

# International Boundary and Water Commission

United States and Mexico

United States Section

4191 N. Mesa, El Paso, TX 79902



## Design and Construction Requirements for All Projects

### USIBWC Directive SD.II.01031-M-1 Appendix A

#### Table of Contents

1. General Conditions for all Projects. ....	1
2. Design Report. ....	2
3. Drawings. ....	3
4. Land Boundary Monuments. ....	3
5. Utility Crossings. ....	3
6. Non-International Bridges. ....	5
7. Vegetative Restoration or Planting. ....	6
8. Minimum Design Requirements. ....	7
9. General Construction Requirements. ....	8
10. Completion of Construction. ....	10
11. Conditions. ....	10
12. USIBWC Resources and Information. ....	11

The purpose of this document is to present criteria and guidelines for the application, review, approval, and inspection of design construction activities not performed by or for the United States Section, International Boundary and Water Commission (USIBWC) when within the limits of USIBWC flood protection works, within the limits of international reaches of the Rio Grande and Colorado River, within the limits of the international land border between the United States and Mexico, as well as any other property which is owned or controlled by the USIBWC.

#### 1. General Conditions for all Projects.

- A. All materials used within any structure that will be in water, convey water, or be adjacent to any rivers, drains, canals, or arroyos shall have National Science Foundation (NSF) 61 rating. Metals, concrete, rocks, and soil are not required to meet this requirement.
- B. Levees (floodwalls, etc.) have specific design and construction requirements. See "[Appendix C-Requirements for Projects On or Affecting a USIBWC Flood Control Structure](#)" and "[Appendix D-Minimum Levee Embankment Testing Requirements](#)" for guidance. For project considerations, levee height shall be the higher of the existing ground surface or the calculated design flood water surface plus a minimum of 3 feet. Levee freeboard is the height of the top of levee above the design flood water surface elevation. Refer the 44 CFR 65.10 for additional information on the required levee freeboard. The levee freeboard does not include settlement, which must be separately

accounted for in the design. Levee may mean earthen levee, concrete floodwall, floodgates, stoplogs, sluice/slide gates, or any combination of such which acts as a flood control structure as well as all appurtenances.

- C. All reports, drawings, specifications, and test results shall be signed and sealed by a professional engineer licensed to practice in the state where the work will be performed.
- D. In USIBWC areas with gated access (e.g. levees in the El Paso, TX and Las Cruces, NM areas), Proponent must design all project public access points to be less than 30 inches in width or provide chicanes which prevent the passage of small ATVs.
  - (1) USIBWC Standard Drawing 26741 is available for construction of typical chicanes.

## 2. Design Report.

- A. A Design Report shall be provided demonstrating that Proponent's work will not negatively affect USIBWC structures (including levees) or property. See "[Appendix E-Design Report Requirements](#)" for guidance on Design Reports.
- B. If project, or part of project, is within a river floodplain, a Drainage Report is required describing hydraulic modeling and results to show that the water surface elevation from the design flood does not increase above the threshold limits established by the USIBWC and that the maximum deflection of flood flows by the project is not more than +5% towards either the U.S. or to Mexico.
- C. Work within the Rio Grande and Colorado River floodplain based on the design flood requires review and concurrence from the Mexican Section in accordance with the 1970 Boundary Treaty. This review and concurrence may require weeks or months of communications. Design work may continue during this period, but in no instance, shall construction proceed until concurrence is reached with Mexico.
- D. USIBWC will use sound engineering judgment to determine which reports are required. For example, if a Proponent wishes to place a conduit 5 feet below the bed of the Rio Grande, a scour analysis will be required. But if the Proponent wishes to place a conduit 25 ft under the Rio Grande, it is unlikely a scour analysis will be required because that amount of scour is not usually seen. Now if the conduit will be 15 feet below the surface in a very narrow section of the river, a scour analysis will probably be likely, but if the same conduit is placed in a very wide section of the river, then a scour analysis may not be required. Every situation is evaluated individually to ensure that USIBWC structures are protected while minimizing the work required by Proponents.
- E. See "[Appendix B-Land Boundary Project Requirements](#)" and "[Appendix F-Hydraulic Modeling Methodology](#)" for guidance on Hydraulic Modeling Reports and hydraulic modeling. See "[Appendix H-Requirements for Projects On the Rio Grande and Colorado River Floodplains](#)" for required design flood flows for each reach of the Rio Grande and Colorado River.

### 3. Drawings.

- A. USIBWC-controlled property boundary shall be clearly shown on Proponent's drawings.
  - (1) USIBWC-controlled property includes all property for which USIBWC holds a property interest including, but limited to, USIBWC property and land for which USIBWC holds an easement for flowage, flood control, or other use.
- B. Project coordinate system, survey units used, datum, and grid to ground conversion shall also be shown.
- C. Drawings shall be of sufficient details to determine exactly what is proposed, how it is to be constructed, and by whom.
- D. In any operation involving earthwork, such as an excavation, drilling or boring, cross sections and profile of the proposed works must be furnished.
- E. Any drawings showing project or project component interaction with USIBWC structures shall be drawn to scale.
- F. Drawings must be signed and sealed by a professional engineer duly licensed in the state(s) where the project is to be constructed.

### 4. Land Boundary Monuments.

- A. No Design Report is required showing impact to USIBWC structures if the only structure is IBWC's Land Boundary Monuments.
- B. Gate access is required at each Land Boundary Monument.
- C. A minimum of 3 feet of clearance between the base (footing) of each Land Boundary Monument and any Proponent structure (above or below ground) is required.
- D. Specifics for land boundary projects is provided in "[Appendix B-Land Boundary Project Requirements](#)."

### 5. Utility Crossings.

- A. Utilities include privately, publicly, or cooperatively owned lines, wires, pipelines, facilities, and systems for producing, transmitting, or distributing communications, power, heat, gas, oil, water, waste, or storm or irrigation water.
- B. In no instance shall a utility hinder or impair USIBWC's ability to perform maintenance or flood operations.
- C. The Proponent shall install and maintain suitable markers or signs indicating the location of the utility where it crosses the levee, pilot channel, and/or river and where the utility changes direction within USIBWC-controlled property. The markers or signs shall be a minimum of 5 feet high. No markers are to be installed on the levee slopes or 15 feet from the toe of the levee.
- D. Sewer and petroleum pipelines shall be doubled lined.
- E. Criteria for Overhead Wire Utility Crossings.
  - (1) The overhead transmission lines shall be constructed and maintained in such a manner as to provide a minimum vertical clearance (at the temperature of 60°

Fahrenheit) of not less than 28 feet above the levee height and at least 22 feet above the floodway water surface elevation from the design flood.

- (2) No structure (poles or guy wires) shall be located closer than 35 feet from the toes of any levee. No structure (poles or otherwise) shall be located closer than 15 feet from the top of any channel bank.
- (3) Guy wires may be anchored within the USIBWC-controlled property and shall be installed in such a manner that they do not interfere with the operation and/or maintenance of the channels, levees, or related structures. A witness post, not less than 5 feet high, shall be installed by each anchor or the cable shall be wrapped up to a point at least 5 feet above the ground with a brightly colored material to make it obviously visible.
- (4) It shall be the Proponent's responsibility to maintain the areas clear of brush within a 10 foot radius of each pole, under the guy wires, and around the anchors on both sides of the levee and within USIBWC-controlled property.

F. Criteria for Other Overhead Utility Crossings.

- (1) Where a utility crosses over a river, the utility shall be placed on piers (the piers must not obstruct flood flows of the river).
- (2) Pipes crossing over the Rio Grande and Colorado River shall require a Department of Transportation permit (U.S. Coast Guard). Clearances and requirements shall be as directed by the U.S. Coast Guard.
- (3) These utilities shall meet requirements for Non-International Bridges outlined below.

G. Utilities under River.

- (1) The Proponent shall determine the minimum cover required under the bed of the maintained river channel and shall submit plans for review and approval. USIBWC requires depths of at least 10 feet in the Upper Rio Grande and 20 feet in the Lower Rio Grande. However, the actual depth shall be determined by scour analysis, required protection of utility, and normal USIBWC maintenance operations in the area. Depth shall also be deep enough to ensure that blowouts of pressurized drilling fluid during drilling operations cannot occur.
- (2) When utility installation is under both levees and the river or pilot channel, the entry and exit location, when located landside of a levee, shall be set back sufficiently from the landside levee toe to ensure that: (a) the utility reaches its maximum depth, and (b) the utility is no less than 300 feet landside from the levee centerline. The utility shall be constructed in a straight alignment for a minimum distance of 15 feet beyond the landside of the levee toe. See "[Appendix C-Requirements for Projects On or Affecting a USIBWC Flood Control Structure](#)" for additional requirements when utilities pass under a levee or other flood control structure.
- (3) For installation under river or pilot channel only, the utility entry or exit location, when located on the riverside of the levee, shall be located at least 35 feet from the riverside levee toe.

- (4) When installing utilities by drilling, the Proponent shall furnish information addressing the following concerns and give specific dimensions, distances, pressures, weights, and all other pertinent data.
  - (a) Comprehensive understanding of the subsurface soil and groundwater conditions to a minimum depth of 20 feet below the lowest pipe elevation
  - (b) Locations of the pipe penetration entry and exit
  - (c) Allowable uplift pressures
  - (d) Drilling procedures and onsite quality control monitoring during drilling operation
  - (e) Grouting of the pipe annulus, backfilling of any excavated areas, and repair of the construction-staging areas

H. Utilities Crossing Under Pilot Channels or Drainage Ditches. The utility shall be installed with a minimum cover of 5 feet under the channel side slopes and bed of the pilot channel or drainage ditch. However, the Proponent shall submit to the USIBWC scour calculations to justify depth.

## 6. Non-International Bridges.

- A. The Proponent shall submit drawings and Hydraulic Modeling Report to indicate the effects the proposed project would have on flows and floodway capacity. The plans shall include cross and transverse section drawings covering the floodplain bound by levees or high ground and reasonable distances up (minimum of 500 feet) and downstream of the proposed structure. The drawings shall have sufficient detail on existing vegetation, roads, and structures along with proposed improvements.
- B. A Design Report and scour calculations are required for all bridges.
- C. Minimum Requirements for Replacement of Existing Bridges.
  - (1) Old bridge piers must be removed to an elevation at least 2 feet below the maintained invert of the channel and at least 1 feet below ground level in the floodplain. USIBWC will provide the maintained invert elevation of the channel at the bridge location.
  - (2) For replacement of an existing bridge, the proposed bridge length shall be no shorter than that of the existing bridge. Abutments shall be moved out of the floodplain and shall avoid levees.
  - (3) The bottom chord of the new bridge shall be higher than xx feet above the top of the levee to allow for flood fighting operations by USIBWC. USIBWC's O&M Department shall provide the distance required above the top of the levee. The bottom chord of the new bridge shall be no lower than the height of the levee(s) in the vicinity of the proposed bridge site. If levee does not exist, the bottom chord shall be at least 1 foot higher than the water surface elevation from the design flood.
- D. Minimum Requirements for New Bridges.
  - (1) The bottom chord of the new bridge shall be higher than xx feet above the top of the levee to allow for flood fighting operations by USIBWC. USIBWC's O&M Department shall provide the distance required above the top of the levee. The bottom chord of the bridge shall be no lower than the height of the levee(s) in the vicinity of the proposed bridge site.

- (2) The bridge structure shall be designed to pass the project design flood at the bridge site without causing an obstruction to normal flows or flood flows, without increasing the flood stage.
  - (3) Piers and bents are to be aligned with the river flow in order to present the least obstruction area to the path of flood waters and floating debris. Piers must be sufficiently founded to preclude scour failure. For parallel bridge crossings, piers and bents shall be placed adjacent to each other and in alignment with the river flow, however, piers and bents shall be spaced to the maximum distance as practical.
  - (4) Proponent shall locate bridge abutments outside USIBWC-controlled property whenever possible.
  - (5) If bridge abutments are within any part of USIBWC's levee(s), Proponent shall ensure that bridge design meets 44 CFR §65.10(b).
  - (6) If bridge or connecting roadways block access to USIBWC levee, Proponent shall provide USIBWC access from one side to the other that is at least 3 feet above the water surface elevation from the design flood. Access may be on the landside of the levee or may be created via floodwall replacement of the levee under the new bridge as long as the access road has a minimum vertical clearance of 16.5 feet.
  - (7) If bridge or connecting roadways block access to USIBWC levee, ramps shall be constructed on the levee, both upstream and downstream of bridge along with a graveled portion of the floodway connecting the two ramps. This graveled connecting road shall have a minimum vertical clearance of 16.5 feet above the floodplain to allow for the safe passage of heavy equipment under the bridge.
- E. For bridges crossing over levees, a minimum vertical clearance of 16.5 feet shall be provided above the levee height to allow for the safe passage of heavy equipment.
- F. International Bridges. International bridges have significant project requirements. Contact USIBWC for details and coordination of your project.

## **7. Vegetative Restoration or Planting.**

- A. Planting of trees and groups of bushes in existing floodways is not encouraged and shall be permitted only where additional levee freeboard is available to permit an increase in water surface elevation. Only native plants with deep-type root systems may be planted in selected areas of existing or approved floodways.
- B. The planting shall be a minimum of 20 feet from the toe of the levee and the top of the channel bank unless otherwise directed by the USIBWC.
- C. Trees shall be planted at an average spacing of no closer than 100 feet, center to center, unless a Hydraulic Modeling Report with full flood modeling is provided showing trees do not raise the water surface elevation of the design flood.
- D. Appropriate protection against rodents or beavers shall be provided and each tree shall be carefully located to prevent damage while mowing operations are conducted.
- E. Trees shall be pruned by the Proponent to allow mowing with tractor type mowers. No vine plants will be permitted.

- F. The Proponent is responsible for performing watering and maintenance on planted vegetation until such time as it is self-supporting. Any plants or poles that die before this time period shall be removed by the Proponent.
- G. The Proponent shall provide drawings indicating planting locations and plant type along with a coordinated planting plan with Hydraulic Modeling Report for review and approval.
- H. After planting is completed, drawings shall be provided showing exact location of each plant. The depth of planting, plant variety, plant source, and planting date shall also be provided.
- I. Seeding of vegetation shall be per "*Appendix G-Reseeding USIBWC Property.*"

## **8. Minimum Design Requirements.**

- A. All concrete items within USIBWC-controlled property involved with water, stormwater, or wastewater are designed per American Concrete Institute (ACI) 350, "*Code Requirement for Environmental Engineering Concrete Structures*"; changes or repairs to these structures shall also be designed per ACI 350.
  - (1) Office buildings, residential buildings, and warehouses may meet the current edition of ACI 318, Building Code Requirements for Structural Concrete, instead of ACI 350.
- B. Bridges and public roadways shall be designed to meet the current edition of American Association of State Highway Transportation Officials' (AASHTO) Standard Specifications for Highway Bridges.
- C. Loads not specifically identified in ACI 350/318 or AASHTO's standards shall meet the current edition of American Society of Civil Engineer's (ASCE) Minimum Design Loads and Associated Criteria for Buildings and Other Structures (ASCE 7).
- D. Any construction within the floodplains of the Tijuana, Rio Grande, or Colorado Rivers or along the land border between the United States and Mexico, whether on USIBWC controlled property or not, must meet the following requirements:
  - (1) In river reaches without levees, threshold limits for maximum water surface elevation (WSE) increases are a maximum of 3 inches in urban areas and 6 inches in rural areas. WSE increase is the difference between the proposed and existing condition WSE.
  - (2) In all reaches, the proposed project cannot change flood flow deflections by more than 5%.
  - (3) Work within the floodplain may require concurrence with Mexico. This concurrence may require weeks or months of communications. Design work may continue during this period, but in no instance, shall construction proceed until concurrence is reached with Mexico.
  - (4) A Hydraulic Modeling Report meeting "*Appendix F-Hydraulic Modeling Methodology*" using the design flows indicated in "*Appendix H-Requirements for Projects On the Rio Grande and Colorado River Floodplains*" is required indicating that the design flood water surface does not exceed these requirements.



## 9. General Construction Requirements.

- A. During non-flood seasons, river constrictions or diversions shall not exceed 50% of the river channel width. Any temporary embankments or similar constructions to divert water from a portion of the river channel must be limited to an elevation of 1 foot lower than the overbank floodway surface.
- B. River diversions or constrictions shall be restricted to a period not to exceed 45 days.
- C. As much construction work as possible shall be performed during the "non-irrigation" season that usually extends from mid-October to mid-January.
- D. Restrictions must be placed on all construction activities involving levee breaks, temporary water diversions or constrictions placed in the river channel. No levee breaks, river channel constrictions, or river diversions are usually allowed during the flood seasons listed below:
  - (1) Upper Rio Grande Flood Control Project: June 1 through October 15
  - (2) Presidio Flood Control Project: June 1 through October 15
  - (3) Lower Rio Grande Flood Control Project: June 1 through October 31
  - (4) Tijuana River Flood Control Project: November 1 through March 31
  - (5) **Note:** Flood conditions may exist before or after these flood seasons that would require restrictions.
  - (6) In order to perform work during these flood seasons, the following conditions must be met:
    - (a) The Proponent shall maintain equipment and personnel capable of restoring the levee within 24 hours. The Proponent will be required to take immediate action upon notification by USIBWC to backfill and compact all excavated trenches and to reconstruct the levee to its original condition to prevent any flooding.
    - (b) The Proponent will also be required to remove all excess material from the floodplain and levees.
    - (c) The Proponent shall furnish to the USIBWC, the names and telephone numbers of 2 persons responsible for initiating this emergency service.
    - (d) Any damages and cost associated with such, to person(s) or property resulting from the Proponent's failure to conduct the necessary emergency measures, will be the Proponent's responsibility.
- E. Proponent's program of work shall be such as to have the minimum impact on river flows.
- F. The river channel, river banks, floodplains, and levees must be restored to their original condition promptly in the event of unexpected high river flows and prior to the next flood season whichever occurs first.
- G. Stockpiling of materials within the floodway or on the floodplain is not permitted.
- H. Approval of the project by USIBWC does not permit the Proponent to work in Mexico.
- I. Safety to the Public. The Proponent shall provide, erect, and maintain all necessary barricades, suitable and sufficient flasher lights, flagmen, danger signals, and signs,



and shall take all necessary precautions for the protection of the work and the safety of the public. Roads closed to traffic shall be Protected by effective barricades on which shall be placed acceptable warning and detour signs. All barricades and obstructions shall be illuminated at night by lights kept burning from sunset until sunrise.

- J. Landscape Preservation. The Proponent shall exercise care to preserve the natural landscape and shall conduct construction operations so as to prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the work. Except where clearing is required for permanent work, for approved construction roads and for excavation operations, all trees, native shrubbery, and vegetation shall be preserved and shall be protected from damage which may be caused by the Proponent's construction operations and equipment. Movement of crews and equipment within USIBWC-controlled property and over routes used for access to the work shall be performed in a manner to prevent damage to USIBWC's facilities.
- K. The Proponent will be responsible for obtaining other permits as may be required (i.e. 404 permits, etc.) for the subject work and for complying with restrictions of the same.
- L. Prevention of Water Pollution.
  - (1) The Proponent shall comply with applicable Federal and State laws, orders, and regulations concerning the control and abatement of water pollution.
  - (2) The Proponent's construction activities shall be performed by methods that will prevent entrance, or accidental spillage of solid matter, contaminants, debris, and other objectionable pollutants and wastes into the river/channel, flowing or dry watercourses, and underground water sources. Such pollutants and wastes include, but are not restricted to refuse, garbage, cement, concrete, sewage effluent, industrial waste, radioactive substances, oil and other petroleum products, aggregate processing tailings, mineral salts, and thermal pollution. Sanitary wastes shall be disposed of in accordance with State and local laws and ordinances.
  - (3) Dewatering work for structure foundations or earthwork operations near streams or watercourses shall be conducted in a manner to prevent excessive muddy water and eroded materials from entering the river or watercourses by construction of intercepting ditches, bypass channels, barriers, settling ponds, or by other approved means. Mechanized equipment shall not be unnecessarily operated in flowing water.
  - (4) Any discharges, including dewatering, into streams or watercourses must meet state surface water quality standards. The Proponent may be required to take water quality samples.
- M. Abatement of Air Pollution.
  - (1) The Proponent shall comply with applicable Federal, State, interstate, and local laws and regulations concerning the prevention and control of air pollution.
  - (2) While conducting construction activities and operation of equipment, the Proponent shall utilize such practicable methods and devices as are reasonably available to control, prevent, and otherwise minimize atmospheric emissions or discharges of air contaminants. Equipment and vehicles that show excessive emissions shall not be operated until corrective repairs or adjustments are made.

- (3) The Proponent's methods of storing and handling cement shall include means of controlling atmospheric discharges of dust.
  - (4) During the performance of the work required or any operations appurtenant thereto, whether on right of-way provided by the United States or elsewhere, the Proponent shall furnish all of the labor, equipment, materials, and means required, and shall carry out proper and efficient measures wherever and as often as necessary to reduce the dust nuisance, and to prevent dust which has originated from their operations from damaging crops, lands, and dwellings, or causing a nuisance to persons. The Proponent will be held liable for any damage resulting from dust originating from their operations on United States property or elsewhere.
- N. Temporary Erosion Control. Erosion and sedimentation control devices shall be constructed or installed as needed based upon site conditions during construction activities. These preventive measures are required to minimize the potential for soil erosion or sedimentation of streams and rivers and to restore the construction site. Temporary erosion control measures should be in accordance with any applicable Stormwater Pollution Prevention Plans and General Construction Permits.
- O. Final Erosion Control. Erosion control techniques may be vegetative or physical. Vegetative techniques including reseeded with native grasses shall abide by "[Appendix G-Reseeding USIBWC Property.](#)"
- P. USIBWC does not allow the use of slag (material left over or separated from metals during smelting) as aggregate material. Ground granulated blast-furnace slag conforming to ASTM C989 is allowable in concrete mixes.

## 10. Completion of Construction.

- A. Upon completion of any construction with USIBWC-controlled property, the worksite area shall be left in a clean and neat condition with all debris and excess material removed from the site.
- B. Upon completion of the construction, complete surveys, signed and stamped by a registered surveyor, shall be provided to USIBWC. Survey data shall be provided in pdf format with supporting data in a comma delimited ASCII file. Data shall be identified by point number, northing, easting, elevation, and description. The survey units used, coordinate system, datum, name of the individual/company who performed the survey, and date of survey shall be noted in both the pdf and ASCII file. Survey boundaries, breaklines, and other relevant data shall be exported from an AutoCAD Civil 3D file to an xml file.
- C. Upon completion of construction, as built (record drawings) shall be provided for the whole project. Drawings shall be in Adobe pdf and shall be sized to at least ANSI B (11"x17") although fullsize drawings (ANSI D 22"x34") are preferred. Drawings shall be provided at a resolution not less than 300 dpi.
- D. Upon completion of construction work, a copy of all completed tests in Adobe pdf shall be provided to USIBWC. Tests shall be provided at a resolution not less than 300 dpi.

## 11. Conditions.

- A. Proponent's project shall not hinder or impair USIBWC's ability to perform maintenance or flood operations.

- B. The USIBWC does not assume any responsibility or liability regarding damages that could be caused to the work, property, or persons in the project area as a consequence of river flood flows or the surface conditions of USIBWC-owned property. The USIBWC does not warrant that any of its property is suitable for any type of work or activity and project proponents are responsible for assessing the condition of the land before commencing work.
- C. Any damage caused by the proposed works to either the banks of the river, USIBWC's structures, or USIBWC's property shall be repaired by Proponent, at the Proponent's cost, to the USIBWC's satisfaction.
- D. The USIBWC will not alter its normal or flood operations criteria as a result of the proposed works.
- E. Proponent is responsible for keeping their structures free of debris accumulation at all times. Proponent shall dispose of all debris in accordance with all applicable environment laws and regulations. In addition, Proponent is responsible for all costs associated with debris removal.
- F. Proponent shall finalize and submit to the USIBWC an Operation and Maintenance (O&M) Plan for their project. It should be noted that the USIBWC will not be the agency responsible for performing operations and maintenance of the Proponent's project.

**12. USIBWC Resources and Information.** Requirements for work, forms, and standard drawings are available on USIBWC's website at [www.ibwc.gov/resources-info/](http://www.ibwc.gov/resources-info/).

- A. The following documents are available for download on that site:
  - (1) Appendix A - Design and Construction Requirements for All Projects
  - (2) Appendix B - Land Boundary Project Requirements
  - (3) Appendix C - Requirements for Projects on or Affecting a USIBWC Flood Control Structure
  - (4) Appendix D - Minimum Levee Testing Requirements
  - (5) Appendix E - Design Report Requirements
  - (6) Appendix F - Hydraulic Modeling Methodology
  - (7) Appendix G - Reseeding USIBWC Property
  - (8) Appendix H - Floodplain Requirements
- B. Please contact our Realty Office ([realty@ibwc.gov](mailto:realty@ibwc.gov)) to discuss which requirements apply to your project. Do not wait until you are ready to construct your project. Contact them well in advance so they can discuss our requirements.

Approved:

**RAMON  
MACIAS**

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RAMON MACIAS  
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January 30, 2024

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Ramon Macias, III, P.E. Engineering  
for  
Dr. Maria-Elena Giner, P.E.  
Commissioner

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Date