

社会開発協力部報告書

# Parque Simon Bolívar

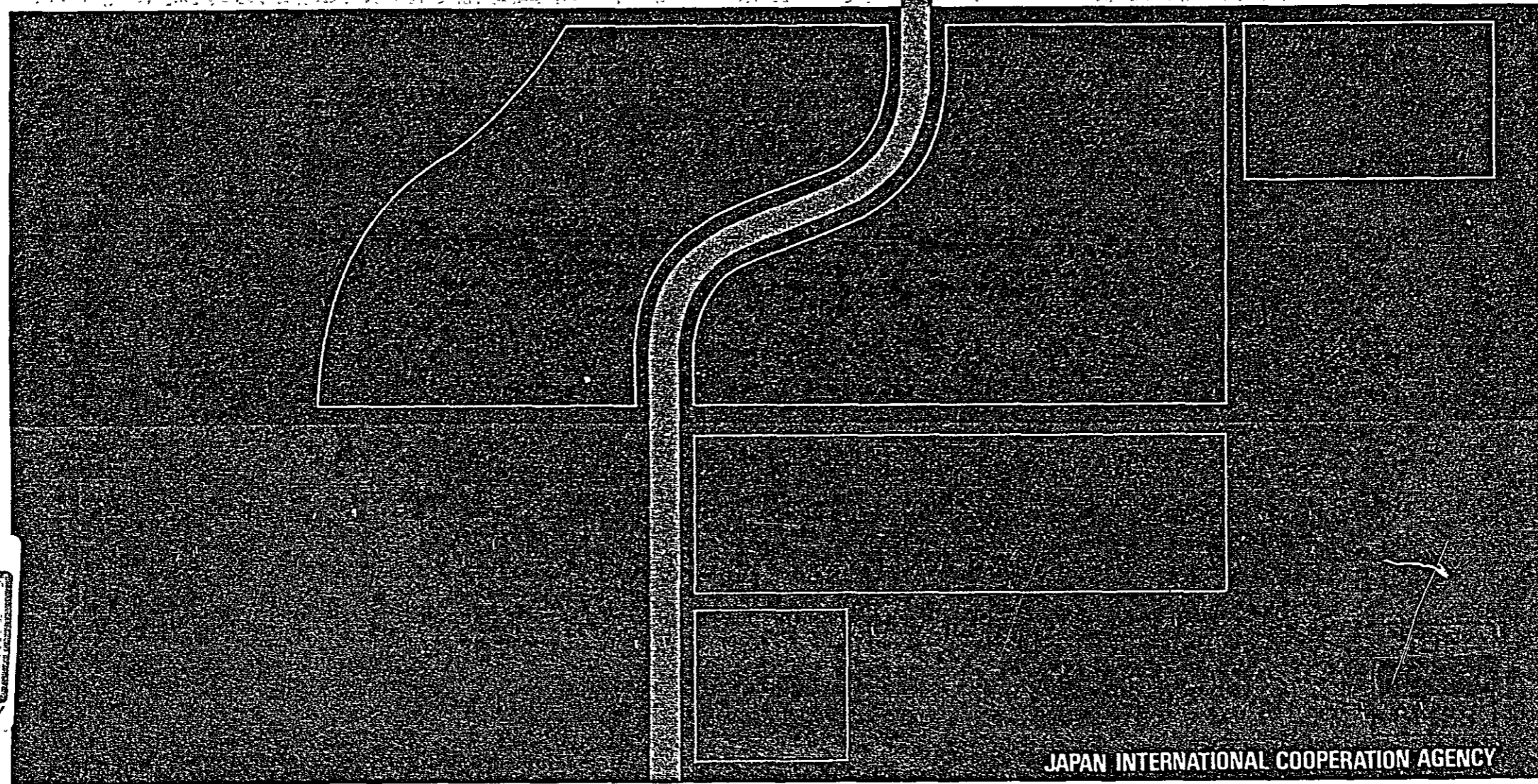
REPUBLIC OF COLOMBIA

No. 7

## THE MASTER PLAN STUDY ON THE SIMON BOLIVAR GREAT MEMORIAL PARK PROJECT

*FINAL REPORT*

SEPTEMBER 1981



JAPAN INTERNATIONAL COOPERATION AGENCY

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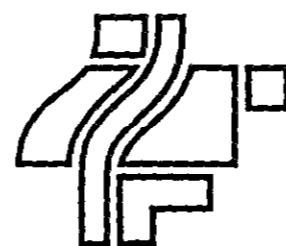
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...primos  
...son por la felicidad de la patria, si mi muerte contribuye  
...en los partidos y se consolida la unión, yo bajaré tranquilo al  
...  
...Simón Bolívar

REPUBLIC OF COLOMBIA

THE MASTER PLAN STUDY ON  
THE SIMON BOLIVAR  
GREAT MEMORIAL PARK PROJECT

*Final Report*



*September, 1981*

JAPAN INTERNATIONAL COOPERATION AGENCY

## Preface

In response to the request made by the Government of Republic of Colombia, the Government of Japan decided to conduct a survey for the Master Plan Study on the Simon Bolivar Great Memorial Park Project and entrusted it to the Japan International Cooperation Agency (JICA). The JICA sent to the Republic of Colombia a survey team headed by Mr. Sohiko Yamada three times during a period from June, 1980 to August, 1981.

The team exchanged views with officials concerned of the Colombian Government over the project and conducted a field survey.

The objectives of this project was to propose a master plan for the 110 ha central portion of the park. Through the close coordination with the Colombian Team concerned, which is incharge of the rest of the park, in order to derive a coherent plan to master plan of the entire park. After the Team returned to Japan, further studies were made and the present report has been prepared.

I hope that this report will serve for the development of the Project and contribute to the promotion of friendly relations between our two countries.

I wish to express my deep appreciation to the officials concerned of the Government of the Republic of Colombia for their close cooperation extended to the team.

September, 1981



Keisuke ARITA  
President

Japan International Cooperation Agency

## Prefacio

De acuerdo con la solicitud de parte del Gobierno de la República de Colombia, el Gobierno del Japon decidió efectuar el estudio del Plan de Diseño del Parque Simón Bolívar y encargó la ejecución de dicho estudio a la agencia de Cooperación Internacional del Japon (JICA). La JICA envió a la República de Colombia, una Misión Japonesa encabezado por el Sr. Sohiko Yamada, en tres oportunidades durante un período de Junio de 1980 a Agosto de 1980.

Se ha efectuado el intercambio de opiniones entre los funcionarios del Gobierno de Colombia y la Misión Japonesa .

El estudio tiene como objetivo elaborar un Plan Maestro de 110 ha de la parte central del parque a través de una coordinación en conjunto con el Equipo de Trabajo Colombiano, a quienes se les adjudicó los trabajos del área colindante a la nuestra y todo lo cual ha permitido preparar el mencionado plan Terminado el estudio correspondiente la Misión retorno a Japon y hechos los analisis pertinentes, se ha preparado el presente informe.

Espero que éste sea útil para el desarrollo del Proyecto y contribuya a la promoción de las relaciones amistosas entre nuestros países.

Deseo expresar mi más profundo aprecio a los funcionarios del gobierno de la República de Colombia, por su estrecha cooperación ofrecida a nuestro equipo.

Septiembre, 1981



Keisuke ARITA  
Presidente

Agencia de Cooperacion Internacional del Japon

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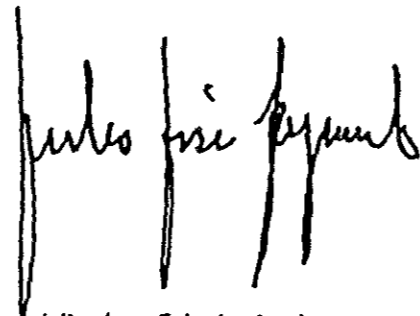
# Acknowledgement

When the Minister of Public Works and Transportation, Dr. Enrique Vargas Ramírez asked me to outline the horizons of the Simon Bolivar Memorial Park I proposed a platonic republic where things would happen differently from the rest of the world. The translation of this non-dimensional language of the ideal universe of poetry into the tri-dimensional existence of a project was left in the hands of the Japanese consultants hired by the Japan International Cooperation Agency and its Colombian Counterpart recruited from the most able professionals of the Universidad Nacional de Colombia. This difficult interpretation was indeed very fortunate since very little was left out of the enormous amount of new concepts contained in the original philosophy where the lyricism of the relationship man-nature was least as enhancing as the necessary grandeur of the Ceremonial Plaza to commemorate the military feats as well as the Panamerican ideals of our Liberator, Simón Bolívar. The primeval idea crystalized along a meaningful mall where the users can read an inspiring message of spirituality, hope and love in harmony with the most contemporary environment of manhood: cybernetics, communication, outer space travel, different types of energy for the use of a world where peace is the main reason of existence and where science, technology and culture attain their true meaning in the measure that they work for the benefit of mankind and for the benefication of human life

The President of Colombia, Dr Julio Cesar Turbay Ayala was personally interested in the step by development of the project and his minister, Enrique Vargas Ramírez, contributed with his intelligent and opportune advice to shape this document in its final form. The presence of the Mayor of Bogotá, Hernando Durán Dussán and his staff was decisive in keeping the adequate dialogue between the city and his necessary organism for its survival.

To them as well as to the Government of Japan and its diplomatic representation in Colombia, to the Work Supervision Committee and to my excellent friends from both teams my sincerest gratitude.

Bogota, September, 1981



Julio Jose Fajardo Artola  
Director  
Simon Bolívar Park Programme  
Advisor  
to the Minister of Public Works and Transportation

It is my great pleasure to submit the final report for the master plan for Simon Bolivar Great Memorial Park.

Despite the great distance separating the two countries, because of the dedication and cooperative spirit of the concerned officials of both countries governments, it was possible to implement this study in such a manner that the close cooperation conceals that distance.

Recognition of the necessity for, and importance of, parks in urban life has increased in recent years and at the same time demand has arisen for establishment of a systematic and comprehensive park administration organization to handle the operation and maintenance of parks

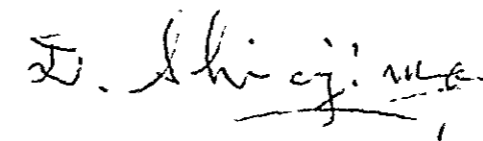
As one of the activities for commemoration of the 200th anniversary of the birth and the 150th anniversary of the death of Simon Bolvar, adored as the father of the country, the Colombian Government has decided to develop the city park and this plan, together with its comprehensive nature, may be judged to be highly appropriate. Japan, which since centuries ago has possessed a garden design tradition unique in all the world, also, in recent years, has developed its own comprehensive technology for park planning and design, in accordance with accumulation of experience in developing city parks.

I have been concerned with park administration for a long time, and the experience of participating in the development of parks in foreign countries, in each country, has provided hints as to what a park should be, and I think that therein lies not a unilateral supply of technology but the true meaning of technical cooperation.

To be provided with an opportunity to cooperate for a project intended to be a memorial to the founder of the Colombian Republic has added a new page to the history of park development in both of the countries concerned

Finally, representing the Supervisory Committee, I wish to express our deep appreciation particularly to all those people in Colombian who cooperated in the work culminating in this report, and our wish that this help enable Colombia to create a truly great park.

September, 1981

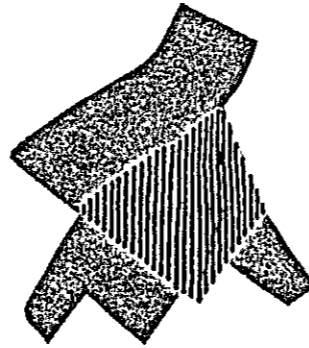


Dai SHIOJIMA  
Chairman  
Japanese Supervisory Committee  
Executive Director  
Ministry of Construction

### 110 ha and 250 ha

For the Master Plan of the Simon Bolivar Park, JICA study covers about 110 ha area in a central part of the whole park area through maintaining close coordinations with Colombian Study that covers about 250 ha area surrounding the central area.

*(for detail, please see page 1, 2, 13)*



### 110 ha y 250 ha

Para el Plan Maestro del Parque Simon Bolivar, el estudio JICA cubre un área aprox. de 110 ha en la parte central de todo el parque a través de una estrecha coordinación con el estudio Colombiano que cubre un área de 250 ha aproximadamente en las inmediaciones del área central.

*(para más detalles, ver páginas 1, 2, 13)*

### 3 Themes

The following three themes for park development are being proposed to lead up to realization of the Simon Bolivar Park.

- 1) Commemoration of the Libertador Simon Bolivar
- 2) Comprehensive City Park Development
- 3) Conservation of Natural Environment

*(for detail, please see page 21, 22)*



### 3 Temas

Los tres temas para el desarrollo del parque son propuestas como guía para la realización del Parque Simón Bolívar.

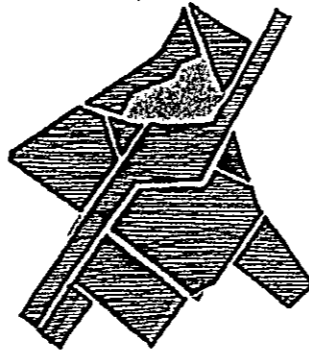
- 1) Conmemoración de El Libertador Simón Bolívar.
- 2) Desarrollo Extenso del Parque de la Ciudad.
- 3) Conservación del Medio Ambiente Natural

*(para más detalles, ver páginas 21, 22)*

### 9 Zones for the Park

The Simon Bolivar Park integrates nine different functional zones such as; multiple activities, static recreations, sports, amusement, cultural and educational activities.

*(for detail, please see page 27, 28)*



### 9 Zonas para el Parque

El Parque Simón Bolívar integra 9 diferentes zonas funcionales tales como; para múltiples actividades, recreación, deportes, entretenimientos, actividades culturales y educativas

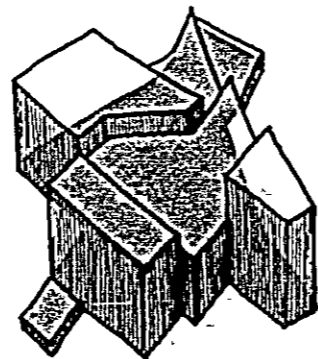
*(para más detalles, ver páginas 27, 28)*

### 46.6 Million Visitors

The number of visitors to the Simon Bolivar Park is projected to be about 46.6 millions in 1990.

	Whole park area	110 ha area
No. of visitors per year	46.6 million	7.7 million
No of visitors on peak day	513.0 thousand	84.7 thousand
No of visitors at peak hour on peak day	149.6 thousand	28.2 thousand

*(for detail, please see page 75, 76, 77)*



### 46.6 Millones de visitantes

El número de visitantes al Parque Simón Bolívar está estimado ser alrededor de 46.6 millones en 1990

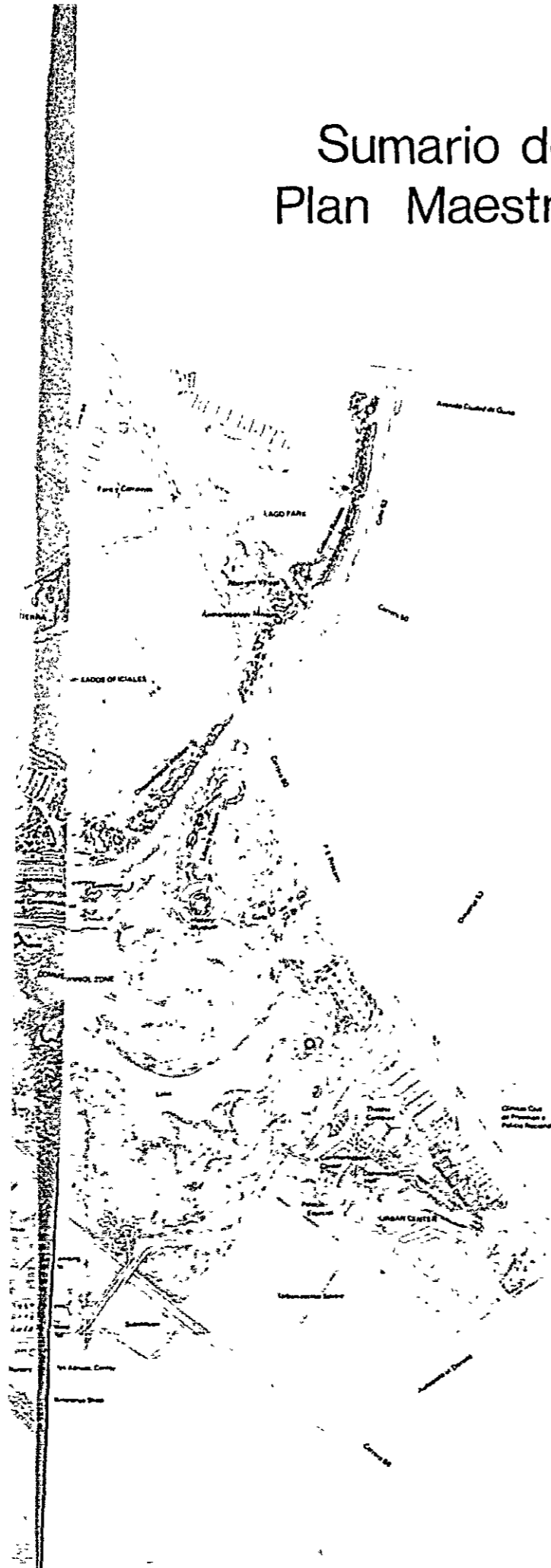
	área central del parque	área de las 110 ha
Nro de visitantes por año en 1990	46.6 millones	7.7 millones
Nro máximo de visitantes por día	513.0 mil	84.7 mil
Nro máximo de visitantes en hora pico de un día	149.6 mil	28.2 mil

*(para mas detalles, ver páginas 75, 76, 77)*

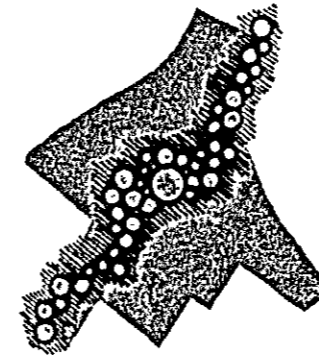
## Summary of the Master Plan



# Sumario del Plan Maestro



**3.4 km of Urban Mall**  
 As a center for the cultural, educational and recreational activities of the Bogota citizens, the 3.4 km distance along Calle 63 from Avenida Ciudad de Quito to Jardín Botánico shall be improved as an Urban Mall, which has varying landscape characterized by 6 theme, culture, History Liberty, Present, Future and Nature.  
*(for detail, please see page 43~50)*



**3,4 km de Alameda**  
 Como un centro cultural, educacional y de actividades recreacionales para los Bogotanos, los 3.4 km de distancia a lo largo de la calle 63, desde la Avenida Ciudad de Quito hasta el Jardín Botánico, será mejorado con una Alameda. El cual contará con una variedad de paisajes caracterizadas por seis diferentes temas, cultura, Historia, Libertad, Presente, Futuro y Naturaleza. *(para más detalles, ver páginas 43~50)*

**88,000 Trees**  
 For the realization of "Commemorative Landscape", grand natural elements shall be introduced to 110 ha area. 30 ha of Woodland, 98,000m<sup>2</sup> of grand water surface, 7 meters height of land relief with 600 thousand M<sup>3</sup> earth and 88,000 trees and shrubs would be provided  
*(for detail, please see page 33~36, 83~90)*



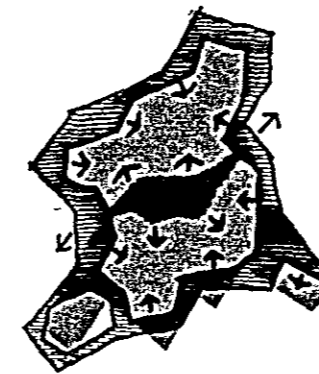
**88000 Arboles**  
 Para la realización del "Gran Parque Conmemorativo" serán introducidos elementos naturales en un área de 110 ha; 30 ha de bosque, 98.000 m<sup>2</sup> de superficie acuática; será provisto de un máximo de 7m de terreno destinado para descanso con 600 mil M<sup>3</sup> de suelo y 88 mil árboles y arbustos  
*(para más detalles, ver páginas 33~36, 83~90)*

**90,000 M<sup>2</sup> facilities**  
 For the realization of "Commemoration of Simon Bolivar" and for the promotion of active park use, various park facilities would be provided as a core of the multiple activities such as national ceremonial plaza, 7 museums, 7 centers, 3 special parks, 18 cafeterias and sonon.  
*(for detail, please see page 37, 38, 51~61)*



**90,000 M<sup>2</sup> Facilita el Parque**  
 Para la realización de la conmemoración de Simón Bolívar y para la promoción de actividades, el parque ofrece varias ventajas, debido a que será provisto de un centro de múltiples actividades, la plaza ceremonial nacional, 7 museos, 7 centros, 3 parques especiales, 18 cafeterias y demás  
*(para más detalles, ver páginas 37, 38, 51~61)*

**10 years Development Project**  
 It is suggested that the Simon Bolivar Park Development Project extends over ten years period from 1981 to 1990.  
 Phase I (1981-82)  
 Preparatory work and urgent actions.  
 Phase II (1983-86)  
 Main development work  
 Phase III (1987-90)  
 Finalization and fulfillment of the development  
*(for detail, please see page 63~73)*



**10 Años en el desarrollo de este Proyecto**  
 Se ha sugerido que el desarrollo del proyecto del Parque Simón Bolívar se extenderá sobre un periodo de 10 años a partir de 1981 hasta a 1990  
 Fase I (1981-82) Trabajo preparatorio y asuntos urgentes  
 Fase II (1983-86) Desarrollo principal del trabajo.  
 Fase III (1986-90) Finalización y cumplimiento del desarrollo. *(para más detalles, ver páginas 63~73)*



## Conclusion and Recommendations

This report presents the final output of the study entitled The Master Plan Study of the Simon Bolivar Great Memorial Park Project in the Republic of Colombia, conducted by the JICA Study Team in close cooperation with the Colombian Counterpart Team during the period from September, 1980 to August, 1981 in compliance with the scope of work agreed upon between the Japanese and Colombian governments as part of the technical cooperation efforts by the two governments.

The main objective of this study is to propose the master plan for an area of about 110 hectares of the property of the Colombian government which is situated in the central part of the Simon Bolivar Great Memorial Park which has a total area of about 350 hectares and which is planned to be developed in the city of Bogota D.E. Consequently, the master plan for this 110 hectares shall be well harmonized with the whole park area of 350 hectares, (referred to as Whole Park Area in this report) as one of the zones in the park.

The Japanese study team appointed by the Japan International Cooperation Agency (JICA), an official agency for execution of technical cooperation programmes of the Japanese government, has conducted joint work with the Colombian counterpart team throughout the study period under the supervision and guidance of the Japanese Supervisory Committee for the survey, study, planning and design works of this master plan, and it is to be noted that the JICA study team has been favored with the very effective cooperation and assistance rendered by the governmental agencies and other institutions concerned, with which the team coordinated its work as necessary through discussions and presentations during process of the master plan study.

The basic conclusion and recommendations proposed in this report have been confirmed and agreed upon mutually through the periodical discussions between the responsible governmental agencies of both countries, Ministry of Public Works and Transportation in Colombia and Japanese Supervisory Committee.

The summary of the conclusion and recommendations derived from the result of the comprehensive in-depth studies covering many aspects and components necessary for the park planning are noted as the following:

The inflow of agricultural population to the large cities has been increasing due to changes in the social and economic environment in Colombia, as in other South American countries. The population of the capital city, Bogota, has increased four-fold during the last 20 years and further increase of the city's population is anticipated. The inflowing population is primarily composed of people of the low income stratum. Their earnings are spent for the most part for building their own houses and because their income level is low they are unable to make a significant contribution to national revenue through paying taxes which are a source of funds to be allocated for public expenditure for development and improvement of public facilities and social capital formation. Although economic development may be sought based upon the enormous growth potential of the population, it is of urgent necessity for this country to strategically improve social infrastructure facilities in the earliest possible stage in order to prevent the eventual destruction of the natural environment by a random sprawl of housing, and to improve the standard of urban living conditions in general.

## Conclusion y Recomendaciones

El presente informe presenta el producto final del estudio que se titula "Estudios del Plan Maestro sobre el Proyecto del Gran Parque Conmemorativo Simón Bolívar en la República de Colombia", dirigido por el equipo de estudio de la JICA en cooperación estrecha con el Equipo Colombiano, contra parte de aquel durante el período de septiembre de 1980 hasta agosto de 1981, de acuerdo con el alcance de trabajos acordados entre los Gobiernos japonés y colombianos, como parte de esfuerzos de colaboración técnica entre ambos gobiernos.

El objeto principal del presente estudio, es proponer un plan maestro para una área de 110 hectáreas aproximadas de la propiedad del Gobierno Colombiano, ubicado en la parte central del gran parque conmemorativo Simón Bolívar, que tiene una extensión total de 350 hectáreas, y planeado a desarrollarse en la ciudad de Bogotá D E. Consecutivamente, el plan maestro para estas 110 hectáreas deberá ser bien armonizado con el conjunto de área de parque de 350 hectáreas (se denominará más adelante área conjunta del parque) como una de las áreas en el parque integral de la ciudad.

El equipo japonés de estudio designado por la Agencia de Cooperación Internacional de Japón (JICA), una agencia oficial para la ejecución de programas de cooperación técnica de parte del Gobierno japonés, ha dirigido trabajos conjuntos con el Equipo Colombiano contra parte a aquél, durante todo el tiempo del estudio bajo la supervisión y dirección del Comité Supervisor japonés para los trabajos de reconocimiento, estudios, planeamiento y diseño de dicho plan maestro, y vale anotar que el equipo de estudios de JICA se ha favorecido con una cooperación y asistencia muy efectiva prestada por las agencias gubernamentales, así como los demás institutos concernientes con los que el equipo japonés coordinaba su trabajo según el caso, por intermedio de discusiones y representaciones durante el proceso del estudio de dicho plan maestro.

La conclusión básica y recomendaciones propuestas en el presente informe han sido confirmadas y acordadas en forma mutua a través de discusiones periódicas entre las agencias gubernamentales de ambos países, Ministerio de Obras Públicas y Transporte de Colombia y el Comité Supervisor Japonés

El Sumario de conclusión y recomendaciones derivado del resultado de los estudios extensos así como profundos que cubre muchos aspectos y componentes necesarios para el planeamiento del parque se anota como sigue

En Colombia ha venido aumentando la afluencia de población agrícola a las ciudades grandes debido a cambios en el medio ambiente socio-económico, en forma igual que los demás países Latinoamericanos. La población de la ciudad capital de Bogotá ha aumentado 4 veces durante los últimos 20 años, y se prevee aún mayor aumento de la población de dicha ciudad. La población afluyente se compone principalmente de la gente del estrato de ingresos inferiores y destinan sus ganancias en su mayor parte para la construcción de sus viviendas por que el nivel de sus ingresos es bajo, y ellos no pueden hacer contribución significativa a la Renta Nacional por medio de pagos de impuestos los que son una fuente de fondos a aplicarse para desembolso público destinado al desarrollo y mejoramiento de facilidades públicas así como la formación del capital social.

Aunque el desarrollo económico se podría buscar sobre base de la potencialidad enorme de crecimiento de población, es una necesidad urgente para la República mejorar estratégicamente facilidades de infraestructura social en la etapa más pronta para prevenir una eventual destrucción del medio ambiente natural por una extensión de la zona urbana sin orden ni concierto, y mejorar la norma general de condiciones de vida urbana.

The fact that Colombia is divided into various regions separated by three Andes mountain ranges is a great handicap for the formation of a comprehensive transportation network within the country, and inadvertently forms independent social and economic spheres in each region. In proportion to the process of development of the transportation and distribution systems between regions and acceleration of exchanges of information, it will become imperative that the nation shall establish a new unified national spirit by ironing out social and cultural differences in each region through economic integration.

With such economic advancement, it is foreseen that the time spent for recreational activities will increase, resulting in amplified desire for cultural and artistic activities and increasing demand for places to satisfy it. When we consider that, in conjunction with the drive toward national integration, it becomes imperative that public facilities for general purposes, with strong symbolic effect, be constructed. Due to these social and economic situations, this project is very timely and will positively yield multiple effects. It suitably commemorates the bicentennial of the birth and 150th anniversary of the death of El Libertador Simon Bolivar, who is still admired as the national founder of the country.

The site of this project is located at the center of Bogota City which extends north and south and forms the principal area of the western district which is in need of development in order to secure balanced growth of Bogota City. This project, in conjunction with the construction of the new government office area and business district, will promote development of the vicinity, exalting Bogota as the capital city.

Bogota City has been selected to host the World Cup games in 1986. This event is expected to trigger an increase in the inflow of tourists from foreign countries, especially Bolivarian countries. Further, with the development of transportation systems, increased ease of mobility will be assured resulting in an increase of domestic sightseers. A city park as envisioned by this project will help publicize the history, culture and industry of Colombia and will of itself further attract various kinds of people from inside and outside of the country to Bogota City. We would therefore expect favorable results through development of tourism-related industries.

The value of the greenery establishment as a social asset will increase in the future. For its development effects will be surely demonstrated, development investments should be apportioned over many years.

As explained above, this project will prompt development directly and indirectly, and produce short and long term effects. It will help to develop material and social foundations for Colombians, especially for its capital city, Bogota. The Colombian government has the capacity to realize this project, the plan of which appears very feasible judging from social, economic and technical requirements. Financially realization of this project is quite possible if cooperation of various organizations and the general public is gained and an autonomous organization is established to maintain the park.

El hecho de que Colombia está dividida en distintas regiones separadas por 3 cordilleras paralelas de los Andes, es una gran desventaja para la formación de una red de transporte extensa dentro del país, tendiéndose a formar inadvertidamente esferas socio-económicas independientes en cada región. A medida del proceso del desarrollo del transporte y sistemas de distribución entre regiones y aceleración de intercambios de informaciones, se hará imprescindible que la nación establezca un nuevo espíritu nacional unificado por medio del allanamiento de diferencias socio-culturales propias de cada región a través de la integración económica.

Con tal adelanto económico se prevee que, el tiempo utilizable para las actividades de recreo aumentará resultando el deseo amplificado para actividades culturales y artísticas y creciendo la demanda para lugares donde se satisfagan tales deseos. Si consideramos que se hará indispensable, junto con la campaña hacia la integración nacional, que se establezcan facilidades públicas para objetos generales, con el efecto muy simbólico. Debido a estas situaciones socio-económicas, este proyecto se considera muy oportuno y rendirá en forma positiva para efectos múltiples lo cual conmemorará apropiadamente el centenario del nacimiento y 150<sup>mo</sup> aniversario del fallecimiento del El Libertador Simón Bolívar a quien se admira actualmente como fundador nacional de la República.

El sitio del presente proyecto está ubicado en el centro de la ciudad de Bogotá que se extiende de norte a sur y forma el área principal del distrito occidental la que se requiere desarrollar para asegurar un crecimiento balanceado de la ciudad de Bogotá. El presente proyecto, junto con la construcción del área nueva de oficinas gubernamentales así como un distrito nuevo de negocios, promoverá el desarrollo de la vecindad, exaltando a Bogotá como la ciudad capital de la República.

La ciudad de Bogotá se ha elegido para auspiciar los Juegos de la Copa Mundial en el año de 1986. En este evento se espera provocar una afluencia de turistas de países extranjeros, especialmente de los de origen Bolivariano. Además, el desarrollo del sistema de transportes así como el aumento de la facilidad mobiliaria serán asegurados en tal sazón resultando también un aumento de espectadores locales.

El parque de la ciudad, como se prevee en el presente proyecto, servirá para darles publicidad a ellos sobre la historia, cultura e industrias de Colombia, lo cual por sí atraerá a mucha gente a Bogotá tanto del interior como del exterior de la República.

Por lo tanto, esperamos resultados favorables a través de un desarrollo de industrias relativas al turismo.

El valor de la zona verde como patrimonio social, aumentará en el futuro, ya que los efectos desarrollados demostrarán sin duda alguna en un plazo largo, lo que la inversión en tal desarrollo será compensada con los frutos morales en los años venideros.

Como se aclaró más arriba, el presente proyecto promoverá el desarrollo en formas directa e indirecta produciendo efectos en plazos corto y largo. El Proyecto ayudará a desarrollar los cimientos físico y social de Colombia especialmente los de la ciudad capital de Bogotá. El Gobierno Colombiano tiene la capacidad para realizar el presente Proyecto cuyo plan se representa bien factible a la vista de requerimientos socio-económico así como técnico.

La realización del Proyecto es bien posible desde el punto de vista financiero, si se obtiene la cooperación de parte de distintos órganos así como del público en general, y a la vez, se establezca un órgano autónomo que se dedique al mantenimiento del Parque.

The following proposals should be examined for suitability to the project.

- **Three themes for development of the park**

- 1 Commemoration of Simon Bolivar
- 2 Comprehensive city park development
- 3 Conservation of the natural environment

Sufficient consideration should be given to each of the above during the long period of development and maintenance of the park. Emphasis should be changed according to the situation at each stage of development and at the same time it remains necessary to determine that these objectives are being attained.

- **10-year development plan**

The period of the implementation plan will be 10 years between 1981 and 1990 consisting of the initiating phase of 2 years followed by 2 periods, each of 4 years duration, during which the Presidential election will be held.

- **Integration of new development area and improvement of existing parks**

The existing park occupying about one-third of the comprehensive park area should be opened to the public and be integrated with the balance of park step by step according to the construction plan.

- **Strategic development by 1982**

For the purposes of publicizing the start of development of the park, gaining future cooperation from various organizations, and enhancing people's interest in the project, it is recommended to construct part of park's main facilities, i.e., the National Ceremonial Plaza and Urban Mall, in advance.

- **Park development organization**

An independent body must be formed, to plan, maintain, and supervise the park. It is necessary to make financial and legal decisions for creation of an organization which can carry out real activities immediately.

- **Urgent actions**

It is suggested to act without hesitation on the following:

- 1 Notices to publicize the meaning and contents of the project to the whole nation.
- 2 Organization of a planning committee consisting of representatives from concerned organizations, to conduct detailed inquiries into construction and management of the thematic facilities within the park.
- 3 Formulation of a legal and financial system for improvement of existing roads and construction of new roads within and beyond the park's dimensions through the coordination of the authorities of Bogota City.
- 4 Examination of the detailed design and construction process plan of the development area, Phase I.

Las siguientes recomendaciones deberán ser analizadas si seran apropiadas o no para el Proyecto.

- **Tres Temas para el Desarrollo del Parque**

1. Conmemoración de El Libertador Simón Bolívar.
2. Desarrollo Extenso del Parque de la Ciudad.
3. Conservación del Medio Ambiente Natural.

Deberán prestar una atención suficiente a cada uno de los temas citados durante un período largo no solo de desarrollo sino también del mantenimiento del parque en referencia. Énfasis en el cambio de acuerdo con la situación de cada etapa del desarrollo, asimismo es preciso también confirmar que dichos objetivos se están logrando.

- **Plan de Desarrollo por 10 Años**

El período del Plan de Implementación será de 10 años, de 1981 a 1990 que consiste de 2 años de fase de arranque seguido por dos períodos de 4 años cada uno, y durante estos últimos se llevará a cabo una elección presidencial

- **Integración del área del nuevo desarrollo y mejoramiento de los parques existentes**

Los parques existentes ocupan alrededor de una tercera parte del área extensa del nuevo Parque, y aquellos deberán ser abiertos al público e integrado con el balance de los parques de etapa a etapa de acuerdo con el plan de construcción.

- **Desarrollo estratégico para 1982**

Con el objeto de publicidad para el arranque del desarrollo del nuevo parque y ganar cooperación futura de distintas organizaciones, así como para atraer la atención de la gente en este proyecto, se recomienda construir parte de las facilidades principales del parque, en forma prioritaria, por ejemplo Plaza Nacional de Ceremonia y Auditorio Urbano.

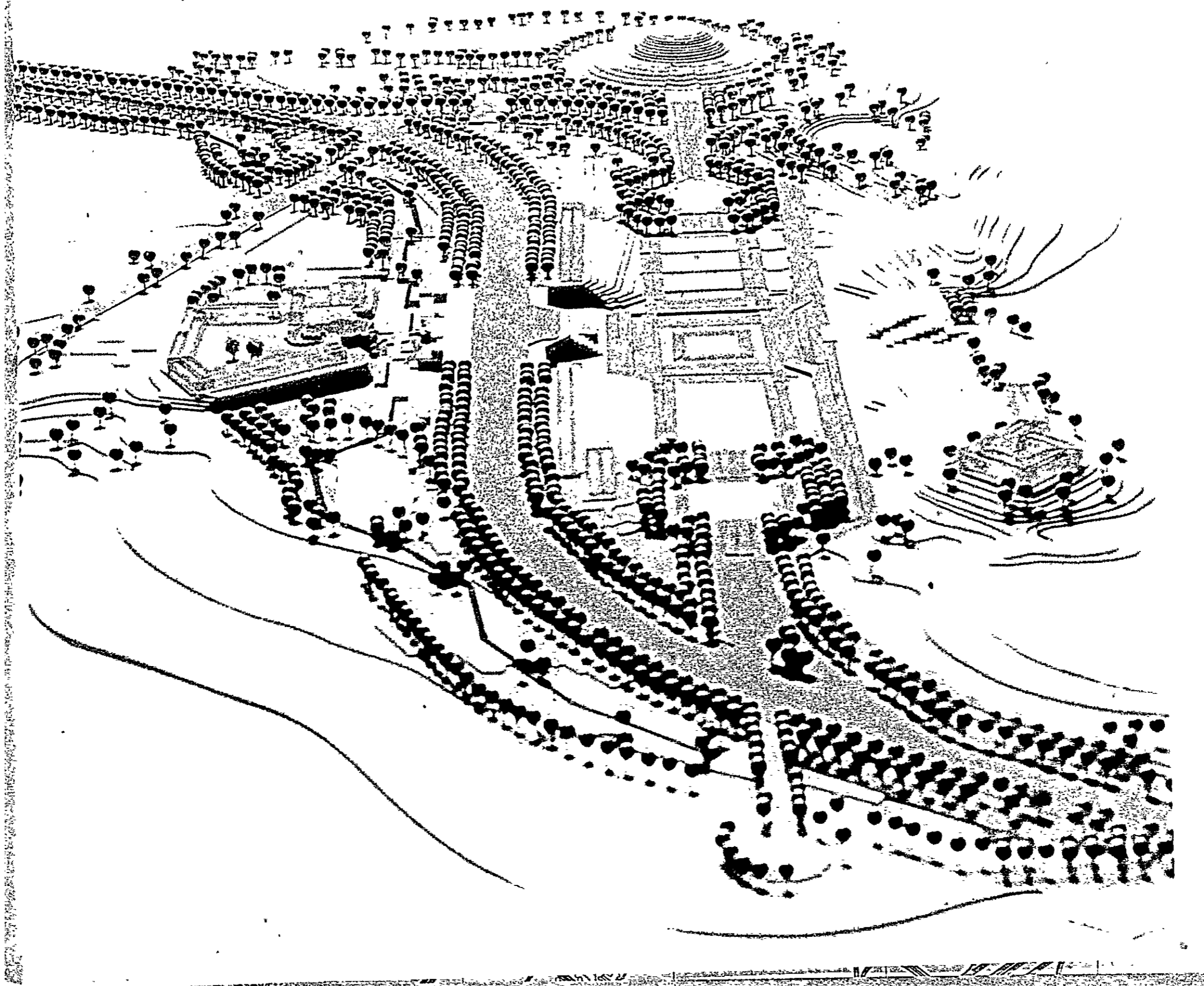
- **Organización para desarrollar el parque**

Un cuerpo independiente se deberá formar para encargarse del planeamiento, mantenimiento y supervisión del parque. Es necesario tomar una decisión financiera y legal para dicha creación de tal organización que llevará a cabo actividades reales inmediatamente.

- **Acciones urgentes**

Se recomienda que se efectúe inmediatamente los siguientes actos:

1. Avisos públicos por los que se dá a conocer el pueblo entero el sentido y contenido del proyecto.
2. Organización de un comité de planeamiento que consista de representantes de los órganos pertinentes para encargarse de resolver consultas detalladas a suscitarse acerca de la construcción y administración de las facilidades del tema del parque.
3. Formulación del sistema legal y financiero para el mejoramiento de caminos existentes y de construcción de los nuevos dentro del parque y en la área colindante del mismo a través de la coordinación de las autoridades de la ciudad de Bogotá.
4. Exámen del diseño detallado y el plan de proceso de construcción de la Esfera I del área de desarrollo.



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# Introduction

## Background of the Study

### Description of the Study to Date

The Government of the Republic of Colombia, which plans to develop a park of about 350 hectares in Bogota as one aspect of activities to commemorate the 200th anniversary of the birth and 150th anniversary of the death of El Libertador Simon Bolivar, has requested the Japanese Government to provide technical cooperation for preparation of the master plan study for the project.

The Japan International Cooperation Agency (hereinafter referred to as JICA), the official agency responsible for the implementation of technical cooperation programs of Japan, organized a JICA Study Team to implement the study under the direction of a Japanese Supervisory Committee.

The responsible agency in Colombia is the Ministry of Public Works and Transportation (MOPT), which organized a counterpart team to work on implementation of the study, under the direction of the Junta de Parque Simon Bolivar (Simon Bolivar Park Development Committee).

The study was performed by the JICA team's assuming responsibility for the area of about 110 hectares in the center of the park, and by the counterpart team's assuming responsibility for about 250 hectares surrounding the central area.

The study was planned so as to be implemented in three phases: Phase I, determination of the conditions for planning and basic concept; Phase II, preparation of the basic plan at the scale of 1/5,000, and Phase III, preparation of the master plan at the scale of 1/2,000

The two teams were able to function in an integral manner through maintaining close coordination as they proceeded with their shares of the work.

The Master Plan Study was prepared with the objective of providing a basis for subsequent work in bringing the project closer to completion so as to be opened and available for use with suitable timing relative to the rapidly approaching anniversary of Simon Bolivar's birth, in July, 1983.

### Scope of the JICA Study

The study implemented by the JICA team, in accordance with the scope of work as decided between the MOPT and JICA in June, 1980, was defined as follows.

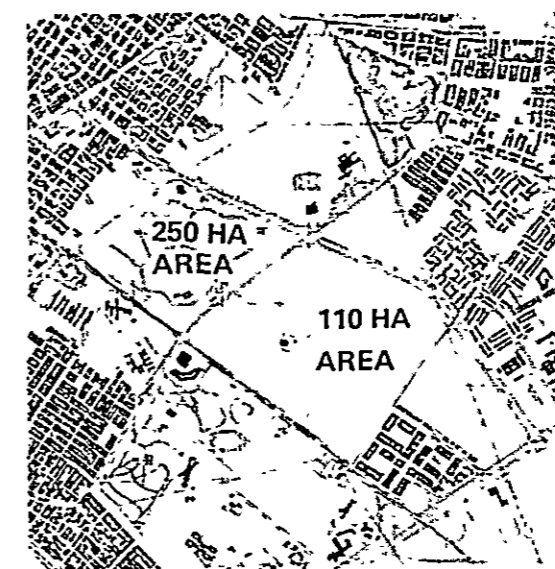
- Areal scope  
As indicated, the team was assigned to work on an area of about 110 hectares in a central part of land under the jurisdiction of the MOPT and to be developed by it as the Simon Bolivar Great Memorial Park. This central area is divided into Lote No. 1 (97.84 hectares) and Lote No. 2 (13.85 hectares) by Carrera 60.
- Contents of the study  
The study is to be concerned with the following, but not to neglect coordination on behalf of the overall project study.
  - 1 Site Analysis
    - a. Natural conditions
    - b. Social conditions (including regulations)
    - c. Land-use
    - d. Recreational facilities
    - e. Infrastructure
  2. Concepts for park planning
  3. Planning policy
    - a. Policy for size, character and contents of the park
    - b. Policy of recreational activities
    - c. Policy of park facilities, landscaping, etc.
  4. Master Plan—Phase I (1:5,000)—
    - a. Zoning plan
    - b. Circulation plan
    - c. Plan of landscaping and planting
    - d. Layout plans of main areas
    - e. Demand and supply analysis (recreation, sports, open space and others)
  5. Master Plan—Phase II (1:2,000-2,500)—
    - a. Cut and fill of land
    - b. Recreational facilities
    - c. Architecture
    - d. Circulation
    - e. Planting design and landscaping
    - f. Drainage, sewerage and water supply
    - g. Electricity
    - h. Cost estimation

### Supplementary Surveys by Colombian Counterparts

The two teams agreed that the following supplementary surveys would be carried out by the Colombian counterpart team in order to insure successful completion of the Master Plan Study.

- Traffic survey
- Soil mechanics and characteristics survey
- Topographic survey
- Recreational activity pattern survey

Fig. - 01 Location Map of the Study Area



# Study Procedure

## Study procedure

Phase I work, for determination of the planning conditions and basic concept, was done according to the following schedule by the two teams working in concert, from September 15, 1980 to December 18, 1980.

- Preparatory work (Sept. 15–Sept. 31)  
Formulation of work program, initial review of preceding plans, and preparation of the Inception Report.
- Field survey and data collection (Oct. 1–Oct. 20)  
Field surveys of the project area, collection of necessary data for park planning, discussion with counterparts and persons at authorities concerned, and existing city park observation.
- Confirmation of the concept for the park (Oct. 20–Nov. 10)  
Identification of the character and the function of the park, establishment of screening criteria for park activities and facilities, establishment of development strategies and conceptual planning framework of the park.
- Establishment of planning policy (Nov. 1–Nov. 30)  
Problem-finding and frame-making, land use and activity zoning policy, distribution policy of recreational activity and park facilities, and clarification of the planning scope of each study team.
- General Planning (Dec. 1–Dec. 18)  
Overall adjustment of the entire study, definition of the further study to be done by each study team, and preparation of the Progress Report.

Phase II, preparation of the basic plan, was carried out from Dec. 19, 1980 to March 31, 1981, according to the following schedule.

- Demand and supply analysis (Dec. 19–Jan. 15)  
Forecasting the number and character of visitors; analysis of capacity and optimum density.
- Physical master plan study (Jan. 15–Feb. 28)  
On the basis of the preceding study work, the following basic physical master plans were

prepared, at the scale of 1/5,000: Zoning Plan, Circulation Plan, Landscape Plan, and Main Facility Layout Plan. This work was reported in the form of the Draft Interim Report.

- Coordination work (March 1–March 31)  
By means of coordination of the work of the two teams, a rough cost estimate was prepared, the planning framework was determined, and the Interim Report was prepared.

Phase III work, concerned with the detailed plan, was carried out from May 13, 1981 to September 15, 1981, according to the following schedule.

- Detailed planning and design (May 13–June 30)  
Study was done at the scale of 1/2000, on the basis of the 1/500 master plan as confirmed in the Interim Report and incorporating the results of the discussions in Colombia. Special attention was given to detailed study of the Urban Mall and National Ceremonial Plaza which are parts of the park which have high priority for urgent implementation, and to study of construction, management and administrative aspects of the park. Moreover, the Draft Final Report and master plan drawings at the scale of 1/2000, encompassing the result of work completed thus far, were prepared.
- Final coordination work (July–August 4)  
Explanations and discussions on the Draft Report were carried out, and in addition to coordinating the work of the two study teams in order to prepare the final plan at the 1/2000 scale, there were discussion and agreements regarding component plans, development plan and details.
- Final report work (Aug. 5–Sept. 14)  
Revisions were made as required by the Final Coordination Work, and all study, drawings, reports and other information prepared up to this time were compiled to form the Master Plan Report. Moreover, a scale model (1/2000) was made, suggesting the form of the park when completed.

## Study output

In keeping with the progress made in the study, the following reports, drawings and visual presentation materials were submitted to the Government of Colombia.

	Date submitted
001 Inception Report	Oct. 1980
002 Progress Report	Dec. 1980
Draft Interim Report {for 110ha area}	Mar. 1981
003 Main Report	
004 Drawing Issues (scale 1/5000)	
005 Illustrative plan of Urban Mall	
Interim Report {for Whole Park Area}	Mar. 1981
006 Main Report	
007 Drawing Issues (scale 1/5000)	
008 Slide presentation program of Interim Recommendations for Master Plan	
Draft Final Report {for 110ha area}	July 1981
009 Main Report (Draft)	
010 Drawing Issues (scale 1/2000)	
011 Illustrative Master Plan of 1/2000	
Final Report	Sep. 1981
012 Main Report (English)	
013 Illustrative Master Plan of 1/2000	
014 Model of 1/2000 (Whole Park Area)	

Among the study output noted above, 002, 006-007 and 008 represent the collaborative effort of both teams based on the output from the JICA team's work.



# Organization of the Study

## JAPANESE SUPERVISORY COMMITTEE

Chairman	Dai SHIOJIMA	Executive Director Parks and Greens Div. City Bureau Ministry of Construction
Member	Yorikazu MARUTA	Associate Professor of Landscape Architecture College of Horticulture University of Chiba
Member	Hiroshi YOKOYAMA	Head Urban Planning Div. Building Research Institute Ministry of Construction
Member	Makoto IGARASHI	Deputy Director Parks and Greens Div. City Bureau Ministry of Construction
Member	Kohji KAMIYA	Professor of Architectural Engineer- ing College of Technology Nippon University

Liaison and secretariat responsibilities are handled by

Section chief	Yasushi HIROTANI	Social Development Cooperation Depart- ment, Japan International Coopera- tion Agency
Project officer	Masahiro KOBAYASHI	Social Development Cooperation Depart- ment, Japan International Coopera- tion Agency

## COORDINATION COMMITTEE

Chairman	Aldemar Mosquera Lara	Director of National Immovables Div. Ministry of Public Works and Transportation
Member	Julio José Fajardo	Advisor to the Minister of Public Works and Transportation

Member	Juan Manuel Salazar	Deputy Director of Planning Department Bogota Special District
Member	Arturo Robledo Ocampo	Team Leader of Colombian Counter- parts
Member	Representative of the Japan International Cooperation Agency (Mashaharu TORII)	Member of Japanese Supervisory Committee and/or Resident Representati- ve of the Japan International Cooperat- ion Agency
Member	Sohiko YAMADA	Team Leader of JICA Study Team

## COUNTERPART TEAM

Leader	Arturo Robledo Ocampo	Colombian National University
Member	Jaime Camacho Fajardo	Colombian National University
Member	Alberto Estrada	Colombian National University
Member	Pedro Mejía	Colombian National University
Member	Fulvio A. Sánchez	Colombian National University
Member	Irma Sánchez	Colombian National University
Member	Fernando Montenegro	Colombian National University
Member	Oswaldo Perez	Colombian National University
Member	Jairo Gonzalez	Colombian National University
Member	María Cristina de Luzardo	National Immovables Div. Ministry of Public Works and Transportation
Member	José Díaz Cortés	National Immovables Div. Ministry of Public Works and Transportation

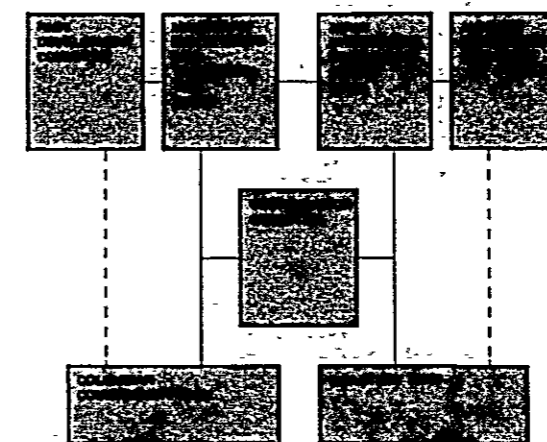
Member	Marcia Wanderley de Vargas	Planning Department Bogota Special District
Member	Jesús María Idrobo	Colombian National University
Member	Rodrigo Villamizar	Centro Regional de Población
Member	Julio César Vera	Centro Regional de Población

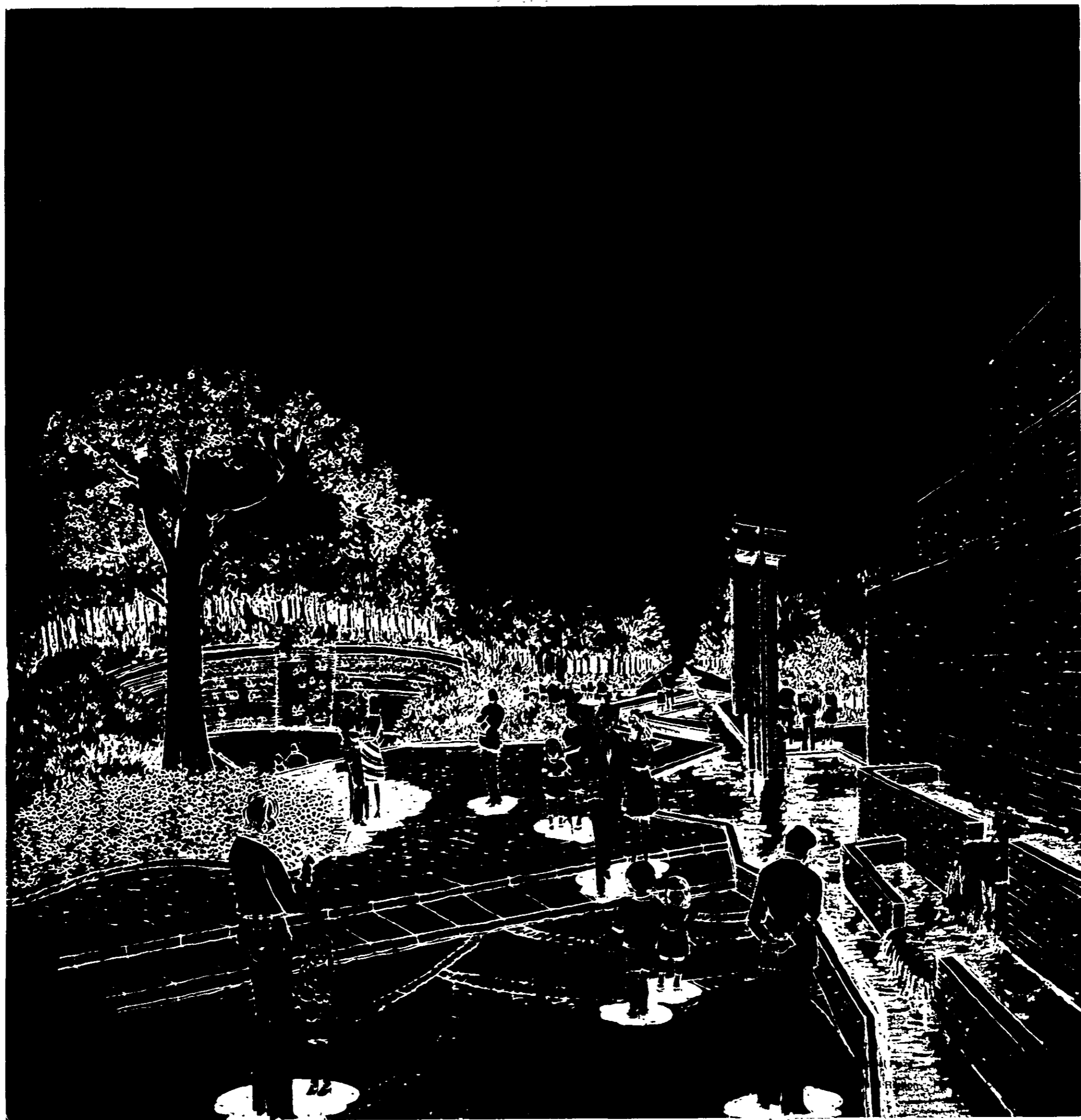
## JICA STUDY TEAM

The working team staffed by JCP Inc. and Pacific Consultants International consisted of the following.

Team Leader (Architect)	Sohiko YAMADA
Landscape Architect (Planting Advisor)	Kenzo OGATA
Landscape Architect (Technical Coordinator)	Hiroshi TANAKA
Landscape Architect	Kanao ITOH
Park Planner	Seiichi YUKUTOMI
Civil Engineer	Hiroshi KIZUE
Unitility Engineer	Sinri HISHIKURA
Architectural Planner	Takashi ONODERA
Socio-Economist	Shin KOKUBO

Fig. - 02 Team Organization Chart of This Study





# Bogota: The Capital of Colombia

## Socio-Economic Characteristics and Potentiality of Development of Colombia

The Colombian economy, after growing at an average annual rate of 4.4 percent in 1975–1977, expanded strongly by 8.9 percent in real terms in 1978, but was unable to maintain that growth rate in 1979 when there was accelerated inflation and increased unemployment. But in comparison with the other Latin American countries, Colombia has experienced relative political stability and a sustained period of economic growth. The sectional GDP for the years 1970–1978 is shown on Table-1.

The characteristics of Colombia's society and economy can be described as the inequality of the distribution of population, income and access to social services among the different income groups as well as among the different regional locations—urban or rural.

There is a general realization that major social and economic policy changes are needed to respond to the demands of the more disadvantaged segments of the population.

The National Council for Economic and Social Policy has recently issued a new development program (*Plan de Integración Nacional – PIN*) which commits the nation to a broad program of socio-economic development with emphasis on social reforms that would distribute the benefits equally to all segments of the population, especially on the social infrastructure sector.

The development program in the PIN which directly relates to the Simon Bolivar Park is described as the measure for the development of new urbanization; that is the advancement of the industrial and recreational parks projects, in Chapter X, Regional and Urban Development.

Therefore, this Simon Bolivar Park Project is in line with the overall development policy, strategy and program of this country, with one of the highest priorities justified by the Presidential Decrees Nos. 3207 of 26th December, 1979 and 248 of 8th February, 1980 together with the Law No. 31 of 1979.

Fig. – 03 Location of Bogota

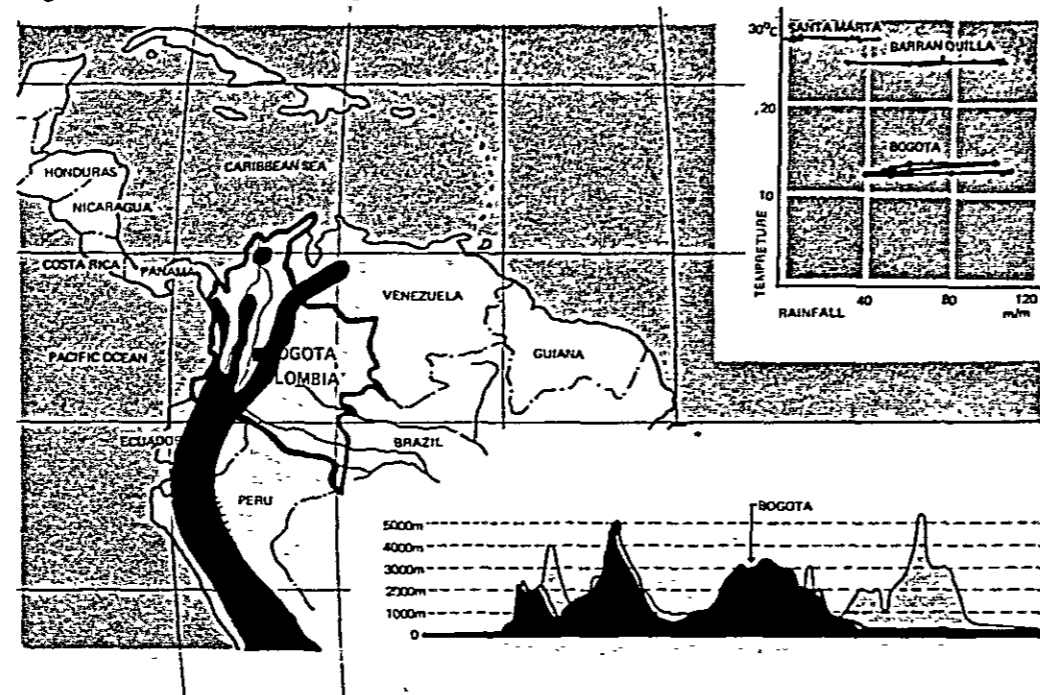
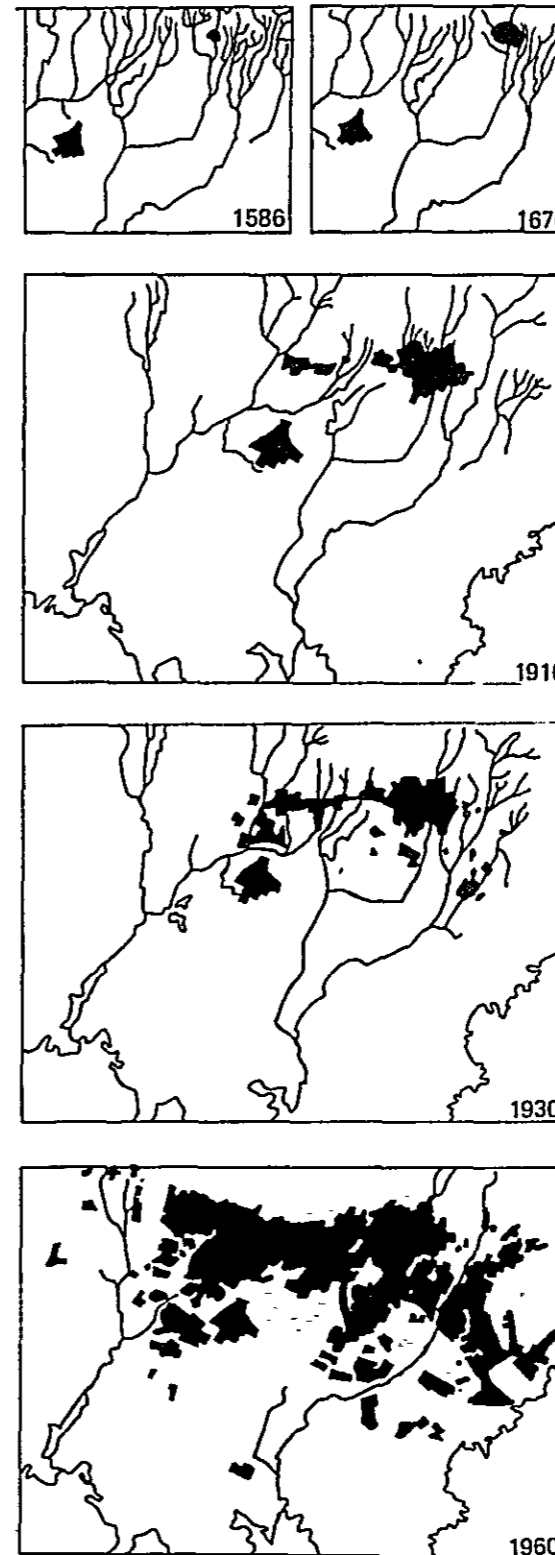


Fig. – 04 History of Urban Growth : Bogota



Source/IDDU

The basis of the development potentiality of this country lies in the promotion of development of natural resources such as coal, natural gas, crude oil and other mineral resources as the fundamentals of industrialization; government and private capital investment for the various branches of manufacturing and agro-industries; elevation of agricultural and industrial productivity together with the improvement of social and industrial infrastructure.

For this purpose, it can be said that it is indispensable that there shall be reform of social structures and the securing of the funds needed for industrialization, by which Colombia has a great potentiality for further development.

**Characteristics of Bogota D.E.**

Bogota is situated on a high plateau in one of the ranges of Andes with the average elevation of 2,700 meters above sea level; has a population of 4.3 million inhabitants in 1980 which is about 16.6 percent of all Colombia, and the average annual temperature of 14.5 degrees Centigrade with very slight changes throughout the year.

The area where urbanization of the city of Bogota is proceeding had once been a great lake and is now a very flat fertile land called Sabana with somewhat deteriorated soil foundation.

Bogota is also the capital of Cundinamarca Department (State), but regarding political administration it is a special district like Washington D.C. and Mexico City D.F., which comprises 18 Alcaldía Menors (wards) with about 30,886 hectares, which is naturally the center of politics, administration, and economy. The city also is a key node for domestic and international distribution of agricultural and industrial products.

Comparison of population, GDP, GDRP and per capital income of Colombia and the city of Bogota D.E. was made for the years 1938-1978 together with the age distribution of population in the city as per Table 2, which shows that the population of Bogota D.E. is about 16 percent of the whole country in 1978 with 3.973 million inhabitants showing a rapid increase of the share from the past decade ranging from 6 to 10 percent. The share of GRDP of Bogota D.E. in the GDP of this country has also increased considerably from 15.6 percent in 1960 to 21.3 percent in 1975 and in line with the increase and concentration of population in the capital, the GRDP share of Bogota D.E. is expected to continue to increase.

The sectoral GRDP of Bogota D.E. and GDP of Colombia was compared for the period of 1960 to 1978 as per Table 3, which shows a clear and distinct picture of urbanization of Bogota D.E. which offers the prospect of better employment opportunities and better accessibility to local services. Further urbanization of Bogota D.E. is expected to continue for some years to come.

Effects of this urbanization trend can be seen by comparing the per capita income of the country and the city; that of the city ranges from 1.6 to 1.8 times higher than the national average.

Based on the correlation coefficient of the past population and GDP & GRDP of Colombia and Bogota D.E. and the estimated growth rates of population described in the PIN, the projection of the populations of the country and the city shows that the population of Bogota D.E. will be 4.297 million in 1980 and 6.086 million in 1990, in which time the population of the city will be about 20 percent of the national total.

Fig. — 05 Pop. Distribution by Social Group : Bogota



Table — 01 Pop. Distribution by Alcaldía Menor

No.	Alcaldía	Area (ha.)	Population	Population Density	Estimated social
1	USAGUEN	5,833	121,428	18 20 61	23 95 PREDOMINA BAJO
2	CHAPPE RO	2,403	132,108	13 15 65 4	54 21 PREDOMINA MEDIO
3	SANTA FE	3,200	103,108	28 19 50 3	30 43 PREDOMINA BAJO
4	SAN CRISTOBAL	3,500	358,344	28 30 40 25	102 38 PREDOMINA BAJO
5	USME	22,200	42,296		1 87 PREDOMINA BAJO
6	TUNAJUELITO	1,850	264,977	29 31 36 5	143 26 PREDOMINA BAJO
7	BOSA	8,200	206,074		25 13 PREDOMINA BAJO
8	KENKEDY	3,280	415,225		126 60 PREDOMINA BAJO
9	FONTEBONA	2,800	324,835	25 25 40 10	116 07 PREDOMINA MEDIO
10	ENGATIVA	3,300	417,003	25 50 25	126 36 PREDOMINA BAJO
11	SUBA	9,700	205,286	20 16 61 3	21 17 PREDOMINA BAJO
11*	BARRIOS UNIDOS	1,100	301,823	25 20 50 5	274 20 PREDOMINA MEDIO-BAJO
12	TEUSACHILLO	1,250	154,965	20 11 68 8	114 79 PREDOMINA MEDIO
13	LOS MARTINES	850	174,883	48 48 29	289 08 PREDOMINA MEDIO-BAJO
14	ANTONIO NARIÑO	475	144,515	29 22 48 3	304 24 PREDOMINA MEDIO BAJO
15	PUENTE ARANDA	1,825	298,506		164 31 PREDOMINA MEDIO
17	LA CANDELARIA	170	58,687		351 10 PREDOMINA MEDIO-BAJO
18	RAFAEL URIBE U.	1,100	359,165	32 23 41 4	326 51 PREDOMINA BAJO

Table — 02 Sectoral GDP in Colombia ( 1970 - 1978 )

SECTOR	1970	1971	1972	1973	1974	1975	1976	1977	1978
Agriculture	30,000	32,819	36,791	37,346	39,872	42,326	43,106	44,106	48,200
Fishing and Hunting	792	867	1,578	1,320	1,618	1,885	1,208	1,245	1,273
Forestry	810	940	984	837	718	701	740	825	832
Mining	2,346	2,346	2,376	2,507	2,321	2,202	2,142	2,078	2,170
Manufacturing Industry	34,210	36,276	39,698	31,251	32,966	33,214	35,587	31,046	40,286
Construction	6,506	8,987	7,232	7,864	8,190	7,825	6,722	7,108	7,349
Commerce	22,382	23,802	25,280	27,687	28,952	29,224	31,183	22,845	26,164
Transport	3,806	8,046	8,824	9,262	10,262	10,826	11,722	12,081	13,854
Communication	1,184	1,228	1,400	1,611	1,900	2,211	2,610	3,027	3,408
Utilities	1,870	1,926	2,244	2,482	2,644	2,785	2,986	3,120	3,624
Financing	4,442	5,191	5,789	6,221	7,186	8,185	9,813	9,890	11,464
Household	7,236	7,818	8,210	8,721	9,327	10,016	10,861	11,207	11,876
Services	8,523	10,181	10,461	11,712	12,427	13,142	14,188	15,208	16,246
Government Services	8,202	8,818	9,757	10,529	10,775	11,188	12,103	11,786	12,827
TOTAL GDP	130,261	137,888	148,829	158,124	168,786	178,275	182,296	182,197	200,226
Growth (%)	5.6	7.6	7.1	6.0	2.6	4.8	4.9	0.0	

Table — 03 Population, GDP and Per Capita Comparison

AREA	ITEM	UNIT	1938	1951	1956	1970	1975	1976	1978	
Colombia	Population	1,000	8,702	11,848		17,495		22,500	24,927	
	Pop growth rate	%		2.7		3.2		2.7		
	GDP	Million pesos			77,714		87,868	130,261	150,194	178,228,226
	GDP growth rate	%			5.08		6.7	9.9	4.1	6.0
Bogota	Per capita income	pesos			8,968		6,468		7,252	
	Area	ha.	2,676	8,094	14,816		30,423		30,886	
	Population	1,000	230.7	980.0	1,132.0		1,320.0		2,877.0	
	Pop growth rate	%		9.6		7.3		6.9		
Colombia	Pop density	people/ha.	128	140	118		96		113	
	Pop share to country	%	3.8	8.7		9.9		12.7		
	GDP	Million pesos			11,808		17,238	25,820	37,811	
	GDP growth rate	%			15.4		11.8	10.9	21.3	
Bogota	GDP share to country	%			15.4		11.8	10.9	21.3	
	Per capita income	pesos			9,220		8,581	10,822	11,778	
	Per capita income	duplo of Colombia			1.81		1.76	1.67		
	SEX AND AGE DISTRIBUTION									
Bogota	Male	%	46.2		48.8		48.6			
	Female	%	53.8		51.2		51.4			
	0-14	%	34.0		32.1		31.4			
	15-24	%	24.1		21.6		21.7			
	25-34	%	16.2		15.7		16.0			
	35-44	%	11.4		9.8		9.6			
	45-64	%	6.9		6.1		6.8			
TOTAL	0-14	%	34.0		32.1		31.4			
	15-24	%	24.1		21.6		21.7			
	25-34	%	16.2		15.7		16.0			
	35-44	%	11.4		9.8		9.6			

Table — 04 Sectoral GDP and GRDP Share Comparison

Industrial Sector	Share (percentage based on constant price of 1970)			
	1960	1970	1975	1978
Agriculture, Forestry & Mining	1.9	1.9	2.2	2.1
Manufacturing Industry	24.1	22.8	18.6	19.8
Construction	5.8	5.5	5.8	7.4
Commerce	16.1	19.1	17.2	21.5
Transport and Communication	6.8	6.9	6.8	6.5
Utilities	1.4	1.4	1.4	1.6
Financing	5.8	6.1	5.4	6.3
Household	12.9	12.7	8.4	9.7
Services	10.8	10.2	7.3	16.3
Government Services	11.3	12.9	6.4	6.4
TOTAL GDP	100.0	100.0	100.0	100.0

# Bogota: 2000 Development Plan

## Greater Bogota Development Plan

With the assistance of the U.N.D.P., the government of Colombia implemented, in 1972, the Bogota Urban Development Research Project (horizon; 1990) on a government-municipality joint basis, with the I.B.R.D. as the implementing agency. The research was made on the Greater Bogota Urban Area, with the target population of 8.9 million.

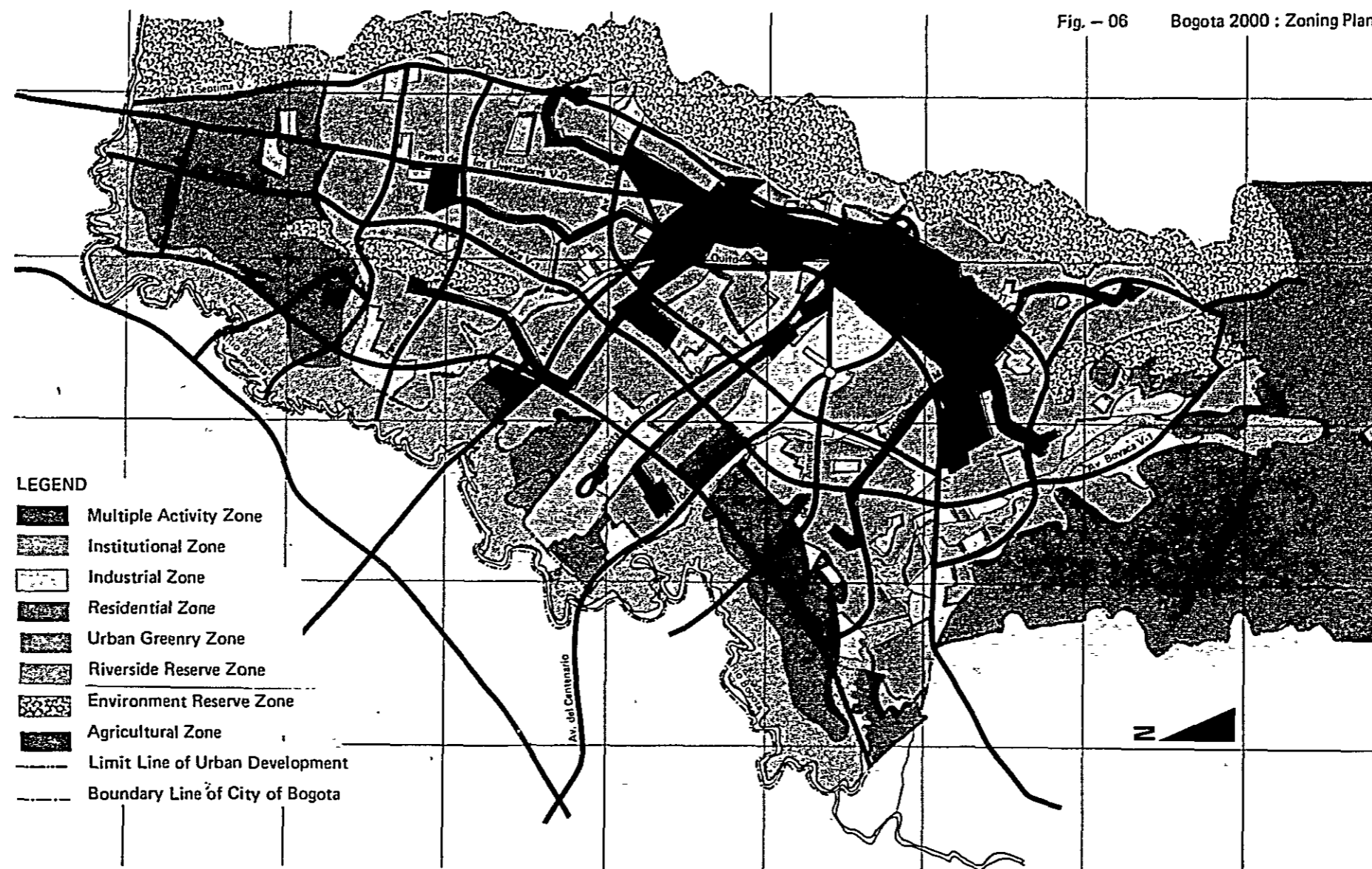
Due to various circumstances, this plan could not be finalized in the city council. However, its concept and idea were mobilized in the Zoning Plan (Acuerdo de Zonificación), which was adopted by the City of Bogota in 1975.

## The Present Situation of Urban Development.

In recent years, the development of the social infrastructure facilities in Bogotá has shown remarkable progress in proportion to the economical development of this country. However, there are many problems and issues seen in the process and quality of the development of these infrastructural facilities, especially in the outskirts of the city where the phenomenon of sprawl is seen due to considerable migration from the rural areas. The most characteristic of the infrastructural problems and issues are seen in the areas along the Río Bogotá and southern foot of a mountain, where the high density population is

concentrated and it is presumed that the proper development of the infrastructural facilities in these areas would affect the political and economic policies of the municipality in the future.

The present state of traffic conditions in the city is said to be one of the most critical issues for the urban development of Bogotá. Public transportation depends heavily on the various types of buses and partially on taxi, and the bus transport services are mainly operated either by every small unstable enterprises or by individuals and therefore, the service routes are biased and it is hard to maintain the quality of normal public transportation services. Although a railway is



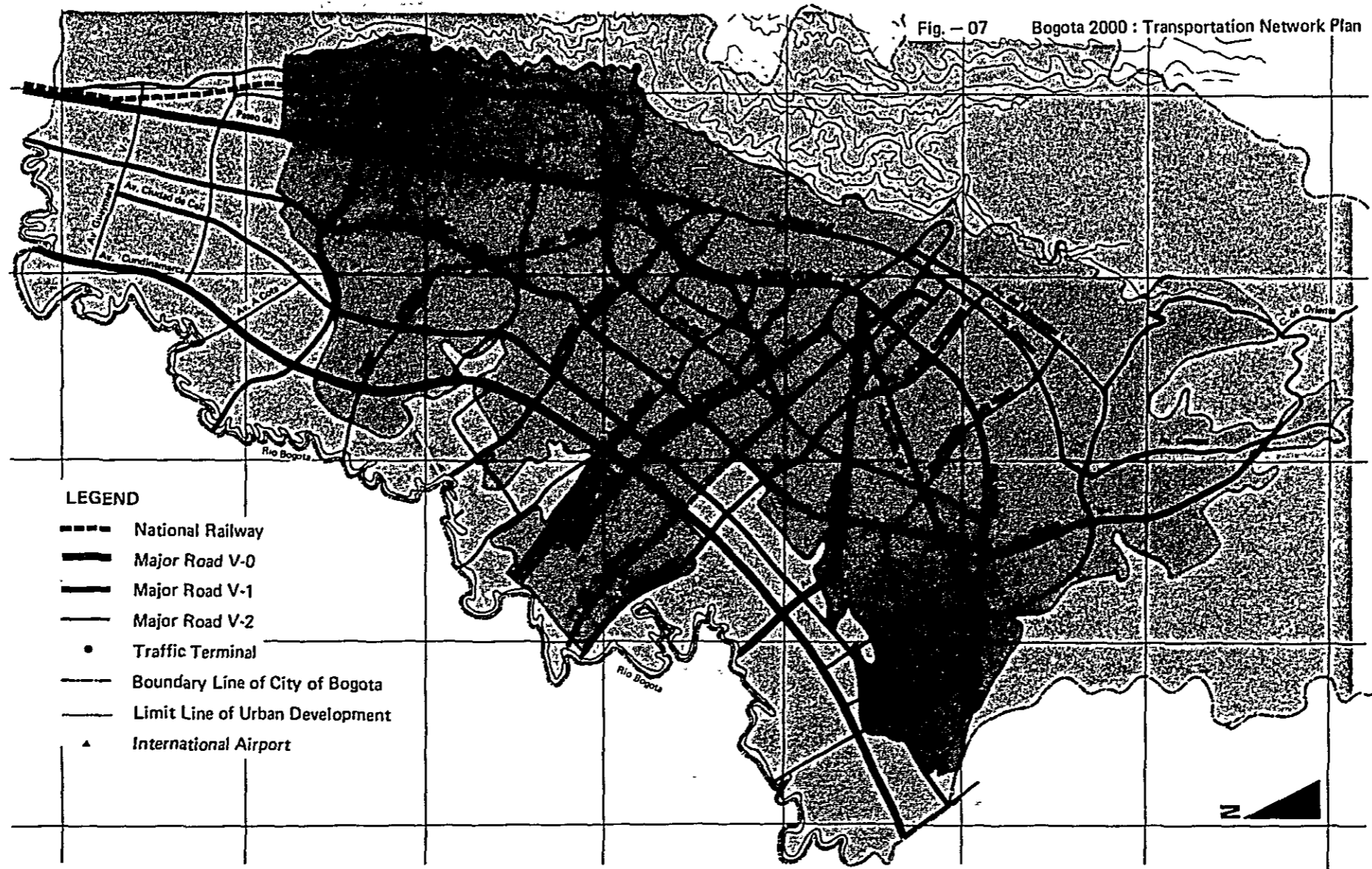


Fig. - 07 Bogotá 2000 : Transportation Network Plan

operated in the city, it is mainly for the transportation of freight and for the carriage of passengers on inter-city routes, and therefore it does not function as a daily public transportation mode for intracity service.

Under the circumstances mentioned above, in Bogotá there is no means of public transportation other than the bus, and at the peak hours, very heavy traffic congestion is caused at many of the arterial roads as well as at the service roads. This leads to very serious problems in the social environment of the city, such as the noises of the traffic, increase of traffic accidents, and poisonous gas emission.

**The Basic Policy of Urban Development.**

The Bogotá Municipality set forth the basic policy for its urbanization in 1975 with the target year of 1985. The existing development programs, implementation and measures taking place at present are said to be based on this urbanization policy. The basic concept of this policy is to restrict the urbanization to the north/south direction, but to promote the expansion of Bogotá's urbanization in a north-western direction with the suitable cores to be made in the semi-circular pattern, which are the characteristics of this policy.

The road network plan described in this basic

policy is to establish the arterial roads comprising 4 circular and 6 radial roads in this city and to construct the traffic terminal which shall connect the through traffic to residential areas and the center of the city, and shall be the junction for inter-city traffic, commuter traffic and the terminal for cargo transportation. The development plans for these arterial roads and the terminal are based on the existing and projected land use patterns. In addition to development of the road network, this basic policy formulates the various infrastructure facilities development plans, such as the water supply plan, sewage plan and so on, in accordance with Acuerdos which have various regulatory provisions for the various types of constructions.

# Bogota: Parks and Green System

## Existing Parks and Green Area

Bogota is endowed with a rich natural environment, by being between the Forest Reserve in the mountain area to the east and the *Recreational Green along Rio Bogota* to the west and by counting these areas as park land, the city's area of park land per capita, 23m<sup>2</sup>/person, is much higher than that of other major cities and capitals of the world. with regard to park area within the administrative boundaries for city planning purposes, however, despite the development of 600 hectares in 1970 as park land, because of rapid growth of the population the area of park land measured by this standard came to be 5.7m<sup>2</sup>/person in 1974 and 4.99m<sup>2</sup> in 1979.

## Development Target and Policy

The intention is that the Distrito Especial de Bogota should have by 1985 the area of 3,630 hectares of park land, including the Simon Bolivar Great Memorial Park, or 6.01m<sup>2</sup>/person (for 6,040,000 persons). Further, by development of a recreational zone along Rio Bogota, 24.41 m<sup>2</sup>/person of green area can be obtained.

The park and green system is to be planned so as to comprise a grid network based on the radial and concentric street pattern of the city.

## Variety of Parks and Green Space

The following types of parks and green space presently exist in Bogota; they differ in terms of type of park, administrative organization; and development mode.

### • National Park

National Parks are managed by the Section of Parks and Monuments of the Conservation Division, Dirección de Inmuebles Nacionales of the Ministry of Public Works and Transportation. In Bogota MOPT has two Parks: Nacional and Independence. Nacional Park (about 310 ha) was created by Law 50/1927 and was opened on August 7 1934 at the end of the Government of President Enrique Olaya Herrera whose name was given to the park after his death in 1937. Simon Bolivar Great Memorial Park was created by Law 31/1979 to commemorate the second centennial of the Libertador's birth.

### • City Park

The Parks and Avenues Division of Secretaria de Obras Públicas is in charge of maintenance of small neighborhood parks and the beautification of roads and avenues. Institute Sports and Recreation is in charge of recreative and sports type big parks which comprise El Salitre (amusement); Tunal, Timiza, El Lago, Gaitán Cortés, La Florida, Distrital del Sur, Kennedy and Montes. Small parks are created by means of land given up by developers according to regulations regarding size, ratios, density and location. Any new land development project must include the building and furnishing of small parks. Big parks are created by a zoning resolution of the City Council or ad hoc resolution. Land may be obtained as grants from land developers, by direct acquisition or by expropriation. The Planning Department of the Parks and Avenues Division establishes regulations and controls the furnishing of parks according to size, location and function. The present acuerdo has a cession (cesión) for making city parks. There are various types of cesión for site development, road, utilities construction. Cesión means a part of the development area of a part of privately-owned land is transferred for public use.

Fig. - 08 Parks and Green Space : Bogota

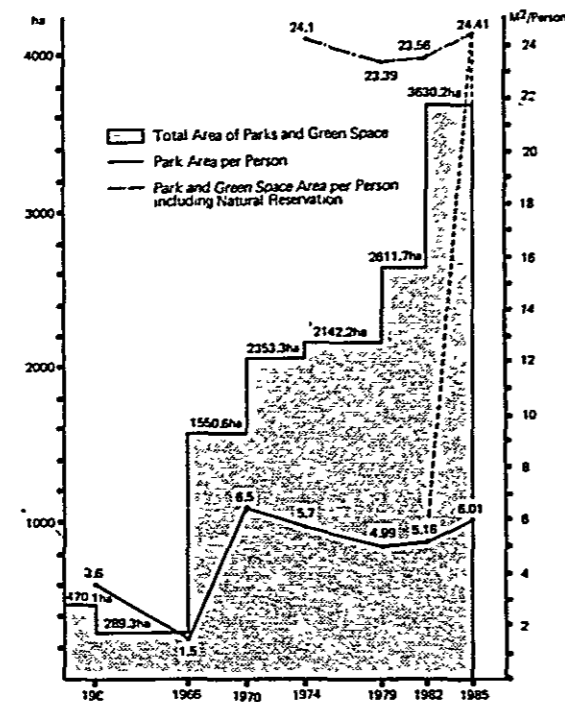
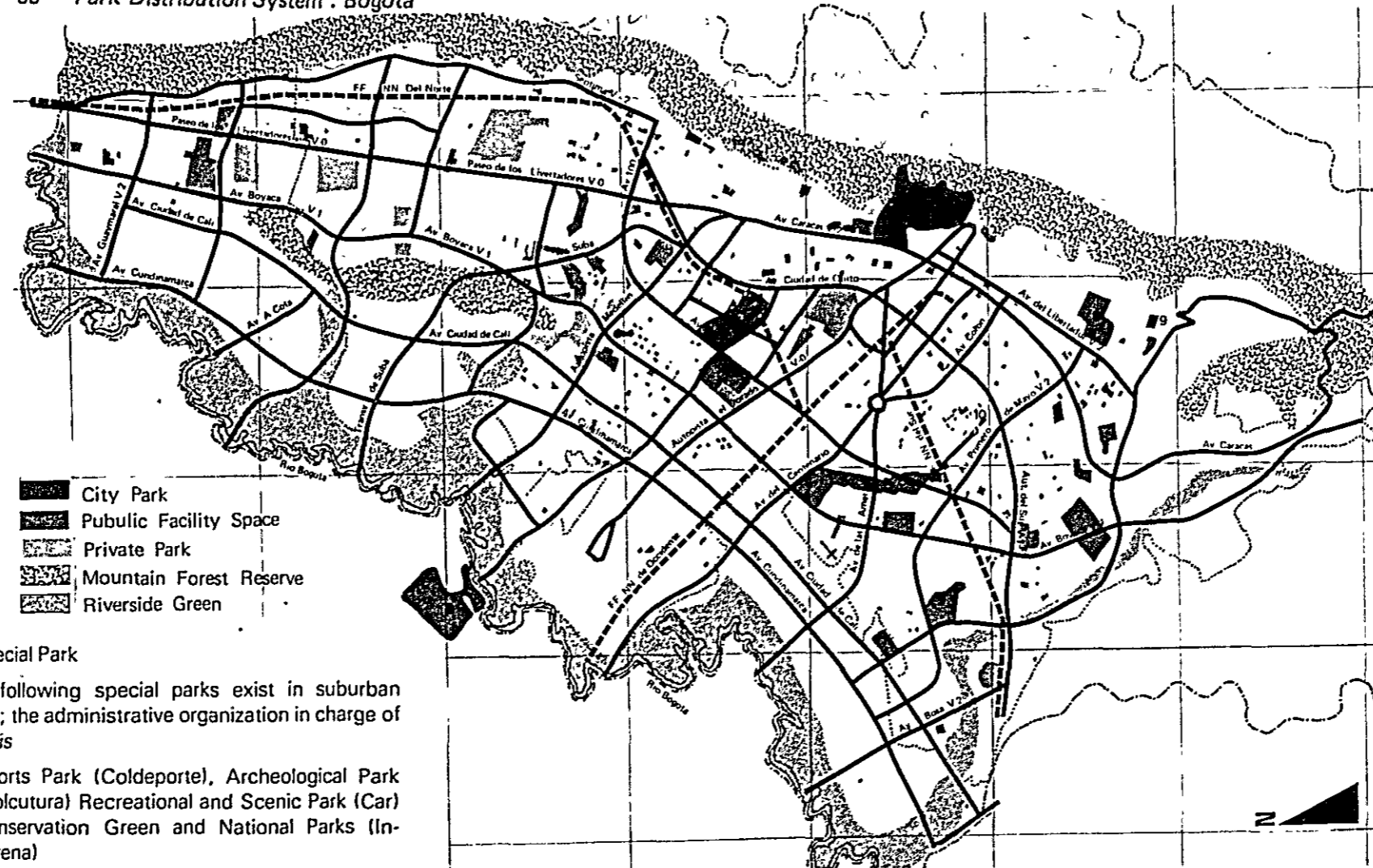


Table - 05 Major City Park in Bogota

Major City Park List						Mechanical playing equipment	Lake	Athletic track	Basketball	Cycling	Football	Mini-football	Mini-golf, golf	Hockey	Mini-basket	Motor-cycle	Rollerskate	Softball	Tejo	Tennis	Volleyball
Parks	Location	Ownership	Administration	Site Area																	
Salitre	Cr. 68-63	Special District	I D.R D	27.7ha	1	1	1	16	-	5	17	2	1	3	-	2	1	2	3	3	
Tunal	Cr. 16-52S	-	-	87.0	1	-	1	17	1	13	17	1	-	-	1	1	1	1	3	-	
Nacional	Cr. 5-38	MOPT	-	16.8	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
El Lago	Cr. 39-63	Special District	-	25.0	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Timiza	Cr. 62-61S	-	-	25.0	1	1	1	3	-	4	5	-	-	-	-	-	-	-	-	-	
La Florida	Engavita	-	-	278.9	-	1	1	38	-	10	-	1	-	-	-	-	-	-	-	3	-
Kennedy	Cr. 86-41S	-	-	17.0	-	-	-	8	-	4	-	-	-	-	-	-	-	-	-	-	
San Cristobal O Distorital Del Sur	Cr. 3E-12	-	-	11.8	-	-	-	4	-	3	2	-	-	-	-	-	-	-	-	-	
Gaitan Cortes O Las Columnas	Cr. 4E-31S	-	-	50.8	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	
Ciudad Montes	Cr. 41-10S	-	-	26.3	-	-	-	4	-	1	-	-	-	-	-	-	-	-	-	-	

Source: I D.R.D. (Distrital Institute for the Recreation and Sports)

Fig. - 09 Park Distribution System : Bogota



• Special Park

The following special parks exist in suburban areas; the administrative organization in charge of each is

- Sports Park (Coldeporte), Archeological Park (Colcutura) Recreational and Scenic Park (Car)
- Conservation Green and National Parks (Inderen)

• Private Clubs

- Club de los Lagartos (Lake, golf course, club house, sports facilities)
- Country Club (Golf course, Club house)

Condition of existing city parks

Salient characteristics determined from the field investigation, photographic review and statistical survey of some of the typical parks in the city are described as follows.

- Location. Most of the parks in this city are located at the foot of the north/south mountains at the eastern part of the city, and because of the location of the parks near to residences of people of the middle and low income levels they are mostly utilized by the people living in the neighborhood of each park, within the radius of about 2 km.

- Physical character: Most of the parks are formed in open flat land covered with lawn or a bare ground with exception of El Lago which has fairly good plantings and a scenic lake. There are not so many park facilities installed at most of the parks other than the football grounds, basketball backboards, and courts and some tennis courts, exception at El Salitre, Nacional and Tunal where mechanical amusement facilities for children are installed and are operated on weekends and holidays.

Activities: Activities in most of the parks are confined to sports, and open-air education for the primary school students escorted by the teachers with exception of the weekends when children and families enjoy mechanical amusements in such parks where these facilities exist.

- Administration: Apart from the national parks there are 11 parks which are under supervision of Bogotá D.E. under direct management of IDR and each park has one administrator and several men for maintenance and security depending on the size and function of the park.

Position of the Simon Bolivar Great Memorial Park in the Bogota Park System

The Simon Bolivar Great Memorial Park, which is located in what will be the center of Bogota in the future, in addition to being an extremely important nexus linking the park system in both north-south and east-west directions, in terms of its own functions will be the first comprehensive city park in Bogota, and thereby it will complement and complete the city's total park system including the neighborhood and city parks already developed and in use.



## Bogota: Recreational Activities

### Recreational Activities in Bogota.

The result of the survey and diagnosis shows that the recreational activity patterns in the city of Bogota D.E. can be characterized as showing two patterns. The one is that of the high and upper middle classes whose activities show great variety. They use fairly sophisticated recreational facilities owned by themselves or located either in the northern part of the city or in the countryside which is easily accessible by their own cars. The kind of recreation includes swimming, tennis, golf, horse riding, picnic, excursion to the country house, concert, social gathering, etc., utilizing their private club facilities and other rather expensive public facilities. The other pattern is that of the lower-middle and low income classes who depend heavily on the public facilities located in the vicinity of their residences or on the commercial facilities like movie theatres. The open-air recreational activities for these classes are rather confined to sports such as basketball, football, and some gymnastics. Many of members of this group aim at obtaining skills needed to become professionals or just staying healthy at minimum cost.

A survey of the recreational patterns was done by a team of the Los Andes University with the sponsorship of C.A.R. in 1972 and some of the results of this survey are shown in the tables shown at the right; they are concerned with park utilization, factors to be improved at existing parks, and advantage of parks. The EZOB study done in 1972 states that the strong emphasis should be placed on the sporting facilities, general park service and the state and presentation of the park.

More recent research on recreational activities and their patterns has been conducted by a team from the National University of Colombia together with the Colombian counterpart team toward the end of 1980 and at the beginning of 1981 in order to review and revise the study of EZOB and to reflect the result of the research the physical planning of the Master Plan. Hereunder is noted a summary of this research.

Table — 06 Park Utilization of Positive Factors in Percentage

Positive Factors	Male	District Parks Female	Total DEI	Total CAL	Grand Total
Sporting Facilities	56.1	50.9	54.9	37.0	48.7
Recreation and Picnic in General	2.4	-	1.6	1.6	1.6
General park services	0.4	-	0.6	6.8	2.0
State and presentation of park	10.6	18.2	12.9	33.7	19.8
Subjective appreciation	8.2	3.6	6.8	7.7	7.1
Location and locality	1.6	-	1.1	5.0	2.4
Infant recreation	3.0	14.5	10.7	-	7.1
Total factors	9.4	10.9	9.9	7.2	9.0
No reply	2.4	0.9	1.9	1.1	1.6
Total	100.0	100.0	100.0	100.0	100.0

Source: EZOB 1972

Table — 07 Advantageous Factors Of Park in Percentage

Factors to be Improved	Male	District Parks Female	Total	Total C.A.R.	Grand Total
None	3.1	-	2.2	2.2	2.2
Sporting facilities	25.5	17.8	23.0	13.2	19.8
General park services	45.9	51.8	47.7	36.3	43.6
State and presentation of park	9.8	21.8	13.4	13.2	13.3
Subjective appreciation	2.4	0.9	1.9	-	1.3
Location and locality	9.8	2.7	7.7	2.8	6.0
Infant recreation	3.1	4.5	3.6	18.8	8.8
No reply	0.4	0.9	0.8	1.1	0.7
Not known	-	-	-	13.2	4.4
Total	100.0	100.0	100.0	100.0	100.0

Source: EZOB 1972

Table — 08 Factors to be Improved at Existing Park by Percentage

Advantageous factors	District	C.A.R.	Total
1 Nothing	2.7	2.2	2.6
2 Sporting facilities	11.8	8.3	10.6
3 Recreation and picnic in general	19.2	29.9	22.7
4 General park service	2.5	3.9	2.9
5 State and presentation of park	35.1	11.7	27.2
6 Subjective appreciation	12.3	10.0	12.0
7 Location and locality	7.4	6.7	7.1
8 Infant recreation	4.4	12.7	7.2
9 No reply	4.1	8.8	5.7
10 Not known	-	6.1	2.0
Total	100.0	100.0	100.0

Source: EZOB 1972

### Survey on recreation in Bogotá (May, 1981)

A survey has been conducted on the recreation in parks and districts of stratum 1 through 6 in Bogotá, by using a very simple methodology, based exclusively on direct observation and short interviews, and on the utilization of a combined team of six architects and six sociologists.

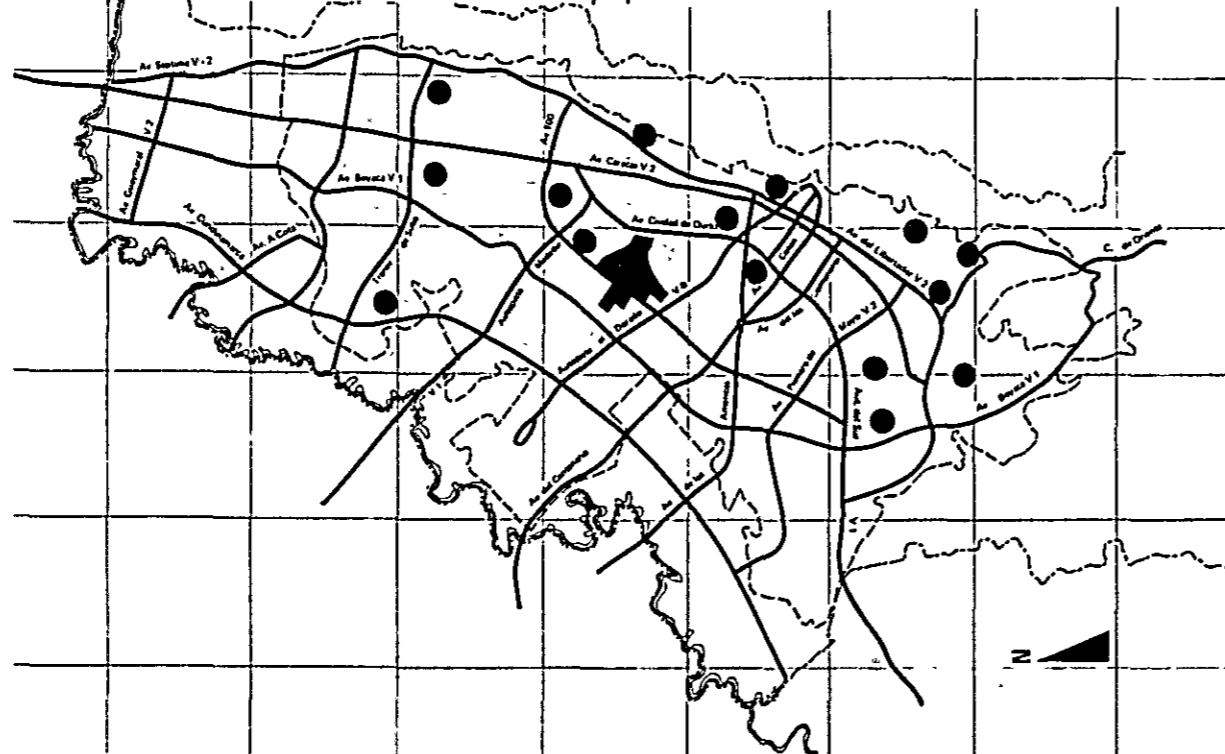
The survey has yielded the following results. a) The recreation in the parks turns on three activities: mechanical games, sports and strolls. These three activities are found singly in some parks such as Tunal, Lago, Unidad Deportiva (Sports Unit) del Salitre, Botanical Garden; and intermixed in Timiza, Nacional and El Salitre. In some parks the densities of activities vary so that on Saturday and Sunday large areas are subutilized and others are congested. Large areas of green are subutilized and those of mechanical games are congested not only because of the nature of demand but because of the specific and limited time of these games. (b) The survey in the districts has shown that there exists a large portion of the population that has no free time, and that continues working in their homes or outside on Saturdays and Sundays. There exists a population that has a certain amount of free time but utilizes it exclusively inside their homes in three activities: watching television, resting doing nothing and receiving visitors. Finally, part of the population goes out to enjoy themselves, but again primarily for a very few activities: going to parks, going to the cinema strolling by the district or driving outside Bogotá.

This situation can not be more regrettable. Most of population in very low income strata either has no time to enjoy themselves, or uses what little time they have at activities which are not very creative or merely amusing. This results in great boredom, in routine repetition of the same activities on Saturdays and Sundays.

In addition it might be said that the very low income strata are those that have no idle time and that at progressively higher levels of economic well-being there is a shift to indoor and then to outdoor recreation. But that in general the people do not know how to enjoy themselves.

The information on spectacles or special events shows that only about 18,000 persons attend cultural spectacles, in a good week-end, 10,000 in local centers and merely 8,000 in the museums and theaters the city has. Attendance presence at the cinema and sports spectacles totals about 500,000 persons when all the centers are in operation and on good week-end. About 380,000 persons go out of Bogotá, also on such a week-end.

Fig. - 10 Location Map of Recreational Survey Spots



- |                                 |                          |
|---------------------------------|--------------------------|
| <b>BARRIOS ESTRATO 1</b>        | <b>BARRIS ESTRATO 3</b>  |
| 1 Barrancas                     | 15 Barrios               |
| 2 San Christobal Alto           | 16 San Fernando          |
| 3 El Codito                     | 17 Paris                 |
| 4 Lijaca                        | 18 Quiroga               |
| 5 San Blas                      | 19 Santa Fe              |
| 6 Camino Vieja de San Cristobal |                          |
| 7 San Pabio                     | <b>BARRIOS ESTRATO 4</b> |
|                                 | 20 Los Nieves            |
| <b>BARRIOS ESTRATO 2</b>        | 21 La Macarena           |
| 8 Rionegro                      | 22 Los Alcazares         |
| 9 C. Jardín Nte                 | 23 Los Cedros            |
| 10 Tunjuelito                   |                          |
| 11 El Cormen                    | <b>BARRIOS ESTRATO 5</b> |
| 12 Bello Horizonte              | 24 Granada               |
| 13 San Isidro                   | 25 La Soledad            |
| 14 Santa Barbara                |                          |

**Survey Spot Map**

**The new concept on recreation**

About 380,000 persons go out of Bogota, also on such a week-end.

*Recreation should not be only a way to spend the time. It must be an activity that somehow contributes to the development of knowledge, the spirit and the body.*

**The Simón Bolívar Park**

*Taking into account the results of the survey and the new definition of recreation, Simón Bolívar Park should be converted to be a great fair of culture and the technology. It shall be conceived of as small areas wherein activities related to music, theatre, dance, gymnastics, history, sciences and technology can be carried out. Also, in each one of these areas, different groups, concerned with various activities such as art, music, drama and many more may have the facilities where spectacles for the public are presented every week, and may also have the spaces near these facilities where the people, in small groups, have the possibility to exercise, discover and develop their own skills. It must be a fair, i.e., varied, gay and in permanent change. Every Sunday there should be a change of program.*

**The inhibitory factors**

*In addition to the lack of idle time, five inhibitory factors affecting attendance at parks have been discovered. They must be eliminated in order to make it possible to fully utilize the park. These are: (a) an economic factor; (b) the difficulty of getting to the park, meaning a transportation problem; (c) the fact that Sunday is devoted to the family and that because families are composed of persons of different ages it is difficult to carrying out special activities for the different groups; (d) the insecurity upon leaving the house; (e) lack of information on availability of activities in the parks.*

*It is proposed: (a) to establish the policy that none of the spectacles in the park are to require special payment (b) to establish a free-of-charge public transport system, using railways and 10% of the automotive fleet (60% for Sunday) that must serve low-resources districts and pass through ten central points of the city; (c) to establish a surveillance system in the districts through the Communal Action Board; (d) to establish a large communal area in the park including a nursery, a center for pre-school children and recreation groups for the 5-to-12 years old school-age population. Thus, young and old people of the family may have the possibility of hearing, seeing and doing something for themselves during Sunday, at least. This becomes necessary when it is noted that it is precisely the woman, in charge of her house and her family, who is the person who now enjoys the city the least.*

*The park must get away from the scheme of a flat park. It must be a park with changes of the ground, with hills, woods, channels and small lakes that serve as means of division for creating small spaces on which a non-formal control of movement of the visitors can be exercised.*

*The industry that has its stands in the area of the technique must pay a large sum, because it concerns an advertisement, and that money must be used to create a capitalization fund until reaching 100,000,000 pesos, that assures the maintenance of the park. The programming must be in the hands of Procultura and the physical upkeep in the hands of the Public Works Ministry.*

*In order to break the scheme of destruction of the public assets it is proposed that all the school students of the district be dispatched to the parks as supporting personnel for the communal services, the organized recreation groups and as part of a large education campaign on the care of the park. In addition, the Television must promote the park through INRAVISION during the entire week by informing people about the program for the following week-end and must also reinforce the educational campaign on the utilization of the park.*

*The above paragraphs of italics was written by C/C.*

# Site and Its Surroundings

## Location

The Whole Park Area is located in the center of Bogotá, D.E., surrounded by three major arterial roads, Autopista el Dorado, Avenida del Congreso and Avenida Ciudad de Quito. It is divided into fourteen lots by land ownership, the road network and the national railway. The area of 116.5 ha is used as public parks and the remainder is reserved for green open spaces for a total area of approximately 350 ha.

## Land ownership

The Whole Park Area of 350 ha is possessed by six different landowners such as Distrito de Especial de Bogota, Beneficencia de Cundinamarca Curia, MOPT National Railways, and Coldeporte.

Lots 10 and 11 belong to Beneficencia and the official agreement of Junta de Planeación of Bogotá D.E. is necessary in case of development of these areas.

Lot 9 fundamentally belongs to Distrito. Up to the

Table – 09 Study Area List by Landownership

Lot No	Ownership	Area(ha)
1	Private "La Culubra"	-
2	M.O.P.T.	15.5
3	M.O.P.T.	5.1
4	M.O.P.T.	21.6
5	M.O.P.T.	35.5(exclude)
6	Distrito Especial de Bogota	55.0
7	Distrito Especial de Bogota	19.2
8	Coldeportes	26.8
9	Distrito Especial de Bogota	19.1
10	Beneficencia de Cundinamarca	17.5
11	Beneficencia de Cundinamarca	7.2
12	Curia Metropolitana	1.3
13	M.O.P.T.	97.8
14	M.O.P.T.	13.9
Total		335.5

Table – 10 Existing Road Classification

1. V-0, T-1 (Primaria) Avenida el Dorado.
2. V-1, L-1 (Primaria) Avenida Ciudad de Quito.
3. V-2, L-8 (Primaria) Avenida del Congreso. Eucaristico (carrera 68).
4. V-2, T-10 (Básica) Avenida Jose Celestino Mutis. (Calle 63)
5. V-2, T-11 (Básica) Avenida Paulo VI. (Calle 53)
6. V-3, L-11 (Secundaria) Avenida Battallon Caldas (Carrera 50)
7. V-3, L-12, (Secundaria) Avenida 60.
8. V-3, T-16 (Secundaria) Avenida el Salitre. (Calle 64)

present, the area has been managed and used by other authorities, however the whole area is planned to be returned to Distrito in the near future.

Railroad property has been regulated as 40m in width according to the Acuerdo. The area along Calle 63 of La Culubra, which has been planned as an urban renewal area, shall be included in the park area.

## Road network

The existing and future road network in the vicinity of the Whole Park Area with the classification established by the Acuerdo 07, 1980, is shown on Table 10. The roads in the vicinity of the Whole Park Area are fairly well maintained but from the engineering point of view there are several questions to be raised.

Autopista el Dorado is one of the most important roads of the city, connecting the center of the city and the international airport (El Dorado) and is intended to provide a means for high speed/mass

transportation. However, there are many roads intersecting with this road at grade crossings, which are causing traffic problems along this road.

Avenida Ciudad de Quito and Avenida 68 are functioning as the main circular roads of the city and consequently, the traffic volume of these two roads is very high. However, many of the intersections along these roads are grade crossings, which are causing heavy traffic congestion because the traffic signals on the crossings can hardly manage to insure smooth traffic on these roads. There are several improvement plans undertaken to make flyovers at the major intersections of the roads and earlier completion of these flyovers would tend to ease present traffic congestion of the roads.

Calle 63 extends in the north/south direction traversing the center of the Whole Park Area. The main function of this road is to be used by the traffic between the Chapinero area and the residential areas in the north-western part of the city. However, due to the present road network

Fig. – 11 Existing Site Condition - 1 : Landownership

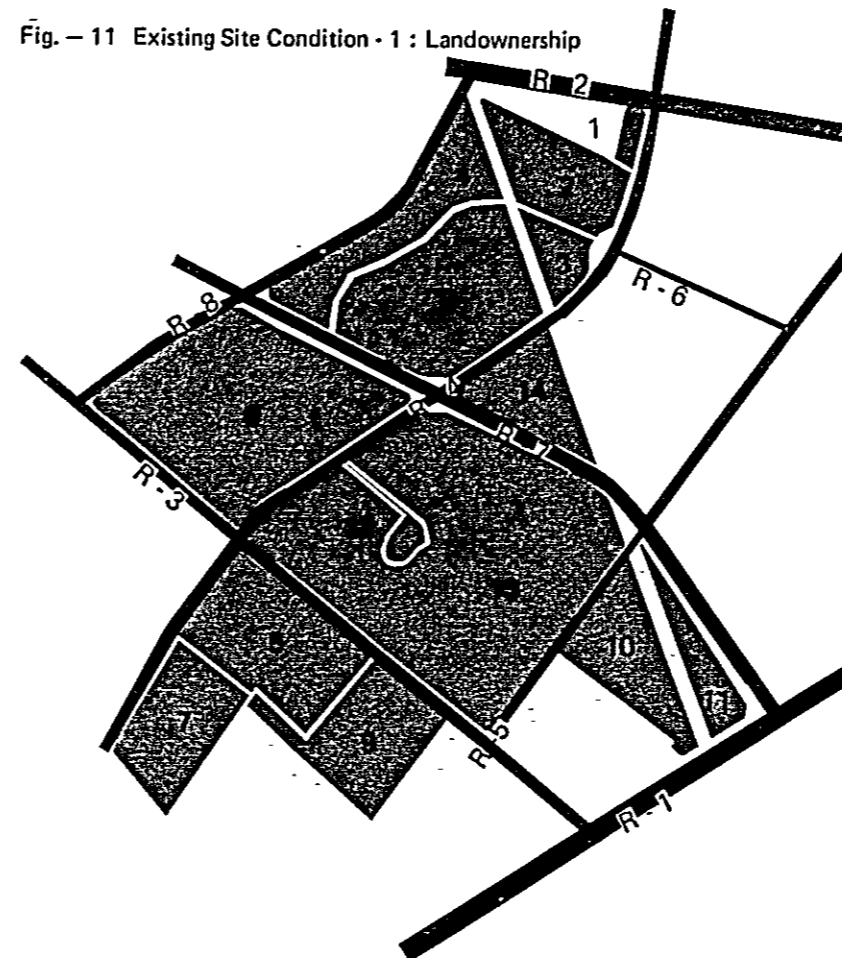
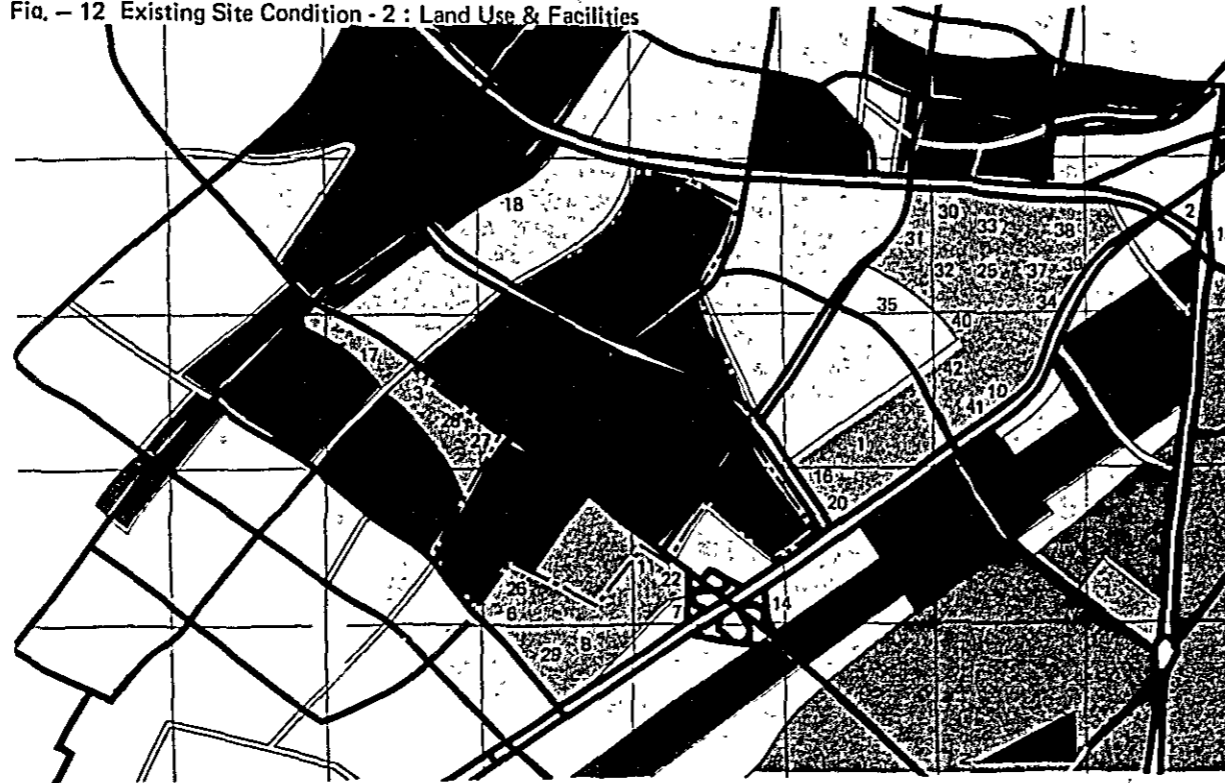


Fig. - 12 Existing Site Condition - 2 : Land Use & Facilities



Administration	Education
1 Centro Administrativo Nacional	25 Universidad Nacional
2 Centro Administrativo Distrital	26 Universidad Libre
3 Instituto de Bienestar Social	27 Inst. Tecnica Distrital
4 Ancianato	28 Colegio CAFAN
5 Inst. Colombiano Audioon y Lenguaje	29 Centro Don Bosco
6 Amparo de Niñas	Research
7 Caprecom	30 Inst. Geografico Agustin Codazzi
8 Armada Nal. Infanteria Marina	31 Inst. Investigaciones Tecnológicas
9 Inspeccion de Policia	32 Inst. Investigaciones Geológicas
Public Service	33 Centro Computador Electrónico
10 Invasion	34 Lav. de Investigaciones Patológicas
11 Subcentral de Energia	35 Inst. Colombiano Normas Técnicas
12 Corporacion de Ferias y Exposiciones	Cultura and Spectacles
13 Empresa de Acueducto	36 Jardín Botánico
14 Empresa de Energía Electrica	37 Biblioteca U N
Health	38 Museo Art. Moderno
15 I C S S. Clinica San Pedro	39 Teatro Auditorio U N
16 Clinica Caja de Pevision	40 Museo de Ciencias Naturales
17 Cruz Roja	41 Concha Acustica
18 Hospital Infantil	42 Estado Alfonso Lopez
19 Centro Medico	43 Unidad Deportiva El Salitre
20 Clinica de la Policia	44 Coliseo El Salitre
Recreation	45 Coliseo El Campón
21 Club Empleados Oficiales	46 Estado El Campón
22 Club Agentes Policia	Religious
23 Parque El Salitre	47 Templo Eucarístico
24 Parque El Lago	

LEGEND

- Multiple Activity Area
- Institutional Zone
- Industrial Zone
- Residential Zone
- Urban Greenery Zone
- Study Area for the Park

situation, this road is being used, as a bypass of the Autopista el Dorado and therefore, the traffic volume on this road is very high and at the intersections with Avenida 68 and with Autopista el Dorado after passing through Avenida de la Constitución heavy traffic congestion is common.

It is estimated, however, that the present high traffic volume and the heavy congestion on this road would be eased by completion of the new road, Avenida el Salitre, a northern extension of Avenida 68 and new construction of the circular roads which would serve as a fairly satisfactory road network around the areas in question.

Calle 531, which ends at the intersection with Avenida 68, will be extended to the west according to a decision by Distrito.

Calle 53, which ends at the intersection with Avenida 68, will be extended to the west according to a decision by Distrito.

Railroad

The existing railroad runs in the east/west direction from the northern part of Parque el Lago to the southern border of the Whole Park Area, but this railway is not for passenger service; it is for freight cargo and the frequency of service is very low (about twice a week), so this railroad is not functioning as a means of public transport of the city.

Existing Facilities of Surrounding Area.

The surrounding area around Whole Park Area contains a relatively small part of the population in Bogotá D.E., but the future growth and development of this area is assured by its substantial economic resources. These are summarized as follows:

- a) It is the city's center of light industry
- b) The airport in the west
- c) There is on-going residential development and the establishment of a new urban center is planned.

Related to the above economic factors, there are several important existing facilities such as, governmental and semi-governmental facilities, and education, research, cultural facilities, which are located along the Autopista El Dorado. The Autopista el Dorado thereby establishes a strong connection between these facilities and the central business district, and airport and possible future development areas in the west. But there are only a few recreational facilities at present.

According to Acuerdo de Zonifications, 1985, it is possible to assume there will be an increase of public facilities around the Whole Park Area in the total urban context in the future.

Existing land use and zoning regulations

The general aspect of land use at Whole Park Area is one of public park and green open space. The project park area of 110 ha is now grass land as reservation area for the Park Project. Actually most of this area has been used for illegal grazing. The existing park area of 250 ha is public parks, green open spaces and grass land for reserved area.

The Acuerdo de Zonificación 1985 provides the general land use framework and identifies the various functional elements of the metropolitan area of Bogotá D.E.

According to the general plan mentioned above, a detailed zoning plan has been established as "Plano Oficial de Zonificación en escala 1:10.000". In this plan, the Whole Park Area is regulated as urban green area ("Zone Verde Metropolitana"). Also the surroundings of the Whole Park Area are regulated as residential and multiple activity areas. The applicable current developments with their implementational and given conditions are as follows:

**Maximum height:** Although the maximum height within the Whole Park Area is not limited, the area and its surroundings are defined as the area of influence of the Airport Study of 1977 so that the maximum height is from 32m to 60m.

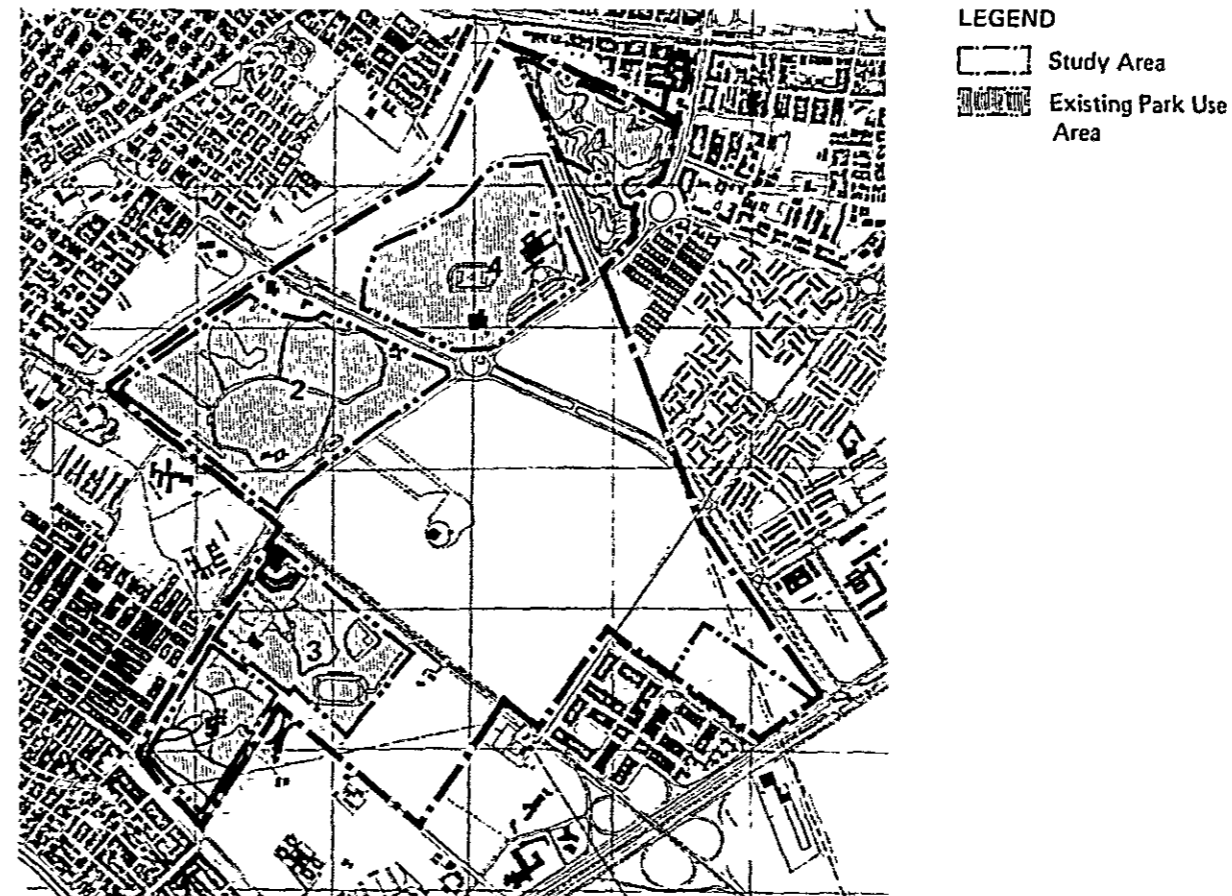
**Maximum number of floors:** In the surroundings of the Whole Park Area in areas of Actividad Múltiple and Actividad Residencial, it is permissible to construct buildings to heights of 5 floors and 8 floors; existing high-rise buildings are excepted.

**Building setback line:** The Width of 10m on both sides of the perimeter road is prohibited from being built up. Minimum building setback line is 3.5m at the side, and 5m at the front of the lot. The ratio between height and setback line is 1/3 to 1/4.

Table – 11 Existing Park Facilities List

Name of the Park	Area (ha)	Operation Body	Main Facilities	Parking		Total
				Exist-ing	Plan-ned	
1 Parque el Lago	15.5	I.D.R.D.	Artificial Lake (4.6ha), cafeteria, boat	80	-	80
2 Parque el Salitre	55.0	I.D.R.D.	Sports facilities: basketball court (14), football court (5) tennis courts (3), mini-golf (3), softball ground (1), rollerskate rink (1), gymnasium (1) mechanical attractions (14) childrens play areas (4), electrical playing equipments (21), restaurant (4), decorative installations, administration office, artificial lake	340	-	340
3 Unidad Deportiva el Salitre	26.8	I D R.D.	Main Gymnasium (10,000 seats) Sub-gymnasium. Karate, weight-lifting, ping-pong, boxing, judo, gymnastics, volleyball, basketball; baseball diamond, stadium, bowling, tejo	75	560	635
4 Botanical Garden	19.2	Distrito	Conservatory, administration building, pond, maintenance shop, nursery	-	-	-
<b>Total</b>	<b>116.5</b>			<b>495</b>	<b>560</b>	<b>1055</b>
5 Club de Empleados Oficiales	35.5	M.O.P.T.	Football Court (3), baseball diamond, softball ground, basketball court (a), tennis court (a), fronton (5), swimming pool (50m), camp site, hotel (24 rooms), social club building (salon, bowling, ping-pong, etc.)	260	235	495

Fig. – 13 Existing Park U Area in the Site



### Utilities

The Whole Park Area is serviced by the networks of the water supply, sanitary sewerage, storm water sewerage, electric power supply and telecommunication systems which can be extended to any facilities to be constructed in this area. Therefore, existing networks will be sufficient to cover the several facilities within the park site by just installing secondary networks. Existing condition of utilities supply are as follows.

### Water Supply

The main pipeline diameter 42" extends north to south in the center of the Whole Park Area along Avenida 60. Submain pipes (dia. 6" to dia. 16") are laid throughout the park site in rectangular meshes and are linked to the main. These pipes can be equipped with additional valves and connection outlets with enough capacity to serve the facilities to be built later. The water supply plan for the park facilities shall be worked out later utilizing the existing networks. Existing network plan of the "Red Acueducto 1.500 Plancha B4" for the Whole Park Area has been made by I.D.U.

### Storm Water

The storm water from the Whole Park Area is directly discharged to three main channels (Canal del Río Salitre, Canal Río Nuevo and Canal del Río San Francisco). The area of the Templete is the center of these rivers' watershed and the catchment areas are as follows:

Canal del Río Salitre: The northeast area of the park site.

Canal Río Nuevo: The northwest area of the park site.

Canal del Río San Francisco: All the south area of the "Salitre".

The existing and future network plan of the storm water discharges has been worked out by I.D.U.

### Sanitary Sewerage

The sanitary sewerage from the Whole Park Area is discharged through existing pipes to four main channels (Canal del Río Salitre, Canal Río Nuevo, Canal del Río San Francisco and Canal Boyacá). The sanitary sewerage plan for the area was formerly worked out in consideration of the existing and future network plan provided by I.D.U.

Fig. — 14 Existing Building Height of the Surroundings

### LEGEND

- Open Space
- ▨ Building of 1 - 3 stories
- ▧ Building of 4 - 5 stories
- Building more than 6 stories



### Electric Power Supply

The Whole Park Area is supplied by four substations, which are now supplying the electricity to the following areas; the southeast area including the National University and Gorgonzola by Central Substation, the north-west area by La Paz Substation, the north area by the Salitre Substation and urban center and Antonio Narinó areas by another substation.

Electric power supply plan within the Whole Park Area shall be worked out referring to the existing electric power line networks and substation location plans prepared by E.E.E.B.

### Scenic Conditions

Whole Park Area as urban silhouette generally seems to be linear and horizontally spread with no vertical variations. Greenery landscape continuity is rather poor and is intermittent throughout the Whole Park Area. Only along the side of Parque el Salitre does greenery appear continuously. These scenery aspects may result from low planting density as well as lack of undulation of the park area. However, Parque el Lago and Jardín

Botánico seem to be more rich in natural scenic features, coordinated with land formations and denser plantings. The park area is thoroughly flat and offers only esplanade grass area with no distinctive landscape attractions, so that the Templete appears to be a big volume and dominates the whole area.

As vista from the park area, the harmonizing urban silhouette of the central district of Bogota with a background of mountains can be seen in the far distance in the south-east. This is the main and most valuable scenery. Newly developed rows of multi-story housing in the same direction appear as uncomfortable solid features lacking any greenery.

Toward the north-west, the gymnasium of Unidad Deportiva el Salitres strongly dominates on the spatial elevation, and becomes a major scenery component. The scenery of this area also lacks greenery element. The typical scene of Parque el Salitre shows skyrised panoramic wheel above the horizontal rows of greenery and gives a strong impression.

## Site Conditions

### Topographic Features

The general topographical condition of the Park Area is thoroughly flat; the gradient is  $\pm 0.3\%$ . For the existing park area of 250ha also, land formation is flat except some artificial undulations at Parque el Salitre and Jardín Botánico. As for the ground elevation established in the Whole Park Area, the minimum elevation is 2578m, and maximum 2582m above the sea level. Along the park area, three main watersheds are contained; these are Canal de el Salitre, Canal Río Nuevo and Canal del Río San Francisco.

### Existing Vegetation

The dominant vegetation within the Project Park Area is grass. A high percentage of the area is occupied by *Pennisetum clandestinum* which is known as "kikuyu grass" of African origin. As for shrubs, *Salanum marginatum*, from Africa, and other species are established in small groups. Concerning the Whole Park Area, trees including *Eucaliptus globulus*, *Acacia melanoxylon*, *Fraxynus chinensis*, *Pinus radiata*, *Cupressus macrocarpa* and others have been introduced and are present in large numbers due to the good growing conditions.

In Jardín Botánico, approximately 150 kinds of Colombian native trees and 50 kinds of exotic trees have been planted. As the flora collection, about 4,000 species of 300 families are being cultivated.

### Soil Conditions

The soil around the Project Park Area is recognized as soils on ancient Quaternary lake sediments. The soil type is generally classified as "Serie Tibaitatá". Layered material is clay deposit and has rather poor drainage.

The surface layer of approximately 0–50cm by on site observations has dark grey brown color and is slightly moist. The Texture of the soil is clay or clay mud with patches of fine aggregates and some small porous spots. Many fine grass roots are contained, but organic matter is low and the pH is acid to relatively acid. This type of layer is commonly known as fairly fertile soil with fair nitrogen content and is good for cultivation.

Subsoil under the surface layer is yellow to brown red colored by clay and slightly plastic conditions. This is poorly drained and rather strongly acid.

### Surface Water

Within the Project Park Area, there is no existing natural water surface, but an artificial lake and pond are located at each Parque el Lago, Parque el Salitre and Jardín Botánico. Total water surface area is approximately 7.6ha. These lakes and pond are mainly water supplied by catchment of rainfall run-off. During a drought water level is maintained by occasionally supplying freshwater. Open watershed is located behind Lote 4 next to Club de Empleados Oficiales and is utilized for the urban sewage system. Usually this canal dries up unless there is a rainfall. When there has been a long and heavy rain some lower parts of the Project Park Area show a slight ponding condition.

### Ground Water

Generally it is said that the ground water level near the surface layer changes from season to season. Approximately 2.0–2.5m from the ground surface, there are clay stratum, so that ground water which originates from a rainfall accumulates on this stratum and the water level rises to 1m below the ground surface at the time of lengthy rainy seasons. However it is recognized that most ground water is located approximately 80m to 100m from the ground surface in the Park Project Area.

### Meteorological Features

Bogota is located in the equatorial zone of low latitude. In general Sabana de Bogotá area has no seasons. However alternating slightly rainy and dry periods are experienced continuously all year. April to June is rather rainy and September to November is also rainy and with some thunderstorms. Every 5 to 10 years, there is frost. In general, temperature is determined by elevation above sea level.

Following are the meteorological conditions in the Bogotá area in meteorological conditions. (in I.G.A.C. 1975).

Average temperature	13.8°C
Maximum average temperature	19.3°C
Minimum average temperature	8.1°C
Absolute maximum temperature	22.5°C
Absolute minimum temperature	7.2°C
Medium relative humidity	72%
Annual rainfall	943.6m/m
Number of days with rain	17 days/year
Prevailing winds	South 13% West 13% North 12% South-west 11%
Wind speed	45km/hr to 7.5km/hr

### Existing fauna and flora

Flora in the vicinity of the Whole Park Area represents typical vegetation of Sabana de Bogotá. *Pennisetum Clandestinum* takes over as the strong dominant and is usually associated with low percentage of *Trifolium repens*, *Bromus Catharticus*, *Holcus Lanatus*, *Poa annua* and others. *Hydrocotyle sp.*, *Oxalis sp.* and etc. are sometimes present in association. As for herbaceous weeds and sub-shrubs, *Solanum marginatum*, *Solanum nigrum*, *Chenopodium ambrosioide*, *Sylibum marianum*, *Atriplex sp*, *Hipochaeris sp* and many other species are found in abandoned areas. Beside these native species, *Eucaliptus sp*, *Fraxynus chinensis*, *Acacia spp*, *Ficus spp*, *Podocarpus spp*, *Salix spp*, *Juglans neotropica*, *Pinus spp*, *Cupressus spp*, and some other species including exotic ones have been widely introduced and are growing dominant all over the Bogotá area.

As for the fauna, around the vicinity of Whole Park Area, commonly we can find many birds, rats and mice, frogs, lizards, marsupials, few fishes and insects. Especially in Jardín Botánico with its diverse planting of species and fully established natural environment, a varied faunae can be found. For example, birds include sparkling violet-ear humming-bird, band-winged nightjar, nightwork, honeycreeper, eared dove, sparrow and others. Butterflies, beetles, dragonflies, crickets, grasshoppers, hovey bees and other insects are present. These fauna breed as parts of the ecosystem according to the ecological environment.

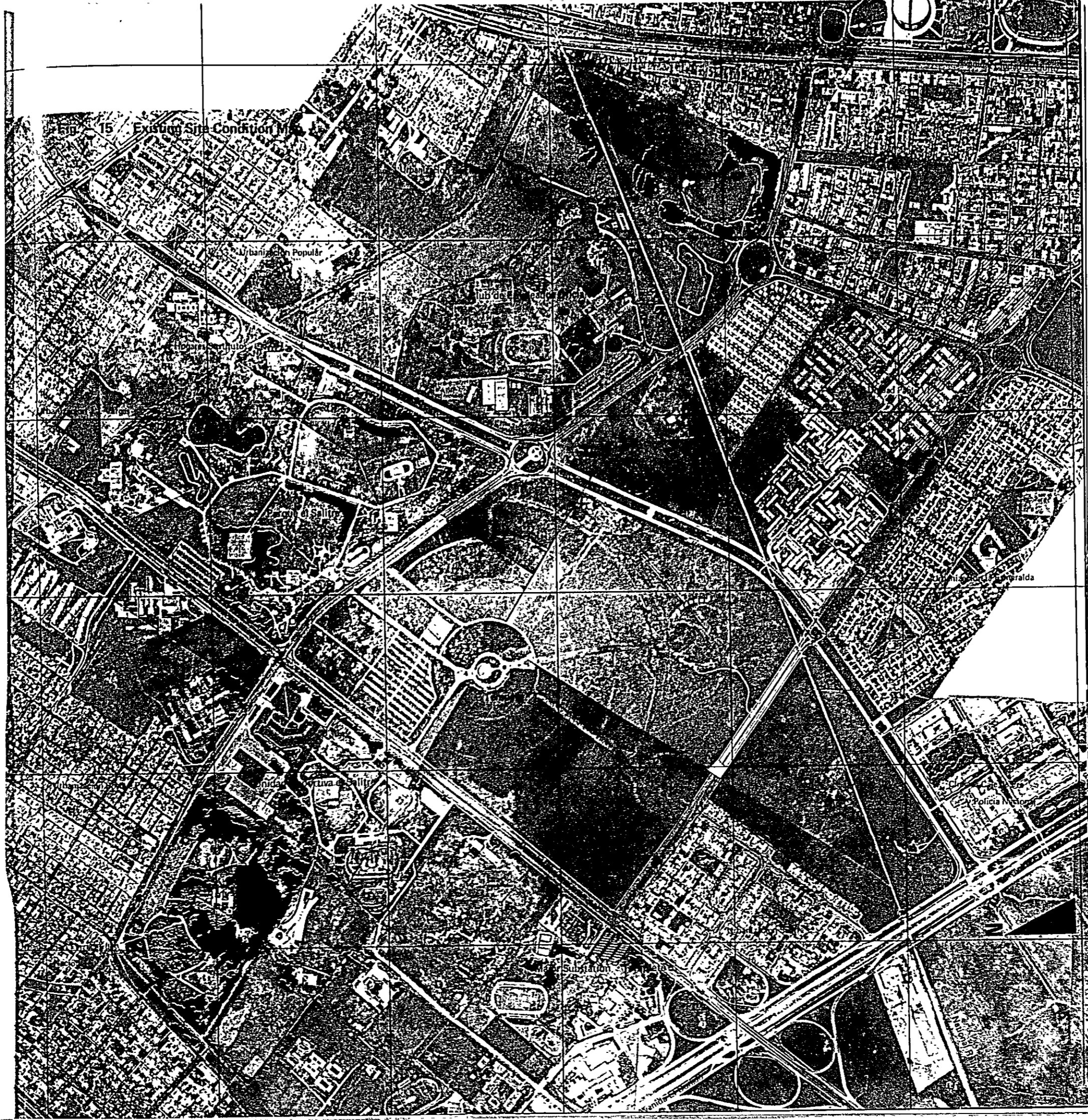


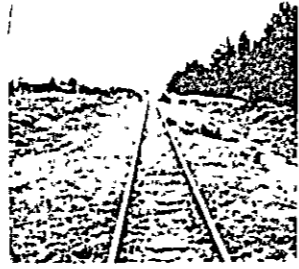
Fig. 15 Existing Site Condition Map

Urbanización Popular

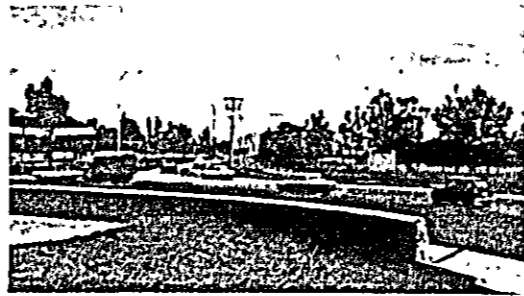
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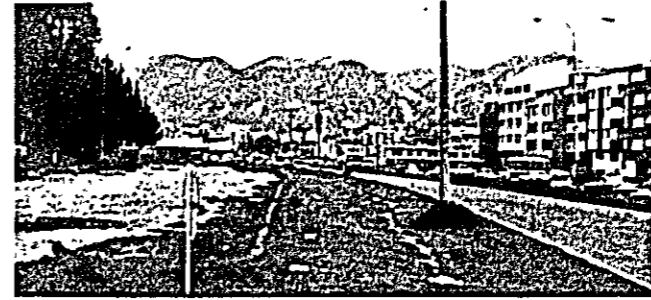




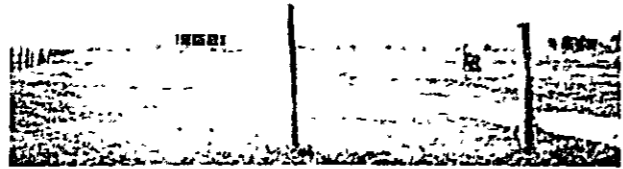
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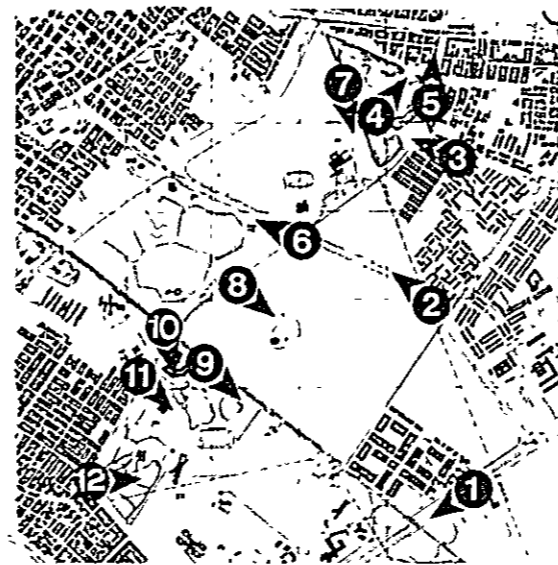
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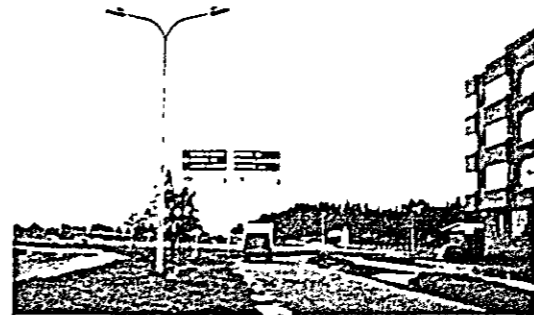
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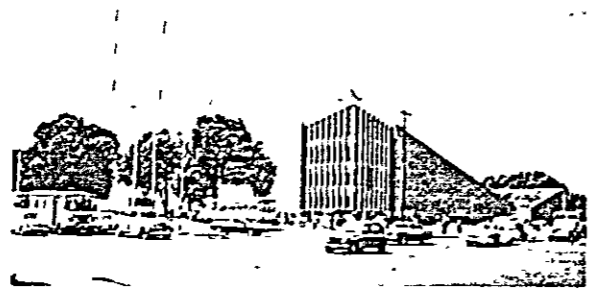
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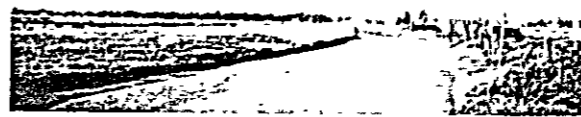
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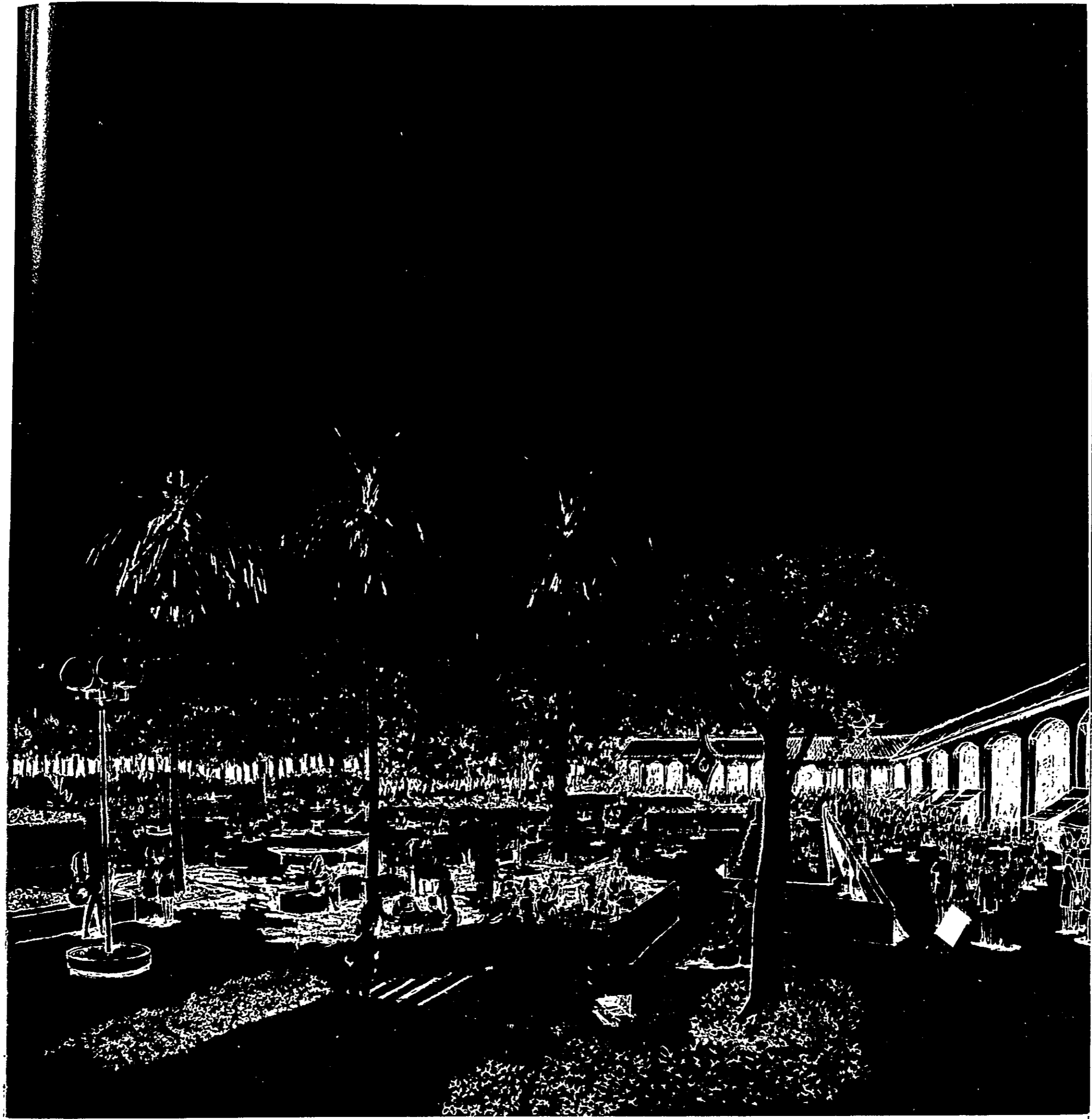
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## Goals and Means

### Development Targets and Policy

#### Target 1. Creation of an Environment Appropriate to a Commemorative Park

The park must be able to serve as a symbol commemorating the Libertador Simon Bolivar, and this cannot be achieved merely by erecting a monument to him or naming facilities and plazas after him. Rather, it must be achieved through the creation of a commemorative park environment that makes people think about the country's historical, cultural, industrial and other legacies as symbolized by him and look at modern times and think about how this legacy is to be passed on to future generations.

#### Policy 1. Creation of Commemorative Landscape

The scenery within the park must be entirely different from the urban environment around it, transcending everyday life in terms of time and space. Such scenery, suggestive of the grandeur and magnificence of nature, will direct the thoughts of visitors for a brief moment to the natural richness of the country and impart a sense of the unbroken flow of time. At the same time, the parts of the park's environment that represent extremely artificially controlled nature, i.e., planted vegetation, ponds and lawns arranged with regularity, will serve as scenery that accents the commemorative and symbolic nature of the park.

#### Policy 2. Introduction of Native Species

Most of the vegetation in the city of Bogota consists of foreign species with such a high adaptability that they threaten to completely replace native species. Accordingly, there is to be active introduction of native species that used to cover the land in order to increase familiarity with them and instill a sense of affection for local nature as a valuable heritage to be passed on to future generations.

#### Target 2. Promotion of Use of the Park by All Strata of the Population

In the many existing city parks in the city of Bogota there is not much opportunity for park leisure other than use of playground equipment and sports facilities. Full use is not made of their wide spaces, and at night they become dark and dangerous. At this rate, they could become

abandoned wastelands, less and less attractive, and fail to contribute to the moral condition of the people. This is why the present park must be planned as a park affording greater opportunities for its utilization and a park of an attractiveness not to be found in conventional city parks.

#### Policy 1. Urban Ribbon as the Core of the Park

As a park within the park, there must be provided a particularly attractive area as space and facilities making possible a variety of human activities, going beyond the scope of recreation activities normally to be seen in city parks and at the same time being conducive to new activities. Such an area will be a link between the city and the park, inviting people into the park to walk and to stop from time to time along the way.

#### Policy 2. Segregation and Integration of the Whole Park Area

The area of the park consists of a combination of several existing parks near to one another and areas to be newly developed and is physically divided by the main street network, a railway and other features. Furthermore, different administrative authorities are responsible for the different parts of it. From the standpoint of creation of a comprehensive city park, which is one of the important aspects of the present park, it is necessary in the park development process to strengthen integration of the Whole Park Area in physical, functional and administrative terms so that it will be able to meet the diverse activity needs of users throughout its area.

Furthermore, the ensuring of a diversity of activities on the basis of integration can only be satisfactory to users and conducive to increase of park use demand if the individual activities are planned as segregated in such a way as not to disturb one another.

#### Policy 3. Strengthening of Planning and Operation

Since the park has ample space for a diversity of uses, if planned properly, it can attract a large number of people.

Accordingly, the park is to be provided with plazas and multipurpose space suitable for a diversity of levels and types of activities ranging from a

National Ceremonial Plaza for regular national and international events to small plazas suitable for informal gatherings. By means of a to-be-established and continuing cycle of (a) discovery of various kinds of potential demand by users, (b) formulation of plans, (c) organization and (d) implementation, it should be possible to raise the rate of utilization of the park to a very high level, thereby maximizing the returns on investment in the park.

#### Target 3. Realization of Park Construction and Maintenance of the Quality of the Park

The following will be necessary in order to make this significant project concept a reality and maintain the dignity of the park and the quality of its conditions of use into the far future.

#### Policy 1. Multilateral Organizational Cooperation and Establishment of Autonomous Organization on the Basis of Such Cooperation

The facilities to be provided in the park can only be realized with collaboration and cooperation among a variety of organizational entities, both private and governmental.

Furthermore, it will be difficult to realize an integrated unified park without the collaboration of the parties that own the various portions of the park area.

Moreover, for realization of the park, it is essential that the existing parks undergo change, with opening by stages and improvement of content, and in order to program such construction and operation and implement it in a sure manner, it is necessary that a unified, permanent organization be established for overall control of the Whole Park Area.

#### Policy 2. Coordination With Higher-level and Related Plans

In view of the fact that the construction of such a large park will have a great bearing on city planning, involve a considerable amount of investment, and have a great social development impact, it is necessary that there be adequate coordination between it and high-level and related plans.

## Development Strategies

Furthermore, in terms of park development itself, it is necessary that there be coordination between plans for construction of mass transit facilities for greater accessibility of the park, other city park construction programs, setting park functions, etc.

### Policy 3. Optimization of Operation and Maintenance Costs

One of the main factors in the lowering of the quality of parks is a decline in the level of services because of failure to undertake adequate maintenance. This being the case, it is necessary to give consideration to provision of a maintenance system capable of achieving maximum effects at optimum costs so as to maintain the quality of the park environment and guarantee its pleasantness to users from the present to the distant future, as well as the selection of plant materials, the architectural plans and the utility plans serving as a premise to such a maintenance system.

### Development Strategy

Based upon the significance of the project mentioned above three strategies are proposed to lead up to realization of the park.

The three categories are as follows.

#### "Commemoration of Libertador Simon Bolivar Strategy"

The spirit that moved Simon Bolivar and the sense of togetherness and national communication between each of the Bolivarian countries as well as Latin-American countries would be exalted with close cooperation and coordination among the people.

Through thoughtful understanding of Colombian history and culture, and education as well as social communication would be propagated widely. The Simon Bolivar Memorial Park would be a means for realizing this.

#### "Comprehensive City Park Development Strategy"

The location, spatial scale and elements of this park fundamentally are to have characteristics and functions appropriate to a comprehensive city park in an urban park system.

The potential for recreational activities in this park would be countless and diverse recreational activities can be provided for all citizens of the Bogota urban area, especially many activities which cannot be provided at the neighborhood and community scale would be provided in this manner.

Also, this park would have a characteristic urban park core to integrate with other parks according to future demand for proportional distribution, and this park would have a role in the initiation of integrated and systematic linkage of urban park systems.

As for prevention of disasters, the wide safety areas of the park will provide suitable spaces, facilities and equipment to the citizen for use in case of disaster.

### "Environmental Conservation Strategy"

Reserving a large-scale open space within an urban area means inevitable important element for urban planning and development. This park easily provides a large amount of greenery in urbanized areas where natural elements are needed.

Greenification of the park area would provide a natural environment and diverse planting will provide many landscape scenes, and also this greenified area will be maintained as a greenery conservation area.

Greenified park areas are going to grow more natural in ecological aspects. Natural environment always consists of flora and fauna on the basis of earth and meteorological conditions; in this park also an environment with these conditions will be established and ecologically conserved.

## Planning Framework and Policy

### General

Before formulating the master plan, it is necessary to identify the project preconditions and targets by use of quantitative indicators. The following are the planning framework and policy clarified in this manner, and the master plan study has been commenced after the confirmation of these bases.

### Development Target Year and Development Area

The time schedule for development of the Park shall be determined by accumulation of the time schedules for each process of the park development. It would be adequate to assume the time required for the total development of the park is approximately 10 years and therefore, the final target year shall be the end of 1990 when all the park facilities and landscaping all completed constructed and the park administrative body is activated to undertake the full operation of the Whole Park Area. The proceeding steps after the Master Plan shall be the Feasibility Study, Detailed Design and the Implementation of the Park by phased construction according to the priority of the park facilities and availability of necessary funds. Taking into account the phased nature of the construction process, intermediate development targets are also made and the operational area of the park shall be extended by the end of each intermediate target year in relation with the growth of park visitors demand.

### User Demand and Its Characteristics

The number of visitors to Simon Bolivar Park is projected as shown at the right on the basis of the demand study.

Table — 12 Targets of Development Area

Category	Indication	Existing	Target in 1990	Intermediate Target	
				up to 1982	up to 1986
Development Area	Total development area (ha)	116.5	301.0		
	Target areal ratio of new development area (%)		68.3	7-10	35-40
	New development area (ha)		205.7	14-20	72-82
	Target areal ratio of improvement area (%)		31.4	3-5	15-20
	Improvement area (ha)		95.3	3-5	14-19

Table — 13 Demand and Target Capacity of Park Use

Category	Indication	Existing	Target in 1990	Intermediate Target	
				up to 1982	up to 1986
Park Visitors	Population in Bogota (unit: 1,000 persons)	4,297.0	6,086.0	4,469.0	5,360.0
	Annual rate of population increase (%)		4.00	4.00	3.50
	Total number of users of existing parks in Bogota (unit: 1,000 persons)	18,565.0	26,307.0	20,078.0	23,160.0
	Total number of demands for park use per year (unit: 1,000 persons)	8,377.0	46,626.0	35,609.3	41,064.1
	Target for total number of capacity for park use per year (unit: 1,000 persons)		46,626.1	13,000.0	28,800.0
	Total number of demands for park use on peak day (unit: 1,000 persons)	92.2	513.0	391.6	451.8
	Target for total capacity for park users at peak hour on peak day (unit: 1,000 persons)	26.9	149.6	33.3	83.5
	Target for average number of visitors on average day (unit: 1,000 persons)	23.3	129.5	28.8	72.3

**Activities To Be Introduced**

Taking into the consideration the development strategies of the park and compatibility with the park system of the city of Bogota, the characteristics of the Simon Bolivar Great Memorial Park should be a comprehensive whole in which are blended various recreational, cultural and other activities. The targets are shown at the right.

**Park Facilities To Be Introduced**

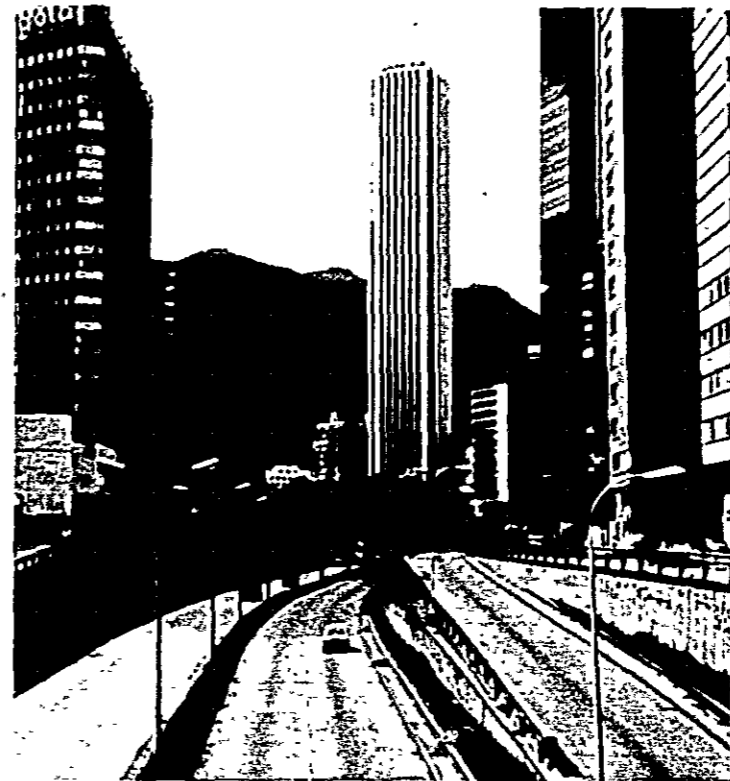
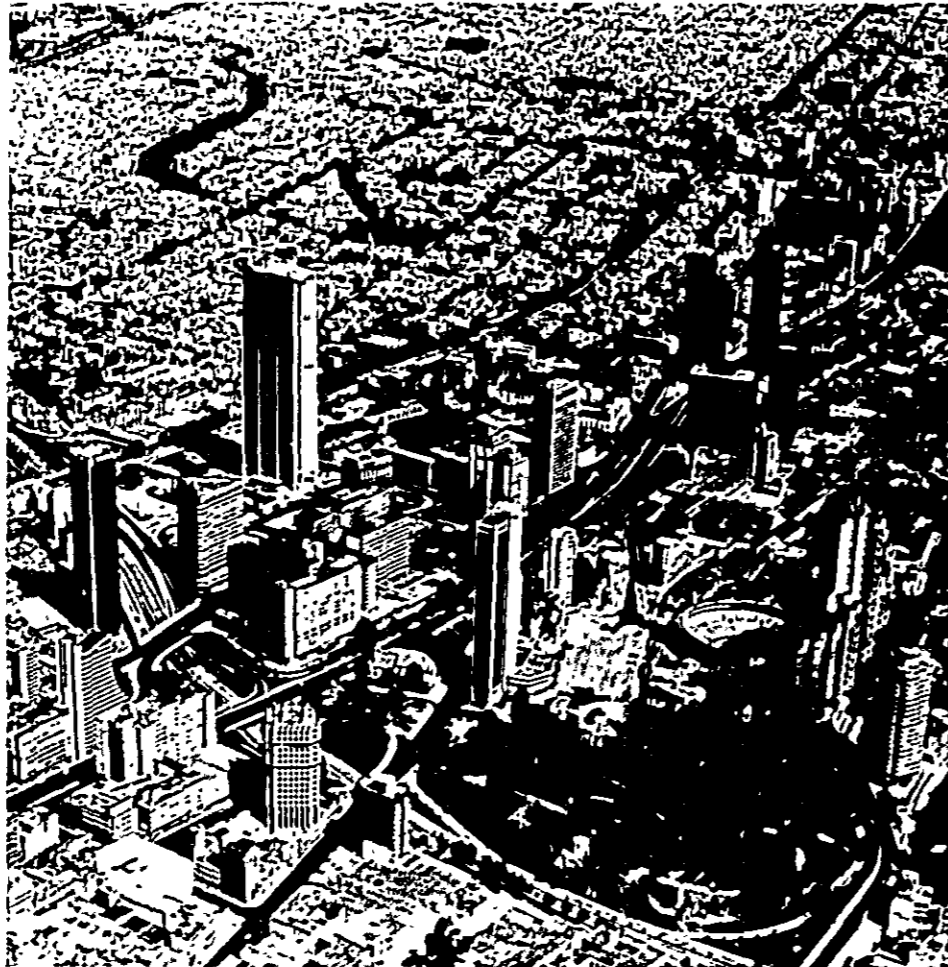
In line with recreational activities to be introduced, effective theme facilities should be selected to activate the park use. But the total building area of these park facilities should be limited on the basis of the principle that the main function of the city park is to preserve open space in an urban area. It is also necessary to provide for park service facilities, and the capacities of those facilities should be determined in relation to the number of park visitors, peak demand, and locational dispersion of such facilities in view of assuring efficiency of service.

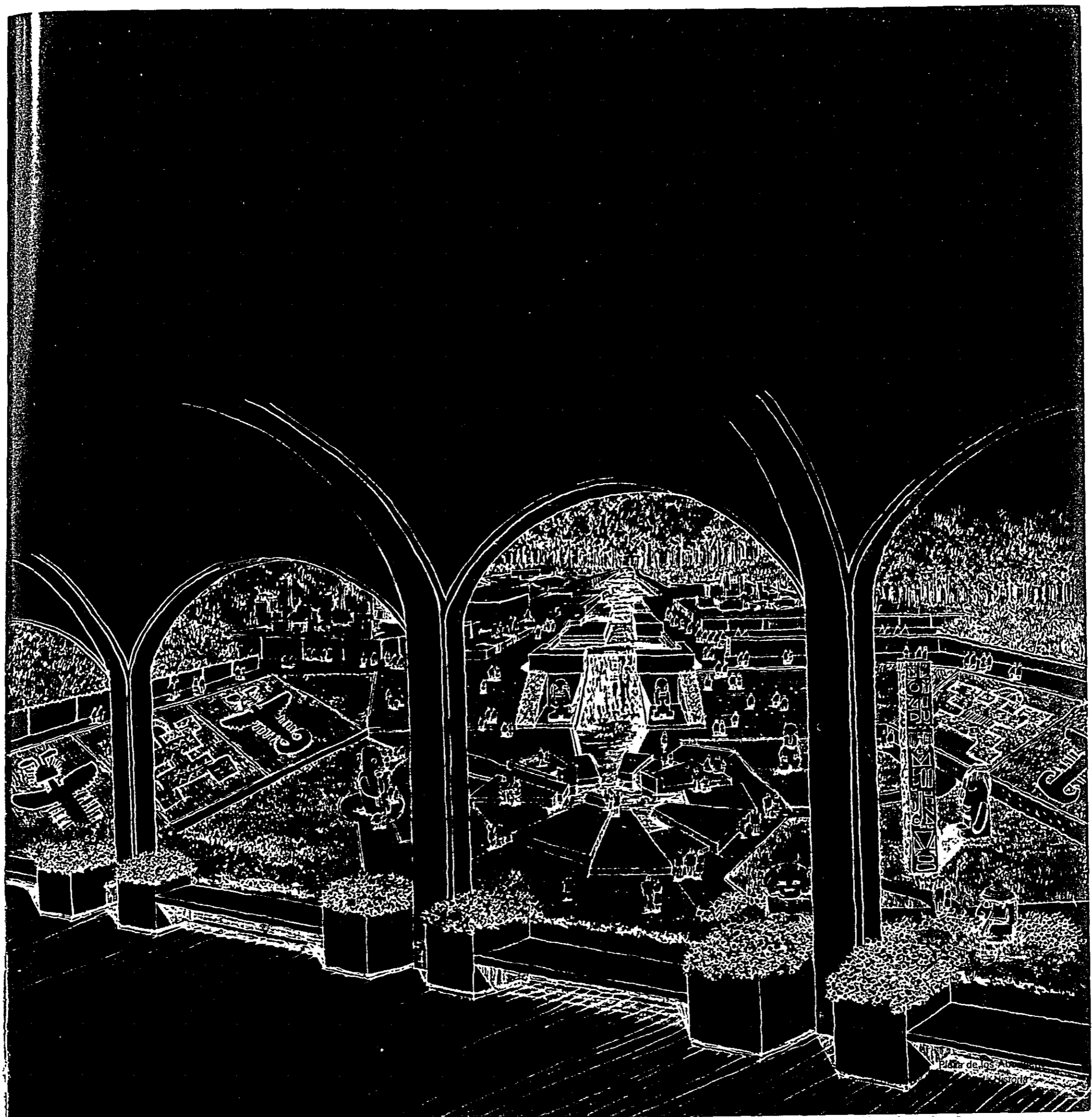
Table — 14 Target Share of Recreational Activities in Bogota

Category	Indication	Existing	Target in 1990	Intermediate Target	
				up to 1982	up to 1986
Recreational Activities	Index targets for the share of recreation and relaxation activity (%)	6.0	35.0	—	—
	Index targets for the share of sports activity (%)	61.4	20.0	—	—
	Index targets for the share of amusement activity (%)	31.1	20.0	—	—
	Index targets for the share of cultural activities (%)	1.5	25.0	—	—

Table — 15 Targets of Park Facilities Development

Category	Indication	Existing	Target in 1990	Intermediate Target	
				up to 1982	up to 1986
Park Facilities	Index targets for the floor area of theme facilities (m <sup>2</sup> )	16,000	90,000		
	Target of lot occupancy ratio to whole park area (%)		3.0		
	Index targets for the building area of service facilities (m <sup>2</sup> )		30,000		
	Target of lot occupancy ratio to whole park area (%)		1.0		
	Framework for the building area of occupied facilities in the park area (m <sup>2</sup> )		30,000		
	Target of lot occupancy ratio to Whole Park Area (%)		1.0		
	Parking requirements (number of vehicles including private buses)	495	7,850	800	4,000







# Zoning Plan

## Zoning Concept

The first step in the Master Plan Study lies in setting the spatial order relationship between space and anticipated intra-park activities with the aim of bringing to fruition the three developmental strategies identified with the Simon Blivar Great Memorial Park.

In this connection, there arises the need for developing a composite zoning system based on a zoning concept compatible with the respective developmental strategies.

The primary aim of the zoning concept is not one of restricting activities but is one of, through the use of a well coordinated zoning system, causing the emergence of new activities, highly enhancing the multiplier effect of park utilization, and creating a site which enables the people to enjoy new, highly fascinating experiences.

## Zoning Procedure

The zoning plan was formulated using the following steps.

### Step 1: Activity Analysis

Rendering of a qualitative, quantitative and pattern analysis of park activities as determined in the Planning Framework.

- Quantitative Analysis  
Optimum per person spatial requirement according to type of activity; activity factor, size of crowd, etc.
- Qualitative Analysis  
Whether of active or static nature; whether activities are simple or complex in nature.
- Pattern Analysis  
Concentrated; evenly dispersed; linear; etc.
- Relationship Analysis  
Inter-activity compatibility & reciprocal relationship

### Step 2: Network Model Analysis

With the aim of establishing a system for integrating the space units, by type of activities based on analysis undertaken to this point, bipolar analysis on spatial continuity and discontinuity and on visual continuity and discontinuity are undertaken.

- Spatial Continuity/Discontinuity  
Primarily movement related. The work here makes it possible for human traffic to flow in response to the surrounding scenery: this factor

is particularly important at points where there is an intensified flow of human traffic.

- Spatial Discontinuity/Visual Continuity  
Related to building of stopping areas. This provides spatial discontinuity by using lakes, and wooded and planted areas while enhancing the visual effect of distant scenery.
- Spatial Continuity/Visual Discontinuity  
Related to producing spatial variation. This gives consideration to having each space unit visually independent but making it possible for pedestrians to enjoy a series of varying scenic views by having these space units interlinked.
- Spatial Discontinuity/Visual Discontinuity  
Provides independent, disconnected space units. By providing space cut off from the outside world, the potential of an area is enhanced and a turning point is provided in going from one area to another.

### Step 3: Zoning Plan for Each Strategy

This step is to formulate a concept of zoning compatible with the respective strategies based on a study of activity analysis, spatial order formation and inter-spatial unit relationship which are expected to emerge from the three developmental strategies.

- Structural zoning for Strategy - 1  
1.) "The Commemoration of Simon Bolivar" strategy represents the central theme of the memorial park and the framework for structuring the entire park on a spiritual level. There is a need for creating a minor universe out of

this park into which the essence of space and time dimensions symbolizing Simon Bolivar, which all Colombians share in common, shall have been embodied, and for creating a tangible spatial structure that will give all park visitors a symbolical sense of this concept.

2.) Based on this concept, a time axis and a space axis are to be established horizontally and vertically, spanning the entire park area, and a National Ceremonial Plaza is to be built at the junction of these axis.

- Activity Zoning for Strategy - 2

1.) The variety of activities that are essential to an urban general park shall be clearly segregated on the basis of space, audio and visual aspects so that the activities can go on without creating any interactivity disturbance. They will be classified under static recreation, active recreation, sports, cultural activity, among others.

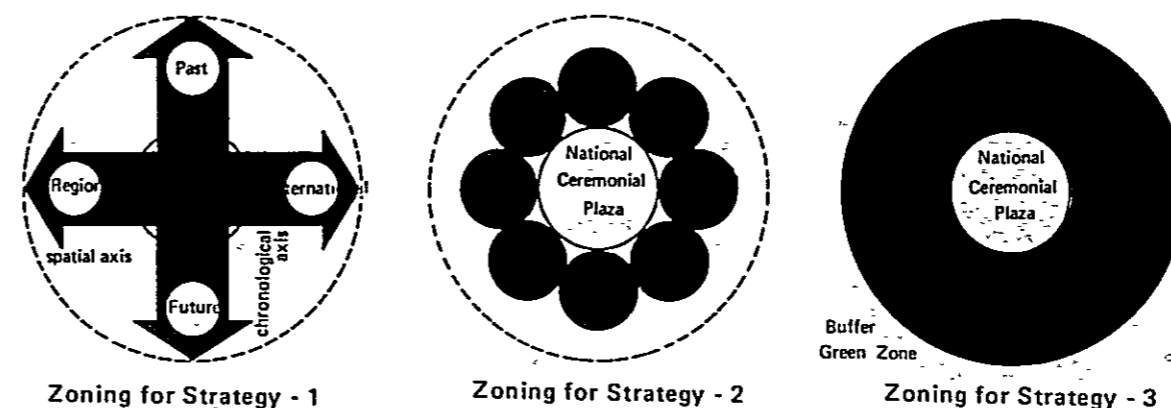
2.) On the other hand, it will not be possible for visitors to utilize all zones of the great park, covering 350 ha, in one day. Thus, the respective zones for the most part will possess their own characteristics while maintaining multiphased subzone characteristics so as to make each zone a completely integrated, independent unit in itself.

3.) The activity zones with high utilization density shall be given adequate accessibility and serviceability through the provision of roadways in the peripheral zones.

- Environmental Zoning for Strategy - 3

1.) By provision of buffer zones in the peripheral areas, it will be possible to cope with the needs for disaster countermeasures, urban

Fig. - 16 Conceptual Zoning Model



beautification zones, urban greenbelt zones, etc. by clearly segregating the buffer zones from the urban areas, and at the same time giving the park visitors a sense of arrival.

2.) Environmental conservation, with the objective of creating a memorial to Simon Bolivar in mind, will be based on the concept of enabling ecological conservation urban greenbelt zone.

**Step 5: Zone Classification**

Based on the zoning system as integrated in Step 4, the entire park area will be segregated into 9 zones.

**Grand Mall Zone**

The Grand Mall Zone is axially located in the central part of the park along with Avenida 63, and includes the National Ceremonial Plaza and other various theme plazas connected by the Urban Ribbon. Multiple activities will be concentrated in this zone and the zone will have an organically close connection with others according to activity patterns to be generated.

This zone can be used for diverse recreation activities, with harmony between an urban sense and natural elements. Besides serving as a place for parades, large gatherings and other events, the Plaza can be converted into a great number of spaces for small group activities. Besides serving as a place for educational and cultural nourishment, much can also be expected of it as a place for creation of new cultural, artistic, music, fashion and other accomplishments by the city's new urban life oriented citizens.

**Commemorative Symbol Zone**

This zone represents natural scenery, coordinating diverse greenery, an open grass field with lots of variation, and expanded water surface. This zone will present grand natural scenery as well as provide static recreation and tranquility for all park users.

**Urban Complex Zone**

The activities assigned to this area are the more formal and programmed ones from the point of view of users, which are, comparatively, more urbane and directed in purpose in their visiting the park. The establishment of a spectacles and exhibition complex, plus international official assemblies and conference facilities, strongly characterizes this zone as a cultural center and as an attraction to tourists and the most educated

public, primarily in evenings.

Included on the Master Plan and intimately linked to this Zone, but not as an integral part of the Park, is a five-star hotel, a complement of the complex, to be realized by private enterprise.

**Sports Recreation Zone**

This zone has a definite active recreation function. The expansion of the area to include organized and controlled opportunities to engage in sports aims simultaneously to a better administration and use of fields and services under Coldeportes management and to free other recreational areas from the nuisances and inconveniences that unplanned sports activities may cause to more leisurely activities and different age groups. To be close to the major activity, the Coldeportes administrative building is located in the center including the Sports person's Health Center.

**Amusement Zone**

The Amusement Zone constitutes the actual part of El Salitre Park including mechanical attractions expanded to the corner of Calle 64 and Carrera 68 to include new mechanical attractions.

In close spatial relation there are a quiet enclosure for small children with a nursery, and an open space with services for the erection of circus tents and itinerant spectacles of this kind.

Separation of functions and connection with the Mall is made by means of thick greenery that runs covering, the Mall unifying the park and makes a visual and structural linkage with the adjoining zones.

**Cultural Zone**

This zone is to be used for the folkloric regional festivals distributed over a simulated map of the country, where the landscape is designed to create conditions according to the tectonic and vegetation characteristics of each region.

Besides this educational function, it will act also as a gathering place for the natives from each regions on traditional festivals accompanied by the performance of spectacles and/or competitions usually included in that kind of celebration. Accordingly, adequate program should be planned.

**Static Recreation Zone**

Completion of tree scenery around the lake will create a enclosed environment for boat rowing and the enjoyment of being surrounded nature. Vinculum of the Cultural Zone and by Mall is

established by means of a aboriginal village as an intermediate point between the Anthropology Museum and existing folkloric manifestations.

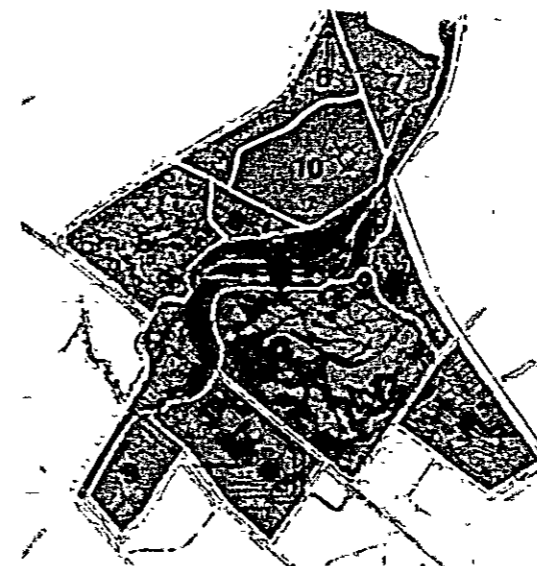
**Entrance Zones**

This zone is located in the south-east and north west parts of the park area, and functions as a main approach area to the park, main information center and some facilities for the convenience of visitors will be provided.

**Botanical Garden**

This zone corresponds to the Jardin Botanico, and is dedicated to academic experiments and education as well as natural conservation. Some parts inter-connected with the Sports Recreation Zone would be systematically reorganized and well integrated.

Fig. - 17 Zoning Plan



# Master Image for Park Landscape

## Scenic Elements

The following are the seven scenic elements of the Simon Bolivar Park.

- **Grand Mall:** With change in the route scenery and functions of Avenida 63, it will assume the form of a gently curved parkway. This parkway, together with the pedestrianways on both sides, will form a belt-shaped grand mall along which rows of trees, pavement, alcoves, plazas and outdoor equipment and furniture will be located, providing a view with an urban sense.
- **Grand Plaza:** A national plaza with a total width of 100m and a total length of 700m will be formed, both sides of the plaza protruding outward in the shape of stands, for an overall long, narrow bowl shape. Here there will be enough space to stage national ceremonies and parades and various other events of different kinds that draw large crowds, such human activity being an important dynamic scenic element.
- **Water Surface:** The wide expanse of the water surface and the variation of the shoreline will be representative of the commemorative park scenery and provide a view befitting the center of a large-scale comprehensive park. In this connection, it is particularly important that the water surface be in harmony with the natural greenery, and as one of the three main visual elements along with greenery and the land itself, the water surface must be given a distinctive character.
- **Land Formation:** This is the foundation of the park scenery on which all of the scenery is based. Since the topography of the parks in Bogota is presently flat and monotonous, basic reconsideration must be given to it so as to provide the kind of varied terrain that makes for scenic variety.
- **Greenery:** On the basis of the quantity and the quality of the natural environment, the greenery of the park affects the overall park scenery. It is proposed that the 110 ha area serve as a core of the overall greenery of the whole park for formation of continuous harmonized green space.

- **Open Grass Fields:** The visual expansiveness of the park and the variation of its terrain can be expressed in terms of greenery by open grass fields, which can serve as a basic element of the scenery in contrast to the expansive water surface and hard surfaces and to groves of trees and individual trees.
- **Park Facilities:** As opposed to the natural scenery of the park, the park facilities will provide artificial scenery as focal points within the natural scenery. Any large structures should be combined with the ground and the natural earthscape as scenic expression.

## Land Relief and Landscape

The flatness, convexity or concavity of the terrain has a decisive bearing on the field of vision

Since flat land generally makes for stability of form, not much can be expected of it in terms of basic scenic variation. Accordingly, it is necessary to choose the space that can be created as sufficient view, and the view is recognized for a scenic structure conducive to a sense of familiarity in psychological terms.

With a convex or protruding terrain, the field of vision is open, making for a psychological sense of openness, and with concave terrain, the field of vision is generally limited and clearly guided, making people feel at ease psychologically. On slopes the scenery has a downward orientation for the majority of people, the field of vision being suitable for appreciation of the overall scenery. On the other hand, going upward there is less selection in the field of vision, and directionality can be attained even with small scenic elements.

## Environment

The principal purpose of the 110 ha area that is to serve as the core of the Simon Bolivar Memorial Great Park is that of introduction of nature into the city. The trees and other vegetation planted on the basis of the terrain, soil, water, climatic and other conditions form the park environment and establish the

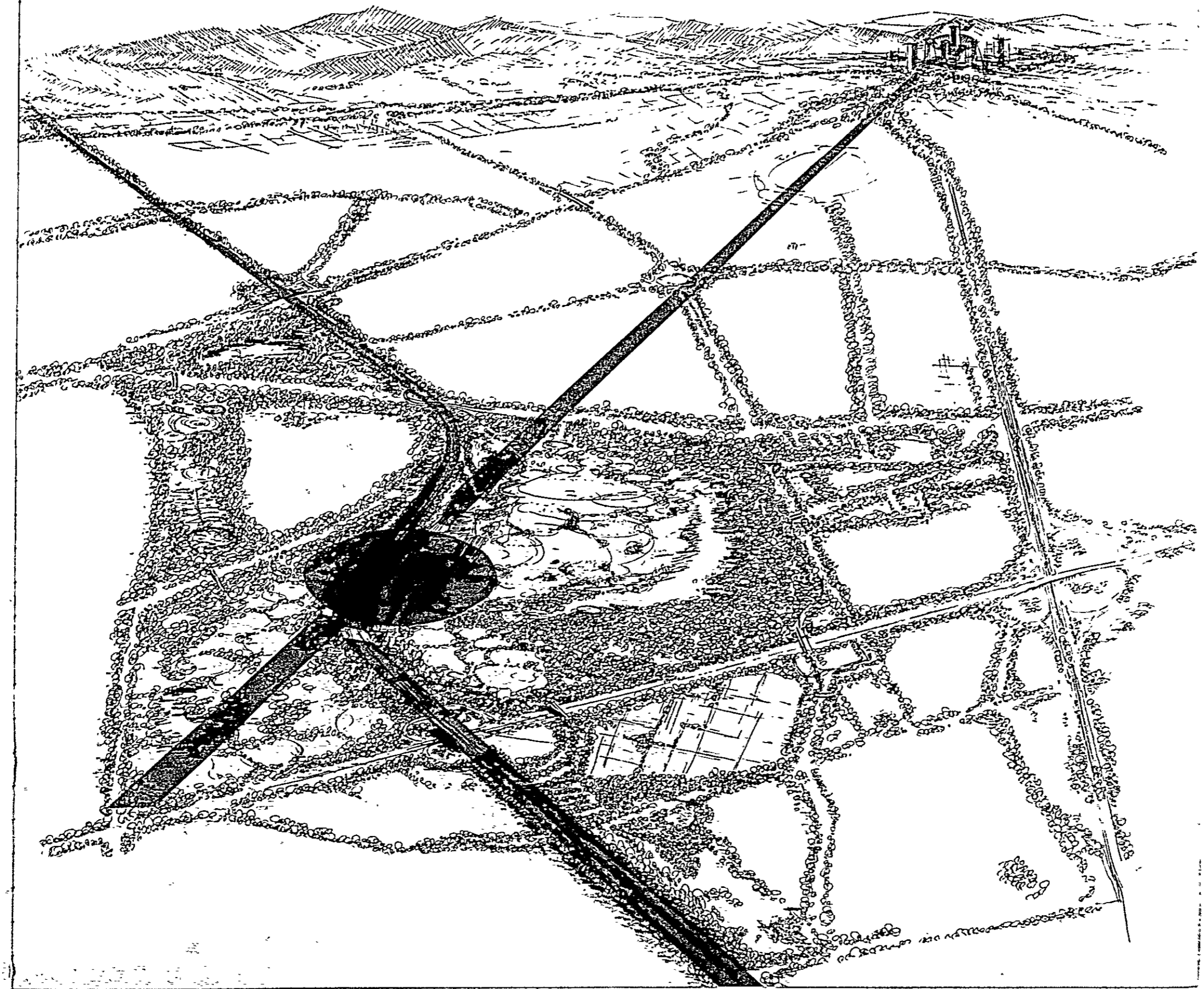
ecological foundation of the park. Furthermore, a variety of fauna make the park their habitat on the basis of this ecological foundation.

In the case of the present park, it would appear to be advisable to have an overall green coverage ratio of at least 65-70%. Furthermore, it is proposed that there be a standard with respect to the percentage of the park area represented by tree shade and that this standard be 30% for the 110 ha area and 20% for the entire park. These standards would appear to be appropriate in comparison with internationally famous large-scale city parks and in view of the present and future level of the city park environment.

## Visual Context for the 250 Hectares Area

Main factors considered in relation to scenic treatment are:

- A clear identification of the Whole Park Area in contrast to the urban silhouette, to reinforce their own and relative values.
- A unity of landscape design throughout, under a concept of dignity according to the park's symbolic and commemorative significance.
- Establishing visual sequences and landmarks as required by the visitors' means of mobilization and the selected vista points or restplaces where to comprehend the park structure. The rhythm of stop and go is accompanied and even induced by the visual environment.
- To preserve the importance of the monument by linking it visually to certain more important points that may allow the easy reading of the park conformation.



# Circulation Plan

## Approach to the Park

The Whole Park Area shall be located just in the center of the city when the urbanization programs of the city will have been implemented in the future. Also, this location shall be the junction point of the three residential areas with different social levels, low income level in the south, the medium in the west and the high in the north, and therefore, shall be best situated as the place for public communications, cultural and educational activities and for the environmental conservation of Bogota D. E.

Thus with a view to forging a catchment area for the entire city of Bogota, it is believed that the approach to the park will account for about 75 to 80% of the overall traffic volume in the entire city area considering the social level configuration of the prevailing population distribution which is making the heaviest use of mass transit systems such as route buses.

To cope with a more expansive sphere of utilization, the approach to the currently planned bus terminal in the southeast sector of the park, access will be provided by means of foot transportation or circulation bus service.

In the event of completion of the mass transit system stations that are projected for construction near the east, west and south sides of the park, it is believed that approach to the park by pedestrians will account for a higher percentage, although the utilization substitution rate resulting from setting of the route bus fares will influence this in a manner and extent yet to be determined.

## Modification of Arterial Road

Although the park area will be intersected by a road system of an important level in the urban traffic system, from the viewpoint of general utilization, unrestricted access will be provided for pedestrian traffic through the building of pedestrian crossing bridges and tunnels.

Upon taking into consideration the impact upon urban traffic, steps will be taken to have relatively unessential roads relocated or eliminated.

In particular, Calle 63 serves as a key urban arterial route linking the residential areas in the western

part of the city with the heart of the city. However, the park's peripheral road network system will need to be improved so that alternate routes will be available when Calle 63 has to be closed off during its use as an urban mall or during its use as a parade route on certain ceremonial occasions.

## Entrances and Parking

The basic thinking on major entrances to the park is as follows.

- Based on the zoning concept of having activity spaces provided in the park's peripheral area, entrances will be located along the peripheral roadways, with a view to accommodating access by means of passenger car and bus and preserving quietude in the quiet zones located in the park interior.
- Because of the spacious area involved and of access being made from many directions, a large number of entrances will be wanted. However, for administrative reasons, it will become necessary to consider putting in a single entrance at each zone where the nature of the activities it is to support has been clearly established.
- In anticipation of huge crowds in the centrally located Ceremonial Plaza when ceremonial activities are undertaken, the provision of a large scale entrance with accommodations for bus parking, situated within 500 meters of the plaza to stay within walking distance limitations, is being considered. This entrance will serve as principal access for all routes in the park running on a north/south axis.

## Pedestrian Mall

The Urban Mall, projected to be built along Calle 63, will form the shortest connecting route network leading to the different destinations via the arterial park roadways that extend around the park area. This mall, which will be created using such elements as water, plants, pavements, plazas, etc. as part of its makeup, will not only have a circulation-oriented function but will also have the function of making it easy for park users to orient themselves as to their present position by being able to establish their sense of direction and by being able to view the state of the gatherings at the activity cores.

## Park Road Classification

The functional classification of the park roads is as follows.

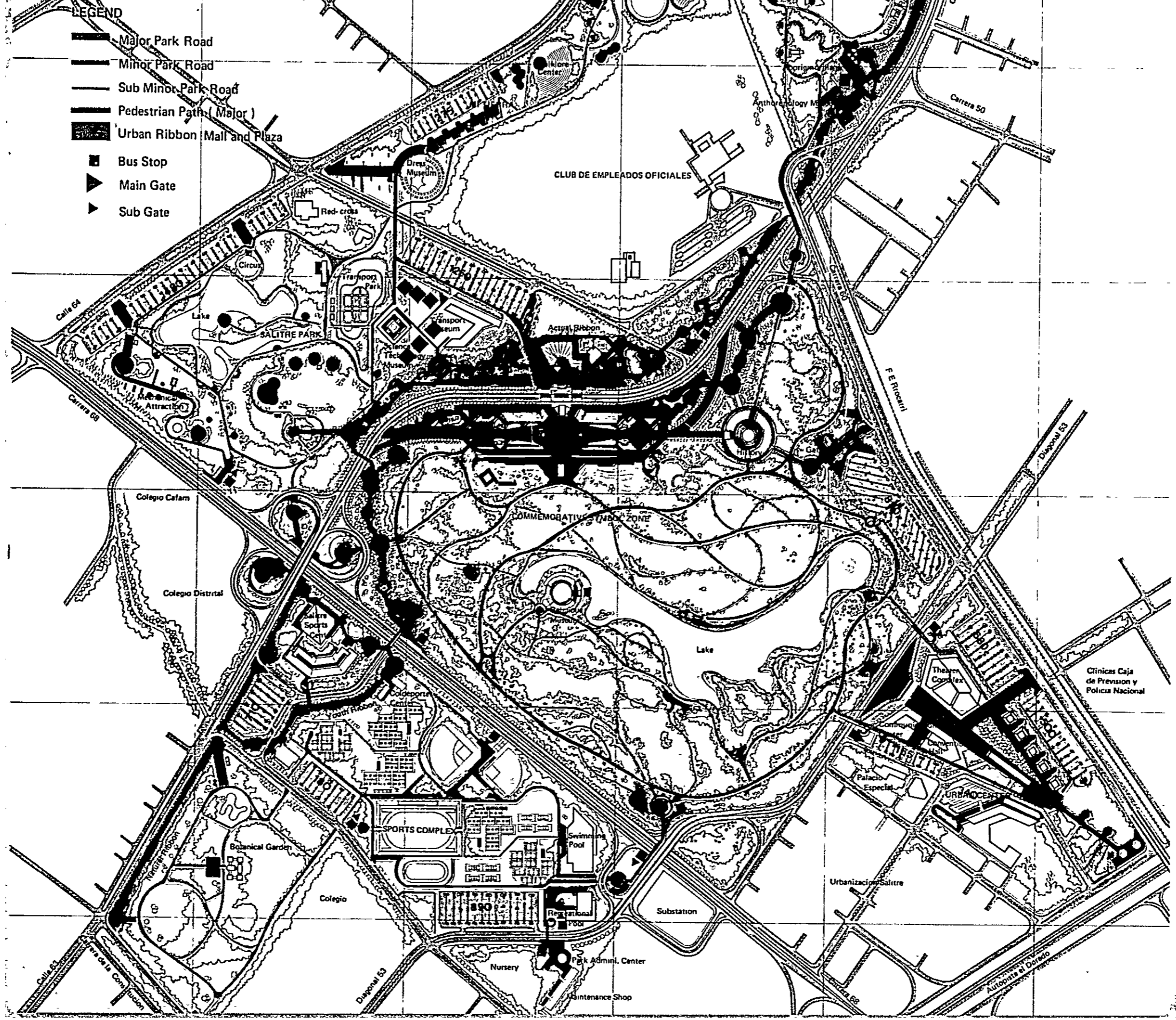
- *Major park roads:* These are park roads that clearly divide the park into different zones and provide linkage between them, the right of way having a width of up to 7 m and the road itself narrowing somewhat at some places.
- *Minor park roads:* These roads will have a width of 3.5 – 4 m and will divide the zones into subzones and provide linkage between the main park roads.
- *Sub-minor park roads:* These are roads for supplementation of the minor park roads and will have the same width as these. Their main function will be as service roads between the main facilities.
- *Pedestrian paths:* These roads, mainly for pedestrian use, will have a width of about 1.0 – 3.0 m. They will be the capillaries of the park road network.

None of these park roads are to present structural obstacles to the passage of park administration and emergency vehicles.

## Inner Traffic System

With a park of this grand scale, an intra-park mode of transportation becomes essential. Transportation in the park will generally be by walking. To realize this, each zone has been given a complete form of activities and been provided with its own entrance. And since it is quite possible that long distances will be involved in moving between zones and that transportation needs will not necessarily be at a constant level, a means of intrapark transportation that is capable of ready response to the fluctuations in transportation needs is being considered. In this sense, it has been decided to have an intrapark excursion mini bus route placed in operation along the park road, linking with the entrances, and doing so on Saturdays, Sundays and holidays to accommodate the main crowds expected on those days.

Fig. -19 Circulation Plan



## Land Relief Plan

### Considerations of Environmental Conditions

The park terrain corresponds to locational and weather conditions and must be suitable in terms of form to the various recreation activities. At the same time, from an ecological point of view the terrain of the park must be comparatively stable, such stability conforming to natural providence and facilitating park administration.

Particularly important is the capacity of the terrain for swift surface drainage after rainfall.

In this park area it is necessary that there be protection of the vegetation from the southeasterly seasonal winds. In other words, a windbreak function must be effectively incorporated in the preparation of the terrain.

### Creation of Park Scenery

As for land formation for creation of scenery, in the existing park areas there is insufficient scenic variation because most of the land is flat, and as a result, the field of vision is plane oriented, with trees and facilities as the main scenic elements.

Accordingly, it is necessary that the park scenery be expressed in 3-dimensional terms and have a sense of perspective incorporated in it, that there be breadth and variation of the field of vision, and that there be proper relation to the distant view and the urban skyline.

### Water Surface

Besides creation of topographical variation through the build-up type of earthwork, the creation of open water surface through earthwork of the excavation type is also indispensable in the formation of the scenery of large-scale city parks. Particularly where the topography is natural and there is undulation it is easier to incorporate an expansive water surface into the park scenery, and in the case of the present park it will be necessary to actively incorporate water surface in order to emphasize its natural scenery.

The water depth of the lake should be 1 - 4m, and full consideration should be given to

conservation and control of water equality and visitor safety. The earth excavated for creation of the lake will be used for building up the mounds for a balance of earth in the vicinity of the lake, which can also serve the function of collection of storm water drainage in the 110 ha area of the park as well as supplementation of water supply.

### Critical Embankment Height

On the basis of a study concerning the embankment limit in the park site, which is characterized by soft ground, it has determined that a limit of about 7m is appropriate for embankment height considering the relationship between the ground conditions and the ultimate bearing capacity. While it is necessary to plan for commemorative landscaping in the park through introduction of natural terrain to replace the completely flat present state of the park terrain, the planning of such landscaping must be such as to achieve maximum effect within this embankment height limitation, and an effort should be made to achieve maximum effect with a minimum of earthwork.

### Land Formation for the 250 Hectares Area

Alterations of existing flat land are kept to a minimum and are dictated mainly by necessity, and are:

– In the Children's Kingdom, by reshaping of the small existing artificial pond, to make a barrier between this area and neighboring mechanical attractions.

– At the entrance from Carrera 60 and Calle 64 to have vertical crossing of a pedestrian and main park road to entrance road, raising the grade and creating an orientation plateau in a point of confluence of circulation.

– In part of the Cultural Ribbon as a simulation of the uneven relief of the central part of the country, creating "valleys" and gorges where the activities and festivals may be held.

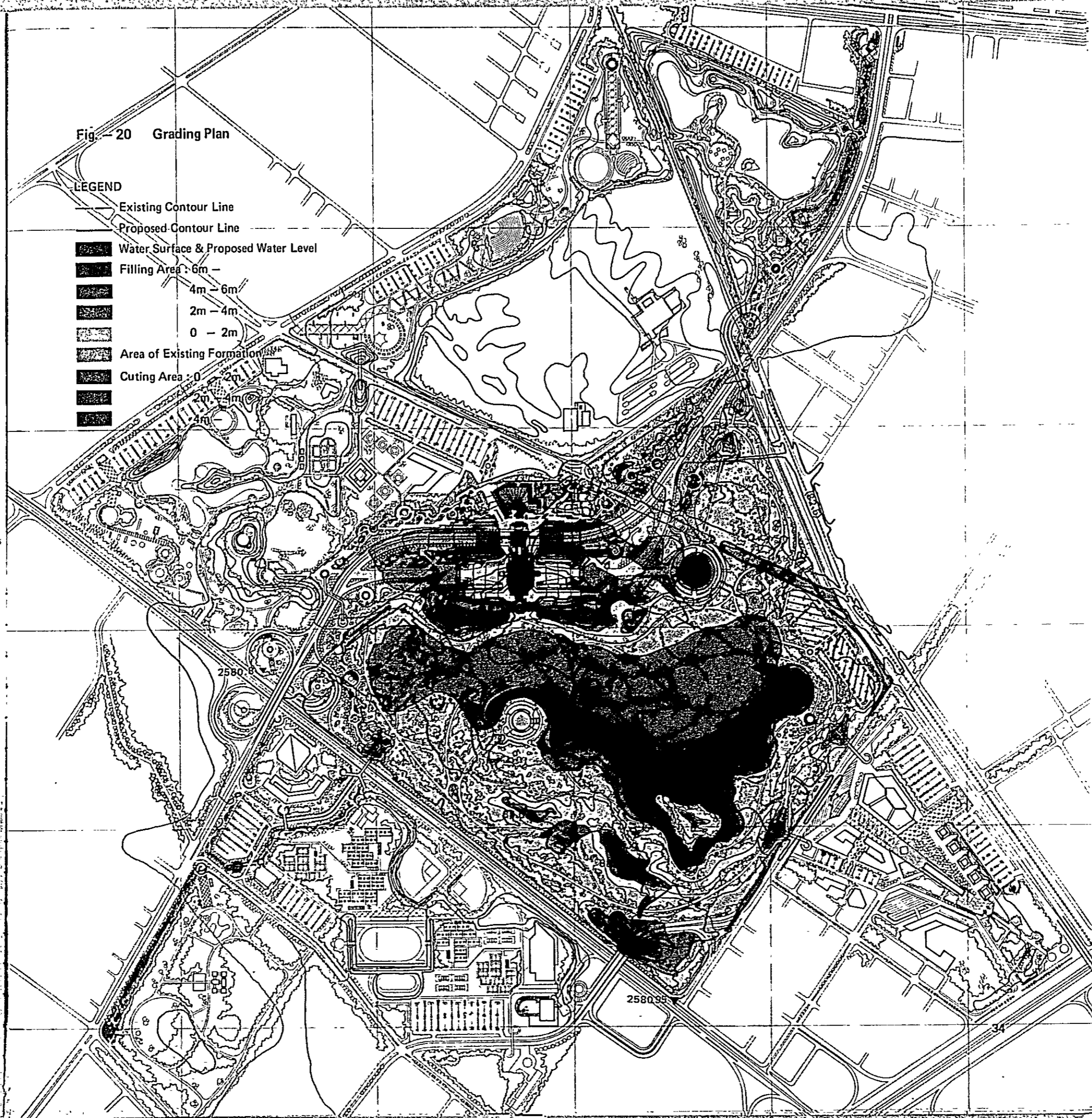
### Basic Policy for Earthwork

- In the drainage system, collection of the water is to be in the direction of the lake, and drainage in the direction of the peripheral road.
- The overall volume of earthwork will be quite substantial on account of the basic conditions of the scenic structure of the park. This will determine the proposed ground formation height on the basis of the planned surface area of the lake and the drainage gradient, the central part of the park being set lower than the existing ground level. This is for the purpose of achieving as far as possible a balance of cut and fill in the earthwork. However, since a considerable volume of borrowed earth will be required as a whole, ways will have to be studied for creation of mounds with high scenic effect with a minimum of embankment work.
- In order to prevent the use of soil with a high clay content, which is not suitable for planting as surface soil as the result of earthwork, it will be necessary to keep the present surface layer soil for use as the surface layer at the time of final embankment formation.
- Borrowed earth can be sandy or have a certain amount of gravel mixed in it, but it should have good water retention and a considerable quantity of organic matter in it, particularly when it is to be used as the surface layer.
- There should be a policy of avoiding environmental disruption through the taking of large amounts of borrowed earth from any single place, the matter of how much can be taken depending, of course, on the particular conditions.

Fig. - 20 Grading Plan

LEGEND

- Existing Contour Line
- - - Proposed Contour Line
- Water Surface & Proposed Water Level
- Filling Area : 6m -
- 4m - 6m
- 2m - 4m
- 0 - 2m
- Area of Existing Formation
- Cutting Area : 0 - 2m
- 2m - 4m
- 4m -



2580.8

2580.95



# Planting Plan

## Greenification Standards

The city of Bogota lies in an area of grasslands called the "sabana de Bogota", grass growing very easily there and there being very little bare ground because of this fact.

At the present time the greenery coverage ratio of the 110 ha area of the park is close to zero, and in order to bring this ratio up to about 30%, it will be necessary to greenify an area of approximately 33 hectares in it, this figure of 30% being an international park standard.

For the entire 350 ha area of the park, the present greenery coverage ratio is 6.6%, which will have to be increased to approximately 20% or 70 hectares of greenification.

## Function of Planting

Comprehensive consideration must be given to creation of planting space that will make it possible to enjoy landscape beauty befitting a place for park use and participation by citizens, the planting being proposed that meets the requirements in each case.

- Physical Functions
- Aesthetic Function
- Environmental Conservation Function
- Psychological Effects

## Condition of Planting

For park planting purposes it is essential that the trees and groves of trees that are planted be cared for from a long-term point of view. In reality, however, it is necessary to open the parks to the public as soon as the planting and other park development have been completed. Accordingly, it is important in terms of park use and management that the trees that are planted have already reached a certain stage of maturity and perfection. The following are the various conditions required of planting plans in view of this situation that city parks are confronted with.

- Transplanting of trees that have attained a state of being able to grow on their own. In other words, the trees that are planted have to be able to grow without individual care.

- The species selected for planting must be easily transplantable and have a high root-taking rate after planting.
- Species must be selected that grow quickly and can be easily controlled in terms of shape and height by trimming, thinning out, etc.
- For planting in grove areas of the park, selection must be made of tolerant species that are able to grow even in the shade.
- From a long-term point of view, ecological consideration must be given to natural succession of the trees in grove areas, the provision of good sunshine conditions being a condition for such succession.
- In grove areas of the park there should be 30 - 50% more planting than the amount required about twenty years hence so that overdense areas can be thinned out and supplementary transplanting can be done where trees have withered or sustained damage after about 10 - 15 years.

## Planting Characteristics and Allocation

The overall planting program for the park is described below in terms of ten types of greenery.

## Species Selection

There is hardly any problem at all regarding use of the species that are generally to be seen in parks and other greenery areas and along roads in and around Bogota. In the present park planning, however, there are cases in which the qualities of the species as scenic elements could be a problem, depending on where the greenery is to be located. Furthermore, there must be selection of species to ensure that those planted in the park are easily managed, and in this respect strict selection criteria must be set for both native species, which are to be particularly stressed in the case of this park, and exotic species.

As for exotic species, the use of which there has not been much experience in Colombia, those species should be selected that have been widely used abroad (particularly under climatic conditions similar to those obtaining in Colombia) for park planting. This does not, however, rule out the possibility of some experimentation.

In the case of native species, ease of transplanting, propagation and care will be decisive in selection, and here, too, some test planting will be necessary in cases of species for which there is not much experience.

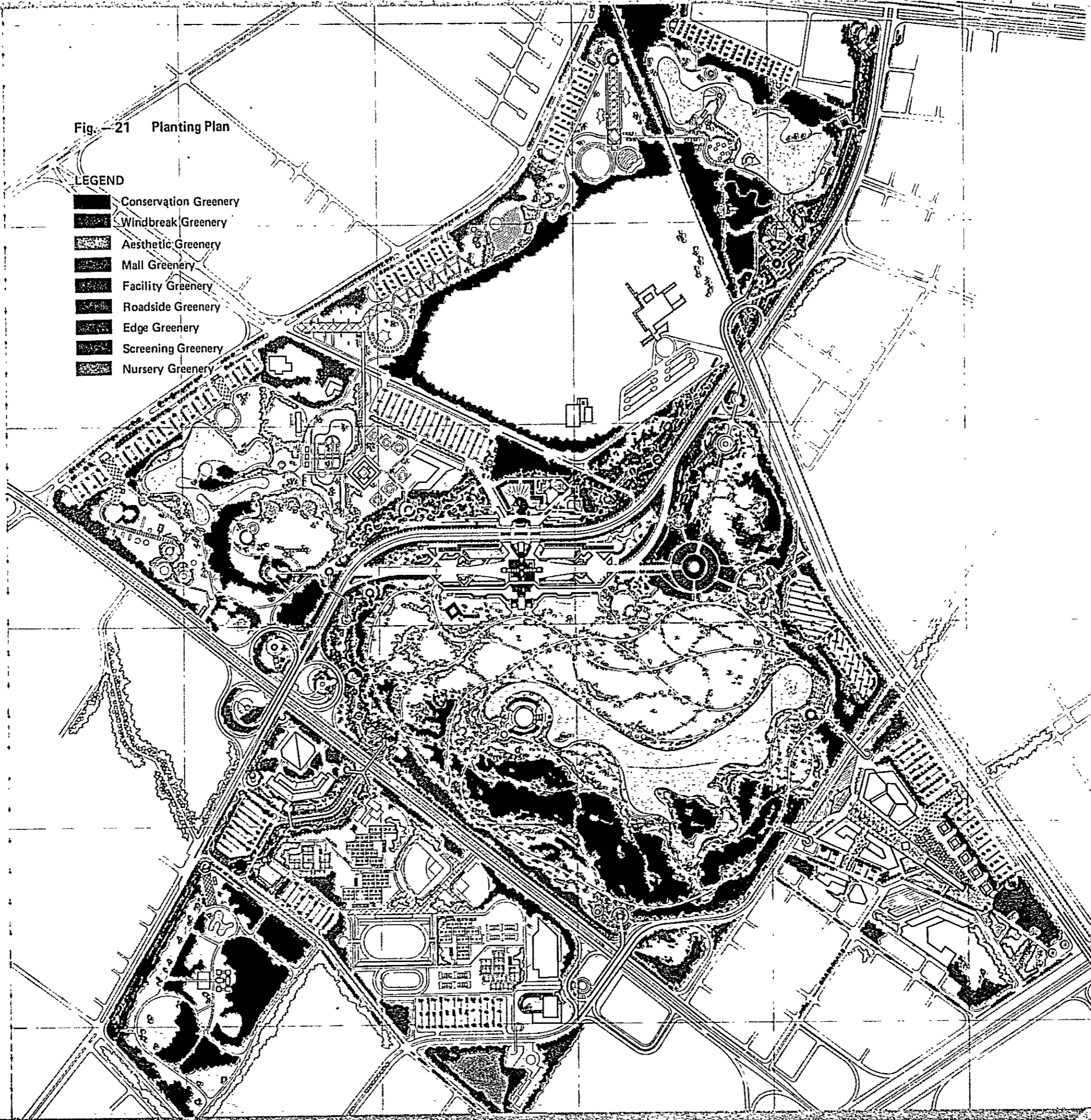
Table — 16 Planting Concept

Code	Greenery Type	Objectives	Location	Species and Shape
01	Conservation Greenery	• Environmental and Ecological Conservation	Jardín Botánico, Lago Park, Southwest of 110 ha	Natural forest
02	Windbreak Greenery	• Protection against the cold wind from southeast direction	Southwest part of the park	Belt Configuration Native and exotic
03	Aesthetic Greenery	• Giving pleasantness to visitors through aesthetic effect	National Ceremonial Plaza & its vicinity	Native and exotic
04	Mall Greenery	• Enhancement of the comfortable atmosphere of the Urban Mall	Urban Mall	Belt configuration colorful & varieties of species
05	Facility Greenery	• Beautification and decoration of the surroundings of main park facilities	Surroundings of main park facilities	Foreign species and gardening species
06	Roadside Greenery	• Demarcation of boundaries • Resistance to exhaust gas	Along outer road Parking area	Large crowns, lower branches
07	Edge Greenery	• Demarcation of boundaries and areas. • Prevention of visual or physical influence from outside the park	Boundary of the park	line configuration Mixed use of different height trees
08	Screening Greenery	• Elimination of elements detrimental to the scenery	Vicinity of main facilities	Linear and uniform shape
09	Turf Greenery	• Elimination of bare ground	Symbol zone, Salitre	
10	Nursery Greenery	• Supplying the young trees	South of Sports Complex	Including flowers

Fig. —21 Planting Plan

LEGEND

- Conservation Greenery
- Windbreak Greenery
- Aesthetic Greenery
- Mall Greenery
- Facility Greenery
- Roadside Greenery
- Edge Greenery
- Screening Greenery
- Nursery Greenery



# Facility Plan

## Concept of Park Facility

The basic significance of an urban park lies in the preservation of open spaces and greenbelt areas, with the purpose of its facilities being to promote park utilization and to enhance its utilization effectiveness. The preservation of a vast space of nature is the primary objective of the memorial park, it being something to leave as a legacy for future generations over a time-span transcending the life cycle of a human being. On the other hand, the park facilities are of the nature of something that needs to be adapted to the utilization pattern of the prevailing period, with constant attention needing to be given to their characteristics, substance, as well as their qualitative and quantitative factors.

## Policy for Introduction of Theme Facilities

- **Commemoration of Simon Bolivar**  
The introduction of a cultural and educational facilities group for teaching and enlightening in regard to the life, culture and technology of the past, present and future, covering the time span symbolical of Simon Bolivar and experienced by the entire citizenry of Colombia. Also, the introduction of a conference site and plaza facilities group to encourage cultural, material and information exchanges on local, country and world levels. When these elements are being introduced, care shall be taken not to duplicate what is already being provided at the existing facilities within the city by seeing to it that the themes of each group are oriented toward the special characteristics of the park. And considerations shall be given to providing functional and visually effective networks between the facilities.
- **Comprehensive City Park Development**  
Plans will be made to introduce within the Park facilities for sports, amusement, culture, conferences, relaxation, etc. providing functions that will do full justice to a comprehensive city park of its caliber but which are not be found in local parks of lesser standing. Under the existing utilization pattern, the activities are mixed together, so efforts will be made to rearrange the facilities with a view to a making the facilities more substantial in nature and to giving character to each zone.
- **Environmental Conservation**  
The park facilities will be concentrated in the peripheral areas, leaving a vast open space and greenbelt zone in the park's center.

## Park Service Facilities

These park service facilities can be broadly grouped into the following three functional categories.

- The first is satisfaction outdoors of human physiological needs. In this category are classified public lavatories, benches and other rest facilities, kiosks, restaurants, cafeterias and soft drink and other vending machines, drinking fountains, and play facilities.
- The second function is management of the park environment and of sanitation and safety, and the facilities falling under this category are park administration buildings, workshops, nursery, litter bins, lighting equipment, gates, boundary fences, etc.
- The third function is provision of information for park use and control of park traffic, and under this category fall information offices, bulletin and message boards, traffic signs, etc.

## Distribution Policy of Service Facilities

- In the installation of service facilities considerations on a comprehensive basis will be given to such factors as projected distribution of park users, performance effects, and ease of orienting one's present position, while keeping in mind such overriding factors as user convenience, ease of maintenance and administration, uniformity of servicing opportunities, and preservation of security.
- With the Urban Mall and the parkways leading from the mall to the entrance gates serving as major activity axis, service facilities designed with high aesthetic effects will be installed.
- Theme facilities and plazas, designed to put the utilization thereof to good advantage, shall be concentrated in the park's peripheral area.
- In the other areas of the park, the number of facilities will be held to a minimum from the standpoint of greenbelt preservation, and measures for controlling the activities of park users will be instituted.
- So as to be able to cope with situations such as special events, exhibitions, etc., consideration will be given to making it possible to set up temporary service facilities in the plaza areas as may be needed for the time and place involved.

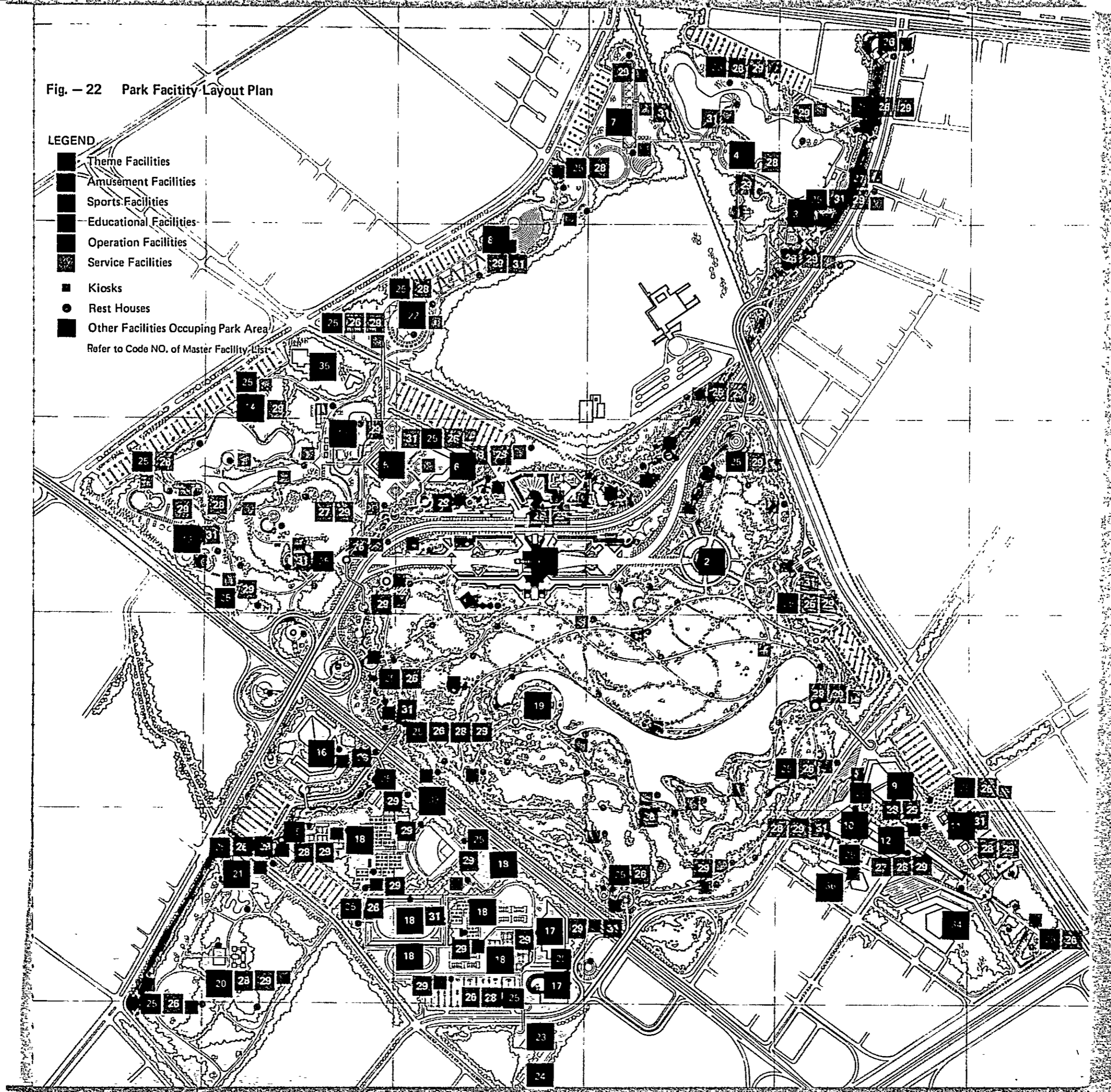
Table — 17 Whole Facility List

Category	Code	Facility name	Location and Number							Area (m <sup>2</sup> )		
			Urban Mall 110 ha	Lago Park	At Tiro	Salitre Park	Sports Complex	Botanical Garden	Urban Center	Site	Building	Floor
Theme Facility	01	National Centennial Plaza	*							60,000	1,000	1,500
	02	Colombian History Museum	*							10,000	2,000	1,500
	03	Latin America Antrologoge Museum	*							10,000	2,000	1,500
	04	Alexander Wilson		*						20,000	3,000	1,500
	05	Science and Technology Museum			*					15,000	2,000	1,000
	06	Trinidad Museum			*					45,000	2,000	1,500
	07	El Valle Cultural			*					10,000	2,000	1,500
	08	Regional Exhibition Center			*					10,000	2,000	1,500
	09	Theaters Complex			*					20,000	14,000	2,000
	10	International Communication Center			*					15,000	4,000	1,500
	11	International Commercial Center			*					10,000	2,000	1,500
	12	Convention Hall (Amphitheater)			*					18,000	4,000	1,500
Amusement Facility	13	Miniature Attractions		*						5,000	300	1,500
	14	Circus		*						25,000	500	1,500
	15	Trinidad Park		*						10,000	2,000	1,500
Sports Facility	16	Sports Sports Complex			*					40,000	14,000	1,500
	17	Archery Field			*					10,000	2,000	1,500
Educational Facilities	18	Sports Facilities			*					10,000	2,000	1,500
	19	Regional Museum	*							10,000	2,000	1,500
	20	Botanical Garden			*					10,000	2,000	1,500
Operational Facilities	21	Natural Science Museum			*					5,000	2,000	1,500
	22	Urban Museum		*						10,000	2,000	1,500
	23	Park Administration Center			*					1,000	500	2,000
Service Facilities	24	Maintenance Shop			*					10,000	2,000	2,000
	25	Emergency Shop			*					10,000	2,000	2,000
	26	Information Office	8	4	1	1	2	1	2	1,000	400	400
	27	Bus Stop	1	1	1	2	2	1	2	20,000	3,000	1,500
	28	Amphitheater	1	2	1	2	2	1	4	15,000	4,000	4,000
	29	Plaza	5	4	3	1	3	2	4	1,000	500	500
	30	Rest	10	20	10	20	10	10	10	5,000	1,000	1,000
	31	First Aid Booth	1	2	2	3	3	2	2	1,000	500	500
	32	Rest House	10	10	10	10	10	10	10	10,000	1,000	1,000
	33	Conference Center			*					1,000	1,000	5,000
Others (Facilities Occupying the Park Area)	34	Archaeological Site			*					10,000	1,000	1,000
	35	Restroom Building			*					20,000	3,000	1,500
	36	Plaza Escorial			*					15,000	2,000	1,500
Total										64,500	12,000	10,000

Fig. - 22 Park Facility Layout Plan

LEGEND

- Theme Facilities
  - Amusement Facilities
  - Sports Facilities
  - Educational Facilities
  - Operation Facilities
  - Service Facilities
  - Kiosks
  - Rest Houses
  - Other Facilities Occupying Park Area
- Refer to Code NO. of Master Facility List



# Operation Program

In order to maximize use of the park, and fully utilization of its functions, a detailed plan for use of the park must be developed, in a comprehensive manner.

## General Information for Visitors

The hours the park is to be open to the public shall be, normally, 8:00 a.m. to 6:00 p.m., with the exception of the Mall, Ceremonial Plaza and theme-related facilities. If the Mall is to be open 24 hours a day, a high level of illumination and security control will be required. The hours of the Sports Ground, Mi-terra and other theme-related facilities is to be from 8:00 a.m. to 10:00 p.m. in view of the time during which the citizens prefer leisure activities, and the usual timing and duration of events.

- **Transportation to and from the Park**  
From the nearest mass transit station and city bus terminal, it is 3 minutes ride by bus and 15 minutes on foot to the park gates. Parking spaces are to be provided along the roads side in the park near entrances for those visitors who drive to the park. Space will be provided there also for a taxi stand and waiting buses. Sub-entrances for visitors who arrive on foot will be located at 300-500m intervals.

Visitors who have arrived at any of the two main gate areas will be able to reach their destinations in the park by use of park circulation buses. Visitors who have arrived on foot at sub-entrances will be able to board city buses at stops at distances of 200-300m from all sub-entrances.

Once in the park, visitors wishing to go elsewhere in the park can use circulation buses and enjoy park scenery as they ride.

As a sub-system for transportation within the park use of small electric (battery-powered) vehicles, which are noiseless and emit no fumes, may be considered.

- **365 Days of Events a Year**  
Ceremonies on the occasion of national holidays of course will be held throughout the year. Somewhere in the park, every day, there will be an event or special event in one or another these areas in which Bogota citizens participate. Families, groups of friends or neighbors or co-workers and the like will be called upon to participate.

These groups will be urged to present requests to the park operation office for the planning and holding of cultural, artistic, sports, charity drives and other events and activities using the park's facilities.

## Application for Use of Park Facilities

Name/nature of event \_\_\_\_\_  
 Sponsor(s) \_\_\_\_\_  
 Purpose \_\_\_\_\_  
 Date, time \_\_\_\_\_  
 Persons to participate \_\_\_\_\_  
 Details \_\_\_\_\_  
 \_\_\_\_\_  
 Submitted by \_\_\_\_\_

The people will be particularly encouraged to participate in evening activities of cultural, educational, artistic, sports, and other nature, in the Urban Ribbons.

## Variety of Courses to Choose From

- **Cultural/artistic course**  
On the Cultural Ribbon park visitors will be able to, and encouraged to, dance, sing, and enjoy song, dance music, and appreciation of paintings, sculpture, photographs, etc. In Mi-terra it will be possible to witness traditional dance and taste traditional cooking from throughout Colombia, as part of a cultural/artistic course through the park. It will be feasible to cover the entire course in one day, or to take several days to cover it thoroughly. For those who wish to enjoy classical drama or opera, such opportunities will be provided at the Teatro de Opera in the Urban Complex, and for those interested in religious art, there is the Religious Museum.
- **Educational course: Historical/scientific**  
Explanatory panels along the Chronological Ribbon, lectures by scholars, and other means will enable visitors choosing this course to acquire a better appreciation of Indian culture and the meaning of the struggle for independence. By next passing from the Actual Ribbon to the Youth Ribbon, visitors will be able to enter the Transportation Museum or Scientific Technology Museum, and become more interested in and modern science and technology.

It is also possible for visitors to follow a course which emphasizes the natural sciences by going from the Natural Ribbon to the Jardin Botanico.

Those particularly interested in details of the history of Colombia may enjoy a visit to the Historical Museum.

- **Sports/athletic course**  
Members of the general population, and youth in particular, will be able to enjoy a sports/athletic course, by going either from the Sports Complex to the Athletic Road on the Youth Ribbon or from the Youth Joy Plaza by means of the field athletic course to the north and across a pedestrian bridge to the Sports Complex.

For marathons, jogging, and various other races, the Urban Ribbons (8 km roundtrip), or the nature course from the great lawn at the 110 ha area to and in the forest, or a circular course around the 350 ha area, may be used at the discretion of the persons involved, affording an opportunity to enjoy park scenery on the way as the course is covered.

- **Weekend Family Course**  
Families will be able to enjoy picnic lunches on the 110 ha lawn, view the panoramas in the Historical Museum, see historical relics and treasures, stroll through the Ceremonial Plaza, go through the Urban Ribbons, and visit the Amusement Center, for an ideal course for visitors who have come to the park with children. In addition to the pleasure of picnicking in a natural environment, visitors can choose the option of going from the lawn around the lake to the forest, where they can enjoy the singing of birds and insects, and then proceed to the lake for boating.
- **Sightseeing and strolling**  
Young lovers, old folk, and others, alone, in pairs or in groups, have many courses to choose from, such as strolling around Parque Lago, enjoying the Gardening Pedestrian of the Cultural, Chronological or Youth Ribbons, circling the 110 ha area's lake, and so on.
- **Events and evening festival course**  
Among the events and activities held in the park many will be held in the evening, made possible by special lighting. Evening events will be presented at the Urban Ribbons Urban Complex, Historical Museum, Latin American Anthropology Museum, Mi-Tierra, and Sports Complex.

Fig. -23 Park Use Plan

LEGEND

- [Icon: square with a stylized figure] — Cultural/Artistic Course
- [Icon: square with a stylized building] — Historical/Scientific Educational Course
- [Icon: square with a stylized person running] — Sports/Athletic Course
- [Icon: square with a stylized family] — Weekend Family Course
- [Icon: square with a stylized eye/glasses] — Sightseeing/Strolling Course
- [Icon: square with a stylized event] — Event/Evening Festival Course

