

## **Urban Renewal of the N-W Area of the Historic Center and the Alameda Corridor of Mexico City**

### **INTRODUCTION**

The 19th. of September of 1985 an 8.1 earthquake in the Richter Scale hit México City with a toll superior to 20,000 deaths. The damage was caused mainly by the amplification of the quake waves and a resonance effect, these two factors working in a jelly or acuose subsoil. More than 650 buildings were damaged or torn down. In the Historic Center of the City and its surrounding areas, many buildings and infrastructures were severely damaged. These casualties basically affected modern buildings, while those built before 1920, that is to say, the colonial and 19th century edifications had a higher resistance to the quake, and hence, the damage they already had was due basically to obsolescence and/or lack of maintenance.

This fact sped up the degradation of the area which started in the fifties because of the decentralization of political, financial, commercial and educational activities. From 1950 to 1970 many institutions moved out. The National Autonomous University of México, by far the largest public university in the Country, moved all its instalations to a new campus in the southern fringe of the City, four major bank corporate offices also changed location and the more important department stores of those days started building new premises all over the City. Also, a great many of buildings dedicated to housing were transformed into storage spaces.

This phenomena was acompanied by large emigration of middle and high income families to newly developed suburbs, all these factors contributing to the economic deterioration of the Center.

The 1985 earthquake accelerated many demolitions in the area. Five of the more important hotels in the City and many big buildings were abandoned and/or demolished, for this reason, for many years big lots remained vacant and a notable degradation acompanied by the occupation of street vendors took place.

From 1950 to the earthquake, three urban renewal programs were implemented in the area we are analyzing, all of them with emphasis in urban landscape and repair or substitution of pavements of streets, sidewalks and public lighting, without considering rebuilding hidden infrastructures of water, sewerage and gas, and areal infrastructures such as, telephone and electricity which were already obsolete.

From 2001, the present government of the City, headed by Mr. Andres Manuel Lopez Obrador decided that major changes should take place to restore the Historic Center and its surrounding areas including the Alameda Corridor through an holistic urban renewal program.

This paper evaluates in part this intervention, since it analyzes the northwest region of the Historic Center and the area known as the Alameda Corridor. This urban plan is different from the prior ones, in that it is an integral restoration of public areas such as streets, parks and plazas and because it takes care of hidden and areal infrastructures as well as pavements, sidewalks, facades, advertisements, newspaper and flower stands, garbage collection bins, bus stops stalls, and urban landscape..

It is also different because the City Government facilitates the participation of the private sector in private spaces for the reconstruction or renewal of affected buildings or in the construction of new edifications for all kinds of activities which promote the regeneration of the central areas creating sinergies which contribute to the economic and social advance

of the community. Among other programs we must note that of housing, basically focused on the attraction of new settlers on this area and the gentrification of it to pull middle class families.

All these actions are contributing to a population recovery and an increase of visitors attracted by the advantage of renovated spaces and the centrality of the zone. In the study area reported in this paper, except from the main plaza, El Zocalo, all streets, parks and plazas were totally remodeled by the City Government in just three years, freeing them from street vendors. The answer of the private sector, because of the advantages given to them has been very positive and thanks to it , many private buildings have been remodeled and many new ones have been built, all this ,resulting in a dramatic change of the image and quality of this part of the City.

### **HOW THE PROGRAM WAS ORGANIZED**

To organize in conjunction with the City Government the "Historic Center Rescue Program"(The Program) the "Historic Center Foundation" (The Foundation) was created, being its president Mr. Carlos Slim Helu, owner of TELMEX, the major telephone company in México, and the richest man in Latin America. Acompaining him one treasurer and seven vocals, all of them from the private sector or non governmental organizations. The technical coordination is in the hands of Mr. Enrique Cervantes Sanchez, a well known urban planner who in conjunction with the government technical authorities decides what to do.

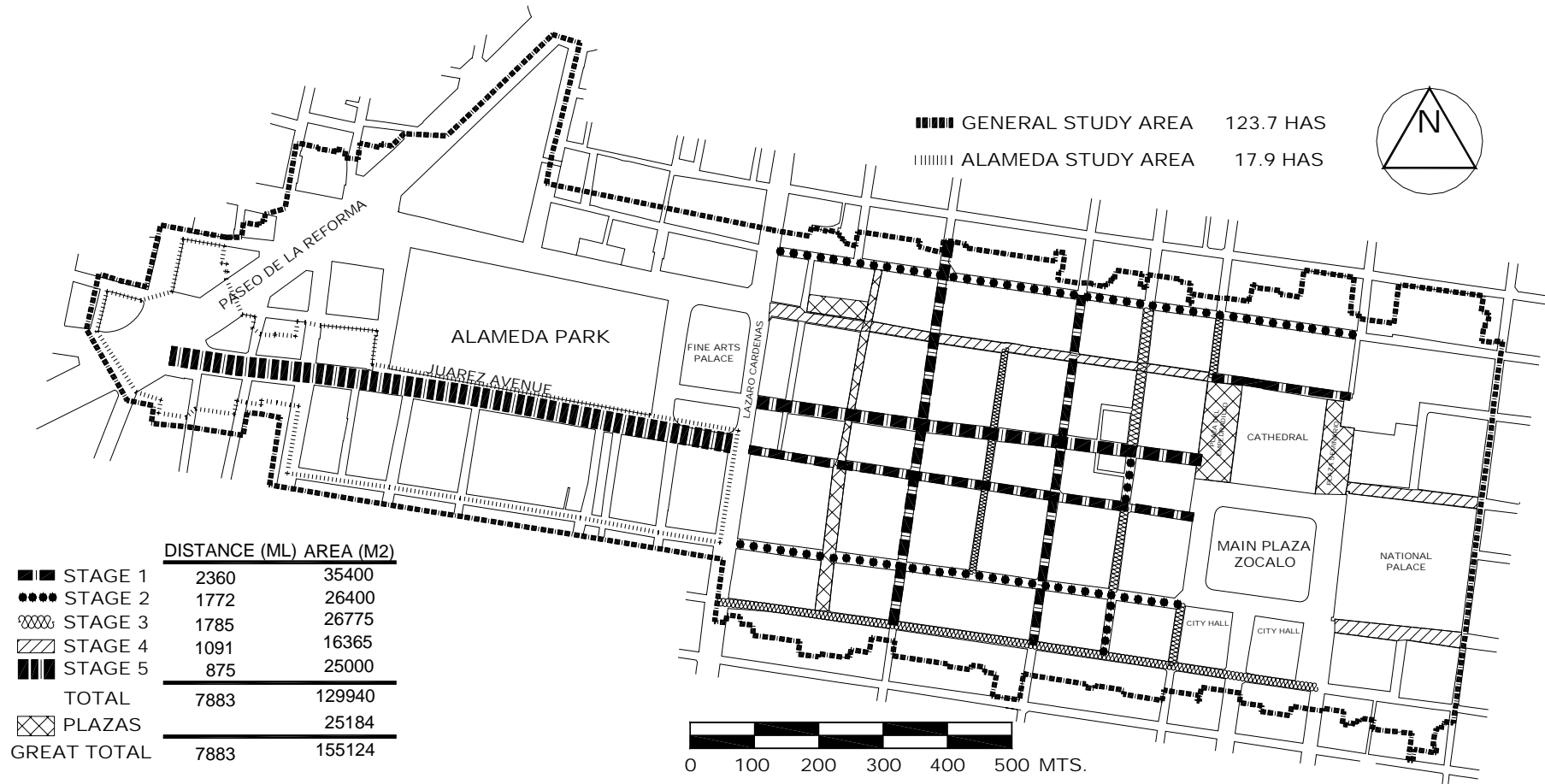
The urban , architectural and engineering projects and constructions in public spaces are in charge of the City Government , considering the opinion of The Foundation , while these activities in private lots are in charge of private companies with the authorization of the City Government.

### **OBJECTIVES OF THE PROGRAM**

1. Stop the sinking of the soil caused by water extraction from the sub soil to improve the support of it, these through:
  - Eliminating the overexploitation of the under ground water reservoirs.
  - Reducing leakage from water pipes.
  - Rising the rain water infiltration or treated water.
  - Rising the recycling of disposable waters.
2. Increase the socioeconomic, educational and cultural levels of the population,. through programs involving nutrition, health, training, scholarships, self employment, and construction or rehabilitation of housing for all levels of society.
3. Rehabilitate the Historic Center through the rise of economic educational,, tourist, entertainment and housing activities.
4. Recuperate, restore , renovate and preserve historical buildings and monuments to give security to persons who work or live in the Historic Center.

The Foundation especificed from the begining a strategy for the rescue and rehabilitation of the Historic Center based on four points: 1.-Solve the sinking problem; 2.-Security and Sanitary actions; 3.- Economic and social well being ;and 4.- Rehabilitation and revitalization.

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## PLAN 1: STREETS AND PUBLIC PLAZAS RENEWAL

## HISTORIC CENTER OF MEXICO CITY

The Historic Center of México City is defined in 446 hectares in which 336 blocks are located containing 4398 lots where different land uses are found, dominating mixed land uses, on it, the most emblematic buildings such as the Metropolitan Cathedral, the National Palace, and the City Hall are located. Between 1998 and 1999 a partial plan for this Center was developed by CENVI in which zoning, land uses, and all regulations concerning urban planning were defined.

In 1950 this center had a population of half a million people, by 1970 its population was 295 thousand inhabitants while in 1990 this area registered a population close to 200 thousand inhabitants, this phenomena lets us note the enormous depopulation of this Historic Center..

350,000 vehicles cross this center every day, only 125,000 of them have this center as their final destination. This causes a major traffic problem.

## STUDY AREA

For this research two study areas were considered. The General Study Area with 123.7 hectares in which the northwest region of the Historic Center and all blocks surrounding the Alameda Park were taken into account, this area being part of the 446 hectares of the Historic Center of Mexico City. The Alameda study area which is part of the former study area, specifically refers to 14 blocks on what is called the "Alameda Corridor" comprehends 17.9 hectares, thus the results of this work are given separately for these two study areas, classifying them in three types of interventions:

1. Rebuilding and restoration of streets parks and plazas, in charge of the City Government;
2. Restoration of historical buildings after the 85 earthquake in charge of Federal or City agencies
3. Construction of new buildings by private sector firms on lots in which damaged edifications were cleared.

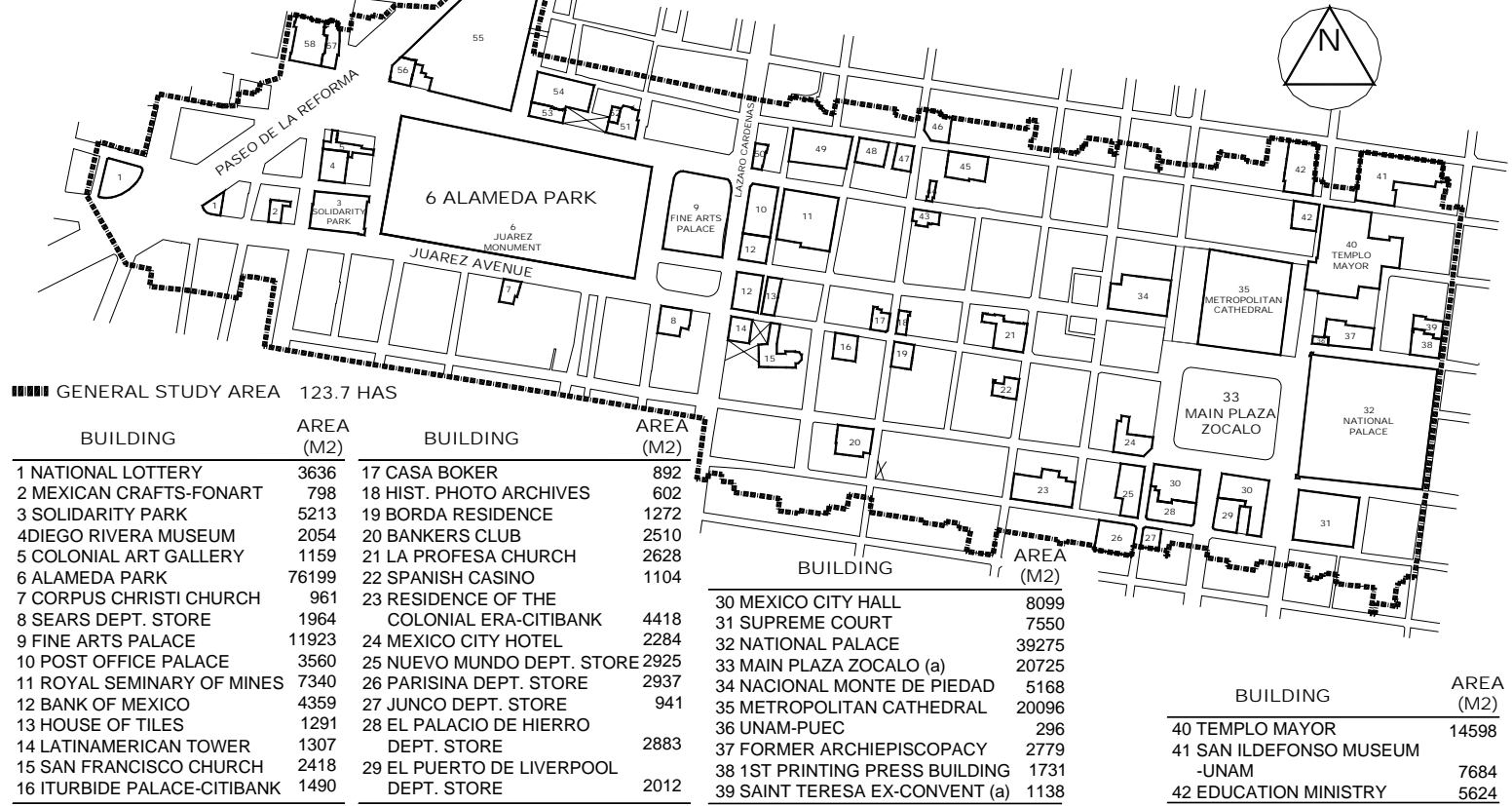
## GENERAL STUDY AREA RESULTS

The rebuilding and restoration was done considering the objectives of the plan presented before. The results that follow were calculated by the author of this paper. The streets parks and plazas were intervened in five stages. The **first stage** took care of the following streets: 5 de Mayo, Isabel la Catolica, Republica de Chile, Madero, Allende, Bolivar the first street of Guatemala, with a total **distance of 2360 m.** and an area of **35,400 m<sup>2</sup>**. The **second stage** included the following streets: 16 de Septiembre, Donceles and two blocks of Palma with **1772 ml. and 26,400 m<sup>2</sup>**. The **third stage** considered: Venustiano Carranza, three blocks of Palma, one block in 5 de Febrero and Motolinia, with a length of **1785 ml. and 26,775 m<sup>2</sup>**. The **fourth stage** took care of Tacuba, one street of Moneda and Corregidora, with a distance of **1091 ml and 16,365 m<sup>2</sup>**. The **fifth stage** considered just Juarez Avenue with a length of **875 ml. and 25,000 m<sup>2</sup>**. These five stages accounted for a **total of 7883 ml and 129,920 m<sup>2</sup>** of rebuilding and restoration of streets. In addition to the streets described before and **four plazas**, Seminario, Empedradillo, Gante and Tolsa, were renovated with **25,184 m<sup>2</sup>**, also the **Alameda Park** with an area of **80,000 m<sup>2</sup>** was restored. (See Plan 1).

According to the City Government figures, the first four stages had a cost of approximately 10 million American Dollars. Considering this figure and the total area of the first four stages, we can derive a cost per square meter of approximately 105 American Dollars. The results officially reported for these four stages are: 8400 ml of sewerage pipes of 45 cm; 692 ml of sewerage for household connections; 427 household connections of water; 10,000 ml of street curves; 32,000 m<sup>2</sup> of sidewalks; and, 47,000 m<sup>2</sup> of streets.

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LAND USE / PROPERTY	AREA (HAS)	BUILDING	AREA (M2)
PRIVATE PROPERTY	52.86	51 SAN JUAN DE DIOS CHURCH	1731
GOVERNMENT PROPERTY	20.3	52 MUSEUM OF ENGRAVINGS	349
PARKS AND PLAZAS	12.46	53 SANTA VERACRUZ CHURCH	1192
STREETS	38.09	54 FRANZ MAYER MUSEUM	4345
<b>TOTAL</b>	<b>123.7</b>	55 TREASURY MINISTRY	33828
		56 CORTEZ HOTEL	1357
		57 SAN HIPOLITO CHURCH (a)	1648
		58 SAN HIPOLITO HOSPITAL	3570
		43 CONGRESS LIBRARY	925
		44 CAFE TACUBA	319
		45 CONDE DE LA HERAS HOUSE	2594
		46 HOUSE OF REPRESENTATIVES	1718
		47 COLONIAL BUILDING	1154
		48 HOUSE OF THE SENATE	1860
		49 NATIONAL MUSEUM OF ART	4903
		50 COLONIAL BUILDING	727

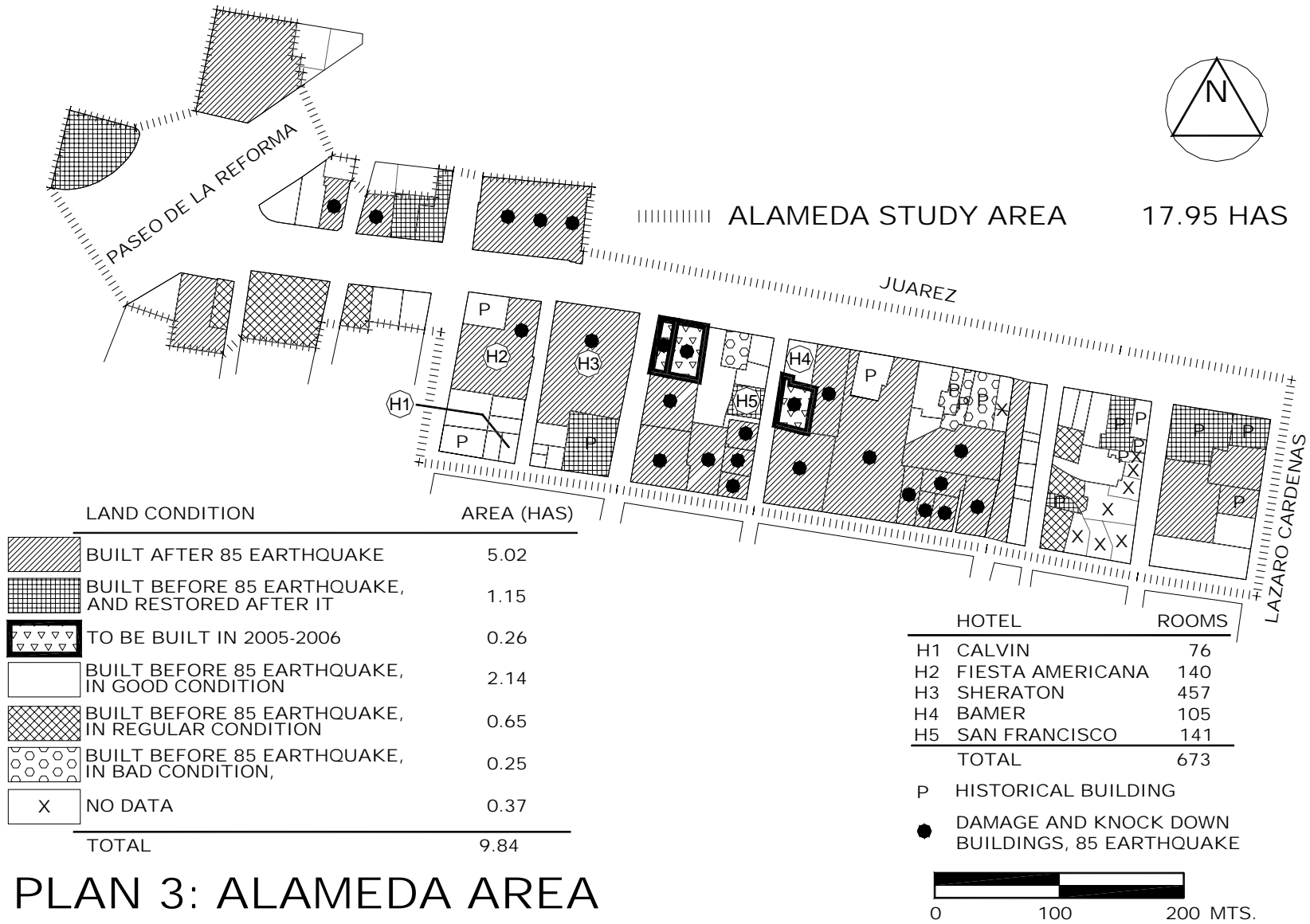


(a) WITHOUT RENEWAL AFTER 85 EARTHQUAKE

## PLAN 2: RESTORED HISTORICAL BUILDINGS AFTER 85 EARTHQUAKE & LAND USE PROPERTY



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PLAN 3: ALAMEDA AREA

In terms of landscape 585 buildings in 74 blocks require rehabilitation in the Historic Center. In this paper study area ,218 buildings with historic value are being repaired, hence, 6600 ml. of facades are in the process of restoration by 13 renowned architects. These works also include 600 new lights , urban furniture in 34 blocks., billboards and canopies .

In terms of land property and according to the author's estimates, presented in Plan 2, from the 123.7 hectares of the general study area, 43% is private property, 16% is government property, 10% are parks and plazas, and 31% are streets. Also, as shown in Plan 2, In the general study area 58 historical buildings of prime importance have been restored after the 85 earthquake , this restorations in charge of the Federal and Mexico City Governments. .

## ALAMEDA STUDY AREA RESULTS

The Alameda Park was built in 1592 and remodeled in 1792 remaining its architectural project the same ever since. The '85 earthquake torn down and structurally affected many buildings in front of this emblematic park, for this reason these blocks were severely degraded and many lots remained vacant for many years. It was until May of 2003 that the reconstruction and restoration works were initiated. The first monument intervened was that of Juarez and the Alameda Park, where all fountains, the sprinkling system, the sculptures, the urban furniture, the lamps, the pavements, and the garden areas were refurbished.



1

2

Alameda corridor



1. El Nacional - Sears de Mexico



2. Private buildings - Citibank-Banamex

Four major premises were built:

1. Hotel and Plaza Fiesta Inn, private investment, finished in 2003, with 6 floors, 140 rooms, 4 restaurants and bars, 15 commercial establishments, and approximately 10,000 m<sup>2</sup> of construction;
2. The Sheraton Hotel, private investment, finished in 2003, with 24 floors, 457 rooms, convention center for 6,000 people, 5 bars and restaurants, and 72,000 m<sup>2</sup> of construction ;
3. The Plaza Juarez Complex, public investment, finished in 2005, a Federal and City government venture where the Foreign Affairs Ministry (construction close to 86,000 m<sup>2</sup>), the Justice Department of Mexico City (construction close to 80,000 m<sup>2</sup>) and the Corpus Christi Church are located, this complex with two buildings of 24 floors, on a lot of more than 22,000 m<sup>2</sup> and an investment for the City Government of 30 million American Dollars for land acquisition and the demolition necessary;
4. Puerta Alameda, private investment, a housing development of 700 apartments for middle class income families with buildings of 16 floors and a construction a little less than 70,000 m<sup>2</sup>.

**These four complexes totaling 318,000 m<sup>2</sup> of built area with an investment superior to 900 Million Dollars**, considering an average cost of 3,000 dollars per square meter, including furniture.



**3-4. Private buildings – behind, Justice Ministry – front, Corpus Christi Church – behind, Foreign Affairs Ministry – front, Bamer Hotel**

This pictures show the location of the Juarez Plaza with its two new 24 floor towers on the back and the Corpus Christi Church already refurbished in the front. This project is located in the lot formerly occupied by the Alameda Hotel Complex which was affected by the 85 quake. On the right the Bamer Hotel not affected by this quake.



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**Juarez Avenue**, built with public monies by the City Government, which stands as stage 5 in Plan 1, was recently inaugurated. It was totally remodeled with a construction area of **25,000 m<sup>2</sup>**. All the hidden and visible infrastructure was replaced, these works including, streets, sidewalks, urban furniture, water, drainage and gas piping and telephone, electric and fiber optic cables. The public lighting was refurbished. The total cost of this avenue was **5 million dollars**. In this Alameda study area, ten buildings have been restored since the 85 earthquake. Of them two major ones, Sears and El Nacional in front of the Bellas Artes.

As shown in Plan 3 the **Alameda study area** comprehends **17.95 hectares**, in it five hotels are located totaling 673 rooms of which, as pointed out before, **597, that is to say, 89% of this total are brand new**. In terms of land condition, from the 17.95 hectares of the Alameda Corridor, 55% are occupied by lots, the remaining 45% are streets. From these lots: 51% are occupied with buildings built after the 85 earthquake; 12% are occupied with buildings built before the 85 earthquake and restored after it; 31% are occupied with buildings in different conditions built before the earthquake; 3% are lots with projects to be built in 2005-2006. No data is available for 3% of the land. From these figures we can conclude that **63% of the available land are new or remodeled buildings, with an investment superior to 1 billion American Dollars**.



5

Alameda corridor



5 before. Private building – Variedades Theatre



5 after. Private building – Variedades Theatre – front, Empty lot – behind, Puerta Alameda

. On the right hand side of the bottom photo, Puerta Alameda is presented. This project consisting of various 16 floor buildings with 700 apartments, is being built in lots where the previous constructions had to be demolished since they were affected by the 85 earthquake. The central building to the left will be remodeled, The other two are in good condition.

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6 7

**Alameda corridor**



**6-7before. Prado Hotel – Private building - Mexicana building**



**6-7 after. Sheraton Historic Center - Fiesta Inn Historic Center – Mexicana building**

The middle picture shows the landscape of two blocks before the 85 quake, to the left ,the Prado Hotel appears, it was the best in the City but had to be demolished because of severe structural damage. The bottom picture shows The Sheraton and Fiesta Inn Hotels, inaugurated in 2003. The Mexicana building to the right of the photos was not affected



**Alameda corridor**

8

9



**8. Citibank-Banamex – Private building – Light Co. building**



**9. México City government building – Citibank-Banamex**

These pictures show three blocks, the bottom one to the right shows the Citibank-Banamex building which was built after the earthquake, all the others built before the earthquake were not structurally affected.

## **CONCLUSIONS**

1. This project took care of the most important area of the Historic Center of Mexico City, in which the more important buildings of the Federal and City Governments of Mexico are located.
2. 7.89 kilometers of streets and avenues were totally rebuilt with an area covering 155,124 square meters .
3. This urban restoration dealt with all the hidden and areal infrastructures of public spaces.,hence a correct operation for at least 40 years is expected
4. The way this program was designed, has allowed the interest ,and therefore the investments of the private sector..
5. The attraction of new clients to all kind of activities, new investmens, new inhabitants are the best proof of the success of this restoration of the Historic Center.

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