INTERNATIONAL BOUNDARY COMMISSION
UNited States and Mexico

Ciudad Juárez, Chihuahua,
May 15, 1939.

MINUTE No. 167

ADDITIONAL WORKS WHICH EACH GOVERNMENT SHALL UNDERTAKE BETWEEN KILOMETER 117.9 AND KILOMETER 135.0 OF THE RIO GRANDE RECTIFICATION PROJECT IN ACCORDANCE WITH THE CONVENTION OF FEBRUARY 1, 1933.

The Commission met at the offices of the Mexican Section in Ciudad Juárez, Chihuahua, at 10:00 A.M., May 15, 1939, for the purpose of taking formal action on an agreement regarding additional works which each government shall undertake on the Rio Grande rectification project in accordance with the Convention of February 1, 1933, and particularly Articles I, III and IV thereof.

The Commission received, studied and approved the Joint Report of the Consulting Engineers dated May 11, 1939, which report is attached hereeto and made a part hereof.

The Commission concurs in the recommendations contained in the attached Joint Report of the Consulting Engineers, and adopts the allocation of work therein made to each country with regard to that part of the Rio Grande rectification project between kilometer 117.9 and kilometer 135.0, which work is in addition to that previously allocated to each country in Minutes Nos. 148 and 161 of the International Boundary Commission.

Since the allocation of works to each government requires construction of part of such works within the territory of the other country, on lands acquired in accordance with the Convention, it is agreed that when one of the two countries performs the works which are assigned to it within the territory of the other, these will be carried on by the performing government's own personnel in the same manner and under the same regulations as though

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The works were being performed within the territory of the government doing the work.

The inspection of the works being executed by each Government will be made by the Consulting Engineers of the Commission, who will periodically submit joint reports to the Commission on the progress of the undertakings.

The meeting then adjourned.

[Signatures]

L. W. Reaumur
Commissioner of the United States.

J. Edward Cordova
Commissioner of Mexico.

O. C. Moore
Secretary of the United States Section.

[Signature]

Secretary of the Mexican Section.
The joint report of the Consulting Engineers attached to Minute No. 129 of the International Boundary Commission dated July 31, 1930, contemplated the installation of grade-control structures where dangerous scour occurred in the pilot channel of the Rio Grande Rectification Project as a result of the introduction of the steeper gradients due to the shortening of river length.

The Commission has heretofore approved the type and location for four grade-control structures, which have been subsequently built.

During the summer floods of last year serious degradation and erosion occurred in that reach of the river between the Quayuco grade-control structure at kilometer 117.9 and kilometer 135.0 of the project. Studies of the engineering field data secured since that time indicate that some type of grade control is needed in this reach of the project. Consideration has been given to the construction of a comparatively inexpensive type of structure which would be adjustable and which would take care of a relatively small amount of drop in channel grade. It was determined that the construction of four such structures, each permitting a drop of 0.4 meter in the channel gradient, would probably arrest the adverse degrading and erosive forces.

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erosive conditions existing in the reach of channel under consideration.

The structure as planned will consist of gravel and rock revetment, confined and bound together with woven fencing, all so placed as to form a lining for the bottom and sides of a sixty-foot length of the pilot channel. The revetment will be supported on mats made of willow or other brush material with the raise in grade accomplished by a dam or dike of similar rock and woven-wire construction placed across the channel on the upstream part of the lining. The channel banks upstream and downstream from the structure will be protected against erosion by standard wire fence revetment.

It is believed that this type of structure will serve the purpose for which it is designed, and that while some maintenance after large flood flows will probably be necessary, the building of this relatively inexpensive type is particularly justified during the period of adjustment now taking place in the river channel.

It is proposed to install this type of structure at the locations and to the grades indicated in the following table:

<p>| Location : | Elevation of River Grade : |</p>
<table>
<thead>
<tr>
<th>Kilometer :</th>
<th>Above :</th>
<th>Below :</th>
</tr>
</thead>
<tbody>
<tr>
<td>119.5</td>
<td>1056.67</td>
<td>1056.27</td>
</tr>
<tr>
<td>123.5</td>
<td>1054.60</td>
<td>1054.10</td>
</tr>
<tr>
<td>129.05</td>
<td>1051.68</td>
<td>1051.28</td>
</tr>
<tr>
<td>133.0</td>
<td>1049.40</td>
<td>1049.00</td>
</tr>
</tbody>
</table>

There is attached hereto a drawing which gives a general plan of the proposed structures.

Since these works were not among those previously allocated to either government in the proration of work contained in Minutes Nos. 148 and 161 of the International Boundary Commission, we submit for your consideration the following additional statements:

Article III of the Convention states that the pro rata cost of the works shall be defrayed by the two governments.

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in the proportion of eighty-eight per cent (88%) by the United States and twelve per cent (12%) by Mexico. Minute No. 129 stipulates the works which are to be considered as prorrateable.

The estimated cost of these works is $12,000, of which Mexico's share (12%) is $1,440, and the United States' share (88%) is $10,560.

The earthwork involved in building the structures is estimated to amount to $1,440 and the other work in connection therewith is estimated to amount to $10,560.

Recommendations:

It is respectfully recommended:

1. That the drawing attached hereto be adopted as the official plan of the International Boundary Commission for the grade control structures at kilometers 119.5, 123.5, 129.05 and 133.0 of the project.

2. That the structures at Ks. 119.5, 123.5 and 129.05 be built at an early date and that the structure at 133.0 be built if the need therefor becomes more definitely established by further channel gradient changes.

3. That Mexico undertake the earthwork in connection with the structures.

4. That the United States undertake the rest of work involved in the construction herein recommended.

Respectfully submitted,

[Signature]
Consulting Engineer, United States Section.

[Signature]
Consulting Engineer, Mexican Section.

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en la proporción de doce por ciento (12%) por México y ochenta y ocho por ciento (88%) por los Estados Unidos. El Acta Núm. 129, estipula las obras que deben considerarse como prorrateables.

El costo calculado para estas obras es de Dls. 12,000.00 de los cuales corresponden a México (12%) Dls. 1,440.00, y a los Estados Unidos (88%) Dls. 10,560.00.

Los trabajos de terracería necesarios para la construcción de las estructuras se estiman en Dls. 1,440.00 y el resto de los trabajos relacionados con las mismas, se estiman en cantidad de Dls. 10,560.00.

Recomendaciones:

Respetuosamente se recomienda:

1. Que se adopte el plano anexo, como el plano oficial de la Comisión Internacional de Límites para las estructuras de control de la pendiente en los kilómetros 119.5, 123.5, 129.05 y 133.0, de las obras.

2. Que las estructuras en los kilómetros 119.5, 123.5 y 129.05, se construyan lo más pronto posible, y que la estructura en el kilómetro 133.0 se construya, si por cambios ulteriores en la pendiente del cauce, se establece en forma definitiva, que es necesaria.

3. Que México tome a su cargo los trabajos de terracería, relacionados con las estructuras.

4. Que los Estados Unidos toman a su cargo el resto de los trabajos relacionados con las construcciones que aquí se recomiendan.

Respetuosamente,

[Signature]
Ingeniero Consultor de la Sección Mexicana.

[Signature]
Ingeniero Consultor de la Sección de los Estados Unidos.