE
AND SELECTED CORES FROM WELL S-30550

Enclosure 13.--Pumping-test data from well S30550, August 18, 1967.

Time (EST)	Duration (min)	Drawdown ^{1/} (feet)		Yield (gpm)	Specific Capacity (gpm per ft of drawdown)
		Below Top of Casing	Total		
0825	0	0	0	0	-
0829	4	70	77	96	1.25
0830	5	75	82	110	1.34
0831	6	90	97	110	1.14
0837	12	90	97	106	1.09
0847	22	95.5	102.5	107	1.04
0900	35	91.9	98.9	105	1.06
0922	57	92.7	99.7	105	1.05
0950	85	92.9	99.9	105	1.05
1055	150	92.0	99	103	1.04
1155	210	92.0	99	103	1.04
1200	215	92.8	99.8	102	1.03
1300	275	90.0	97	102	1.05
1325	300	90.5	97.5	101	1.02

^{1/} The static water level was estimated to be about 7 feet above the top of the well casing.

Because of the prevailing high water table.

care should be exercised in the siting, location and design of buildings and other facilities to provide for the installation of acceptable disposal systems. Factors which must be considered are the prevailing high ground water level on the island, the proximity to bathing, boating and shellfish areas. Comfort stations and change houses should be limited in size by the potential size of the disposal facilities which serve them.

Comfort stations should be constructed to allow for required slopes of the sewage disposal system and to keep the unit above the ground water level.

Major developed areas of the Seashore shall be provided with commercial electric power where it can be procured or existing lines can be extended at reasonable cost. Power lines shall be placed underground whenever possible.

Major and minor developed areas where power is required but cannot be procured shall have their requirements filled by the use of gasoline or diesel electric generating systems. These systems shall be furnished with sufficient spare parts, have adequate housing and be removed from the visitor use area.

POWER:

Electric power is furnished to the Seashore developed areas by the Long Island Lighting Company by means of submarine cables under the bay which are located at various points along the island and on the island. Overhead transmission lines use company poles and poles of the U.S. Coast Guard where available.

Power is available in highly developed areas only; however, lines can be extended to serve most of the Seashore area.

COMMUNICATION:

Telephone:

The New York Telephone Company furnishes service to the highly developed areas of the Seashore by means of submarine cables under the bay which are located at various points along the island and lead to transmitter stations on the island. Overhead transmission lines are then carried on company poles, Long Island Lighting Company poles or poles of the U.S. Coast Guard where available. Direct burial cables are used for a few short stretches where required by local conditions. At the present time, service is limited and most residences in the highly developed area are being served by eight party lines.

Telephone service may be extended by the installation of additional submarine cables and/or by extending existing facilities on the island.

The U.S. Coast Guard has a telephone line from their station near Captree Island to their Moriches station. This line is overhead except for three short stretches where it is buried and goes roughly down the center of the island. It leaves the island near the Coast Guard Forge River station and becomes a submarine cable to the Moriches station.

A rough sand road passable for four-wheel drive vehicles runs along the overhead transmission line. This road has been interrupted in certain developed areas and where the cables go underground. In these areas, vehicles must use the beach.

Telephone service shall be provided to all major developments within the present area of service and to points where it can be readily extended. Telephone lines in major development areas and heavy visitor use areas shall be placed underground when opportunity permits.

Other:

DEVELOPED AREAS	TYPES OF FACILITIES									
	MAINLAND PORT TERMINAL	BOAT LAUNCHING RAMP	BOAT LAUNCHING RAMP	BOAT LAUNCHING RAMP	BOAT LAUNCHING RAMP	BOAT LAUNCHING RAMP	BOAT LAUNCHING RAMP	BOAT LAUNCHING RAMP	BOAT LAUNCHING RAMP	BOAT LAUNCHING RAMP
MORICHES INLET	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.
EAST LEAD	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.
PATTERSON QUASH	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.
SMITH POINT EAST	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.
SMITH POINT WEST	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.
PELICAN	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.
WHALEHOUSE POINT	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.
LONG COVE	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.
WATCH HILL	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.
TALISMAN	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.
SAVINGS HAVEN	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.
WEST BEACH	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.
	EXIST.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.	PROF.

DISTRIBUTION OF DEVELOPMENT

LS4 WSC-OLW

November 28, 1967

Memorandum Report

To: Chief, Office of Land and Water Rights, WSC
Through: Supervisory Hydraulic Engineer

From: Hydraulic Engineer, OLWR, WSC

Subject: Field trip to Fire Island National Seashore, October 24-26, 1967

The undersigned visited the Seashore to:

- Purpose 1.** Check on the progress of the well drilling contract at Whale House Point and Talisman.
- Purpose 2.** To make a reconnaissance of the entire island.
- Purpose 3.** Office reports on physical development and water demand for Fire Island National Seashore.

PURPOSE 1. Contract #14-10-S-615-83

The contractor, Mathies Well and Pump Company, Inc., of Lindenhurst, Long Island, New York, was drilling at Talisman. The driller had drilled to 308 feet and had screened depths 464 feet to 434 feet. At the time of the visit the contractor was grouting the well and was expecting to complete the well on or about the middle of November. Estimated yield of well is 100 gpm. Enclosed is a copy of well log for the test well drilled at Talisman Area.

FINANCES: In discussions with Mr. Greene, Administrative Assistant of the Seashore, and with Mr. Miller, Geologist, U.S. Geological Survey, it was brought out that Addendum #1, issued to all prospective bidders on May 19, 1967, had double the necessary quantities of core samples and drive-point sample settings for each construction site. As a result of this, it was estimated that the Government will realize a savings of about \$5,000 without sacrificing any technical information that may be obtained from the well.

During the course of the discussions, it was also noted that Geologist Miller has been communicating with Assistant Superintendent Morris and Administrative Assistant Greene every week on the progress or lack of progress of the test well drilling operation. Geologist Miller is scheduled to be transferred to Billings, Montana, by Thanksgiving and at the time of the meeting did not know who his replacement would be.

PURPOSE 2. RECONNAISSANCE

On October 26, Mr. Greene, Mr. Miller, and the undersigned drove down the island from Smith Point County Park to Robert Moses State Park to acquaint ourselves with and to get a rough idea on the number of wells existing on the Island. Because of lack of time on this trip to conduct a thorough investigation, only general information was noted.

It appears that from limited observation and from the knowledge of the Geologist and Mr. Greene all residences outside the communities of Atlantique, Cherry Grove, Cornells Estates, Davis Park west of Brookhaven Town Park, Denewood, Fair Harbor, Fire Island Pines, Fire Island Summer Club, Kismet (Lighthouse Shores) Kismet Park, Seaboy Beach, Longaleville, Ocean Beach Park, Point O' Woods, Robbins Rest, Saltair, Seaview and Water Island, receive their water supply from shallow depth drive points wells. The towns receive their water supplies from wells varying in depth between 400 feet to 600 feet. Enclosed are two plans which graphically illustrate the location of all wells on the Island in 1963. The plans were extracted from a Geological Survey Professional Paper 483-I titled "Correlation and Foraminifera of the Monmouth Group (Upper Cretaceous) Long Island, New York." No contact was made with the town officials for water supply information.

Some deeper wells on Government land are:

SMITH POINT: 6" well with a 2" suction pipe. Located in a circular pit 6 feet in diameter and about 3 feet deep. Depth 359-374 feet artesian flow of 21 gpm at grade. It has been estimated that 100-150 gpm could be pumped by Geologist Perinutter (letter to Richard Ketchum, dated January 17, 1967). Visible signs of high iron concentration from the ground stains in the immediate vicinity of the outlet was noted.

TALISMAN AREA: 6" well with 2" feed line. Water is pumped to a 3,000 gallon pressure tank and then distributed throughout Government facilities. This well is located about 500 feet west of where the present well is being drilled for the same area. Artesian flow - no flow measurements taken. The well is housed in a rectangular enclosure measuring about 3 x 5 feet, and 6 feet deep.

Other wells located on Government land which is reported in the master plan for the area but not visited on this trip are located at Moriches Inlet and at Watch Hill.

PURPOSE 3. DEVELOPMENT AND WATER DEMAND (OFFICE STUDY)

According to the master plan the following areas are planned for development. (See enclosure for type of facilities.) Construction, as reflected in the Long Range Program Schedule 1967-1977 - April 1967, Edition, is scheduled as follows:

<u>Area</u>	<u>R & T</u>	<u>B & U</u>
Watch Hill	1967	1969 & 1971
Sailors Haven	1967 & 1971	1968 & 1969; 1971
Smith Point West	1968, 1970 & 1971	1970 & 1971
Pattersquash	1971	1972
Whale House Point	1971 & 1972	1967 & 1973
East Lead	1971 & 1972	1974
Smith Point East	1973 & 1974	1975
Talisman Area	1972	1973
Pelican	1972	1976
Long Cove	1972 & 1973	1973
Moriches Inlet	1973	1976
William Lloyd Estate		1974

WATER DEMANDS: As reflected in the enclosed memorandum from Chief, Design and Construction, PSC, Reese Smith's memorandum of November 15, 1967, to Chief, Office of Land and Water Rights, WSC, the water demand estimated for the following areas are:

Watch Hill	40,000 gpd
Sailors Haven	40,000 gpd
Smith Point West	Minimum

As related by Mr. Greene the Watch Hill complex may possibly receive its water supply from the Davis Park complex. E-log and well data are enclosed for the well drilled at Davis Park.



IN REPLY REFER TO:
L54-DP

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Philadelphia Planning and Service Center
Design and Construction
Philadelphia, Pa. 19106

November 15, 1967

Memorandum

To: Chief, Land and Water Rights, WSC
From: Chief, Design and Construction, PSC
Subject: Fire Island National Seashore, Estimated potable
water requirements

We wish to confirm the information given verbally to your Mr. Garland Moore by our Engineer John Longworth during their telephone conversation of November 8th as follows:

We estimate the potential potable water demand at Watch Hill Developed Area at 40,000 gallons per day and at Sailors Haven Developed Area at 40,000 gallons per day. *30 gpm*

The Smith Point West Developed Area requirements which were estimated at 75,000 gallons per day were based on the needs of a major development including campground, bathing and picnic facilities. The present Developed Area Plan which has not been approved as yet, but is based on an approved master plan indicates a small contact station and a residence which would require service and would therefore create a minimum demand. *53 gpm*

We appreciate receiving the preliminary production estimate of 100 gallons per minute for the test wells at Sailors Haven and Watch Hill and would appreciate receiving more detailed information as it becomes available.

H. Reese Smith
H. Reese Smith

cc:
Deputy Assoc. Director Jensen
Ass't Director, D&C Krueger
Deputy Ass't Director, D&C Rosenberg
NERO
Superintendent, New York City Group

EW
10/9

October 6, 1967

154-OLW

Memorandum

To: Chief, Office of Land and Water Rights, WSC
Attention: Mr. Ketcham

From: Chief, Branch of Water Resources

Subject: Application for permit from State for wells at Fire Island

Please refer to your letter of October 5 to the New York State Department of Conservation on the above subject.

To my knowledge, this is the first time the Park Service has applied for a permit in New York State. Although the Service has authority to make such application this action is permissive and not mandatory. Because this is a precedent, the matter should be discussed with the Solicitor's Office before any formal application is made.

When the forms are received, it is suggested that they be filled out and together with all other pertinent material, made into a package for the Solicitor's information. The matter can be discussed with the Associate Solicitor for Parks informally and, if desirable, a formal memorandum requesting his advice can be prepared later.

(Signed)

E. W. Reed

cc:

Mr. Reed - OLWW

EWReed:ljc

705-10-5-27

L54 WSC-OLW

October 5, 1967

New York State Department of Conservation
Water Resources commission
373 Maple Avenue
Westbury, New York 11590

Dear Sirs:

Our National Seashore Superintendent at Fire Island has advised us that use of a recently drilled well in his area is contingent upon application to your commission for a permit. We have in our files an information circular and one on rules and regulations as a guide, but it would appear from sample applications shown that you would provide pertinent forms for such an application upon request. This letter requests a nominal supply of 10 or 15 copies of these forms and any pertinent data that will serve to aid this agency to make a proper application to use groundwater from a successful test well in the aforementioned park area.

Sincerely yours,

Richard L. Stanton

Richard L. Stanton
Chief, Office of Land
and Water Rights, WSC

cc:
WASO, Mr. Reed
OLW
OLW (Water Rights) Corres.

RWKetcham:mf 10/5/67



MATHIES WELL & PUMP CO., INC.

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Fire Island National Seashore
SEP 22 1967

SUPERINTENDENT
SECRETARY
ADMINISTRATIVE ASST.
PAINT ENGINEER
20 September 1967

LAND ACQUISITION OFFICER
SECRETARY
LAND ACQUISITION ENGINEER
APPRAISER

SEP 22 1967

Chief
Admin.
Realty
Appraisal
Cadastral
Water Rights
File

U. S. Department of the Interior
National Park Service
Fire Island National Seashore
Patchogue, New York 11772

ATTN: Mr. Thomas F. Norris, Jr.
Acting Superintendent

SUBJ: CONTRACT NO. 14-10-5-615-86
WELL AT SAILORS HAVEN

Gentlemen:

We have filed the completion report to the New York State Water Resources Commission on the basis that the well at Sailors Haven is a permanent well to be used for observation purposes only. Removal of water from this well requires a permanent permit from them and same should be obtained by you, since we are not providing the pumping equipment for the well.

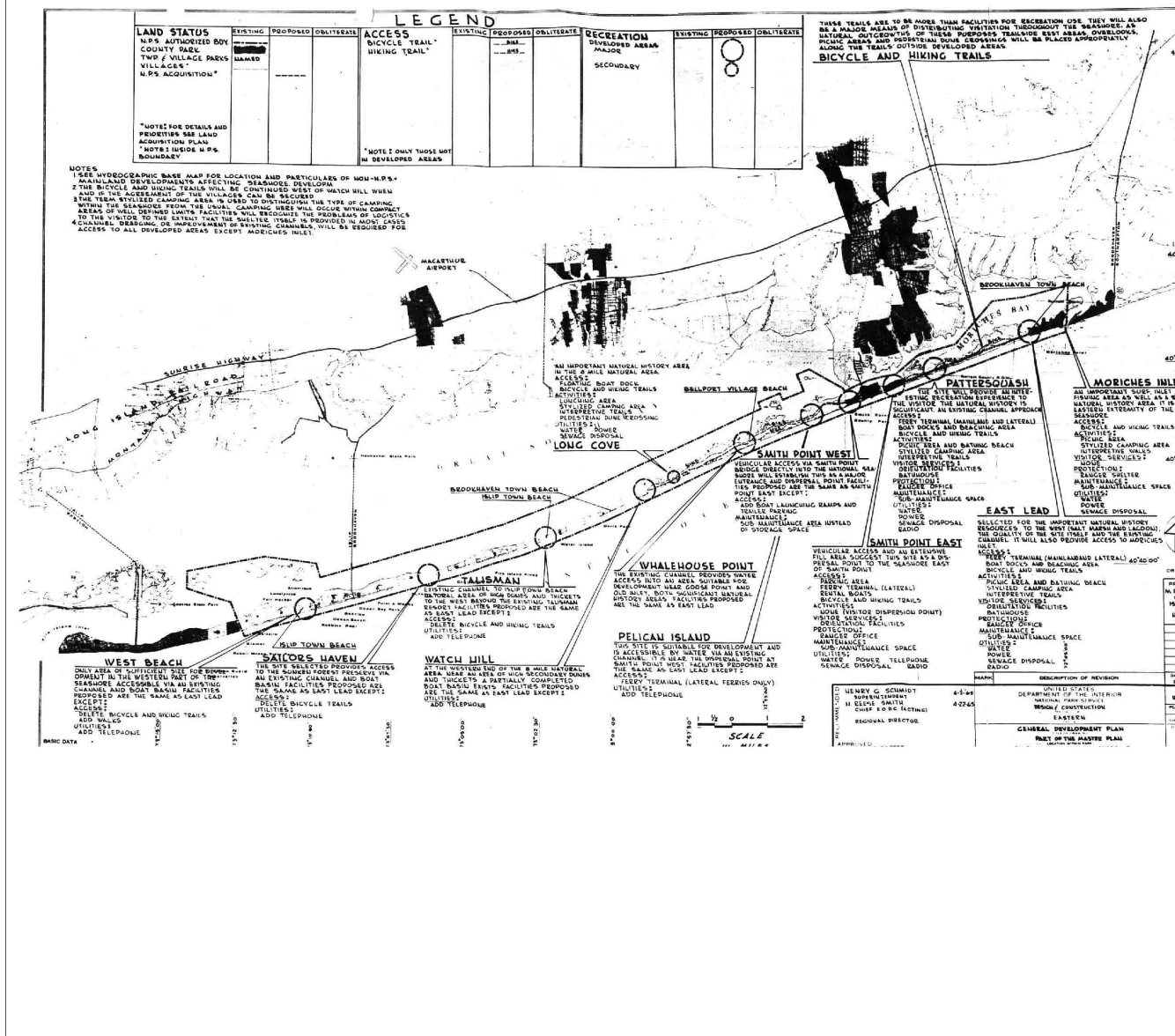
In order to take more than 45 gallons per minute from this well, this permission granted must come from Albany and a public hearing is required. We suggest you contact the Water Resources Commission in Westbury for further details concerning this.

Very truly yours,

MATHIES WELL & PUMP CO., INC.

Richard L. Shockley
Richard L. Shockley

RLS/cwm



Docket Information

Number of Documents in Docket 31

Documents Dated from 7/20/1967 to 11/28/1967

Docket Compiled: 3/10/2011