

INTERNATIONAL BOUNDARY AND WATER COMMISSION  
UNITED STATES AND MEXICO

Ciudad Juárez, Chihuahua,  
August 28, 1963.

MINUTE NO. 214

ENGINEERING CONSIDERATIONS RELATING TO RELOCATION  
OF THE RIO GRANDE AT EL PASO, TEXAS, AND CIUDAD JUAREZ, CHIHUAHUA

The Commission met at the offices of the Mexican Section, at Ciudad Juárez, Chihuahua, on August 28, 1963 at 10:00 a.m., to consider the engineering criteria and plans required to put into effect the joint recommendations for relocation of the channel of the Rio Grande at El Paso-Ciudad Juárez, referred to in the Memoranda of July 17, 1963 entitled "Recommendations to the Presidents of the United States and of Mexico by the Department of State and the Ministry of Foreign Relations for a Complete Solution of the Chamizal Problem".

The Commissioners reviewed the engineering aspects of the new channel of the river recommended in the Memoranda under reference, and the studies and computations which, under instructions from their respective Governments, they made of those aspects during the preparation of the Memoranda. They reviewed the "Preliminary Plan, Relocation of Rio Grande, El Paso, Texas-Ciudad Juárez, Chihuahua", which is attached to this Minute as an Exhibit and forms part hereof, as well as the engineering studies and criteria on which it is based and the preliminary cost estimates of the new channel and of the bridges which are to replace those presently in service.

They noted that the centerline of the proposed new channel would diverge from the centerline of the present channel at point "A" shown on the Exhibit. Beginning at that point, the centerline is described as follows, with distances approximate: It would be aligned easterly along a curve of 2,300-foot radius and 0.44 mile in length, and a tangent of 0.62 mile, approximately parallel to the present channel and from 600 to 900 feet to the north of it; thence northeasterly along a curve of 1,640-foot radius and 0.32 mile in length, and a tangent of 0.22 mile; thence easterly along a curve 2,080 feet in radius and 0.35 mile in length and a tangent of 0.62 mile, crossing the west boundary of Cordova Island at a point 200 feet to the south of Monument No. 3 and approximately 1,000 feet to the south of the north boundary of said Island and 3,500 feet to the north of the present channel of the river; the line would continue to the southeast along a curve 1,910 feet in radius and 0.33 mile in length, which would cross the east boundary of Cordova Island 330 feet to the east of Monument No. 13 and thence also southeasterly along a tangent 0.82 mile; thence easterly along a curve of 5,730 feet in radius and 0.53 mile in length to connect with the present channel. The total length of the new channel would be approximately 4.3 miles.

The Commissioners found that the hydrologic studies, together with the consideration that the business districts of the two cities require a high

degree of flood protection, support the criterion that the new river channel should be designed to carry a flood of 18,000 cubic feet per second with 3.3 feet of freeboard, as shown on the preliminary plan. They found that the proposed alignment of the new concrete-lined channel would be free of abrupt turns which might cause a significant rise in flood stages; that notwithstanding the fact that the new channel would have a greater length and curvature than the present channel, water elevations for the design flood would be lower in the new channel because of reduction in friction losses due to its concrete lining; that the lined channel requires considerably less width of right-of-way through the high-cost urban areas, with substantial savings in costs of land and improvement for right-of-way and in construction of new bridges; and that the preliminary plan also provides for inlet works to allow entrance of storm drainage, and for check structures in the new channel to be able to provide a water depth of six feet or more.

The two Commissioners noted that the relocation of the Rio Grande at El Paso-Ciudad Juárez requires approval of a Convention by the two Governments.

The Commission then adopted the following resolution, subject to the approval of the two Governments:

A. The Commission finds engineeringly sound the new location of the river at El Paso-Ciudad Juárez as recommended, and as shown on the Exhibit, and approves the preliminary plan and cost estimates shown thereon, subject to such modifications as the Commission may agree upon in final design and construction.

B. The Commission specifically approves the following findings of the preliminary plan:

1) The precise areas which would be affected by relocation of the river, which in the aforementioned Memoranda and the maps attached thereto are given approximately to the nearest acre and hectare, are as follows: South of the centerline of the relocated channel and north of the present channel of the Rio Grande there would be a tract of 823.50 acres comprised of 366.00 acres in the Chamizal Tract, 193.16 acres in the southerly part of Cordova Island, and 264.34 acres to the east of the Island. North of the centerline of the relocated channel would be a tract of 193.16 acres which presently is the northerly part of Cordova Island.

2) The new channel of the Rio Grande as shown on the Exhibit would be concrete-lined, with cross-section as narrow as compatible with the capacity required to carry the design flood.

3) The new channel would provide a high degree of flood protection and a stable channel which could be properly operated and maintained by the two Governments through their respective Sections of the Commission. The new lined channel would provide a stable international boundary, would permit more effective sanitary control of the river, and would contribute to improvement and beautification of the border between the two countries at El Paso-Ciudad Juárez.

C. The Commission recommends the following joint measures by the two Governments to implement the plan:

1) That when the Convention relating to the relocation of the river comes into force, the International Boundary and Water Commission:

a) Make the necessary topographic surveys for demarcation of the new boundary.

b) Prepare detail plans and perform all other engineering work preliminary to and preparatory for relocation of the river as may be required by the Convention.

c) Undertake, at the earliest practicable date, the construction of the new bridges required to replace the six existing bridges and such portions of the new river channel as might be feasible and desirable as determined by the Commission. The bridge or bridges required to replace the two existing Cordova Island bridges shall be located as determined by the Commission, and each Section of the Commission shall assume responsibility for operation and maintenance of the portion of such bridge or bridges in its country, with the understanding that each Section may make arrangements if deemed necessary or desirable with local authorities of its country for operation and maintenance of its part of such bridge or bridges or for repayment of costs of said operation and maintenance.

2) That when such prerequisite measures as are set forth in the Convention have been effected:

a) Each Government, in the territory under its jurisdiction, remove all structures from the right-of-way for the new channel as delineated by the Commission.

b) The Commission demarcate the new boundary line.

c) The Commission, after the two Governments have approved the new boundary line, proceed to complete the relocation of the river channel and all related engineering operations.

D. The Commission recommends that the equal division between the two countries of total costs of constructing the new channel and bridges, as recommended in the Memoranda of July 17, 1963, be effected by each Government performing, through its Section of the Commission, a portion of the construction work corresponding to one-half of the total cost.

E. The Commission recommends that in carrying out the construction of works allotted to it, each Section of the Commission may make use of any competent public or private agencies in accordance with the laws of its country.

F. It is recommended that each Section of the Commission observe, in the works which it may have to execute in the other country, the laws of that country, with the exemptions and facilities hereinafter stated:

1) All materials, implements, equipment and repair parts intended for the construction, operation and maintenance of such works shall be exempt from taxes relating to imports and exports. For this purpose, each Section of the Commission shall furnish verification certificates covering all materials, implements, equipment and repair parts intended for such works.

2) The personnel employed either directly or indirectly on the construction, operation or maintenance of such works shall be permitted to pass freely from one country to the other for the purpose of going to and from the place of location of the works, without any immigration restrictions, passports, or labor requirements. For this purpose, each Section of the Commission shall furnish adequate means of identification to the personnel employed by it on the aforesaid works.

G. The Commission recommends that construction of the works built in pursuance of the provisions of the Convention not confer upon either of the two countries any rights either of property or of jurisdiction over any part whatsoever of the territory of the other, and that the jurisdiction of each country be limited by the international boundary, which would be marked on the works.

H. The Commission recommends that to effectuate the provisions of the Convention each Government through its respective Section of the Commission obtain and retain direct ownership, control and jurisdiction over the part of the new channel of the river and the right-of-way in its own territory as shown on the Exhibit, the structures and improvements located therein except for the new bridges to replace the four that presently exist between El Paso and Ciudad Juárez, as well as over such other rights-of-way as each Government may require in its territory.

The meeting then adjourned.

(Signed) J. F. Friedkin  
Commissioner of the United States

(Signed) D. Herrera J.  
Commissioner of Mexico

(Signed) J. D. Walstrom  
Secretary of the United States Section

(Signed) Fernando Rivas S.  
Secretary of the Mexican Section