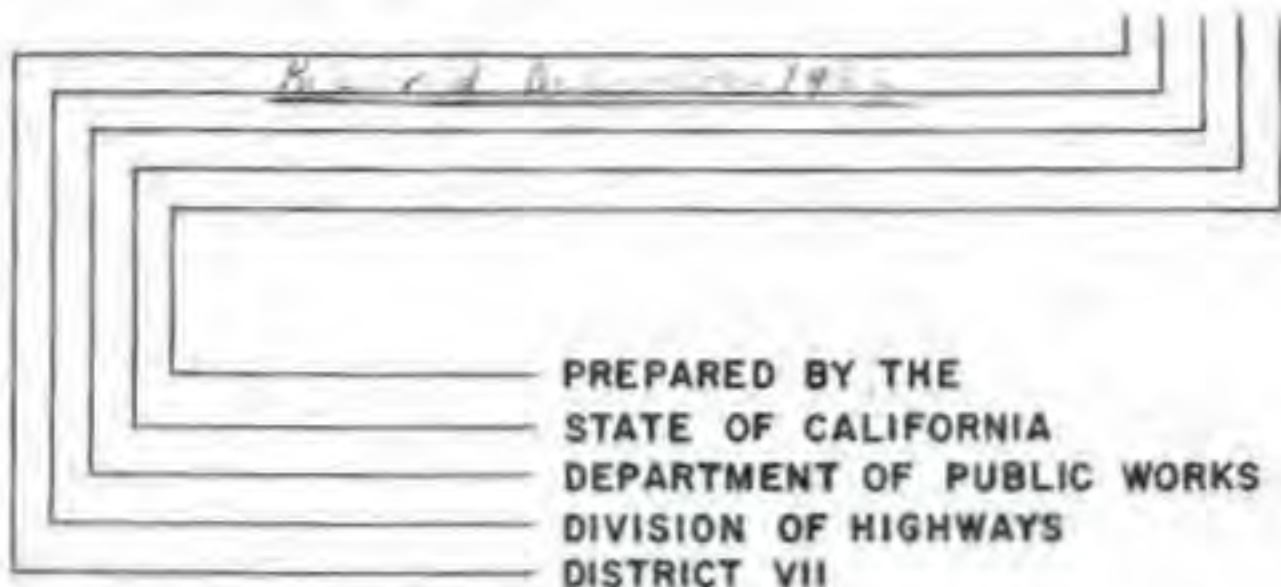


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ROUTE 60 FREEWAY RECONNAISSANCE STUDY IN THE SANTA MONICA BAY AREA

AN INVESTIGATION OF THE FEASIBILITY
OF A JOINT HIGHWAY-RECREATION FACILITY
BETWEEN THE CITY OF SANTA MONICA
AND THE COMMUNITY OF MALIBU BEACH

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AND THE COMMUNITY OF MALIBU BEACH

PREPARED BY
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
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FORWARD

FORWARD

The following report concerns those particular studies for the replacement of the existing State Highway Route 60, U. S. 101 Alternate, that involve the recreational or beach erosion control facilities, both existing and planned between the City of Santa Monica and the community of Malibu, some 12 miles up coast.

The intent of this report is to acquaint those Federal, State or local agencies having a vested, jurisdictional or regulatory interest in or over the recreational or beach erosion facilities with the nature of these studies and to solicit their cooperation and support.

The Division of Highways has the responsibility of conducting studies which deal, primarily, with, highway location; but inasmuch as certain recreational or erosion control facilities may be affected by the highway location, it is deemed necessary and prudent to gather all information pertinent to the operations of the above-mentioned facilities.

Section I

Introduction

A. Present Route

The present Route 60 is located adjacent to a beach lying at the foot of a mesa which varies between 125 and 275 feet in elevation. The elevation of the present facility varies between 15 and 25 feet above mean sea level. The present highway began as a stage route back in 1875 and has progressed from a two lane county road type of facility to its present status of a four to six lane State highway. This stretch of Route 60 now provides four separate distinct functions.

1. It provides a scenic drive along California's shoreline for the motoring tourist.
2. It serves as an access road to the extremely popular recreational beaches that are adjacent to it.
3. It is the only traffic facility providing for local traffic service between Santa Monica and Malibu Beach.
4. It provides a "through" route for north-south traffic.

B. Present Status

Route 60 is considered of sufficient importance to be included in the California Freeway and Expressway System as established under Senate Bill No. 480 by the 1959 session of the California Legislature. Recent traffic studies made during July and August of 1960 indicate an average daily traffic of approximately

35,000 vehicles are now using the present facility, and it is reasonable to assume that the near future will see at least a two-fold increase in the present traffic volume.

C. Future Development

This two-fold increase is based on the anticipated uniform growth of Southern California between the years 1960 and 1980. However, the recent inclusion of the county area north and west of the Los Angeles City Limits into the Los Angeles Metropolitan Water District will greatly accelerate the rate of development of the unimproved properties adjacent to Pacific Coast Highway. Therefore, it is quite possible that this two-fold increase in traffic volume could occur much earlier than 1980.

D. A New Location for Route 60

Regardless of other considerations, the traffic carrying capacity of the Pacific Coast Highway will have to be greatly expanded to meet the anticipated traffic demand. The present right of way of the existing highway is not of sufficient width to permit the necessary expansion, and a new location for the Route 60 Freeway will have to be determined. On February 8, 1960, the Division of Highways formally notified the local jurisdictions within the Santa Monica Bay area of the commencement of studies of possible locations for the freeway that would replace the present facility serving Legislative Route 60.

E. Request for Joint Highway-Recreational Study

On September 27, 1960, the Los Angeles County Board of Supervisors, the Los Angeles City Council, and the Santa Monica City Council adopted resolutions requesting the Governor of California to instruct the Department of Public Works through the Division of Highways, and the Department of Natural Resources, through the Division of Beaches and Parks and the Division of Small Craft Harbors, to conduct joint studies to produce a Master Plan of Utilization of the beach property in the Santa Monica Bay area for highway-recreational purposes that would best serve both the highway-recreational needs of the public.

These resolutions will be incorporated in the Route 60 Freeway location studies to determine the feasibility and need for a combined highway-recreational highway.

Section II

Description of the Route 60 Reconnaissance Study

A. Possible Locations of the Route 60 Freeway

The studies of possible locations for the Route 60 Freeway which were made during 1960 indicate that there are three primary alternate locations for this freeway in the Santa Monica Bay area which may be feasible. This is not to imply that there are only three alignments available; each alternate location represents a loci of a great many possible alignments and variations. These three basic locations for the Route 60 Freeway that are under consideration are the INLAND location, the OFFSHORE location, and the ONSHORE location. It is the latter two locations that lend themselves readily to a joint highway-recreational development.

B. Analysis of Need for Joint Highway-Recreational Development

1. Beach Expansion The present beach facilities of the Santa Monica Bay area are becoming inadequate due to the increasing population density of the West Los Angeles area. With the completion of the Santa Monica Freeway providing an easy access route to the beach area, an even greater demand will be placed on these facilities. Thus in the near future there will be a definite need for expansion to provide for more beach area and to allow for considerably more parking area, as insufficient parking space is one of the basic problems of the existing facilities. It is possible that the Division of Highways in cooperation with the Division of

Beaches and Parks may produce a combined facility that would satisfy these future recreational needs and also provide a suitable alignment for the Route 60 Freeway.

2. Harbor Development Boating has become a major recreation in Southern California. New facilities, such as the Marina Del Rey, are being constructed to ameliorate the present demand for small craft anchorage. However, if the present trend continues, these new facilities will not be adequate for future needs. A causeway, of sufficient width to contain a freeway, constructed a half-mile offshore from Santa Monica to Malibu would create a large lagoon that would provide as large a yachting harbor as the Los Angeles area would probably ever require. It would also provide a water recreational area for such sports as water skiing and sailing that would be unmatched in Southern California.

C. Study Locations of a Combined Highway-Recreational Study

1. The ONSHORE location The highway-recreational development plan would be in the form of a freeway together with access roads and other pertinent facilities including parking areas that would be constructed upon an artificially widened beach, and could well be patterned upon the so called "Los Angeles County Master Plan for Beach Development".

This "Master Plan" with certain modifications was approved by the U.S. Army Corps of Engineers in their report entitled, "Appendix II, Coast of California, Point Mugu to San Pedro Breakwater, Beach Erosion Control Study". This report was approved by or concurred with by numerous State

agencies including the then Division of Water Resources, the Department of Public Works, Division of Highways, Division of Beaches and Parks, the Department of Fish and Game and the State Lands Commission. This report was then submitted to the 83rd session of Congress where it was approved under House Document No. 277 dated September 3, 1954, as an authorized Beach Erosion Control Project.

This highway-recreational development plan would expand the present recreational areas of the beaches between Santa Monica and Malibu along with continuing to provide the several traffic functions now being provided by the existing Route 60 facility. Also this location more nearly satisfies the requirements of the recently proposed "Pacific International Scenic Drive" of which Route 60 will probably be an integral part. This highway-recreational development plan is often referred to as the BEACH MASTER PLAN.

2. The OFFSHORE Location This location might be constructed either as a continuous bridge or a land fill located between 1000 feet and one-half mile off shore as was suggested by a citizen of Santa Monica. The size, clearance, and spacing of openings through the OFFSHORE location to make the lagoon created by the causeway usable for a yachting harbor would be determined by the Division of Small Craft Harbors. Construction costs for this type of a facility would be considerably more than that of the usual land facility. However, this construction cost might be somewhat offset by the small

right of way cost as this type of facility would require very little right of way acquisition. This location is sometimes referred to as the LAND MOLE line.

3. Oceanographic Problems The preliminary consideration of the ONSHORE and OFFSHORE locations have not included detailed studies of the oceanographic problems that will be encountered. It is possible that these oceanographic problems may be of such magnitude as to render these two locations economically unfeasible. Problems such as the littoral drift, beach attrition, and beach accretion will require extensive study by other interested agencies such as the United States Army Corps of Engineers and which may necessitate the employment of additional consultants such as the Scripps Institute of Oceanography. Selection of the final location for study purposes will depend heavily on the marine aspects of a Joint Highway-Recreational study.

D. The INLAND Location

This location is for the most part atop the bluffs facing the ocean. It is a sufficient distance inland to avoid the necessity of acquiring beach property or commercial property adjacent to the present facility. Although there would be large cuts and fills involved, there is little question as to the engineering feasibility of the INLAND location. The disadvantage of this location is that it would require extensive right of way in a well developed residential area which would result in exceptionally high right of way costs.

Section III

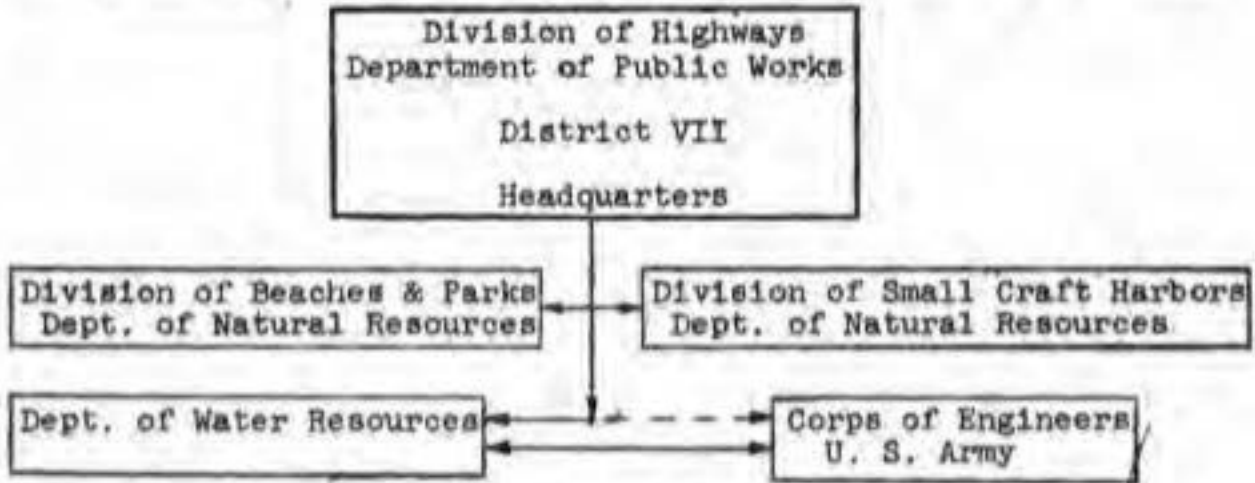
Description of a Joint Highway-Recreational Study

A. Organization of a Joint Highway-Recreational Study

1. INITIAL STUDY GROUP Informal exploratory meetings have been held with other agencies to determine if they would participate in that portion of the Study that involves recreational facilities by exploring these features that come under their respective jurisdictions.

The Division of Small Craft Harbors and the Division of Beaches and Parks of the State Department of Natural Resources and the State Department of Water Resources have indicated their approval of the formation of a Joint Study Group and have designated certain members of their respective staffs to serve on this Study Group. The Department of Water Resources has discussed the basic fundamentals of this joint highway-recreational project with the Corps of Engineers, U.S. Army and that agency has indicated their willingness to serve as technical advisors to study the marine aspect of said study. The Division of Highways as initiators of this project will work with this group in gathering, processing, and dissemination of material among the participating members.

The INITIAL STUDY GROUP will consist of the following agencies:



2. JOINT STUDY GROUP This group will consist of the INITIAL STUDY GROUP augmented by numerous other State and local jurisdictions who will be added to the group when their respective interest develops to a point that their participation would be necessary and advisable.

B. Purpose of the Joint Highway-Recreational Study

The purpose of the JOINT STUDY will be to review the feasibility of financing and constructing a joint highway-recreational facility serving the Santa Monica Bay area. Said study will be accomplished by obtaining the following information:

1. Establish the general features of the ONSHORE location and the OFFSHORE location considering the needs and interests of each agency.
2. Establish the engineering criteria necessary to assure that the two marine

locations will be physically sound with respect to natural forces.

3. Determine the costs assignable to the various features of the two joint plans.

C. Final Highway Route Determination

Upon completion of the initial phase of this joint study the Division of Highways will submit to each participating agency for their review and comment all information that has been gathered including the records of any marine surveys made and any recommendations relative to beach expansion and erosion control that may be received.

Next, the Division of Highways will hold public meetings within the Santa Monica Bay area to present to the public the facts relative to the location of the Route 60 Freeway. This meeting will be held in conformance with the policy of the California Highway Commission and to meet certain Federal Aid requirements.

After this public meeting and prior to the State Highway Engineer making his recommendation to the California Highway Commission, other agencies may, at this time, recommend the participation of their agency in a joint highway-recreational development. However, the extent to which an agency may wish to participate together with a method of financing such participation will have to be determined before the California Highway Commission can consider such participation in selecting the location for the Route 60 Freeway.

Section IV

Conclusion

It is the responsibility of the Division of Highways in the determination of a location for a freeway alignment to consider all possible locations in order to select that alignment which provides the best traffic service consistent with community benefits and least costs. Therefore, the Division of Highways will further explore with its own forces the possibilities of an INLAND location for the Route 60 Freeway. However, with the cooperation of the several Federal, State and local agencies in the preparation of a JOINT STUDY, it may well be that the logical conclusion for the alignment of the Route 60 Freeway will be a joint highway-recreational facility.

CALIFORNIA FREEWAY AND EXPRESSWAY SYSTEM



LOS ANGELES - ORANGE AREA

REPORT PLATE A



SANTA MONICA MOUNTAINS



PACIFIC OCEAN





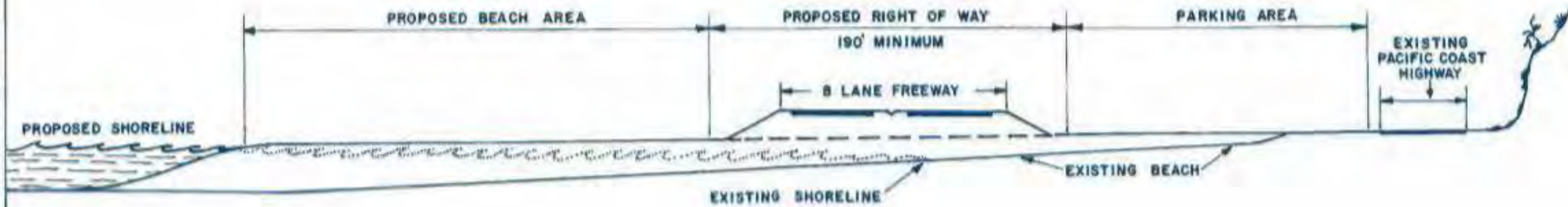
LEGEND

- ***** ONSHORE (Beach Masterplan)
- OFFSHORE (Land Mole-Causeway)
- ##### INLAND (Land Location)
- ADOPTED ROUTE 173

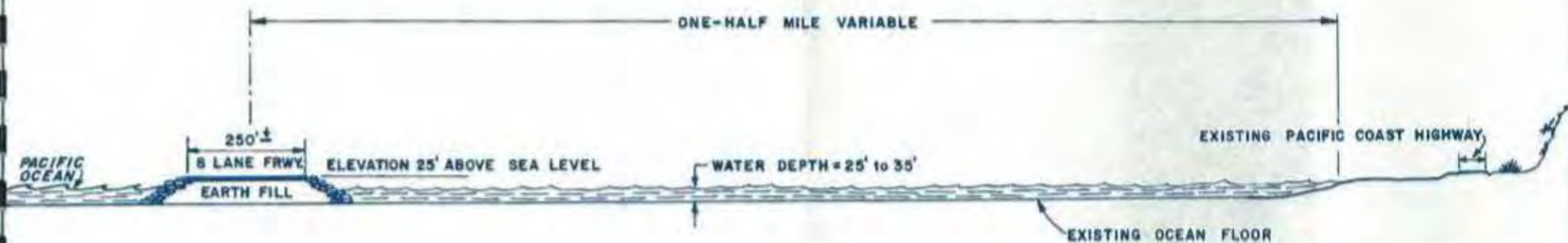
**VICINITY MAP
AND
ALTERNATE ROUTE 60
FREEWAY LOCATION DISCUSSED
IN THIS REPORT**

REPORT PLATE B

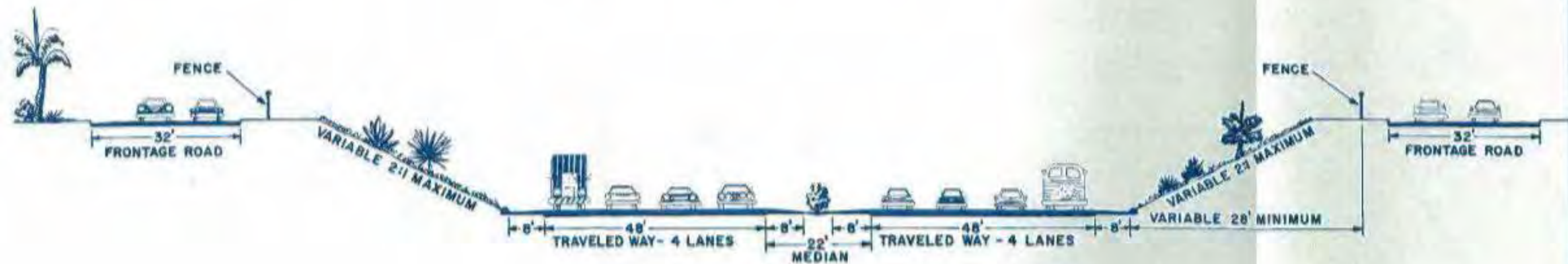
TYPICAL GEOMETRIC SECTION FOR BEACH MASTERPLAN



TYPICAL GEOMETRIC SECTION FOR LAND MOLE (CAUSEWAY)



TYPICAL GEOMETRIC SECTION FOR LAND STUDY



*This Cross Section not applicable
in known or suspected slide areas*

REPORT PLATE E