March 4, 2008

No.: US 058/08
File: 903-01 Rectification Project

Dear Commissioner Herrera:

I refer to Minute No. 313, “Maintenance in the Rectified Channel of the Rio Grande,” signed February 5, 2008. I am pleased to inform you that the United States Government has approved Minute No. 313 by letter from the Department of State, dated February 28, 2008.

The U.S. Section looks forward to joint implementation of this Minute with the Mexican Section once the approval of the Mexican Government is received. As you know, this Minute will facilitate maintenance of the flood control features of the Rio Grande Rectification Project to the benefit of residents in both countries.

Sincerely,

Carlos Marna, P.E.
Commissioner
ENGLISH

ENG. CARLOS MARIN
United States Commissioner
International Boundary and Water Commission
The Commons Building C Suite C100
4171 North Mesa
EL PASO, TEXAS 79902

Dear Commissioner Marin:

It is my pleasure to confirm receipt of your courteous letter No. US 058/08, dated March 4, 2008, in which you kindly informed me that the United States Government has approved Minute 313 entitled, “Maintenance in the Rectified Channel of the Rio Grande,” signed February 5, 2008.

Accordingly, I am pleased to inform you that as of February 8 of this year, the Government of Mexico approved the aforementioned Minute, therefore in that sense, with your letter and this response, the referenced Minute has entered into force.

I take this opportunity to reiterate to you the assurances of my attentive and distinguished consideration.

Sincerely,

(Signed)

J. Arturo Herrera Solis
Mexican Commissioner
MAINTENANCE IN THE RECTIFIED CHANNEL OF THE RIO GRANDE

The Commission met in the offices of the United States Section on February 5, 2008, at 10 a.m., for the purpose of establishing the respective responsibilities of each Section for maintenance work in the rectified channel of the Rio Grande and associated floodways in an approximately 91.01 mile (146.462 kilometer) reach from El Paso, Texas-Cuidad Juarez, Chihuahua to Fort Quitman, Texas.

The Commissioners noted that Article XI of the “Convention Between the United States and Mexico for the Rectification of the Rio Grande,” signed February 1, 1933, provides that “the International Boundary [and Water] Commission is charged hereafter with the maintenance and preservation of the rectified channel. To this end the Commission shall submit, for the approval of both Governments, the regulations that should be issued to make effective said maintenance.” The Commissioners further noted that Article IV, Section C of the “Treaty to Resolve Pending Boundary Differences and Maintain the Rio Grande and Colorado River as the International Boundary,” signed November 23, 1970, states that, “The Commission shall recommend to the two Governments the execution of works it may consider advisable and practical for improvement and stabilization of the channels of the Rio Grande...in its limitrophe sections, including among others the following measures: clearing, channel excavations, bank protection and rectifications. The Commission shall include in its recommendations an estimate of the costs of construction, operation and maintenance of the works, and a proposal for the division of the work and costs...”

The Commissioners then considered that IBWC Minute No. 165, entitled “Rules and Regulations for the Maintenance and Preservation of the Rio Grande Rectification Project in the El Paso-Juarez Valley,” establishes rules and regulations for the maintenance and preservation of the Rio Grande Rectification Project in the El Paso-Juarez Valley, but pointed out that the rules and regulations contained in Paragraph D required additional clarification to facilitate more effective implementation. The Commissioners noted further that Minute No. 165 does not address which Section is responsible for removing sediment in the channel.

The Commissioners observed that without a clear understanding of the responsibilities to be undertaken by each Section, it has been difficult to schedule and arrange necessary maintenance work on an on-going basis. The Commissioners noted that the August 2006 floods resulted in significant increases in sedimentation in some areas of
the river that require priority attention. The Commissioners concluded that failure to remove silt and attend to other basic maintenance tasks presents a risk of municipal flooding and could result in a change in the river course, thus altering the international boundary. The Commissioners further pointed out regularly scheduled maintenance would allow for clear delineation of the international boundary, thereby enabling law enforcement authorities in both nations to more effectively execute their assigned duties.

The Commissioners reviewed and found satisfactory the recommendations presented in the “Joint Report of the Principal Engineers Regarding the Division of Maintenance Work in the Rio Grande from the Point Closest to Monument No. 1 to the End of the Rectification Reach in the El Paso-Juarez Valley,” signed by United States Section Principal Engineer Alfredo Riera and Mexican Section Principal Engineer Gilberto Elizalde Hernandez on September 25, 2007. The Commissioners approved the criterion applied by the Principal Engineers for the division of maintenance between the two Sections of the Commission and the prioritization of the work based on critical locations where the river channel currently has problems conveying normal and flood flows as a result of sediment, vegetation growth and protection levees in poor condition whose repair is necessary that were identified after flood flows in August of 2006. The Commissioners observed that the Principal Engineers recommended a general distribution of works that would allow each country to better plan, allocate funding and undertake maintenance of the pilot channel, floodway and structures and provide for the assignment of equal areas of responsibility. The Principal Engineers reported to the Commissioners that the cost would be split as nearly as practicable between the two Sections as described in the Joint Report of the Principal Engineers.

Based on the foregoing, the Commissioners agreed to submit the following resolutions for approval of the two Governments:

1) The “Joint Report of the Principal Engineers Regarding the Division of Maintenance Work in the Rio Grande from the Point Closest to Monument No. 1 to the End of the Rectification Reach in the El Paso-Juarez Valley,” signed by United States Section Principal Engineer Alfredo Riera and Mexican Section Principal Engineer Gilberto Elizalde Hernandez on September 25, 2007, is adopted with its attachments and forms an integral part of this Minute and shall form the basis for the division of work with regard to general maintenance of the pilot channel, floodway and structures.

2) Each Section of the Commission shall develop schedules and a plan of operations for conducting the priority maintenance works outlined in the aforementioned Joint Report and exchange an annual work plan no later than the first of April of each year.

3) The Mexican Section shall remove silt from kilometer marker 0+000 to 3+200, from kilometer marker 9+400 to 12+900, and from kilometer marker 27+680 to 94+211.
4) The U.S. Section shall remove silt from kilometer marker 3+200 to 9+400, from kilometer marker 12+900 to 27+680, and from kilometer marker 94+211 to 146+462.

5) Regardless of the foregoing resolutions, for specific cases the Commission may agree through the exchange of letters between the Commissioners to reassign reaches to equalize the work done by each Section.

6) Each Section shall bear all costs related to work in its assigned areas of responsibility.

7) In the event that work is funded by one Section but executed by the other Section, it shall be credited as if the work were executed by the Section providing the funding.

8) Each Section shall dispose of the material removed from the river in its respective territory. However, in particular cases, the Commissioners may agree to the conditions under which one Section may dispose in its territory of sediment which corresponds to the other Section.

9) All activities undertaken pursuant to this Minute shall be subject to the availability of funds, resources, and corresponding personnel as well as to the applicable laws and regulations of each country.

10) This Minute shall enter into force upon written notification of approval by the Government of the United States of America and the Government of the United Mexican States through the respective Sections of the Commission.

The meeting was adjourned.

Carlos Marin
United States Commissioner

William F. Harlow
United States Section Secretary

J. Arturo Herrera Solis
Mexican Commissioner

José de Jesús Lázaro Grano
Mexican Section Secretary
JOINT REPORT OF THE PRINCIPAL ENGINEERS
REGARDING THE DIVISION OF MAINTENANCE WORK IN THE RIO GRANDE
FROM THE POINT CLOSEST TO MONUMENT NO. 1 TO THE END OF THE
RECTIFICATION REACH IN THE EL PASO-JUAREZ VALLEY

To the Honorable Commissioners
International Boundary and Water Commission
United States and Mexico
El Paso, Texas and Cd. Juarez, Chih.

Sirs:

In compliance with your instructions and in accordance with the stipulations in the
Conventions between Mexico and the United States for the Rectification of the Rio Grande in
1933 and for the Solution to the Problem of the Chamizal in 1963 and the Commission Minutes
Nos. 165, 168, 214, 219, and 228, we submit for your consideration the proposal to divide
the works for the maintenance of the Rio Grande channel and floodways in the area of El Paso,
Texas-Cd. Juarez, Chih. Furthermore, our recommendations for the work priorities is based on
critical locations where the river channel currently has problems conveying normal and flood
flows as a result of sediment, vegetation growth and protection levees in poor condition. The
August 2006 floods resulted in significant increases in sedimentation in some areas of the river.

The river reach where the works are located extends approximately 91.01 miles (146.462
Km) along the Rio Grande (sketch of location attached) from the point closest to Monument No.
1 on the international boundary line to Fort Quitman near Little Box Canyon (Cañón de
Cajoncitos), which includes the International Diversion Dam, the 4.375 miles (7 km) of concrete
lined channel in the Chamizal (Lopez Mateos Channel), and the grade control structures located
approximately at Kms. 52+302 (Island), 65+177 (Tornillo), 85+293 (Alamo) and 120.054
(Guayuco).

The regulations established in paragraphs D-I though D-XI of Minute No. 165 have been
reviewed and no basis has been found for proposing changes to them. However, we deem it
pertinent to clarify some points in the aforementioned regulations to facilitate their application.

Rule I establishes that each Section shall be responsible for and perform the work required
within its territory to keep the floodway clear of vegetation between the pilot channel and the
corresponding levee. Rule III establishes that each country shall maintain at its cost the levee
located in its territory. Rule V establishes that each country carry out at its cost the works
relating to the conservation of the structures located in the levees in its territory. The Rules II
We recommend giving priority to the following critical sites identified after the occurrence of high flows (on the order of 240 m$^3$/s) in August 2006.

**PRIORITY SITES IDENTIFIED AFTER FLOOD FLOWS IN AUGUST 2006.**

For Mexico:

- Reconstruction of 5 ruptures in the levee, located downstream of the Fort Hancock-Porvenir International Bridge.
- First phase of desilting the river pilot channel (22 Km), upstream of the “Alamo” grade control structure located at Km 85+293, including topographic study, construction plans and execution of works.
- Desilt the Rio Grande channel downstream of the confluence of the Mexican Las Bandejas Arroyo.
- Rehabilitate the crown of the Mexican levee, including vegetation removal on the Mexican berm, from the upstream end of the lined channel to the end of the rectification reach (Km 5+900 to Km 146+462).
- Desilt 2 of the 7 Km of the lined channel (upstream end).
- Rehabilitation of the provisional protection levee located between American Dam and the upstream end of the lined channel, including topographic study and construction plans.
- Desilt the reach between American Dam and the upstream end of the lined channel, including the topographic study.
- Desilting in the area near International Dam (approximately 800 linear meters), including topographic study.

For the United States:

- Restore 8 miles (12.874 Km) of levee to project elevation, from the end of the Chamizal Project to Riverside Dam Site.
- Desilt 2 of the 7 Km of the concrete lined channel (upstream end).
- Realignment of the river and bank protection downstream from International Dam.
- Realignment of the river at the Diablo and Guayuco Arroyos. (The river alignment has changed due to the impact of the arroyos.)

**RECOMMENDATIONS:**

1. That the division of work with regard to general maintenance of the pilot channel, floodway and the structures be adopted exactly as it is being proposed in this Report.

2. That the vegetation removal within the floodway and the sediment removal in the pilot channel be executed at a time when it is convenient for both countries; but in order to ensure that the work receives adequate maintenance, this shall be carried annually as specified in Minute 165.
and IV establish that each Section of the Commission shall bear half the maintenance costs of the pilot channel and the structures located in, on or across the floodway, without specifically defining each country's responsibility for said works.

From the previous Joint Reports of Principal Engineers concerning river maintenance, we observe that once the construction was complete, in order to comply with the Rules II and IV, the work was divided between the two countries in such a way that each one executes approximately the same amount as the other, with no permanent division of work, by virtue of the fact that the job site has remained stable. However, we consider it pertinent to establish the following general distribution of works that will allow each country better planning, funds allocation and execution capabilities:

**GENERAL DIVISION OF WORK:***

**Mexico:**

a) Desilt the pilot channel in the following reaches.

<table>
<thead>
<tr>
<th>REACH</th>
<th>LOCATION (KM MARKERS)</th>
<th>DISTANCE (Km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Dam to International Dam</td>
<td>0+000 to 3+200</td>
<td>3.200</td>
</tr>
<tr>
<td>Chamizal (López Mateos) concrete channel</td>
<td>9+400 to 12+900</td>
<td>3.500</td>
</tr>
<tr>
<td>Riverside Dam Site to Km 94+211</td>
<td>27+680 to 94+211</td>
<td>66.531</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>73.231</strong></td>
</tr>
</tbody>
</table>

b) Compliance with the Section D, Rules I, III and V of Commission Minute No. 165, relating to the maintenance of the floodway, levee and structures in the levee that are in Mexican territory.

**United States:**

a) Desilt the pilot channel in the following reaches.

<table>
<thead>
<tr>
<th>REACH</th>
<th>LOCATION (KM MARKERS)</th>
<th>DISTANCE (Km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Dam to Km 9+400</td>
<td>3+200 to 9+400</td>
<td>6.200</td>
</tr>
<tr>
<td>End of concrete channel to Riverside Dam Site</td>
<td>12+900 to 27+680</td>
<td>14.780</td>
</tr>
<tr>
<td>Km 94+211 to End of Rectification</td>
<td>94+211 to 146+462</td>
<td>52.251</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>73.231</strong></td>
</tr>
</tbody>
</table>

b) Compliance with the Section D, Rules I, III and V of Commission Minute No. 165, relating to the maintenance of the floodway, levee and structures in the levee that are in United States territory.
3. That major repairs required by any of the structures to ensure continual functioning of the work be executed by prior agreement of the two Sections of the Commission.

4. That each Section of the Commission develop schedules and a plan of operations for conducting the above mentioned priority maintenance work.

5. Should any event occur that substantially modifies the runoff conditions in the river channel, the distribution of work to maintain it will be reviewed and if circumstances warrant, adjustments will be made as necessary.

Respectfully,

Alfredo J. Riera
Principal Engineer
United States Section

Gilberto Elizalde Hernández
Principal Engineer
Mexican Section
NOTE: The Km markings are approximate; they were taken from "El Paso Rio Grande Projects, Canalization and Rectification Projects".

### General Division of Work

<table>
<thead>
<tr>
<th>Reach</th>
<th>Location</th>
<th>Distance (Km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Dam to International Dam</td>
<td>0+000 to 3+200</td>
<td>3.200</td>
</tr>
<tr>
<td>Channel (Lipán channel) concrete channel</td>
<td>9+400 to 12+600</td>
<td>3.200</td>
</tr>
<tr>
<td>Riverdale Dam Site to Km 84+211</td>
<td>27+000 to 84+211</td>
<td>57.251</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>73.531</strong></td>
<td></td>
</tr>
</tbody>
</table>

**United States**

<table>
<thead>
<tr>
<th>Reach</th>
<th>Location</th>
<th>Distance (Km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Dam to Km 94+400</td>
<td>3+200 to 94+400</td>
<td>6.200</td>
</tr>
<tr>
<td>End of concrete channel to Riverdale Dam Site</td>
<td>12+600 to 27+000</td>
<td>14.700</td>
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<tr>
<td>Km 84+211 to End of Rectification</td>
<td>84+211 to 148+493</td>
<td>62.251</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>73.531</strong></td>
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**INTERNATIONAL BOUNDARY AND WATER COMMISSION**

**UNITED STATES SECTION**

**DIVISION OF MAINTENANCE WORK FROM MONUMENT No. 1 TO THE END OF THE RECTIFICATION — EL PASO-JUÁREZ VALLEY**

1 OF 1 | EL PASO, TX | SEPTEMBER 28, 2007