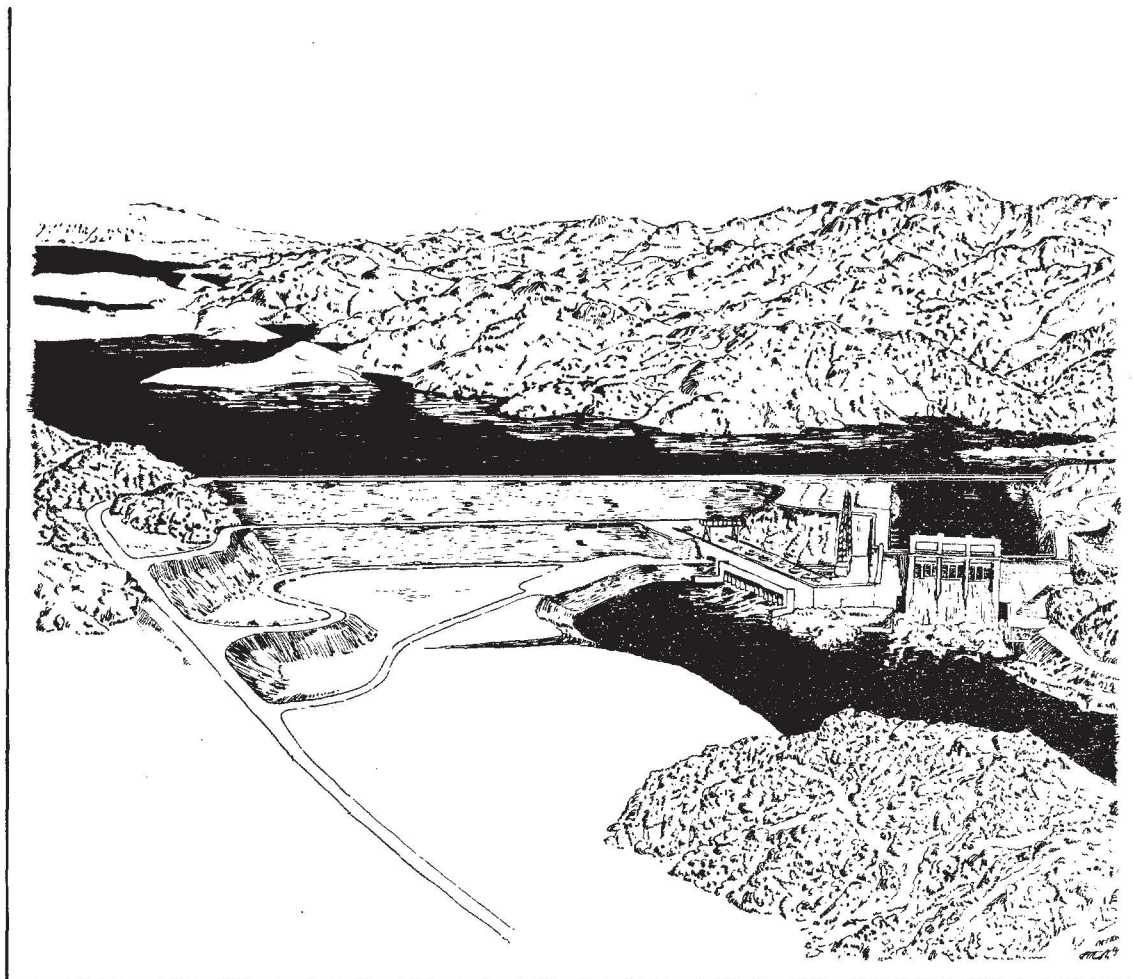


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Lake Mead
NRA

THE MASTER PLAN
OF RECREATION DEVELOPMENTS FOR
LAKE MOHAVE
LAKE MEAD NATIONAL RECREATION AREA



ON MICROFILM

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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OF RECREATION DEVELOPMENTS FOR
LAKE MOHAVE
LAKE MEAD NATIONAL RECREATION AREA

prepared by
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Lake Mohave Planning Project
Boulder City, Nevada
November 1953

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INTRODUCTION

The Memorandum of Agreement between the National Park Service and Bureau of Reclamation relating to the development and administration of the Boulder Canyon Project Area, approved by the Secretary of the Interior on October 13, 1936, included in addition to Lake Mead and surrounding shores, Reclamation withdrawn lands along the Colorado River for a distance of approximately 42 miles below Hoover Dam. This area comprised the Lake Mead National Recreation Area which soon became a popular recreation area in the midst of the Arizona-Nevada desert region.

In 1942, construction was started on Davis Dam at a point 67 miles below Hoover Dam. After interruption caused by the war, construction was resumed in March, 1946. On July 18, 1947, the Secretary of the Interior approved a modification of the Memorandum of Agreement relating to the development and administration of the Boulder Canyon Project Area. This modification extended the Lake Mead National Recreation Area boundaries to include all of the Reclamation withdrawn land along the Colorado River to the south line of Township 21 North, G. & S.R.M., in Arizona, and to the center line through Township 32 South, Ranges 64 and 66 East, M.P.M., in Nevada. An area in the vicinity of Davis Dam and the Government village remains under the jurisdiction of the Bureau of Reclamation.

This extension of the Lake Mead National Recreation Area permits the inclusion of Lake Mohave, the reservoir impounded by Davis Dam, in its entirety and approximately 2.8 miles of the Colorado River below Davis Dam.

As Lake Mohave was formed, the need arose for the preparation of a Master Plan for recreation developments. Public Law 350, Appropriation Act for 1950 for the Department of the Interior, Bureau of Reclamation states:

"Provided, further, that funds appropriated for the Bureau of Reclamation shall be available for expenditure through the facilities of the National Park Service in amounts not to exceed \$25,000 for any one reservoir area for studies of recreational areas and planning for their utilization. Funds so expended shall not be reimbursable or returnable under the Reclamation Law."

Through provisions of this law, an allotment of \$25,000 was received as a working fund.

Prior to receiving the allotment which established the Lake Mohave Planning Project, development plans for several areas were prepared by the technical staff of the Region Three Office of the National Park Service in Santa Fe, New Mexico.

On December 3, 1951, the staff assigned to the Lake Mohave Planning Project established an office at Headquarters, Lake Mead National Recreation Area, Boulder City, Nevada. Current development of several concession and Service facilities has required considerable time by the Staff in surveying and inspecting the work as it progresses.

Throughout the duration of the planning project the Region Three Office of the National Park Service has continued to aid in the planning for the recreational developments. The Bureau of Reclamation officials in Boulder City have readily provided maps and technical data which have been invaluable. The Superintendent and staff have cooperated in every way to provide assistance to the planning staff. All assistance from these sources has been greatly appreciated.

Chapter I Davis Dam and Lake Mohave

Construction History

As early as 1902-3 a possible dam site in Pyramid Canyon was being investigated by Reclamation forces. A dam in this location was not considered practicable, however, until Hoover Dam had been built upstream to control the floods of the Colorado River.

Following further investigations and explorations in 1938, construction of Davis Dam (in Pyramid Canyon) and appurtenant works was authorized in April 1941. Actual construction began in August 1942. Some excavation was undertaken during the first few months, but inability to secure materials while World War II was in progress brought the work to a halt in December of the same year.

Work was resumed in March 1946. The first year thereafter was devoted to the excavation of the diversion and forebay channel and the foundations for the spillway and intake structures. Then followed a period of intensive foundation grouting and preparations for concrete placement. Construction of the massive spillway and intake structures began in January 1948. The initial diversion of the river was accomplished in June 1948. Construction of the main dam embankment was started in September 1948 and completed in April 1949. The intake and spillway structures were substantially completed in the same month.

In January 1950 the six temporary diversion openings of the spillway structure were closed with concrete stop logs, and the first storage of water in the reservoir was begun. Placing of concrete in the six openings to complete the spillway sections was then initiated. The construction of the reinforced concrete power plant structure, begun in January 1949, was completed in the summer of 1950. In 1951 the huge generators were put into operation. The project was completed in the spring of 1953.

The Utah Construction Company was the main construction contractor on the dam and power plant. A contract for installation of the turbines and generators and other power plant and switchyard mechanical and electrical equipment was awarded to Donovan-James-Wismer and Becker.

Location and Accessibility

Davis Dam is located on the Colorado River in Pyramid Canyon, 67 miles below Hoover Dam and about 10 miles north of the point where Arizona, Nevada and California meet. It is 34 miles west of Kingman, Arizona via State Highway 68, and 20 miles east of a junction with U. S. Highway 95 via Nevada State Highway 77.

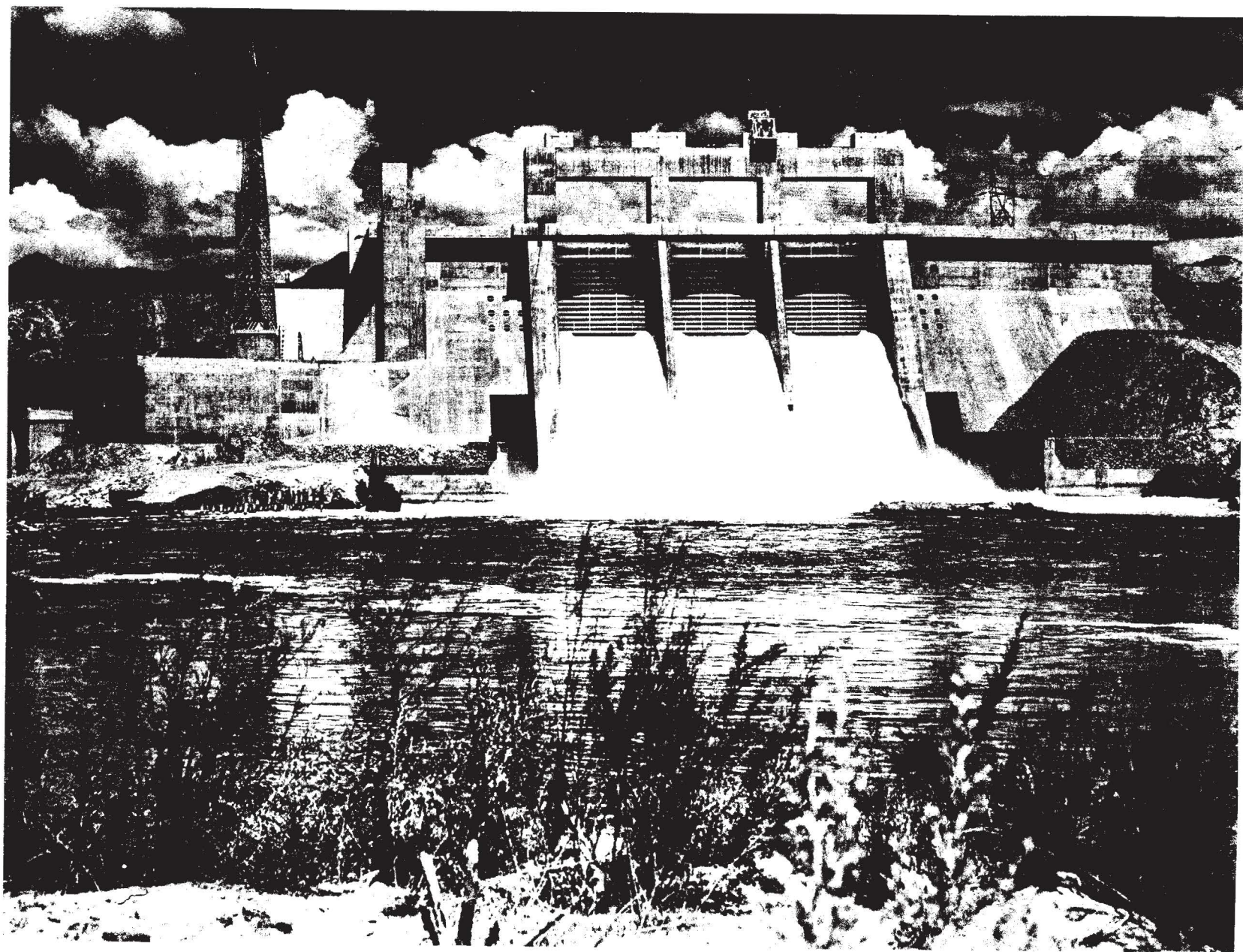


Plate 1--Davis Dam

In addition, Lake Mohave is accessible by three paved roads, at Willow Beach and Katherine in Arizona and at Eldorado Canyon in Nevada. Numerous gravel and primitive desert roads reach the lake in both States.

Purposes

Davis Dam is another link in the chain that is being forged to harness the unruly lower Colorado River. It's major purposes are to serve treaty provisions pertaining to division of Colorado River waters between this country and Mexico, to produce hydroelectric power and to reregulate for irrigation use downstream irregular water releases from Lake Mead through Hoover Power Plant.

General Description

Davis Dam, rising 138 feet above the normal river bed, is an earth- and rock-fill embankment with concrete spillway, intake structure, and power plant. It has a crest length of 1,600 feet, and its top width of 50 feet accommodates a two-lane highway. Its reservoir has a capacity of 1,820,000 acre-feet and extends the entire 67 miles upstream to the tailrace of the Hoover Dam power plant. Confined for most of its length between the steep walls of Pyramid, Painted, Eldorado, and Black Canyons, the lake is comparatively narrow -- not more than 4 miles across at its widest point.

The dam, its power plant and appurtenant features, and some 1,100 miles of transmission lines were constructed at a cost of approximately \$114,000,000. Almost 4 million cubic yards of earth and rock fill were required to form the dam, and about 565,000 cubic yards of concrete and 20 million pounds of reinforcing steel were placed in the spillway, power plant, and other structures. Over 4 million cubic yards of rock and earth were excavated to form the diversion and forebay channel and foundations for the spillway, intake structure, and power plant.

Power Development

The semi-outdoor-type Davis Power Plant is located on the Arizona side of the river immediately downstream from the dam embankment. Its five 45,000-kilowatt generating units have an installed capacity of 225,000 kilowatts and produce about a billion kilowatt-hours of electrical energy annually. Water is delivered from the forebay to the power plant through five 22-foot-diameter penstocks.

High-voltage switchyards near the power plant provide the takeoff point for a system of transmission lines and substations to interconnect the Davis, Hoover, and Parker Power Plants and to extend to load centers in central and southern Arizona, southern Nevada, and southern California. The electrical integration and interconnection of

these Bureau of Reclamation power plants spells maximum generation of power with efficient use of water resources. The highly developed agriculture and the complex industrialism of the Pacific Southwest are very dependent upon Colorado River kilowatts. As Davis Dam energy goes out over the power line network, the entire area stands to benefit materially in terms of economic expansion and increased stability.

Probable Fluctuation of Water Level

Fluctuation of water level of Lake Mohave is considerably less than the high fluctuation which occurs in Lake Mead. Present plans are for an operating level elevation of 643. High water elevation is 647. It is anticipated that occasional seasonal low water at an elevation of near 623 can be expected during the summer months.

In 1953 the operating level was maintained until early June with a low water elevation of 622 in early September. Following September it is expected that the operating level will again be reached by December 1.

Land Status

The Recreation Area is limited to Reclamation withdrawn lands. Within the boundaries there are numerous private land ownerships, most frequent in Arizona between Cottonwood and Katherine. None of the private holdings are so situated as to conflict with proposed developments. Private land holdings are shown on the General Development Plan, Plate No. 3.

Grazing of cattle is carried on within and adjacent to the Recreation Area. All lands are arid and not applicable for other agricultural pursuits. Many abandoned mines are scattered along the shores of Lake Mohave. At the present time none are actively in operation.

Chapter II Recreation Resources

Lake Mohave offers a large expanse of water with an interesting and rugged shoreline varying from vertical cliffs several hundred feet high to broad talus slopes eroded by numerous washes.

The greatest attraction is and may remain the excellent fishing for bass and rainbow trout. As more and better facilities are developed the lake will attract vacationers who are seeking boating and camping enjoyment in addition to the plentiful sunshine and clear air of the desert region.

In general, the climate favors outdoor recreation throughout the year. Winters are relatively mild. High temperatures of over 100° during July, August and September reduce the enjoyment of the area during these months. Rainfall is less than five inches a year.

Sites for Recreation Development

The rugged topography, deep washes and difficulty of access limit the lakeshore areas suitable for development to less than a dozen sites. Most of the developments must necessarily be located in broad washes which are not ideal for the development of recreational facilities due to (1) the need to "stack" various facilities up the wash rather than along the shore and (2) the danger of occasional flooding from summer thunderstorms in the surrounding mountains. Dikes and levees must necessarily be constructed to protect facilities from this threat. The General Development Plan (Plate 3) shows the locations of the development sites.

Primary Developments

Five areas are proposed for primary development. Three of these sites now have varying degrees of development.

(1) Willow Beach (Arizona). -- Prior to the impoundment of Lake Mohave a trout camp was in existence on the river bank at Willow Beach, located approximately 12 miles below Hoover Dam in the scenic Black Canyon. The Willow Beach area is highly scenic and consists of several narrow washes and a narrow strip of sand and gravel banks along the lake shore. An oil surfaced road provides access from U. S. Highway 93 and 466. This site is the one area available for development in the northern section of the lake where trout fishing is the best and where the lake is narrowly confined between high canyon walls.

(2) Fire Mountain (Nevada). -- Two miles south of Eldorado Canyon the topography provides the best lake shore site for development in the Lake Mohave area. At this location a relatively level area of ample size is flanked by two excellent potential harbors. One of the most impressive mountains of the region, Fire Mountain, rises in many



Plate 5 (Upper)--View of Lake Mohave at Willow Beach showing narrow bench proposed as location for multiple guest units



Plate 5 (Lower)--Public Campground at Willow Beach

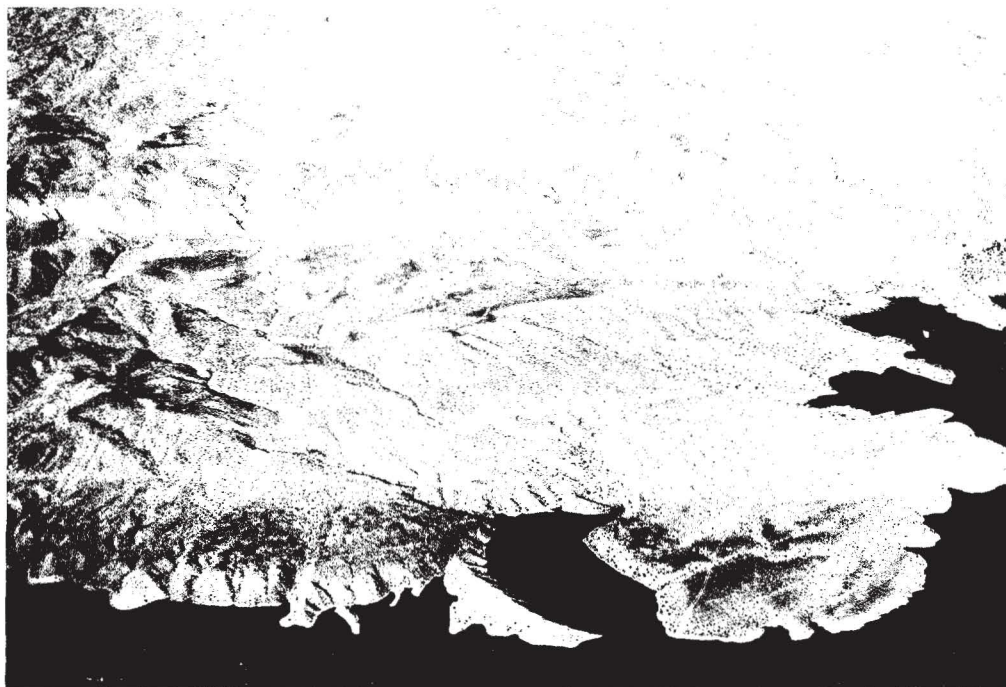


Plate 7 (Upper)--Aerial view of the Fire Mountain Site



Plate 7 (Lower)--View of Searchlight Ferry Site

colored hues directly across the lake. This site should very well serve upper sections of Lake Mohave from the Nevada side, now very inadequately served by the development at Eldorado Canyon which will revert to a secondary site. Access will be necessary prior to development. A paved highway now exists as far as Eldorado Canyon.

(3) Searchlight Ferry (Nevada). --Some of the best fishing in Lake Mohave is in the broad Cottonwood Basin which is 16 miles north of Davis Dam. At the narrow point of the lake immediately north of the basin is the Searchlight Ferry site. Here in a broad wash is an existing fishing camp with very limited facilities. The location is excellent and promises to be a good site for an expansive fishing camp.

Access is by a good gravel road from Searchlight, Nevada, 15 miles distant.

(4) Cottonwood (Arizona). --Broad talus slopes reach to the shores of the Cottonwood Basin. On the Arizona side a gravel road from U. S. Highways 93 and 466 provides access to the lake. The topography of the area is desirable for development. One small harbor is at present used by day-use fishermen and an airstrip constructed by the Searchlight Ferry concessioner is located at the northern end of the site.

The location and relation to highways and other development sites do not favor a major concession development, but a vacation home-site area with small docking facilities would be desirable.

(5) Katherine (Arizona). --One and one-half miles north of Davis Dam in Arizona a broad wash reaches to the lake where an excellent harbor is situated. With substantial progress now under way, the Katherine Area promises to be one of the best developments in the Recreation Area. Views of the lake and the Dead Mountains to the west are excellent. Since this is the southern most point on the lake, the winters are exceptionally mild, the summers extremely hot.

A recently constructed paved highway provides access from the east end of Davis Dam. Roads within the public-use and vacation homesite areas are essentially completed.

Secondary Developments

(1) Eldorado Canyon (Nevada). --Eldorado Canyon was an existing fishing camp on the river which moved up canyon to higher ground as the lake was formed. Located in a narrow, scenic, but dangerous (due to potential wash floods) canyon, and with poor harbor potentials, the site is capable of only limited development.

A paved road from Nelson, Nevada, and U. S. Highway 95 provides access through the scenic Eldorado Mountains.

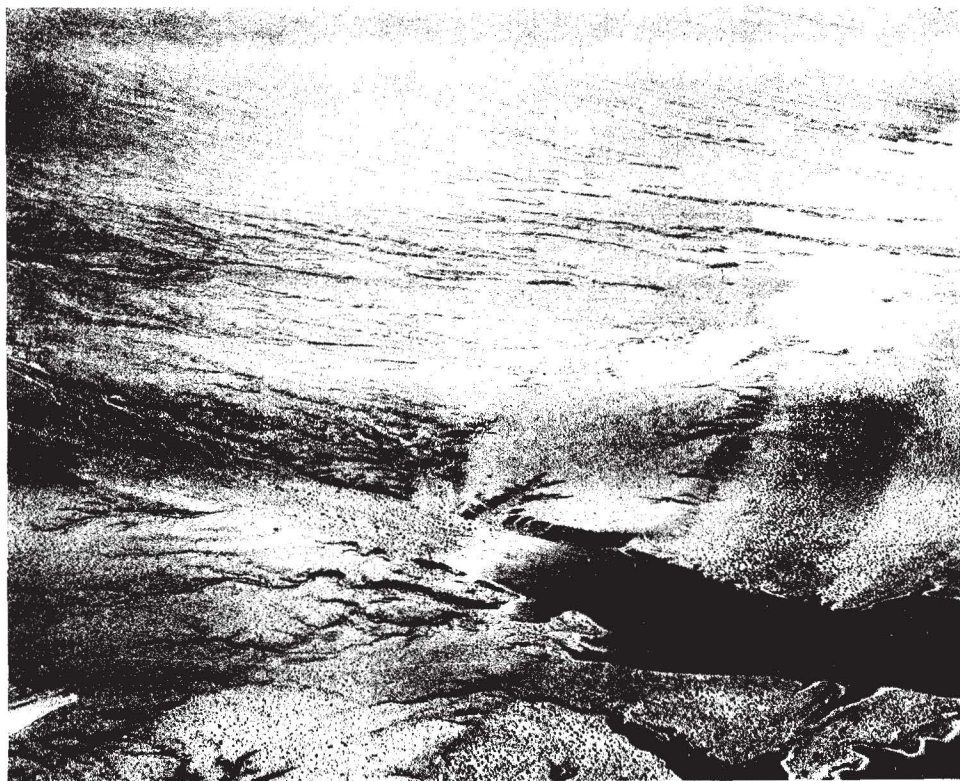


Plate 10--Aerial view of Cottonwood Vacation Homesite Site



Plate 12 (Upper)--View of Concessioner Dock at Katherine



Plate 12 (Lower)--View of Parking Area and Road Construction at Katherine.
Concessioner cafe shown during construction



Plate 16--View of Eldorado Canyon showing restricted area available
for development

(2) Opal Mountain (Nevada).--Named for a nearby landmark, the Opal Mountain site has excellent topography for development but is at present inaccessible. Planning for a probable vacation homesite development is reserved for the future. A proposed road between Eldorado Canyon and Searchlight Ferry will provide future access. When this road is nearer to realization, the trends of use for Lake Mohave will determine the facilities and type of development for Opal Mountain.

(3) Dead Mountain Development (Nevada).--The Dead Mountains in Nevada, near the southern limits of the Lake Mead National Recreation Area, are the only mountains within the entire Recreation Area which are readily accessible. A gravel road from Nevada State Highway 77, at a point 7 miles from Davis Dam, leads into the mountains. The flora is much different from the surrounding desert. Pinyon, juniper, and mountain mahogany flourish in the higher reaches of the range. Desert bighorn sheep are in evidence. Excellent views toward Lake Mohave are available.

Here, also, is one of the area's best archeological features, Petroglyph (Gravevine) Canyon, containing one of the most extensive groupings of petroglyphs in the entire Southwest.

(4) Colorado River Area.--One short stretch of the Colorado River in its normal channel remains available within the boundaries of the southern portion of the Recreation Area. The Arizona banks are easily accessible, covered densely with mesquite trees. This site is popular for bank fishermen and picnicking, and affords a view of Davis Dam.

(5) Campsites.--Lake Mohave is well supplied with many small coves which provide shelter for small boats. With the addition of some shade trees, these coves and shores would provide excellent campsites with boat access only.

A few larger sites are to be reserved for organized camps which will require access by land.

Natural History

Interesting features of any recreation area include the wildlife, plant life, geology and history of the area. The desert regions have great interest to vacationers who find these features new and interesting.

Fish and Wildlife.--The region has a widely varied assortment of wildlife species, ranging from those requiring an aquatic habitat, through those preferring the dry desert and canyon slopes, to animals of the higher elevations. Along the lake may be found beaver, originally numerous but now greatly reduced in number by the formation of the reservoir, muskrat and otter. The washes back from the lake contain



Plate 18 (Upper)--Petroglyphs at Petroglyph Canyon



Plate 18 (Lower)--View from Petroglyph Canyon showing area proposed for picnic area to the right of wash

such species as the woodrat, kangaroo rat, pocket mouse, white-footed mouse, antelope squirrel and jack-rabbit. The canyons and higher elevations of the Dead Mountains are the habitat of the desert bighorn. Several are known to range throughout Black Canyon and a small band has been seen near Newberry Peak in the Dead Mountain Range. Mule deer, once found in the region, have been exterminated through man's activities during the construction of Hoover and Davis Dam but could be re-established.

Birds are abundant, especially during the migration season when hundreds of water and shore birds, representing many species, drift through the region. A wide variety of reptiles, mostly harmless species, may be found.

As a wildlife sanctuary, the lake has two outstanding areas -- Black Canyon and Dead Mountains.

Lake Mohave is noted for the rainbow trout which are usually found in the upper portion of the lake but have been caught throughout its length. Bass are the most abundant game fish. Bluegill and carp are numerous.

Plant Life. -- The major portion of the Lake Mohave area lies within the arid Lower Sonoran life zone. As a result of the average annual rainfall of less than 5 inches, the plant life is highly specialized. The perennials send out vast root systems to obtain water, while the annuals develop from seeds to mature plants in a matter of only a few weeks when sporadic rains make a limited amount of moisture available.

Few flowering plants are found in bloom during the summer, but from February until June there is an interesting procession of flowers on the mountain slopes and in gravelly washes. The various species of cacti are the most colorful, with the beavertail cactus affording the greatest display of brilliance. Solid masses of yellow, visible for a considerable distance, show the presence of shrubby brittlebush. Asters, desert chicory, wild heliotrope, desert mallow, and sand verbena bloom profusely by the side of some of their smaller and less showy neighbors.

There are few trees in the area except along some washes. Cottonwood, desertwillow, mesquite and catclaw are scattered along the lake shore and in some washes. In the Dead Mountains are found pinyon, juniper, live oak and mountain mahogany. Joshua trees are scattered on the higher slopes.

Geology. -- The origin of the canyons and rock formations along Lake Mohave is not worked out in sufficient detail to allow for an accurate description. In the Black Canyon region is a vast assortment of volcanic and metamorphosed rocks, the major portion of them dating back approximately 60,000,000 years. The mountains began as vast flows of lava that covered an area many miles in extent. Then followed

a period of relative quiet in which the forces of erosion removed part of the lava flow and some drainage patterns were established. Following this came additional flows of lava which spread over the region. These lavas, in turn, were eroded into the rugged mountains and canyon country of today.

Below Black Canyon the region becomes a series of relatively broad valleys, made up principally of outwash gravels and sands from the nearby mountains, and old sands and clays deposited by the ancient Colorado River. Here and there may be found shallow canyons cut in older rocks, apparently of the same relative age as those of the Black Canyon.

At the lower end of Lake Mohave are the Dead Mountains and Pyramid Canyon. Pyramid Canyon is cut in highly crystalline granites. The Dead Mountains have been studied very little geologically. They are the result of a great uplift, followed by extensive erosion that uncovered a very hard core of fine grained granite. Lava flows and dikes in the rock formations bordering the granites tell of one or more periods of great volcanic activity before the final uplift of the range began.

Archeology. -- The Lake Mohave region has provided much of archeologic interest. A few sites, in particular Petroglyph Canyon, can be visited. Excavation of other sites has provided a supply of artifacts suitable for display in museums.

Numerous evidences of prehistoric life have been found along the length of Lake Mohave. Prior to the impoundment of the lake, sites now below high water were surveyed and reported on. They are shown on the Archeological Base Map of Lake Mead National Recreation Area, NRA-LM-10700. This map is not included in this report.

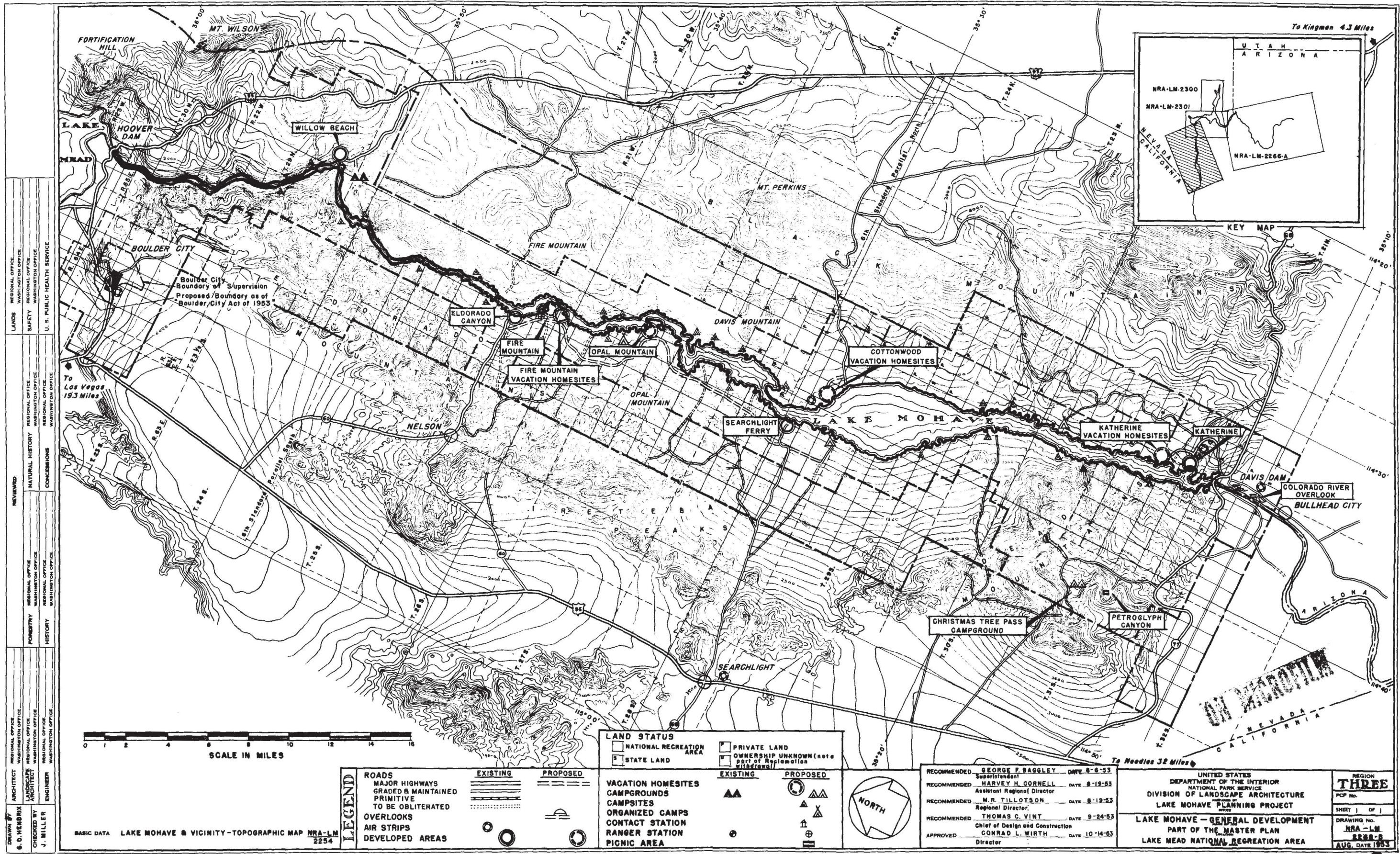
At Willow Beach an important prehistoric campsite has been excavated by the National Park Service. These excavations revealed several successive periods of occupation, beginning in pre-ceramic times and extending up to about 1150 A. D. These findings are described in a full technical report, "The Archeological Excavations at Willow Beach, Arizona, 1950", by Albert H. Schroeder, as yet unpublished.

History

Many events of historic importance have taken place along this part of the Colorado River valley. As far back as 1826 this region became known to Anglo-American fur traders and trappers because of its large numbers of beaver. Both in 1826 and 1827, the river was visited by the famous trapper and frontiersman -- Jedediah Smith -- with a large party. Possibly the best known bit of history was recorded in 1858 when Lieutenant J. C. Ives successfully brought a stern wheel steamboat named the "Explorer" up the Colorado River as far as the lower end of Black Canyon. Here disaster struck, and the boat was

sunk when it hit a submerged rock about three miles upstream from the present day Eldorado Canyon. Not to be denied, Ives and two of his crew took a small skiff and worked their way upstream through the Black Canyon and into the valley above as far as Las Vegas Wash. The region was again visited and rather thoroughly explored by Captain George Wheeler and party in 1871.

Mining activities became of primary importance by the turn of the century, and the region saw such famous mills along the river course as the Goldbug and Aztec. Limited steamboat traffic on the river as far as Eldorado Canyon aided in the mining ventures. In recent years mining has lost much of its earlier activity.



Chapter III Recommended Program

A Master Plan for development of the Lake Mohave region becomes a part of the Master Plan for the entire Lake Mead National Recreation Area and a program of development necessarily is correlated with the development of the entire Area.

It is expected that 2,000,000 people will have visited the Lake Mead National Recreation Area for the year 1953. Due to the lack of facilities, limited access over good roads, and because it is new and unknown, Lake Mohave has been visited by a comparative few. As it becomes better known and as access is improved, it is believed that Lake Mohave will receive an increased visitation. There are two primary reasons for this attitude: (1) A narrow lake with many protecting coves provides safer and pleasanter conditions for boating, especially small craft, than does the broad expanse of Lake Mead and (2) a relatively small seasonal fluctuation is well adapted for lakeshore developments.

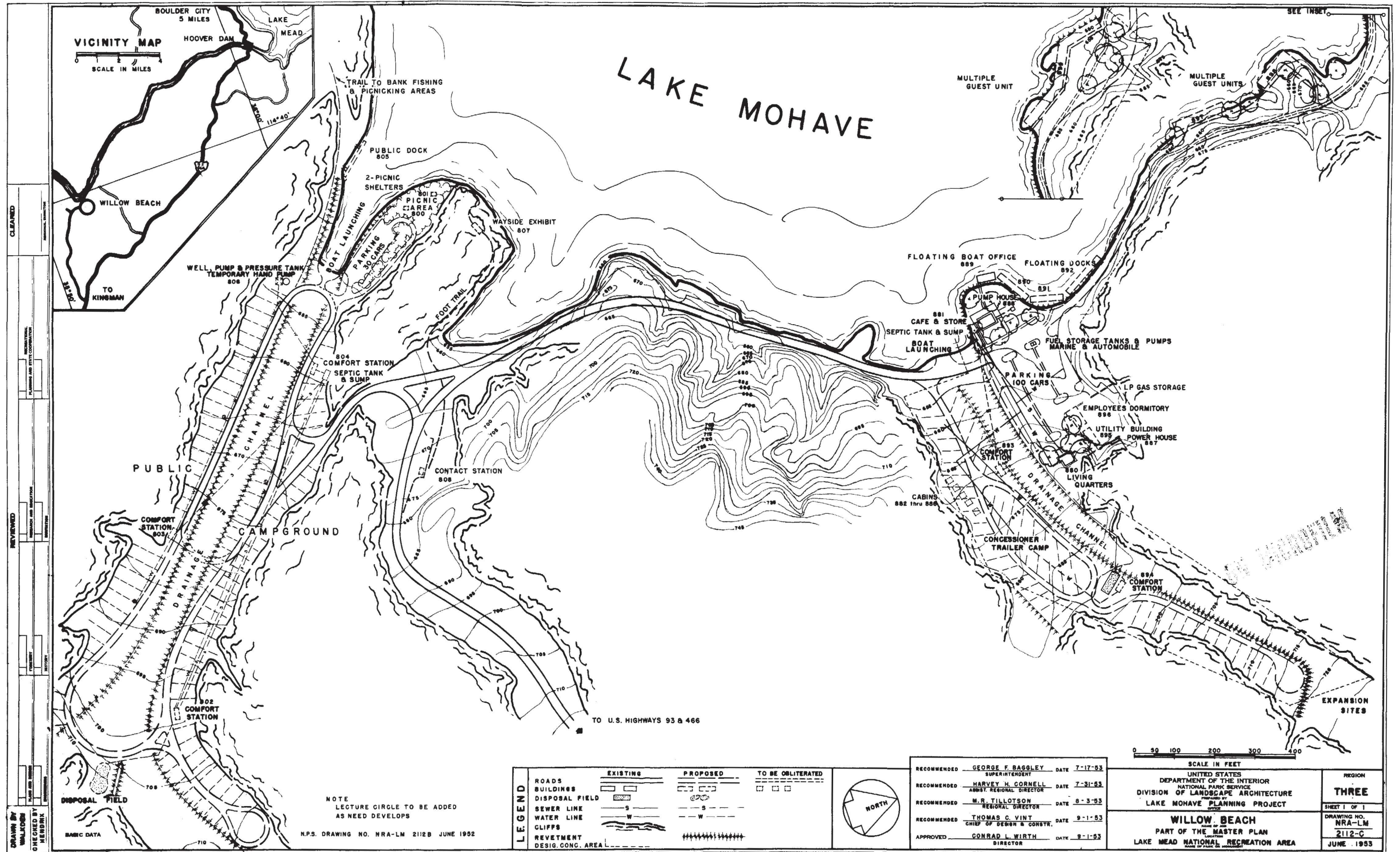
Numerous factors determine facilities desirable in a developed area. Difficulty in providing utilities to widespread facilities due to rugged terrain, cost of installation, and cost of access necessitate a relatively compact grouping of elements. A major development area must therefore provide both concessioner and Service facilities which may be reached by one primary access road and are served, in some instances, by a common utility system.

Development

General development plans have been prepared for each proposed site. The following pages are devoted to rather detailed comment on the development of recreation facilities.

(1) Willow Beach, NRA-LM-2112-C (Plate 4).--Willow Beach has developed from a trout camp on the shores of the Colorado River. As the lake began to rise, grading was undertaken to provide a level area at or near an elevation of 650 where permanent facilities could be situated.

Existing Facilities.--Upon this site, a concessioner has constructed an attractive building housing office, cafe and restrooms. Nearby has been built a pump house which houses a pump and chlorination system. The concessioner has provided a septic tank and sump, pumping the effluent to a disposal field in an adjacent wash. Other existing facilities include the concessioner's residence, a power house in which a diesel power plant is located, five temporary cabins, trailer court, LP gas installation, and floating dock with office. Installation of fuel tanks and pumps has been partially completed.



Difficulties of the Terrain.--Sites suitable for development at Willow Beach consist of three narrow washes, all subject to summer flooding, and a narrow, sandy bench along 2000 feet of lake shore. This situation provides certain difficulties in locating desirable facilities.

The access road to the area is located in the center wash. Ditches have been provided to handle minor drainage, but an occasional flood can be expected to wash out portions of the road every three or four years.

In each of the other washes where facilities are existing or proposed, wide drainage channels must be provided.

Concession Facilities.--Proposed concession facilities will be located on the level bench where some facilities now exist, in the adjacent wash, and along the 2000 feet of lake shore upstream.

Near the concessioner's residence, a utility building and employees' dormitory are proposed. These two buildings, with a wall or fence on the west, will provide a utility court in which the existing power house and LP gas installation can remain.

The National Park Service will provide a parking area located between this utility group and the cafe building. A launching ramp in the wash is provided by the Service.

This development is located at a great bend in Lake Mohave. As the lake is quite narrow and has considerable current near its head, boat docks extended out into the lake are inadvisable. The existing docks, which are proposed for replacement, are anchored adjacent to the shoreline. Boats are moored to an overhead cable from near the dock to a jutting point of land 800 feet upstream.

The existing trailer court in the adjacent wash is proposed for expansion to 50 sites and the addition of two comfort stations which will include showers. The existing temporary cabins will be removed. Additional sites for trailers can be developed up the wash.

The useable shore upstream along the lake is proposed for location of multiple guest units. Construction of an access road (a narrow road is in existence) and stabilization of portions of the shore are prerequisites to construction of the guest units.

Service-Provided Facilities.--Adjacent to the access road serving the area is a proposed Contact Station and small parking area. A trail from the contact station will lead to a Wayside Exhibit situated on a rocky promontory overlooking the lake.

A public campground, picnic area, boat launching ramp and public dock are proposed for development in the southerly wash. The

area is now used as a campground. In order to provide safety for campers, the campsites are to be located along the rocky walls of the wash with a large drainage channel in the center. Pit toilets will be used temporarily until a well with pump and pressure system, comfort station with septic tank and disposal field can be added. These facilities are dependent upon a power source not now available. It is contemplated that commercial power can be made available. Two picnic shelters are proposed for the picnic area. Trails from the picnic area and campground will lead north to the wayside exhibit and south along the lake shore to bank fishing sites.

(2) Fire Mountain, NRA-LM-2258-C (Plate 6).--This site provides terrain which is the most suitable for development of any site on Lake Mohave. Since it is located 2 miles south of Eldorado Canyon, an access road approximately 3-1/2 miles in length will be required before any development is started.

Proposed facilities include contact station and small museum, public campground, picnic area, lecture circle, lodge, multiple guest units, marine store, floating dock and mooring facilities, trailer court, service station, utility and residential areas, and homesites.

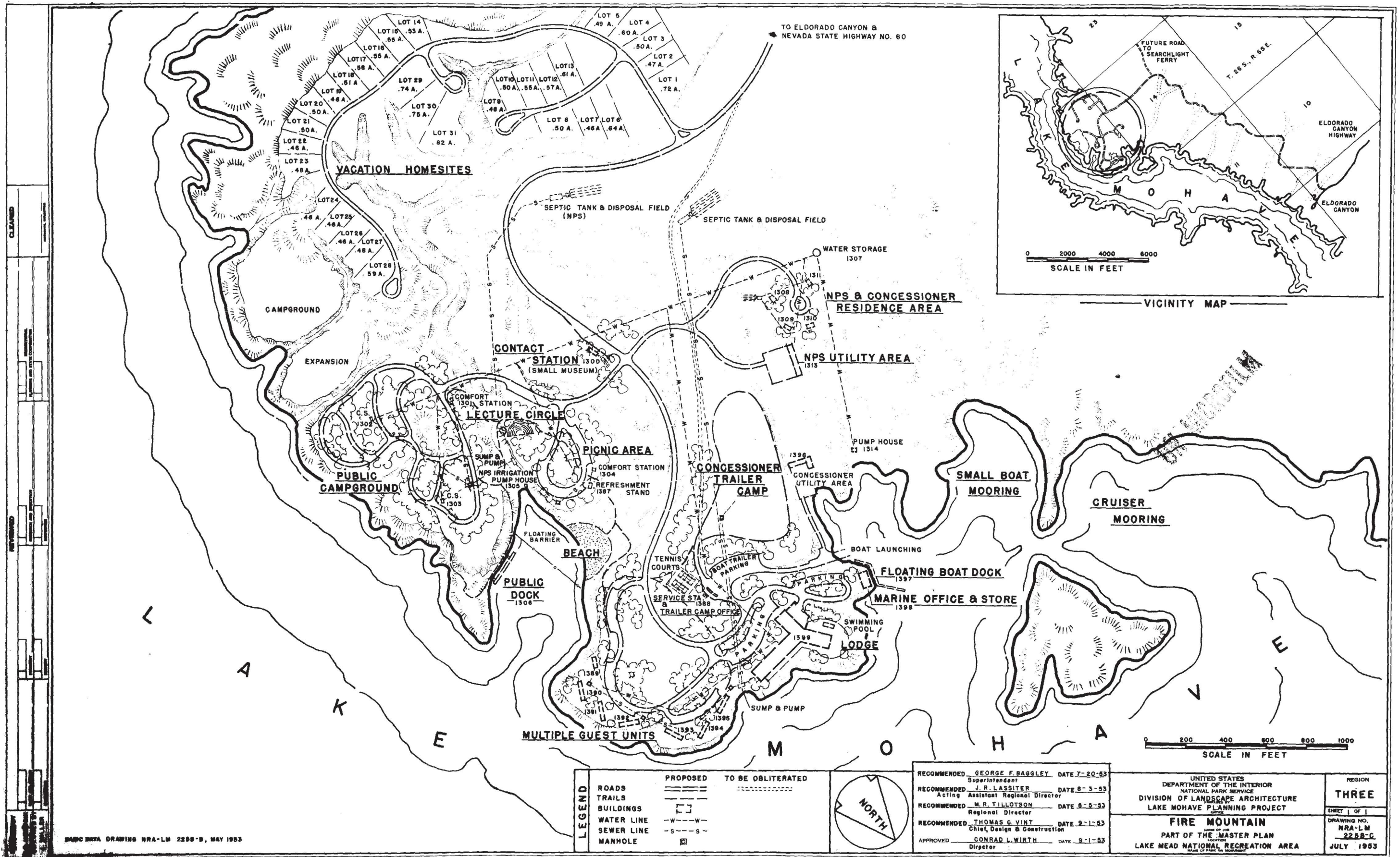
Due to the favorable terrain, the various facilities can be situated along the lake shore. Concession facilities are planned in a compact arrangement in order to provide ease of operation.

Concession Facilities.--The terrain permits ease of boat launching at only one location on the large and excellent harbor. This location dictates the site for a boat dock, marine store and office. The access road provides direct circulation to a parking area at the marine store and office as well as to a parking area serving the nearby lodge. Minor roads provide access to the boat launching ramp, service station, boat trailer parking and trailer court on the west. On the opposite side of the main road, roads and parking areas serve the lodge, multiple guest units and beach.

Service-Provided Facilities.--The approach road traverses the southern end of a gravel ridge, providing an open view to the entire development. The first contact is provided at the Contact Station. An adjacent road provides access to picnic area, beach, lecture circle and public campground. Grading off a sandy hill will be required to provide a beach. Access to the beach will be by trails from the picnic area and from a parking area near the multiple guest units.

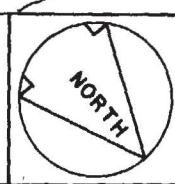
On the opposite side of the entrance road the National Park Service and Concessioner employee quarters area and a Service utility area are provided.

Vacation Homesites.--A Vacation Homesite area, consisting of 31 sites, is located south of the public use area on high ridges with views of Lake Mohave to the north, east and south.



BASE DATA DRAWING NRA-LM 2258-B, MAY 1953

LEGEND	PROPOSED	TO BE OBLITERATED
	ROADS TRAILS BUILDINGS WATER LINE SEWER LINE MANHOLE	----- ----- ----- ----- ----- -----



RECOMMENDED	GEORGE F. BAGGLEY	DATE 7-20-53
Superintendent		
RECOMMENDED	J. R. LASSITER	DATE 8-3-53
Acting Assistant Regional Director		
RECOMMENDED	M. R. TILLOTSON	DATE 8-5-53
Regional Director		
RECOMMENDED	THOMAS G. VINT	DATE 9-1-53
Chief, Design & Construction		
APPROVED	CONRAD L. WIRTH	DATE 9-1-53
Director		

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DIVISION OF LANDSCAPE ARCHITECTURE LAKE MOHAVE PLANNING PROJECT	REGION THREE SHEET 1 OF 1 DRAWING NO. NRA-LM 2258-B JULY 1953
FIRE MOUNTAIN PART OF THE MASTER PLAN LAKE MOHAVE NATIONAL RECREATION AREA	

(3) Searchlight Ferry NRA-LM-2259-A (Plate 8). --Searchlight Ferry is another fishing camp which had its start on the Colorado River. It is located in a broad wash where the flood danger is not serious. The site is provided with a well-protected harbor.

Existing Facilities. --At the present time a concessioner operates a fishing camp consisting of floating boat dock, small store and 7 small primitive cabins. A power plant and well with pump have been installed. Pit toilets are provided by the National Park Service.

Concession Facilities. --All present facilities will be removed as new facilities are provided. A new dock, marine store and office are proposed as permanent installations. In order to accomplish this, the harbor will require dredging. Boat launching, boat repair and service station are proposed near the lake shore.

At a location sufficiently removed from the lake shore to permit a sewage system, a main concession building, comfort station and overnight cabins are proposed. Deluxe multiple guest units could be developed on a ridge south of the harbor.

Above the road serving these facilities is a site for a trailer court.

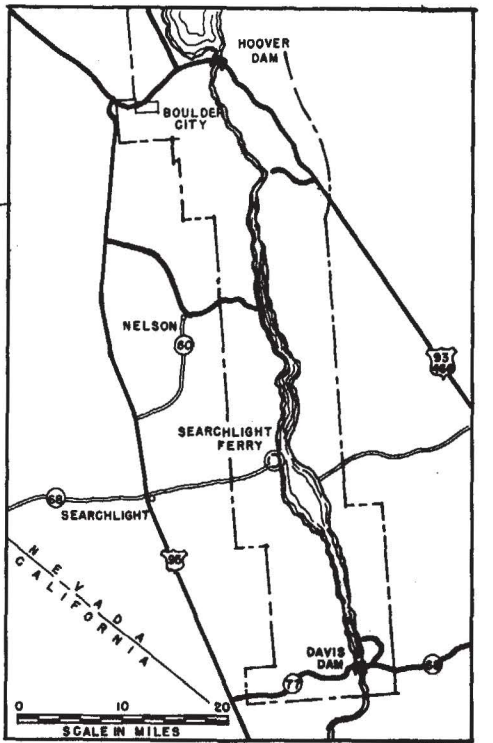
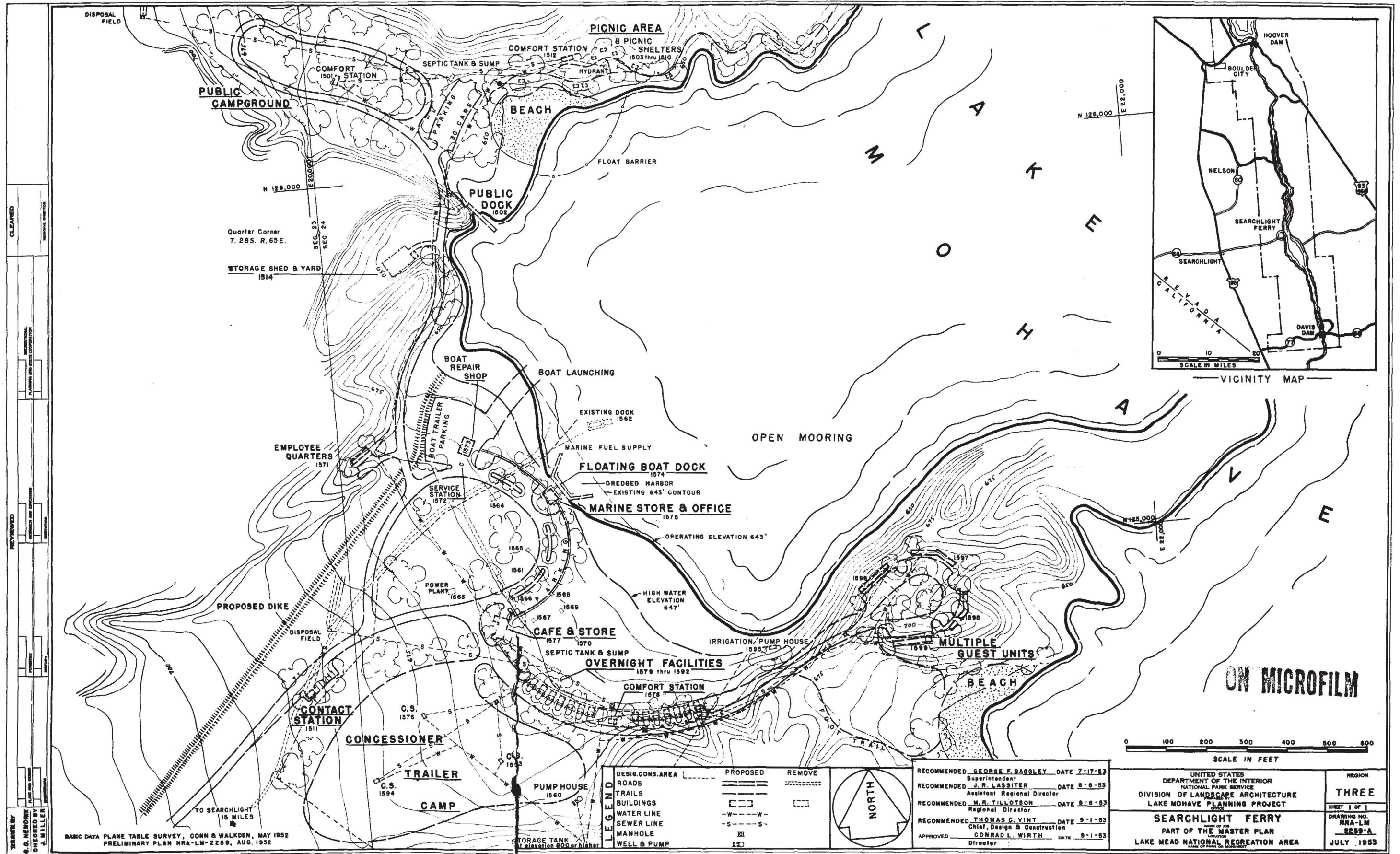
Service-Provided Facilities. A smaller wash to the north, easily made accessible by a short road, is the site for a public campground, picnic area, beach and public dock. These public facilities would be completely separated from, yet quite near, all concession facilities. A Contact Station will be located on the entrance road.

(4) Cottonwood Vacation Homesites NRA-LM-2264-A (Plate 9). --The broad, flat slope adjacent to Cottonwood Basin on the Arizona side provides suitable area for Vacation Homesite Development. The Searchlight Ferry Concessioner has constructed a landing strip in this area, ferrying air travelers to the Searchlight Ferry site.

One adequate harbor is located near the south end of the airstrip. Improved service for air travel is proposed as a concession facility with the addition of an office and shop, gasoline storage and pumps and boat dock which would serve air travelers and the lessees of the homesites.

Forty-six Vacation Homesites are proposed facing the lake. An extension of an existing gravel road would provide access to U. S. Highways 93 and 466, 18 miles distant.

(5) Katherine NRA-LM-2216-F (Plate 11). --Following the impoundment of Lake Mohave, it became apparent that a fine site for development existed at the Katherine Wash, 1-1/2 miles north of Davis Dam. An existing access via a gravel road was available, the harbor excellent and a broad area available for development of recreational facilities.



ON MICROFILM



DESIG. CONS. AREA	PROPOSED	REMOVE
ROADS	---	---
TRAILS	---	---
BUILDINGS	---	---
WATER LINE	---	---
SEWER LINE	---	---
MANHOLE	---	---
WELL & PUMP	---	---



RECOMMENDED: GEORGE F. BAGLEY DATE 7-17-53
Superintendent
RECOMMENDED: J. R. LASSITER DATE 8-6-53
Assistant Regional Director
RECOMMENDED: M. R. TILLOTSON DATE 8-8-53
Regional Director
RECOMMENDED: THOMAS C. VINT DATE 9-1-53
Chief, Design & Construction
APPROVED: CONRAD L. WIRTH DATE 9-1-53
Director

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF LANDSCAPE ARCHITECTURE
LAKE MOHAVE PLANNING PROJECT

SEARCHLIGHT FERRY
PART OF THE MASTER PLAN
LAKE MEAD NATIONAL RECREATION AREA

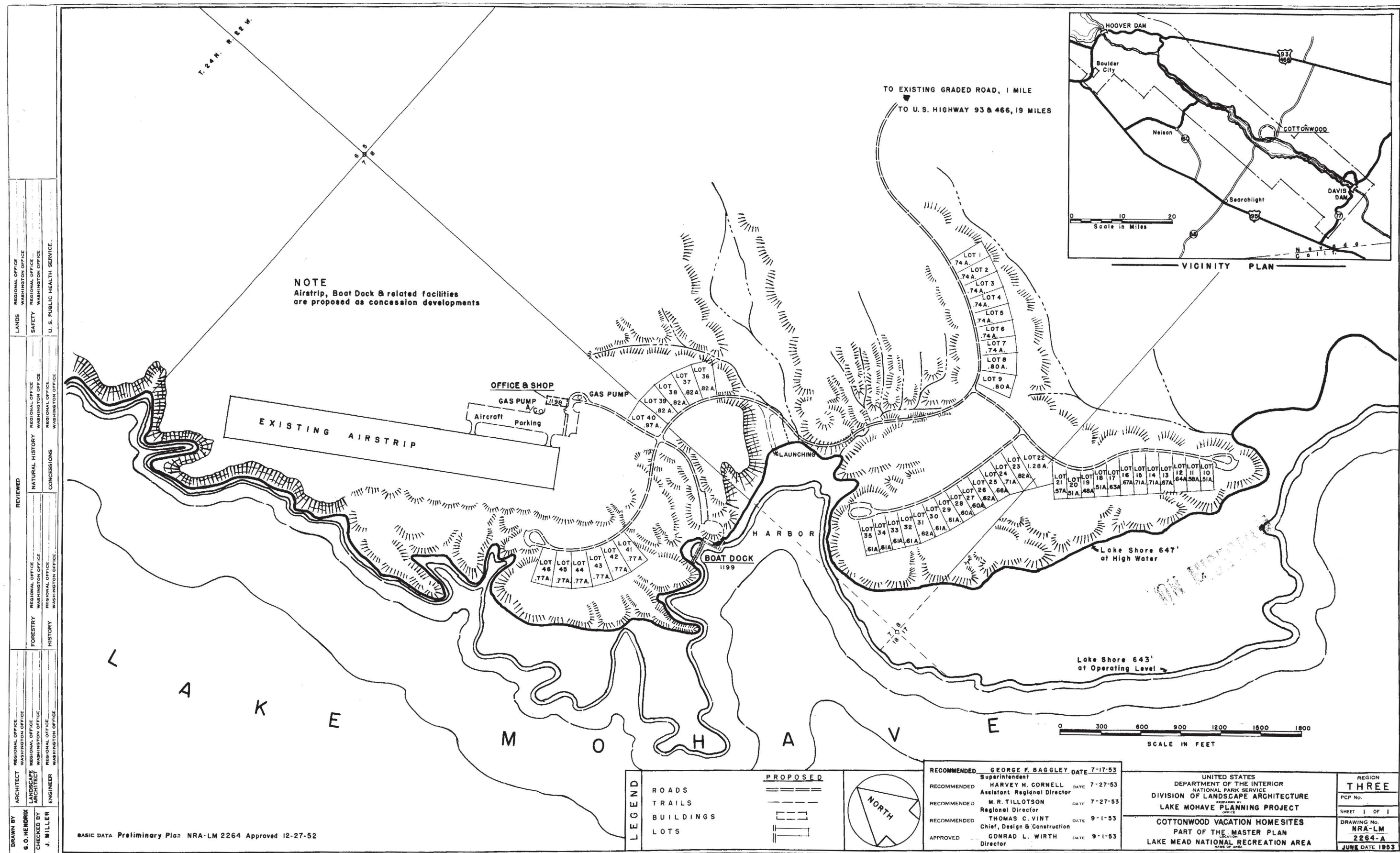
REGION
THREE
SHEET 1 OF 1
DRAWING NO.
NRA-LM
3529-A
JULY 1953

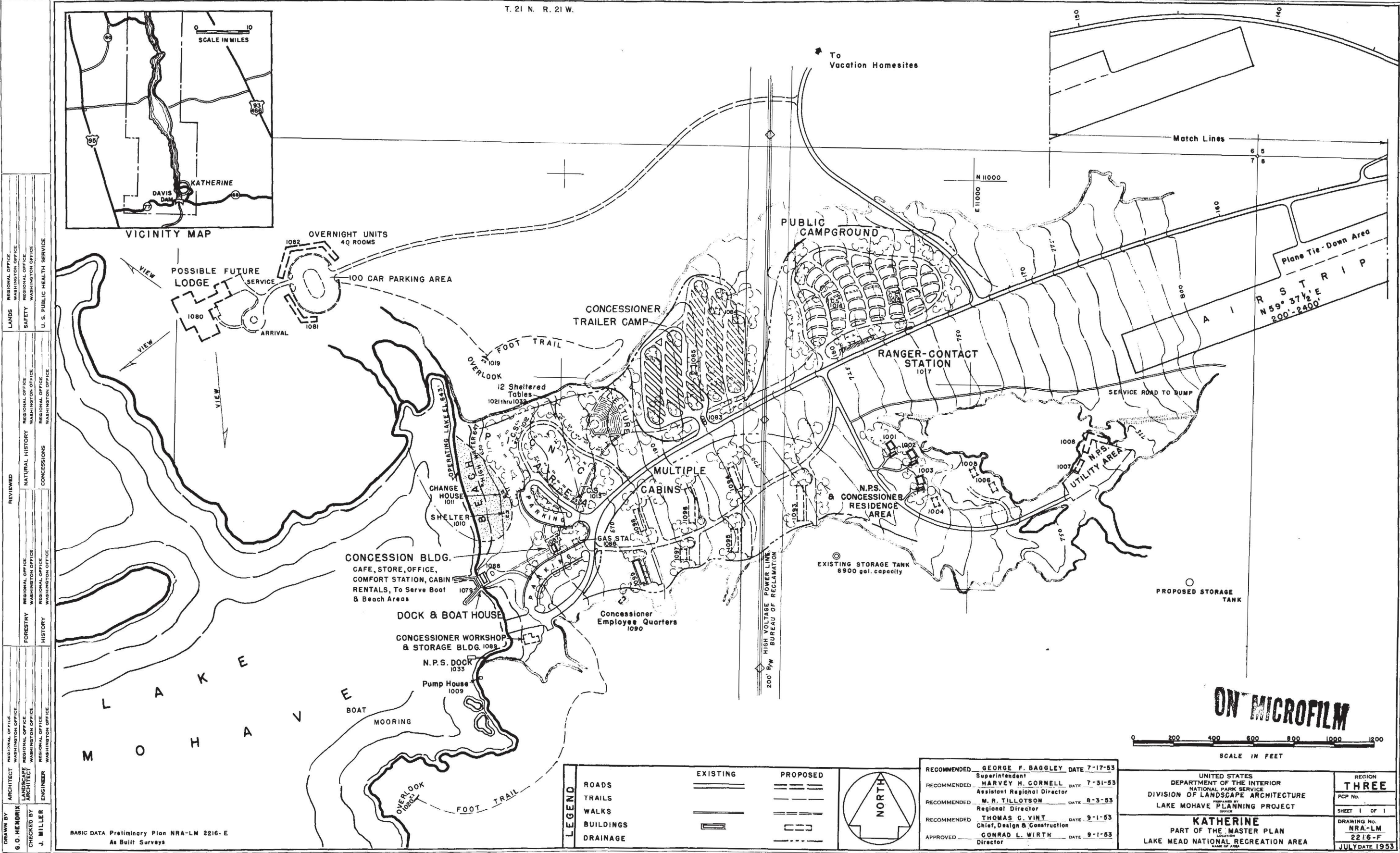
DESIGNED BY
C. G. HENON
CHECKED BY
J. MILLER

REVIEWED
APPROVED
DATE

LEGEND
SYMBOLS
EXPLANATIONS

BASIC DATA PLANE TABLE SURVEY, CONN & WALKDEN, MAY 1952
PRELIMINARY PLAN NRA-LM-2259, AUG. 1952





A development plan was prepared by the Division of Landscape Architecture, Region Three Office, National Park Service. The plan included in this report is the latest revision and shows developments since the area was selected.

Existing Facilities. --In 1951, a concession contract for Katherine was negotiated with Mr. Fred Faver. Mr. Faver has proven to be a very sound concessioner. A capable architect was engaged and numerous plans for development were prepared.

The first construction in the area started early in 1952. The concession has completed a fine boat house and floating dock, cafe and store building, 8-room multiple guest unit, complete sewage disposal system and a fine mooring and boat rental arrangement. A trailer court and airstrip are at present under construction.

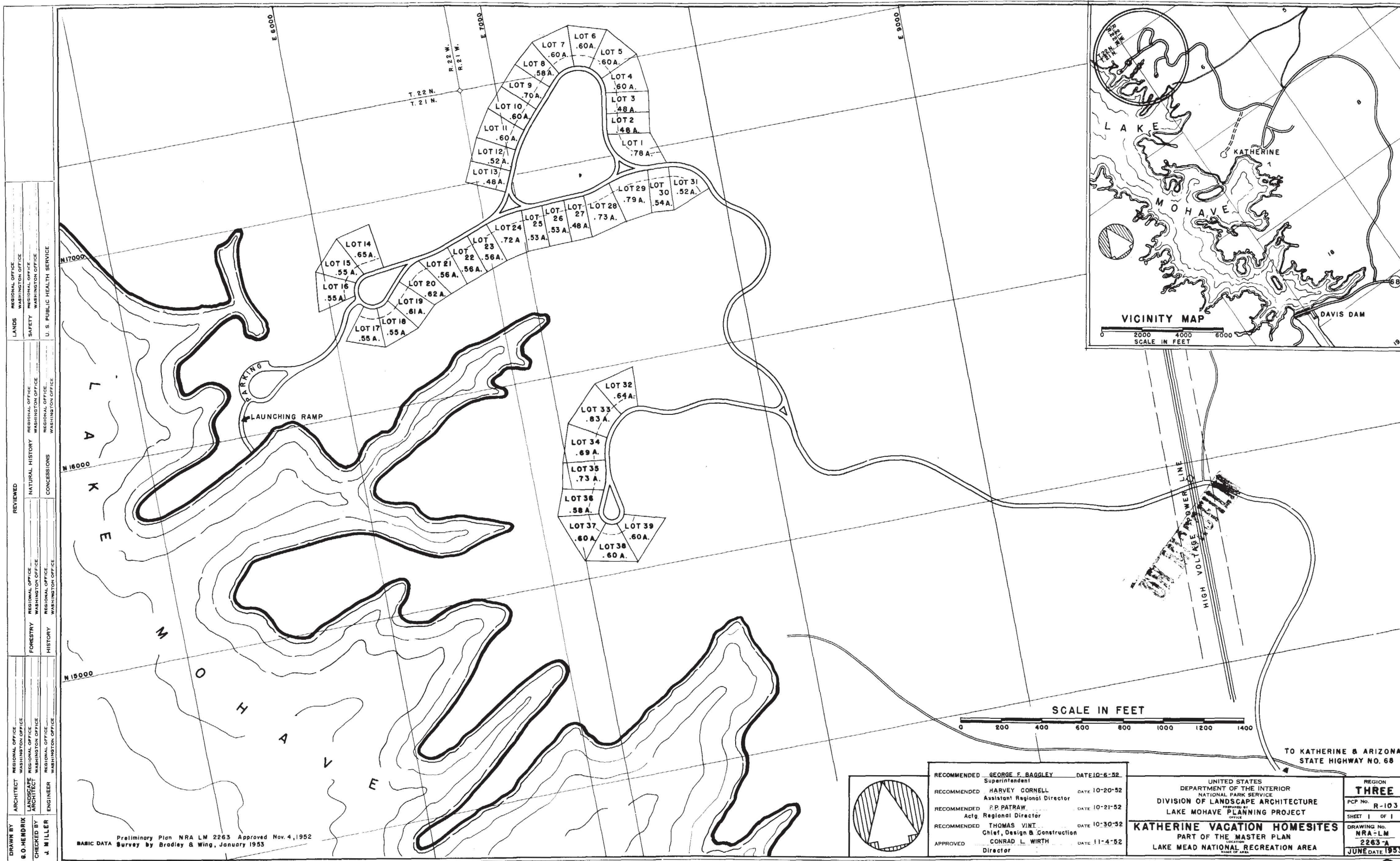
Early in the development of the area, the National Park Service installed a water system with pump, chlorinator, temporary storage tank and distribution system. Three residences for Service employees have been constructed. A Service dock and public beach are in use. During the spring of 1953, the Service constructed a power line from Davis Dam, providing all electric power needed for the development. The concessioner has installed his distribution system for power and water, connecting with Service lines.

The Service has recently completed a contract under which a fine, hard-surfaced road provides access to the area from the east end of Davis Dam. Included in the contract was the construction of parking facilities for 145 cars and a launching ramp.

Concession Facilities. Additional facilities proposed for the concession development include an addition to the cafe and store, additional multiple guest units, service station, marine fuel installation, workshop and storage building and employees' quarters. A possible lodge site is located on a rocky ridge north of the harbor.

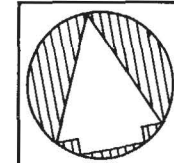
Service-Provided Facilities. --The National Park Service proposes to provide a public campground, picnic area, beach facilities, adequate lecture circle, two scenic overlooks, and trails. A Ranger-Contact Station will be located adjacent to the public campground. A Service utility area will be located to the rear of the residence area.

(6) Katherine Vacation Homesites NRA-LM-2263-A (Plate 13). -- Approximately 1 mile north of the Katherine Developed Area, a site has been selected for the development of Vacation Homesites. The circulatory and access roads and homesite lots have been surveyed and grading of the roads completed. Construction of a connecting road to Katherine is now underway. A majority of the lots have been leased.



DRAWN BY	ARCHITECT	REGIONAL OFFICE	WASHINGTON OFFICE	REVIEWED	LANDS	REGIONAL OFFICE	WASHINGTON OFFICE
CHECKED BY	LANDSCAPE ARCHITECT	REGIONAL OFFICE	WASHINGTON OFFICE	NATURAL HISTORY	SAFETY	REGIONAL OFFICE	WASHINGTON OFFICE
J. MILLER	ENGINEER	REGIONAL OFFICE	WASHINGTON OFFICE	CONCESSIONS	U. S. PUBLIC HEALTH SERVICE	REGIONAL OFFICE	WASHINGTON OFFICE

Preliminary Plan NRA LM 2263 Approved Nov. 4, 1952
BASIC DATA Survey by Bradley & Wing, January 1953



RECOMMENDED	GEORGE F. BAGGLEY	DATE 10-6-52
	Superintendent	
RECOMMENDED	HARVEY CORNELL	DATE 10-20-52
	Assistant Regional Director	
RECOMMENDED	P. P. PATRAW	DATE 10-21-52
	Actg. Regional Director	
RECOMMENDED	THOMAS VINT	DATE 10-30-52
	Chief, Design & Construction	
APPROVED	CONRAD L. WIRTH	DATE 11-4-52
	Director	

UNITED STATES DEPARTMENT OF THE INTERIOR DIVISION OF LANDSCAPE ARCHITECTURE LAKE MOHAVE PLANNING PROJECT KATHERINE VACATION HOMESITES PART OF THE MASTER PLAN LAKE MEAD NATIONAL RECREATION AREA	REGION THREE PCP No. R-103 SHEET 1 OF 1 DRAWING No. NRA-LM 2263-A JUNE DATE 1953
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(7) Eldorado Canyon NRA-LM-2111-D (Plate 15).--This fishing camp has developed from a camp originally located on the Colorado River. It is reached over an excellent paved road from Nelson, Nevada, and U. S. Highway 95.

The site is extremely limited for expansion of facilities. All development is located in a narrow canyon with vertical walls, subject to extremely dangerous floods. The harbor is most inadequate with open mooring necessarily handled on the opposite side of the lake.

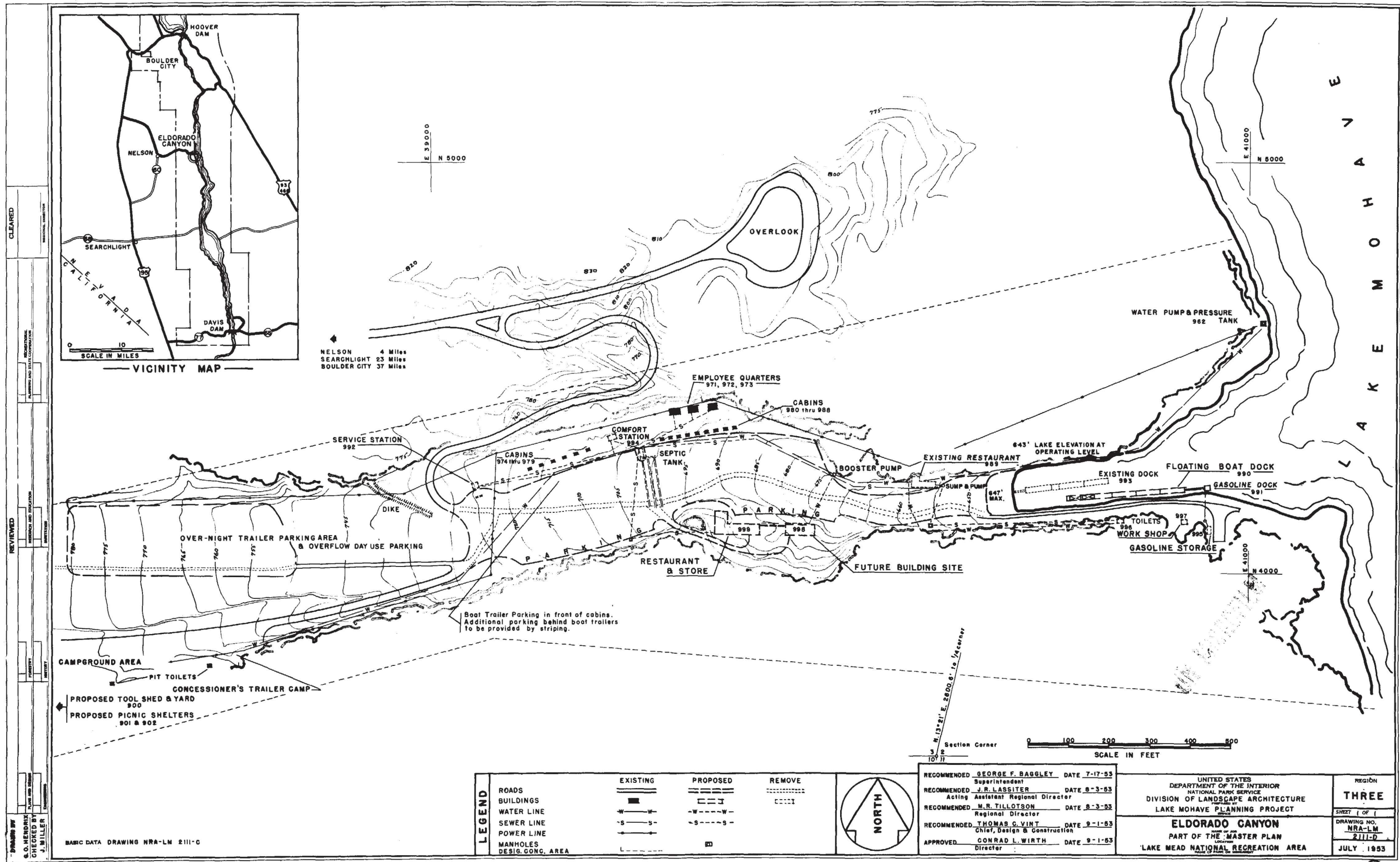
The proposed Fire Mountain Development two miles south will provide all facilities needed for this portion of Lake Mohave. However, most Service officials believe that the Eldorado Canyon development can never be completely eliminated. On this basis, a Master Plan revision has been prepared which permits improvements of concession developments but eliminating certain heretofore proposed facilities which would be required for development as a major area.

Existing Facilities.--The present concessioner has a number of facilities, generally inferior to his needs and the standards of the National Park Service. The floating boat dock and office and restaurant building are considered undesirable. Fifteen cabins and three employees' residences are located on one side of the canyon. A trailer court with power and water connections for 14 trailers is located on a low bench far up on the south side. An inadequate sewer system, pit toilets and fair water system are the utilities provided. A power line, which was constructed to provide power to an old mill now inundated, provides electric power. Recently a gasoline dock and gas storage facilities were installed.

Concession Facilities.--A high bench in the south wall of the canyon has been partially graded to provide building sites. This bench is the site for a proposed restaurant and store with space for an additional building, possibly a multiple guest unit. An improved dock, two comfort stations with improved sewage disposal, service station and necessary utility expansion are also proposed for concession development. Most of these improvements are necessary to provide satisfactory sanitary and safety conditions.

Service-Provided Facilities.--When Fire Mountain is developed, it is proposed that no Service-provided facilities will remain at Eldorado Canyon. Two picnic shelters are proposed for location in the upper part of the canyon.

A small tool shed and yard are needed for maintenance needs. It is proposed for location near the picnic area.



(8) Dead Mountain Developments NRA-LM-2260 (Plate 17).--

Petroglyph Canyon.--Facilities for use of visitors to the Petroglyph sites will be needed when protection forces are able to provide the policing necessary to an area of this type.

Access roads and parking area, picnic shelters, pit toilets, well and hand pump will provide facilities for the pleasure and comfort of the visitors. A wayside exhibit and trails will provide interpretive needs.

Christmas Tree Pass Campground.--The development of this fascinating site is proposed to provide camping sites with necessary circulation, pit toilets and water supply. A wayside exhibit will explain the geology, plant and animal life of the region, and trails will circulate throughout the area.

Cottonwood Basin Overlook.--The construction of approximately 1-1/2 miles of proposed road will terminate at an overlook from which an excellent view of the region is obtained.

(9) Colorado River Overlook and Picnic Area NRA-LM-2265-A (Plate 19).--Along the stretch of Colorado River south of Davis Dam, a picnic area is proposed among the mesquite trees which cover the river bank. Picnic facilities for individuals and groups are proposed with water supply and comfort stations.

A wayside exhibit and overlook will provide views and basic information on Davis Dam.

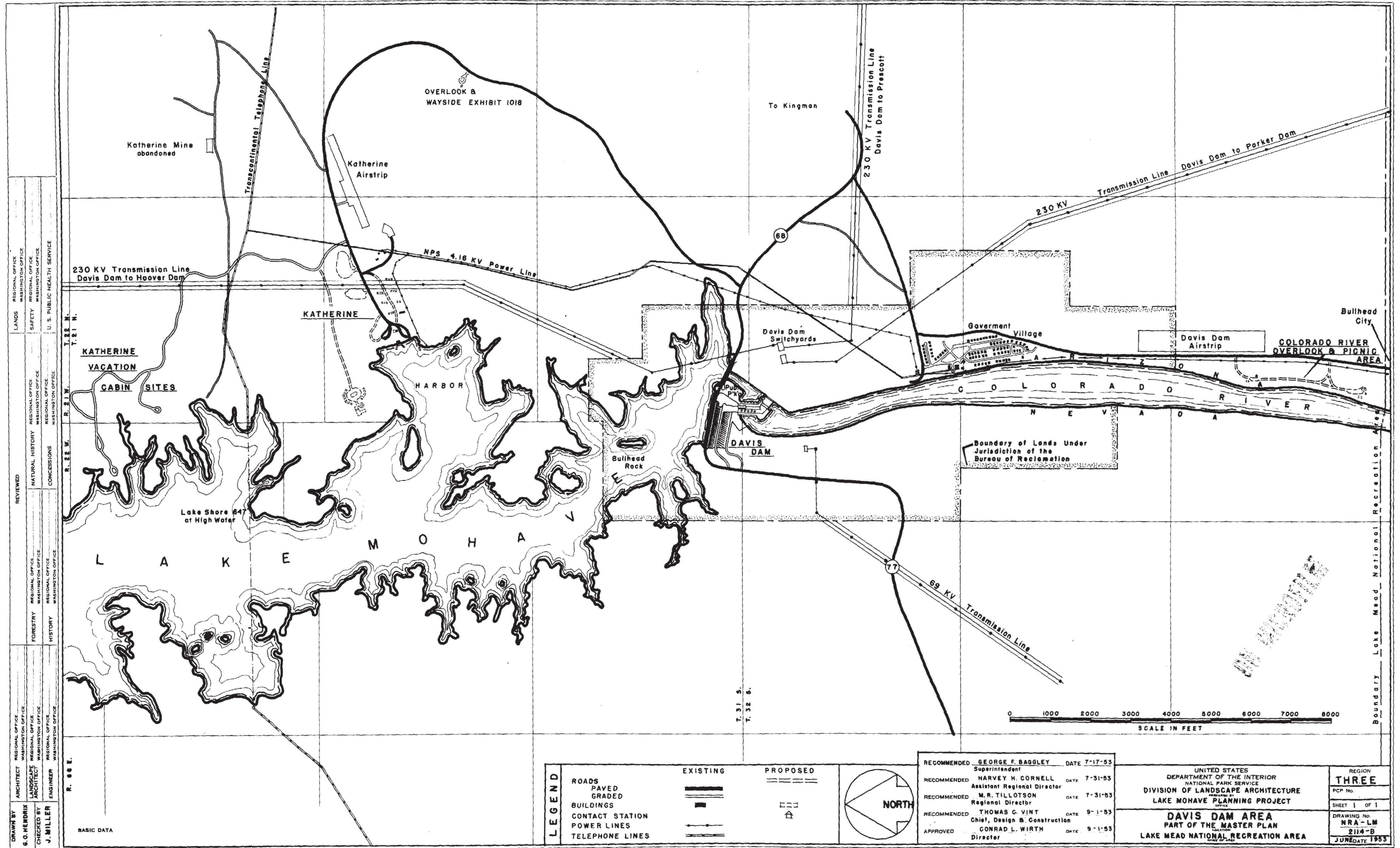
(10) Campsites.--The General Development Plan, NRA-LM-2268-A (Plate 3) indicates numerous campsites and several organized camps along the lakeshore.

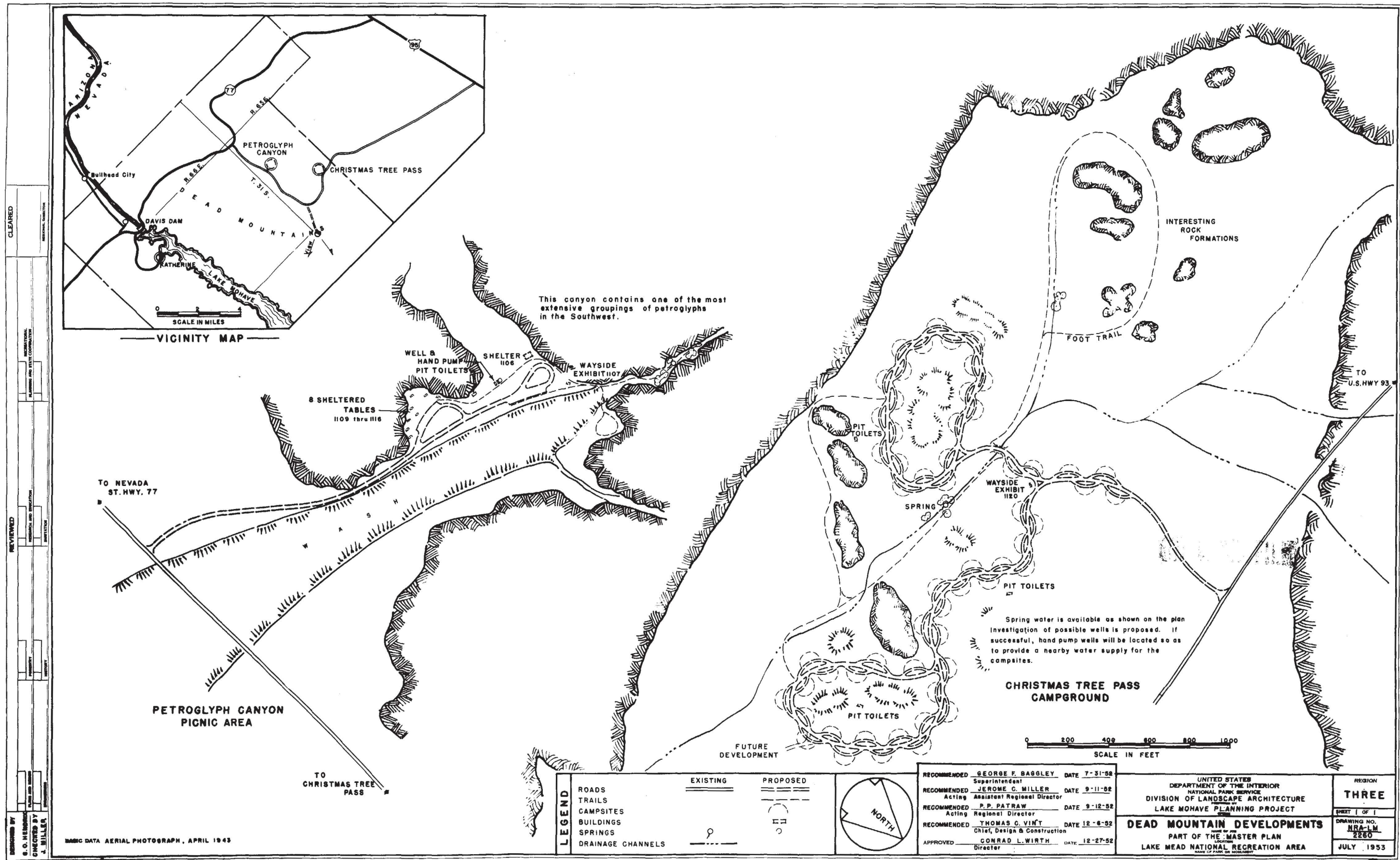
The campsites are proposed as camps for families or other small groups who reach the sites by boat. Trees will be planted to provide shade. It is believed that these small sites will become very popular.

Plans have not been prepared for the organized campsites. Occasionally non-profit organizations become interested in establishing permanent camps on the lake shores. These indicated sites are available and the National Park Service will help bonafide organizations of this type to plan such a camp.

Access Roads

All developed areas except for the Fire Mountain and Opal Mountain sites are available over existing roads. Three of these roads are surfaced; the balance require improvement or relocation and surfacing.





One major road proposal for the Lake Mohave area would connect Eldorado Canyon and Searchlight Ferry. This route, in addition to providing a lake shore road, would serve Fire Mountain and the potential Opal Mountain sites. The Opal Mountain site is discussed in Chapter II under Recreation Resources.

Short sections of new roads are proposed to provide access to Petroglyph Canyon, Christmas Tree Pass Campground, Cottonwood Basin Overlook and Cottonwood Vacation Cabin Sites.

Chapter IV Cost Estimates

In this chapter cost estimates are listed for all developments proposed for construction by the National Park Service. These estimates will be used in preparing the Project Construction Program for the Lake Mead National Recreation Area.

Some of the proposals listed are now included in the Area Project Construction Program. In such instances, the PCP number is listed.

(1) Willow Beach

A. Roads and Trails

1. Roads

a. Complete Campground Road, Route 34, .72 mi., R-87-1	\$	4,000
b. Cabin Spur, Route 35, .35 mi.		8,000
c. Surfacing & Curbs, Concession Parking Area, Route 9		7,500
d. Parking Area, Contact Station, 10 cars, Route 9		1,000

2. Trails

a. North Shore Trail, Route 4	3,400
b. Wayside Exhibit Trail, Route 12	1,000
c. South Shore Trail, Route 13	1,600

Total, Roads, & Trails	\$	26,500
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B. Buildings and Utilities

1. Utilities

a. Water System, Campground	U-73	\$	12,000
b. Sewer System, Campground			15,000

2. Buildings

a. Administrative (Interpretive)

1. Contact Station, 808	6,000
2. Wayside Exhibit, 807	2,500

b. Residential - None	0
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c. Utility

1. Comfort Stations (3), Campground, 802, 803, 804	\$ 36,000
2. Pump House, Campground, 806	1,500
3. Picnic Shelters (2), 800, 801; B-112-1	4,000
4. Public Boat Dock, 805	5,000

3. Miscellaneous

a. Lakeshore Bank Protection	M-172	10,000
b. Drainage Channel, Campground		10,000
c. Drainage Channel, Concession Area		5,000
d. Campground Development	M-169-1	10,000
e. Tool and Storage Yard		6,000

Total, Buildings & Utilities	<u>\$ 123,000</u>
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Total, Willow Beach	\$ 149,500
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(2) Fire Mountain

A. Roads and Trails

1. Roads

a. Access from Eldorado Canyon, Route 4, to Marine Store & Office, Route 45, (3.8 mi.)	\$ 120,000
b. Campground and Picnic Area Roads, .9 mi., Route 46	22,000
c. Residence & Utility Area Road, .3 mi., Route 84	6,000
d. Boat Trailer Parking & Launching Ramp, .15 mi., Route 47	4,000
e. Lodge Parking Area, 70 cars	8,000
f. Cabin Parking Loop, .3 mi., Route 48	6,000
g. Vacation Homesite Roads, .8 mi., Route 49	16,000

2. Trails

a. Beach connecting trails, .85 mi.	<u>1,700</u>
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Total, Roads & Trails	\$ 183,700
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B. Buildings & Utilities

1. Utilities

a. Water System

1. Domestic Water System	\$ 34,000
2. Irrigation System	9,000

b. Sewer System

1. Campground & Picnic Area	\$ 20,000
2. Residential & Utility Area	13,000
3. Contact Station	1,000

c. Power System - Power line extension will be requested of the public utility company	- - -
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2. Buildings

a. Administrative

1. Contact Station and small Exhibit room, 1300	15,000
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b. Residential

1. Employee Residence, 3 bedroom, 1308	16,100
2. Employee Residence, 3 bedroom, 1309	16,100
3. Employee Residence, 2 bedroom, 1310	13,800
4. Employee Residence, 2 bedroom, 1311	13,800

c. Utility

1. Comfort Stations (3), Campground 1301, 1302, 1303	36,000
2. Comfort Station, Picnic Area, 1304	12,000
3. Irrigation Pump House, 1305	10,500
4. Public Boat Dock, 1306	5,000
5. Equipment Storage and Shop, 1313	32,500
6. Pump House, 1314	1,500

3. Miscellaneous

a. Campground Development	22,500
b. Lecture Circle Development	10,000
c. Planting, Picnic Area	5,000
d. Grading & Planting, Residential Area	5,000
e. Beach Development	5,000

Total, Buildings & Utilities	<u>\$ 287,800</u>
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Total, Fire Mountain	<u>\$ 471,500</u>
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(3) Searchlight Ferry

A. Roads & Trails

1. Roads

a. Searchlight Ferry Spur, Loop & Parking for 50 cars, Route 14	\$ 34,000
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b.	Access Road to Campground, Incl. Loop and Parking for 30 cars, .5 mi., Route 44;	R-84-1	\$	16,000
c.	Cabin Spur, Route 51, .38 mi.			7,000
d.	Boat Launching & Boat Trailer Parking			2,000
2.	Trails			
a.	Lakeshore Trail, Route 11, .3 mi.			1,200
b.	Boat Dock to Cabin Area & Campground Trail, Route 10			1,100
	Total, Roads & Trails		\$	61,300
B.	Buildings & Utilities			
1.	Utilities			
a.	Water System, Campground & Picnic Area		\$	12,000
b.	Sewer System			
	1. Campground & Picnic Area			12,000
	2. Contact Station			1,000
c.	Power System - to be requested from public utility company			- - -
2.	Buildings			
a.	Administrative			
	1. Contact Station, 1511			10,000
b.	Residential - None			0
c.	Utility			
	1. Comfort Station, Campground, 1501			12,000
	2. Comfort Station, Picnic Area, 1512			12,000
	3. Pump House, 1513			1,500
	4. Public Dock, 1502			5,000
	5. Picnic Shelters (8), 1503 thru 1510			16,000
	6. Tool Shed & Yard, 1514			6,000
3.	Miscellaneous			
a.	Campground Development			9,000
b.	Picnic Area Development			3,000
c.	Beach Development			4,000
d.	Dike			1,000
	Total, Buildings & Utilities		\$	104,500
	Total, Searchlight Ferry		\$	165,800

(4) Cottonwood Vacation Homesites

A. Roads and Trails

1. Roads - Access & Interior Roads, 2.5 mi., Route 16	\$ 30,000
Total, Cottonwood Vacation Homesites	\$ 30,000

(5) Katherine

A. Roads and Trails

1. Roads

a. Public Campground Spur, Route 32; R-90-2 .74 mi. 18' wide .50 mi. 10' wide	15,000
b. Cabin Spur, Route 30, .22 mi. R-100	4,000
c. Picnic Spur, Route 31, .2 mi. R-101	4,000
d. Utility Area, Grade & Surfacing, Route 79	1,000
e. Lodge Spur & Parking, .6 mi., Route 33	12,000
f. Parking Area Expansion, Route 18	18,000
g. Overlook Spur on Route 18	4,000

2. Trails

a. Walks & Trails north of road, Route 5	3,000
b. Trails, south of road, Route 6	500

Total, Roads and Trails \$ 61,500

B. Buildings and Utilities

1. Utilities

a. Water System

1. 50,000 gal. Reservoir, 8 mi. dist. line, U-74-2	20,000
2. Irrigation System, Well, Pump, Pressure System	9,000

b. Sewer System

1. Campground, Septic Tank & .12 mi. 6" collecting lines	8,000
2. Picnic Area & Beach Sump & Pump, .09 mi. 6" collecting line; .34 mi. 3" pressure line	7,000

c. Power System, .34 mi. underground dist. lines	4,000
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2. Buildings

a. Administrative

1. Contact Station, 1017;	B-113-1	\$	12,000
2. Overlook shelters (2), 1019 & 1020			5,000
3. Wayside Exhibit, Overlook, 1018			2,500

b. Residential

1. Employee Residence, 2 bedroom, 1004			13,800
2. Employee Residence, 2 bedroom, 1005			13,800
3. Employee Residence, 3 bedroom, 1006			16,100

c. Utility

1. Warehouse, Shop & Oil House, 1007			
	B-116-2		12,000
2. Equipment Storage, 1008			20,000
3. Shelter, Beach, 1010			2,000
4. Comfort Stations (2), Beach & Picnic Area 1012 & 1013;	B-118-1		24,000
5. Comfort Stations (2), Campground, 1014 & 1015;	B-117-1		24,000
6. Sheltered Tables, 1021 thru 1032;	B-143-1		12,000

3. Miscellaneous

a. Planting, Picnic Area			9,000
b. Campground Development;	M-166-1		13,500
c. Planting, Grading, Walks, Residences;			
	M-174		4,000
d. Lecture Circle (complete)			10,000
e. Grading, General			10,000
f. Beach Facilities			3,500
g. Swimming Floats (4)			10,000
h. Fencing Utility Area;	M-155-1		3,500

Total, Buildings & Utilities	\$	268,700
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Total, Katherine	\$	330,200
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(6) Eldorado Canyon

A. Roads and Trails

1. Roads

a. Surface Treatment, Canyon Floor for Parking and Roads, Route 4	\$	5,000
b. Campground Road, Route 29 (complete)		2,000

Total, Roads & Trails	\$	7,000
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B. Buildings and Utilities

1. Utilities - None
2. Buildings

- a. Administrative - None
- b. Residential - None
- c. Utility

1. Tool Shed and Yard, 900	\$	6,000
2. Picnic Shelters (2), 901 & 902; B-141		2,000

3. Miscellaneous

a. Campground Development		6,000
Total, Buildings & Utilities	\$	14,000
Total, Eldorado Canyon	\$	21,000

(7) Dead Mountain Developments

A. Roads and Trails

1. Roads

a. Dead Mountain Spur, Route 17, State Highway 77 to West Boundary	\$	39,000
b. Parking, Petroglyph Canyon		3,000
c. Roads, Christmas Tree Pass Camp- ground, Route 52, 1.3 mi. 20' road 1.4 mi. 10' road		10,000
d. Road to Cottonwood Basin Overlook, 1.5 mi.		30,000

2. Trails

a. Petroglyph Canyon Trail, .34 mi., Route 15		400
b. Christmas Tree Pass Campground Trails, 1.2 mi., Route 16		4,000
Total, Roads and Trails	\$	56,400

B. Buildings and Utilities

1. Utilities

a. Water System

1. Well and Hand Pump, Petroglyph Canyon	\$	1,000
2. Well and Hand Pump, Campground		1,000

b. Sewer System (pit toilets). See Buildings - - -

2. Buildings

a. Administrative

1. Wayside Exhibit, Petroglyph Canyon, 1107	\$ 2,500
2. Wayside Exhibit, Cottonwood Basin Overlook, 1117	2,500
3. Wayside Exhibit, Campground, 1120	2,500

b. Residential - None

c. Utility

1. Shelter, Petroglyph Canyon, 1106	2,500
2. Picnic Tables & Shelters (8), 1109 - 1116	2,000
3. Pit Toilets, Petroglyph Canyon	500
4. Pit Toilets, Christmas Tree Pass Campground	500

3. Miscellaneous

a. Picnic Area Development	2,000
b. Campground Development	4,000

Total, Buildings & Utilities \$ 21,000

Total, Dead Mountain Dev. \$ 77,400

(8) Colorado River Overlook and Picnic Area

A. Roads and Trails

1. Roads

a. Road and Parking, 1.4 mi., Route 39	\$ 30,000
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Total, Roads & Trails \$ 30,000

B. Buildings and Utilities

1. Utilities

a. Water System	\$ 5,000
b. Sewer System	

1. North Comfort Station	1,500
2. South Comfort Station	1,500

c. Power System	3,000
-----------------	-------

2. Buildings		
a. Administrative		
1. Wayside Exhibit and Overlook, 1121	\$	5,000
b. Residential - None		
c. Utility		
1. Comfort Station, 1122	\$	12,000
2. Comfort Station, 1123		12,000
3. Picnic Shelter, 1124		1,500
3. Miscellaneous		
a. Picnic Area Development		2,500
Total, Buildings & Utilities	\$	44,000
Total, Colorado River Overlook & Picnic Area	\$	74,000
(9) <u>Lake Mohave Campsites (boat access)</u>		
Planting of 22 Sites	\$	5,000
(10) <u>Lake Shore Road, Fire Mountain to Searchlight Ferry</u>		
22 miles, Route 12	\$	660,000
TOTAL, Lake Mohave Development		\$ 1,984,400

