

**INTERNATIONAL BOUNDARY AND WATER COMMISSION  
UNITED STATES AND MEXICO**

Ciudad Juárez, Chihuahua  
December 10, 1999

**JOINT REPORT OF THE PRINCIPAL ENGINEERS  
CONCERNING THE DEMARICATION OF THE INTERNATIONAL BOUNDARY AT THE  
BORDER PORTS AND THE INTERNATIONAL BRIDGES ALONG THE  
UNITED STATES/MEXICO BORDER**

To the Honorable Commissioners  
International Boundary and Water Commission  
United States and Mexico  
El Paso, Texas/Ciudad Juarez, Chihuahua

Sirs:

We respectfully submit this Joint Report concerning the demarcation of the international boundary (IB) at the border ports and international bridges along the United States/Mexico border to define more clearly the location of the boundary at these sites and thereby assist in avoiding unintended incursions by authorities in both countries in their not knowing the location of the IB which could bring about questions over sovereignty. Based on your instructions, in this respect, that we present for your consideration a detailed program that the Commission may consider for boundary demarcation at the ports of entry and international bridges, pursuant to the authority in Article 2 of the 1944 Water Treaty and Article VII of the 1970 Boundary Treaty.

**International Boundary Demarcation at Border Ports and International Bridges and Land Boundary; Present Conditions**

We observed that the Commission, in compliance with responsibilities given to it by the two Governments regarding the boundary demarcation of the western land boundary and international bridges maintains 276 international monuments numbered 1 through 258, including 18 intermediate international monuments identified with a number and a letter. The monuments are located at varying distances from one another along the western land boundary, beginning with Monument No. 1 at El Paso, Texas/Ciudad Juarez, Chihuahua and ending at Monument No. 258 at the Pacific Ocean. In addition, the Commission has installed and maintains 442 intermediate markers located in urban areas and other critical areas to prevent questions relating to sovereignty of the two countries. We observed that each Section of the Commission is concluding a report on inspection of the western land boundary monuments under the terms of Commission Minute No. 244, entitled "Maintenance of the Monument in the Western Land Boundary" and that the Principal Engineers are consulting with the corresponding agencies of their respective country concerning the need to install additional monuments along the western boundary to more precisely define the location of the international boundary. In the case of bridges over the international rivers, the Commission has installed or requested the installation by the parties responsible for construction of the international bridges, to place demarcation plaques at the place indicated by the Commission.

We further observed that in many of the ports along the land boundary the nearest international monument or intermediate marker is not sufficiently close to the port of entry to determine, in a clear manner, the location of the international boundary on the roadway between the border facilities of both countries. We also observed that for the international bridges, the location of the international boundary is often marked only on one side of the bridge and is not defined on the roadway.

We have reviewed the boundary demarcation program performed under the "Joint Report of the Principal Engineers Referring to the Demarcation of the International Boundary at the Border Ports of Entry and International Bridges along the United States - Mexico Boundary", dated June 18, 1993 and found most of the features to be adequate in fulfilling the purposes of the program. However, we observed that the painted zones that indicate the location of the boundary at the international crossings, has deteriorated and faded rapidly due to heavy traffic and thus become costly to maintain. Therefore, we consider that demarcation on the pavement would be identified in a more effective manner by placing pavement markers exactly on the international boundary and by placing traffic buttons along the roadway in a band covering a width of 1.0 meter (3.28 feet) on each side of boundary as shown in Exhibit A.

### **Demarcation Program Works**

We propose that the Commission proceed with the demarcation program as shown in Exhibits A and B. Exhibit A illustrates a typical demarcation for a boundary crossing. Exhibit B lists the existing port of entries and international bridges and specifies the country responsible for the demarcation work. We also propose that the following procedure be followed to carry out an equitable distribution of work for this demarcation program between the two countries:

- a) That the costs of demarcation be consider:
  1. Fabrication and installation of the plaques and pedestals;
  2. Placement of raised markers and reflecting buttons;
  3. Costs of maintenance which include replacement of the raised markers, reflecting buttons and plaques; and
  4. Reparation and painting of the pedestals.
- b) That all the items listed in paragraph a) be summarized as two basic items: length marked (width of crossing) and number of plaques/pedestals installed.
- c) That the Principal Engineers exchange information each year in which locations that have been demarked with project components would be identified and those work items carried by each Section, credited to the appropriate Section.
- d) That to maintain a balance of costs between the two countries, the first indicator used should be the length marked by each country, and if an imbalance in the number of plaques/pedestals installed by each country occurs in following this procedure, the Commission will determine when and at what proposed crossings the country which has supplied the least number of

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plaques/pedestals should supply the remaining plaques/pedestals. These remaining plaques/pedestals should be placed at new crossings that the other country may demark or to replace those plaques/pedestals that may have been removed or destroyed by vandalism on some of the existing crossings.

- e) That maintenance at each demarked crossing be performed under the Commission supervision, by the country which performed the demarcation. Maintenance, which includes replacing raised markers, reflective buttons and plaques, and repairing and painting of pedestals, will be performed at least once a year at each demarked crossing.
- f) That when the Commission renders its judgment on the consistency of the proposed border ports and proposed international bridges with applicable United States - Mexico treaties and agreements in force, each Section will make the necessary arrangements with the parties responsible for the construction, operation and maintenance of each bridge and port of entry in each country, to effect the initial demarcation under this program and to ensure that the parties responsible for their operation and maintenance in each country carries out the maintenance of the demarcation. Installation and maintenance will follow the demarcation shown in Exhibits A and B.
- g) In the cases of international bridges, each Section will ensure that, prior to the judgment of the Commission under the terms of Article IV B of the 1970 Boundary Treaty, the bridge proponent in the respective Section's country is provided the information on the location of the international boundary under the terms of Article II of the 1970 Treaty.
- h) That each year the Principal Engineers evaluate the proposed demarcation program and present to the Commission, those adjustments as they may consider appropriate based on observed results.

**Recommendations**

Based on the foregoing, we respectfully make the following recommendations:

1. That the Commission adopt the demarcation program proposed in this report, in the manner shown in Exhibit A and in the crossings listed at Exhibit B.
2. That each year, the Principal Engineers exchange a list of those locations that have been demarked by each Section, based on project components and crediting those components to the Section that carried out the work in the manner described in this Joint Report, such that upon conclusion of the program there will be an equitable distribution of work.
3. That when the Commission renders its judgment on the consistency of proposed border ports and proposed international bridges with applicable United States - Mexico treaties and agreements in force, each Section will make the necessary arrangements with the parties responsible for the construction, operation and maintenance of each bridge and port of entry in each country, to effect that the parties responsible for their operation and maintenance in each

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country performs the maintenance of the demarcation. Installation and maintenance will follow the demarcation shown in Exhibits A and B.

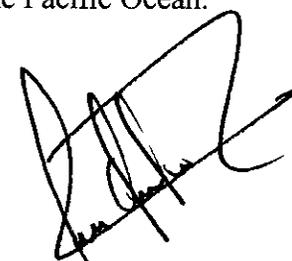
4. That in the case of new border ports of entry or international bridges, the Commission instruct the agencies responsible for their construction and maintenance, that they perform the demarcation at their expense, in the manner shown in Exhibit A under the supervision of the Commission, and in the same manner cover the cost of maintaining the international boundary demarcation, whether this is performed directly by the sponsor under the supervision of the Commission or covering the costs of the respective Section.
5. In the cases of international bridges, each Section will ensure that, when the Commission renders its judgment under the terms of Article IV B of the 1970 Boundary Treaty, the bridge proponent in the respective Section's country is provided the information on the location of the international boundary under the terms of Article II of the 1970 Treaty.
6. That beginning no later than five (5) years from the approval of this Report, and at every five years thereafter, the Principal Engineers prepare a report to the Commission on the condition of the boundary demarcation undertaken under the program proposed in Exhibit B.
7. That each year the Principal Engineers evaluate the proposed demarcation and present to the Commission, adjustments as they may consider appropriate based on the observed results.
8. That upon completion of the present inspection under the terms of the Commission Minute No. 244, the Principal Engineers will recommend to the Commission in the Year 2000, a program to more precisely define the location of the international land boundary between existing monuments from El Paso, Texas/Ciudad Juarez, Chihuahua to the Pacific Ocean.

Respectfully,



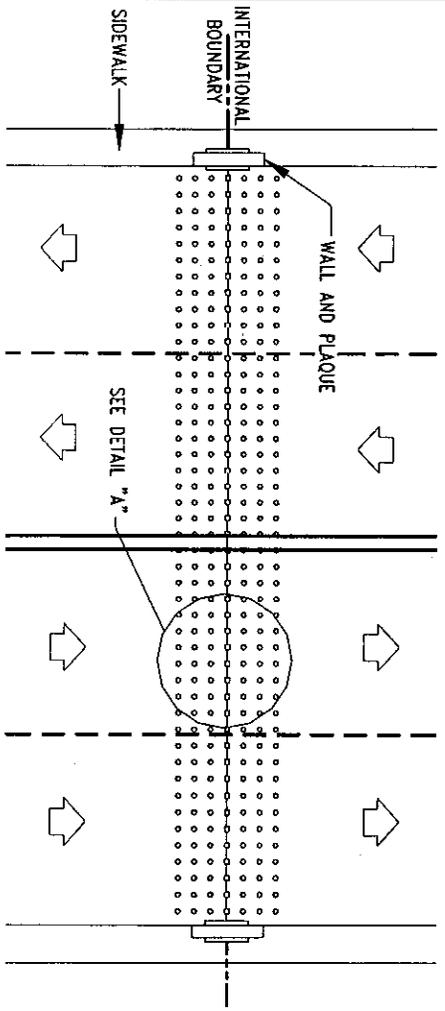
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Carlos Marin  
Principal Engineer



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Luis Antonio Rascon Mendoza  
Principal Engineer



TYPICAL INTERNATIONAL BOUNDARY DEMARCATION

NOT TO SCALE

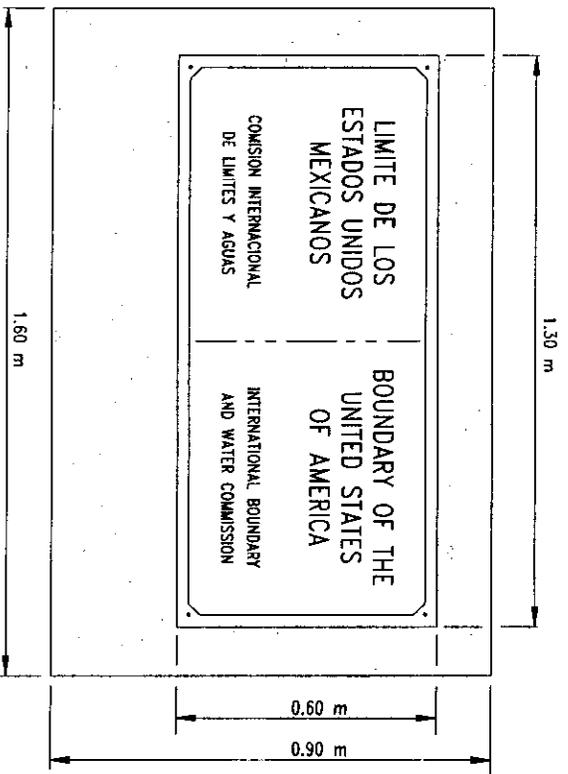
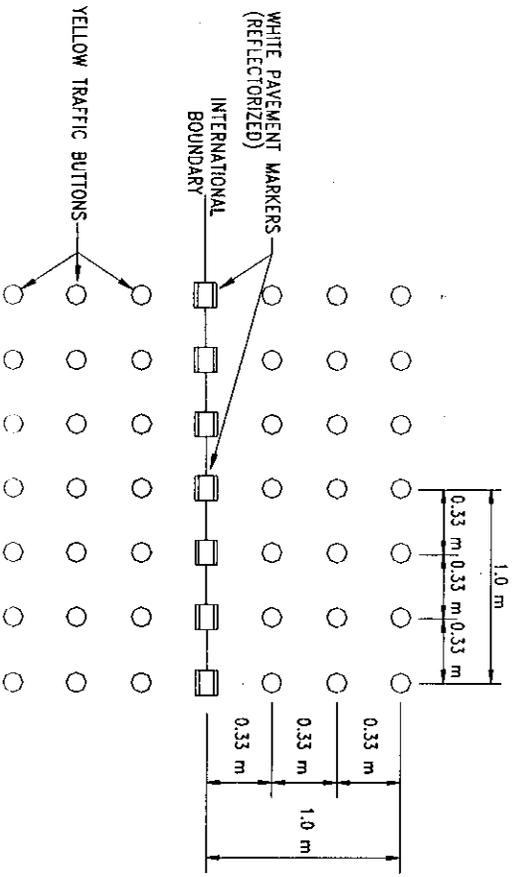


EXHIBIT "A"

WALL AND BOUNDARY PLAQUE

NOT TO SCALE



DETAIL "A"

NOT TO SCALE

FOR THE UNITED STATES

*[Signature]*  
PRINCIPAL ENGINEER

APPROVED

FOR MEXICO

*[Signature]*  
PRINCIPAL ENGINEER

*Dec. 10, 1955*  
DATE

INTERNATIONAL BOUNDARY & WATER COMMISSION  
UNITED STATES & MEXICO  
BOUNDARY DEMARCATION  
FOR THE  
INTERNATIONAL BRIDGES & PORTS OF ENTRY

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**EXHIBIT B (Page 1 of 2)**

**JOINT REPORT OF THE PRINCIPAL ENGINEERS  
CONCERNING THE DEMARCATION OF THE INTERNATIONAL BOUNDARY AT THE  
BORDER CROSSINGS AND THE INTERNATIONAL BRIDGES ALONG THE  
UNITED STATES/MEXICO BORDER**

**WORK PLAN - UNITED STATES SECTION**

NAME OF BRIDGE	CROSSING WIDTH		NO. OF PLAQUES TO BE INSTALLED
	Feet	Meters	
Tornillo-Guadalupe (Fabens - Caseta)	16	4.88	0
Ft. Hancock-Porvenir	16	4.88	0
Del Rio - Acuña	40	12.19	0
Solidarity (Laredo III - Colombia)	100	30.48	0
Laredo-Nuevo Laredo I	40	12.19	0
Lincoln - Juárez (Laredo-Nuevo Laredo II)	75	22.86	0
Laredo IV - Nuevo Laredo III	100	30.48	0
Pharr - Reynosa	48	14.63	0
Free Trade Bridge (Los Indios - Lucio Blanco)	48	14.63	0
B&M Vehicular (Brownsville - Matamoros II)	50	15.24	0
B&M (Railroad) (Brownsville - Matamoros II)	18	5.49	0
Gateway - Puerta Mexico (Brownsville - Matamoros I)	25	7.62	
Veterans - Ignacio Zaragoza (Brownsville - Matamoros III)	25	7.62	0

NAME OF PORT OF ENTRY	CROSSING WIDTH		NO. OF PLAQUES TO BE INSTALLED
Otay Mesa-Mesa De Otay	218	66.45	2
Tecate-Tecate	143	43.59	2
Andrade-Algodones	45	13.72	2
San Luis-San Luis	110	33.53	2
Nogales-Nogales II (Mariposa)	111	33.83	2
Nogales-Nogales I (Puerta Mexico - Dennis DeConcini)	203	61.87	2
Naco-Naco	63	19.20	2
Douglas-Agua Prieta	167	50.90	2
<b>PAGE TOTAL</b>	<b>1661</b>	<b>506.28</b>	<b>16</b>

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**EXHIBIT B (Page 2 of 2)**

**JOINT REPORT OF THE PRINCIPAL ENGINEERS  
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BORDER PORTS AND THE INTERNATIONAL BRIDGES ALONG THE  
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**WORK PLAN - MEXICAN SECTION**

NAME OF BRIDGE	CROSSING WIDTH		NO. OF PLAQUES TO BE INSTALLED
	Feet	Meters	
Paso del Norte (Santa Fe - Juarez)	46	14.02	0
Good Neighbor (Stanton.- Lerdo)	45	13.72	0
Cordova - Americas	153	46.63	0
Zaragoza (Ysleta -Zaragoza	108	32.92	0
Presidio-Ojinaga	40	12.19	1
Amistad International Dam	24	7.32	0
Eagle Pass-Piedras Negras I	40	12.19	0
Falcon International Dam	24	7.32	0
Roma - Miguel Aleman	26	7.92	0
Rio Grande City - Camargo	20	6.10	1
Hidalgo-Reynosa I	40	12.19	0
Hidalgo - Reynosa II	48	14.63	0
Progreso-Nuevo Progreso	20	6.10	0

NAME OF PORT OF ENTRY	CROSSING WIDTH		NO. OF PLAQUES TO BE INSTALLED
	Feet	Meters	
San Ysidro-Tijuana	619	188.67	0
Calexico-Mexicali (old)	165	50.29	2
Calexico East-Mexicali (new)	72	21.95	0
Lukeville-Sonoita	48	14.63	2
Sasabe-Sasabe	22	6.71	2
Antelope Wells-El Berrendo	25	7.62	2
Columbus-Palomas	25	7.62	2
Santa Teresa-San Geronimo	54	16.46	2
<b>PAGE TOTAL</b>	<b>1664</b>	<b>507.19</b>	<b>14</b>