

Draft Tiered Site-Specific Environmental Assessment

City of San Juan Community Safe Room

San Juan, Hidalgo County, Texas

HMGP DR-1791-TX PROJECT #327

October 2013



Federal Emergency Management Agency
Department of Homeland Security
500 C Street, SW
Washington, DC 20472

I. Background

In accordance with 44 Code of Federal Regulations (CFR) for the Federal Emergency Management Agency (FEMA), Subpart B, Agency Implementing Procedures, Part 10.9, a Programmatic Environmental Assessment (PEA) for Hazard Mitigation Safe Room Construction was prepared and a Finding of No Significant Impact (FONSI) was issued in on June 2, 2011, pursuant to Section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ; 40 CFR Parts 1500-1508). This Tiered Site-Specific Environmental Assessment (SEA) is being prepared in accordance the June 2011 PEA. The focus of this Tiered SEA is on those areas of concern requiring additional discussion or analysis that are beyond the scope of the PEA.

II. Purpose and Need

The City of San Juan has applied for Hazard Mitigation Grant Program (HMGP) funding through the Texas Division of Emergency Management (TDEM) under application numbers HMGP-DR-1791-TX Project #337. Section 404 (HMGP) of the Robert T. Stafford Relief and Emergency Assistance Act, 42 U.S.C. § 5121 et seq., authorizes FEMA to provide funding to eligible grant applicants for cost effective activities that have the purpose of reducing or eliminating risks to life and property from hazards and their effects. Mitigation grant program regulations and guidance that implement these authorities identify various types of hazard mitigation projects or activities that meet this purpose and may be eligible for funding. These projects represent a range of activities that protect structures, the contents within those structures, and/or the lives of their occupants.

The City of San Juan lies in the central-southern region of Hidalgo County just to the east of Pharr and McAllen. As of the 2011 census the city population was 34,872, and the county population was 797,810. As part of Hidalgo County, the City of San Juan is included in the "Cover the Border Hazard Mitigation Plan." According to the plan, tropical storms and hurricanes were rated as the highest priority for the border region as a whole. The probability or likelihood of occurrence of a tropical storm or hurricane hitting the Rio Grande border region is "highly likely," and the spatial extent is "large," meaning that the hazard is expected to affect 50 percent or more of people and/or property in the region. The potential impact of a tropical storm or hurricane is "catastrophic" and may result in a high number of deaths and injuries, with more than 50 percent of property damaged or destroyed and a complete shutdown of facilities for 30 days or more. Although FEMA funding is being considered for several proposed safe rooms in San Juan and Hidalgo County, currently there is no safe room available to the citizens and emergency services personnel in the city or in the surrounding areas, yet the vulnerability for the area to hurricane events are high. Immediate life safety protection is needed for populations that are unable to evacuate before hurricane landfall, including emergency responders, or in the event of a quickly arising tornado.

III. Alternatives

Two project alternatives are proposed in this SEA: 1) No Action Alternative and 2) Proposed Action Alternative- Construction of a Stand-Alone Safe Room in San Juan.

Under the No Action Alternative, nothing would be done to address the risk of hurricanes and tornadoes in the project area. A safe room would not be constructed. As a consequence, the residents and emergency responders in San Juan and surrounding areas would remain at risk and would continue to be in danger when hurricanes and other quickly arising high wind events target the project area.

The Proposed Action Alternative involves the construction of a new stand-alone monolithic dome safe on a vacant field located at 300 East Ridge Road (Latitude: 26.17435; Longitude: -98.15399), San Juan, Hidalgo County, Texas. The safe room would consist of approximately 20,000 gross square feet and 15,863 square feet of usable space. It would provide protection for approximately 793 people during a hurricane and 3,156 people during a tornado. When not in use as a safe room, the facility would serve as a multi-use space. The project also includes installing a generator and a storm drain system and utilities at the safe room site, which will link into the existing systems. Although not completely funded by FEMA, a parking lot will also be installed at the safe room site. The parking lot will occupy approximately 2.5 acres. The safe room will occupy approximately .8 acres. The safe room will be built in accordance with FEMA 361: Design and Construction Guidance for Community Safe Rooms (FEMA, 2008).

IV. Environmental Impacts

Discussion of the environmental impacts associated with the No Action Alternative is included in the June 2011 PEA. This document incorporates the PEA by reference. The PEA can be found in FEMA's electronic library at <http://www.fema.gov/library/viewRecord.do?id=4670>.

FEMA's environmental planning and historic preservation review reveals that all environmental areas of concern are appropriately accounted for in the PEA with the exception of floodplain impacts. Table 1 provides a summary of the findings for the environmental areas of concern that FEMA typically reviews.

Table 1: Summary of Other Environmental Areas of Concern

Area of Concern	No Action Impacts	Proposed Action Impacts
Land Use	No effect.	Land use impacts are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. The proposed action would have minor impacts to land use and would be consistent with surrounding or planned land uses in the short- or long-term. The project would disturb less than 5 acres. No special land use permit or waiver will be required. The project does not impact coastal zones or coastal barrier resource units. The proposed action does involve the conversion of prime and unique farmland, but the total point value for the

		conversion according to the Farmland Impact Conversion Rating Form AD-1006 is 110, which falls below the significance threshold of 160 given in the PEA. Please see site-specific agency correspondence regarding land use from the Coastal Coordination Council and the Natural Resources Conservation Service (NRCS) in Appendix B.
Geology, Soils, and Seismicity	No effect.	Impacts to geology, soils, and seismicity are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. The safe room project will not disturb more than 5 acres of land, and it is not located in an area subject to tsunami, seismic, volcanic, erosion, landslide, mudslide, or structural instability hazards. The proposed action would convert prime farmland to a developed area, but the total point value for the conversion according to the Farmland Impact Conversion Rating Form AD-1006 is 110, which falls below the significance threshold of 160 given in the PEA. FEMA coordinated with NRCS and documentation is available in Appendix B.
Water Quality and Resources	No effect.	Water quality impacts are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. During the construction phase, the proposed action would have minor temporary effects to water quality that would be at or below water quality standards or criteria. The proposed action would not cause or contribute to existing exceedances of water quality standards on a short-term or prolonged basis. The proposed action would not disturb more than 5 acres of land. The applicant coordinated with the Texas Commission on Environmental Quality (TCEQ; see Appendix B) and the TCEQ stated that they did not “anticipate significant long term environmental impacts from this project.” The TCEQ recommended that the applicant take necessary steps to insure that best management practices (BMPs) were utilized to control runoff from construction sites to prevent detrimental impact to surface and ground water. BMPs are included in the Section 7 Mitigation Measures of the PEA. Implementation of the Section 7 measures are a requirement of the PEA FONSI.
Wetlands	No effect.	Impacts to wetlands are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. The project will have no effect on wetlands because the project is located outside of designated wetlands and does not adversely affect any wetlands.
Biological Resources	No effect.	Impacts to biological resources, including federally threatened and endangered species

		<p>and critical habitat, are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. Per the U.S. Fish and Wildlife's species list, the Gulf Coast jaguarondi (<i>Herpailurus (=Felis) yagouaroundi cacomitli</i>); northern aplomado falcon (<i>Falco femoralis septentrionalis</i>); ocelot (<i>Leopardus (=Felis) pardalis</i>); star cactus (<i>Astrophytum asterias</i>); Texas ayenia (<i>Ayenia limitaris</i>); and Walker's manioc (<i>Manihot walkerae</i>) are all federally endangered species that are known to occur in Hidalgo County. The proposed safe room site is an open farm field with little or no vegetation other than grasses. The site is surrounded by residential and other development and by agricultural operations. The proposed safe room site does not contain suitable habitat for the above listed species. The safe room site is not designated as critical habitat for any listed species. Therefore, FEMA has determined the project will have no effect on threatened and endangered species and will not adversely modify or otherwise affect critical habitat. The proposed action would have negligible impacts to native species and their habitats and population levels of native species would not be affected. Sufficient habitat would remain functional to maintain viability of all species.</p>
Human Health and Safety	Students, faculty, staff, and residents would remain vulnerable to tornado hazards.	Human health and safety impacts are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. Wastes resulting from the proposed action would be safely and adequately managed in accordance with all applicable regulations and policies. There would be no short- or long-term adverse impacts to public safety. All residents in the area will benefit from the safety provided by the facility. The proposed action would not result in an exceedance of available waste disposal capacity nor would it result in regulatory violation(s). Environmental site assessments were not required based on the known past use of the parcel as undeveloped farmland. Per the PEA FONSI, excavated soil and waste materials will be managed and disposed of in accordance with applicable local, state, and federal regulations. If contaminated materials are discovered during construction activities, the work will cease until the appropriate procedures and permits are implemented. This is a required condition of the grant award.
Minority and Low-Income Populations	Students, faculty, staff, and residents would remain vulnerable to tornado	Impacts to minority and low-income populations were not examined in the SEA because the threshold of significance outlined

	hazards.	in the PEA was not exceeded. Though low-income and minority populations exist in the project area, no disproportionate adverse impacts to these portions of the population is anticipated. All residents in the area will benefit from the safety provided by the facility.
Historic Properties	No effect.	Impacts to historic properties are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. FEMA determined in accordance with CFR 36 Part 800.4(d)(1) that there would be no effect to historic properties, including structural and archeological resources, due to the Proposed Action Alternative. The State Historic Preservation Office (SHPO) concurred with this determination in a response letter dated June 7, 2011 (see Appendix B). Per the PEA FONSI, if ground disturbing activities occur during construction, the applicant will monitor ground disturbance and if any potential archeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA. This is a required condition of the grant award.
Air Quality	No effect.	Air quality impacts are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. Minor short-term effects to air quality are anticipated during the safe room construction. Emissions in attainment areas, such as San Juan, would not cause air quality to go out of attainment for any National Ambient Air Quality Standards. The applicant coordinated with the TCEQ (see Appendix B) and the TCEQ stated that San Juan "is currently unclassified or in attainment of the National Ambient Air Quality Standards for all six criteria air pollutants. Therefore, General Conformity does not apply. Although any demolition, construction, rehabilitation or repair project will produce dust and particulate emissions, these actions should pose no significant impact upon air quality standards. Any minimal dust and particulate emissions should be easily controlled by the construction contractors using standard dust mitigation techniques." Dust mitigation techniques are included in the Section 7 Mitigation Measures of the PEA. Implementation of the Section 7 measures are a requirement of the PEA FONSI.
Noise	No effect.	Noise impacts are not analyzed further in this SEA because they do not reach a level of significance as outlined in the PEA. Noise levels resulting from the proposed action would not exceed typical noise levels expected from construction equipment or generators. Noise generated by construction and operation of the facility would be

		<p>temporary or short-term in nature. There would be minor to moderate temporary adverse noise effects during construction of the safe room. The applicant must follow the noise mitigation measures as identified in Section 7 of the PEA to the maximum extent possible. These measures include limiting construction activities to normal business hours and avoiding construction activities within 200 feet of noise-sensitive receptors such as schools, hospitals, residential areas, nursing homes, etc.</p>
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In compliance with FEMA regulations implementing Executive Order 11988, Floodplain Management, FEMA is required to carry out the 8-step decision-making process for actions that are proposed in the floodplain per 44 CFR §9.6. Step 1 is to determine whether the project is located in the floodplain. Because FEMA considers the construction of community safe rooms as critical actions, the proposed project must be reviewed to determine whether it is located within the 100-year or 500-year floodplain. FEMA has determined that the Proposed Action Alternative is located in the 500-year floodplain, Zone B, as depicted on Flood Insurance Rate Map (FIRM) 4803340425C, dated 11/16/1982 (see Figure 1). Zone B indicates an area with moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods, or areas of shallow flooding with average depths of less than one foot or drainage areas less than 1 square mile. Based on contour analysis (Appendix C) which used data from the Texas Natural Resources Information System (TNRIS) and an International Boundary Commission Contour Map, the 500-year elevation at the safe room site is estimated to be approximately 115.0 feet MSL (mean sea level) NGVD (National Geodetic Vertical Datum). The ground surface elevation at the safe room site is estimated to be 111.0 feet.

Step 2 is to notify and involve the public in the decision-making process, which will be incorporated into the notice of availability for this SEA.

Step 3 is to identify and evaluate practicable alternatives to locating the proposed project in the floodplain, including alternative sites and actions outside of the floodplain. Large areas in the 100- and 500-year floodplain are common for the low-lying, flat topography along the Rio Grande, and areas outside of the 100- and 500-year floodplain are not common. Almost the entire City of San Juan and its surrounding areas is located in Zone B, while there are some small areas that are designated in Zone A and AH, areas of 100-year flooding. There are portions to the north and east of the city that are designated as Zone C, areas outside of the 100-year and 500-year floodplain.



Figure 1: FIRM with Safe Room Site Indicated.
Source: FEMA.

No other land parcel in the area that was outside of the 500-year floodplain is available for safe room construction due to their distance to infrastructure, drainage situations, or other unsuitable proximity. Retrofitting an existing structure is costly and does not provide enough space for the occupancy desired. Although in the 500-year floodplain, the proposed site was selected because it has a higher elevation compared to surrounding areas. The proposed safe room will be able to serve the special needs populations on the southeast side of the city and will also shelter the special needs evacuees from the County in this area. No practicable alternative site or action outside of the 100- or 500-year floodplain exists.

Step 4 is to identify impacts associated with occupancy and modification of the floodplain and support of floodplain development that could result from pursuing the Proposed Action Alternative. Per 44 CFR 9.10 “Identify impacts of proposed actions,” FEMA should consider whether the proposed action will result in an increase in the useful life of any structure or facility in question, maintain the investment at risk and exposure of lives to the flood hazard, or forego an opportunity to restore the natural and beneficial values served by floodplains or wetlands. FEMA should specifically consider and evaluate impacts associated with modification of floodplains; additional impacts which may occur when certain types of actions may support subsequent action which have additional impacts of their own; adverse impacts of the proposed actions on lives and property and on natural and beneficial floodplain values; and these three categories of factors: flood hazard-related factors, natural values-related factors, and factors relevant to a proposed action’s effects on the survival and quality of wetlands. Per 44 CFR, natural values-related factors include, water resource values (natural moderation of floods, water quality maintenance, and ground water recharge); living resource values (fish and wildlife and biological productivity); cultural resource values (archeological and historic sites, and open space recreation and green belts); and agricultural, aquacultural and forestry resource values. Factors relevant to a proposed action’s effects on the survival and quality of wetlands include public health, safety, and welfare, including water supply, quality, recharge and discharge; pollution; flood and storm hazards; and sediment and erosion; maintenance of natural systems, including conservation and long term productivity of existing flora and fauna, species and habitat diversity and stability, hydrologic utility, fish, wildlife, timber, and food and fiber resources; and other uses of wetlands in the public interest, including recreational, scientific, and cultural uses.

Building the safe room in the floodplain could potentially increase the risk of structural damage to the safe room itself due to flooding. In addition, there is safety risk to the populations that might be sheltering in the safe room during a 500 year flood event. It is not anticipated that the Proposed Action Alternative will result in an increased base discharge nor should it increase the flood hazard potential to other structures. The City of San Juan and surrounding areas is already developed and the majority is located in the 100- or 500-year floodplain. The addition of a safe room to protect lives in an already built-up area is not anticipated to encourage development in the floodplain beyond what is already in place. The safe room is intended to serve existing populations and it is not anticipated that the construction of the safe room will encourage increased occupancy in the surrounding floodplain areas. The safe room site is located in the 500-year floodplain and is a tract of land that has supported agricultural activities in the past. The parcel does not offer suitable habitat for any federally listed species, but could support native plant and wildlife species if allowed to return to its native state. Currently, the site is a field that supports agricultural functions.

The functions of the floodplain to provide flood storage and conveyance, filter nutrients and impurities from runoff, reduce flood velocities, reduce flood peaks, moderate temperature of water, reduce sedimentation, promote infiltration and aquifer recharge, and reduce frequency and duration of low surface flows will remain intact after the implementation of the project. There will be minor reductions in these services due to the conversion of approximately 3.5 acres of undisturbed land, but there will not be significant adverse impacts to these services provided by the floodplain. Development of the site will not impact groundwater recharge. Water quality may be impacted during the construction phase due to sedimentation and run-off. These impacts are considered to be minor and temporary effects to water quality that would be at or below water quality standards or criteria. The proposed action would not cause or contribute to existing exceedances of water quality standards on a short-term or prolonged basis. There will not be impacts to wetlands.

Floodplains also provide services in the form of providing fish and wildlife habitat, breeding, and feeding grounds. These floodplain values will not be adversely impacted and the overall integrity of the ecosystem will not be impacted. FEMA has determined the project will have no effect on threatened and endangered species and will not adversely modify or otherwise affect critical habitat. The proposed action would have negligible impacts to native species and their habitats and population levels of native species would not be affected. Sufficient habitat would remain functional to maintain viability of all species.

The proposed action does result in an adverse impact to prime and unique farmland, as the parcel will be permanently converted from agricultural use. This impact is deemed insignificant based on an analysis conducted in coordination with the Natural Resources Conservation Service (see Appendix B). This analysis includes a comparison of the safe room parcel of land to surrounding agricultural parcels and their relative value. Hidalgo County has a geographic area of roughly 1 million acres of which approximately 640,000 acres are farmable according to the NRCS analysis. The 3.5 acre safe room site represents .0005 percent of the farmland in the county to be converted. Based on the consultation process with NRCS, FEMA determined that the conversion of farmland was not significant and selected the site for development.

Step 5 is to minimize the potential adverse impacts and support to or within floodplains identified under Step 4 and restore and preserve the natural and beneficial values served by floodplains. Many of the impacts discussed above are considered insignificant and mitigation is not practicable or warranted. The applicant coordinated with the Texas Commission on Environmental Quality (TCEQ; see Appendix B) and the TCEQ stated that they did not “anticipate significant long term environmental impacts from this project.” The TCEQ recommended that the applicant take necessary steps to insure that best management practices (BMPs) were utilized to control runoff from construction sites to prevent detrimental impact to surface and ground water. BMPs are included in the Section 7 Mitigation Measures of the PEA. Implementation of the Section 7 measures is a requirement of the PEA FONSI. As explained above, construction of the safe room is not expected to result in an increased base discharge nor will it increase flood hazard to other structures. The safe room footprint is minor when compared to the extensiveness of the 500-year and 100-year floodplain in the City of San Juan and surrounding areas. In order to reduce the impacts identified in Step 4 of flooding on the proposed new structure and its occupants, the structure and its supporting utilities will be elevated at or above the 500-year elevation because the construction of a safe room is considered a critical action. The finished floor will be at or above the 500-year flood elevation of 115 feet. In addition, the City of San Juan will be required to coordinate with the local floodplain administrator and obtain required permits prior to initiating work. All coordination pertaining to these activities and applicant compliance with any conditions should be documented and copies forwarded to the state and FEMA for inclusion in the permanent project files. Obtaining a permit from the floodplain manager will ensure that the safe room is constructed in accordance with the local floodplain ordinance and in accordance with the minimum floodplain management criteria set forth in 44 CFR Part 60. The project will be in compliance with the National Flood Insurance Program.

Step 6 is to determine whether the proposed action is practicable and to reevaluate alternatives. Per the discussion above, including elevating to mitigate flood risk to the safe room and the unavailability of a location outside of the floodplain, the Proposed Action Alternative is the only practicable alternative.

Step 7 requires that the public be provided with an explanation of any final decision that the floodplain is the only practicable alternative. In accordance with 44 CFR §9.12, the City of San Juan must prepare and provide a final public notice 15 days prior to the start of construction activities. Documentation of the final public notice is to be forwarded to FEMA for inclusion in the permanent project files.

Step 8 is the review of the implementation and post-implementation phases of the proposed action to ensure that the requirements stated in 44 CFR Part 9.11 are fully implemented. The proposed safe room project will be constructed in accordance with applicable floodplain development requirements and in line with the conditions outlined below.

V. Mitigation

1. The City of San Juan must coordinate with the local floodplain administrator and obtain required permits prior to initiating work. All coordination pertaining to these activities and applicant compliance with any conditions should be documented and copies forwarded to the state and FEMA for inclusion in the permanent project files.

2. The City of San Juan must elevate the safe room at or above the 500-year floodplain elevation of 115 feet.
3. In accordance with 44 CFR §9.12, the City of San Juan must publish a public notice 15 days prior to the start of construction activities. Documentation of the public notice is to be forwarded to FEMA for inclusion in the permanent project files.

In addition, the City of San Juan will be required to comply with the conditions that are stated in the PEA FONSI, dated June 2, 2011, for the Proposed Action Alternative (see Appendix A).

VI. Agencies Consulted (see Appendix B)

Natural Resources Conservation Service
Texas State Historic Preservation Office
Texas Commission on Environmental Quality

VII. Public Comment

A public notice advertising the availability of this Draft SEA for public review and comment will be posted in the local newspaper of record and on the FEMA website at <http://www.fema.gov/library/index.jsp>. The Draft SEA will be available at a local repository and at <http://www.fema.gov/library/index.jsp>. A 15-day public comment period will commence on the initial date of the public notice. FEMA will consider and respond to all public comments in a Final SEA. If no substantive comments are received, the Draft SEA will become final and a Finding of No Significant Impact (FONSI) will be issued for the project.

VIII. List of Preparers/Reviewers

Dorothy Weir, Principal Preparer, Environmental Specialist, FEMA Region 6
Kevin Jaynes, Principal Reviewer, Regional Environmental Officer, FEMA Region 6

IX. References

Federal Emergency Management Agency (FEMA). 2008. Design and Construction Guidance for Community Safe Rooms. FEMA 361, Second Edition. Available on-line at <http://www.fema.gov/library/viewRecord.do?id=1657>. Accessed October 2, 2013.

Rio Grande Institute. 2008. Cover the Border Hazard Mitigation Plan. Available on-line at http://cees.tamtu.edu/covertheborder/draft_plan/RGI%20FINAL%20PLAN_14%20county.pdf. Accessed October 2, 2013.

Appendix A

Finding of No Significant Impact (FONSI)

Final Programmatic Environmental Assessment for Hazard Mitigation Safe Room Construction



FEMA

**FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
FINDING OF NO SIGNIFICANT IMPACT (FONSI)
FINAL PROGRAMMATIC ENVIRONMENTAL ASSESSMENT
FOR HAZARD MITIGATION SAFE ROOM CONSTRUCTION**

BACKGROUND

In accordance with the National Environmental Policy Act (NEPA) of 1969, FEMA's regulations for implementing NEPA at 44 Code of Federal Regulations (CFR) Part 10, and the President's Council on Environmental Quality NEPA implementing regulations at 40 CFR Parts 1500-1508, FEMA prepared a draft Programmatic Environmental Assessment (PEA) to evaluate the potential impacts to the human environment resulting from the construction of residential and non-residential (individual) safe rooms and community safe rooms that are proposed for funding under FEMA's Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation (PDM) Program. Section 203 (PDM) and 404 (HMGP) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. § 5121 et seq., authorize FEMA to provide funding to eligible applicants for eligible, feasible, and cost-effective activities that have the purpose of reducing or eliminating risks to life and property from hazards and their effects. One such activity is the construction and installation of safe rooms to protect populations from extreme wind events. The PEA is incorporated by reference into this FONSI.

The PEA evaluated five alternatives: (1) No Action; (2) Retrofit or Renovation of an Existing or Proposed Facility (Type A: Existing Facilities; Type B: New Facilities or Significant Renovation of Existing Facilities); (3) Safe Room Connected to an Existing Building and Beyond Original Footprint; (4) New Stand-Alone Construction in Previously Disturbed Areas; and (5) New Stand-Alone Construction in Previously Undisturbed Areas.

FEMA will develop tiered Site-Specific Environmental Assessments (SEAs) for those safe room projects requiring evaluation under areas of concern not evaluated in this PEA, having impacts beyond those described in the PEA or otherwise requiring a tiered SEA as identified in Table 1 in the PEA. Notice of the availability of the draft PEA was published in the Federal Register on April 27, 2011, for a 30-day public comment period. No comments were received on the draft PEA.

CONDITIONS

Actions under this PEA and FONSI must meet the following conditions. Failure to comply with these conditions would make the FONSI determination inapplicable for the project and could jeopardize the receipt of FEMA funding.

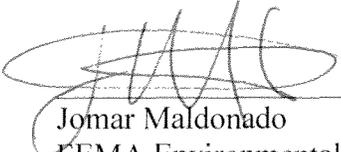
1. Excavated soil and waste materials will be managed and disposed of in accordance with applicable local, state, and federal regulations. If contaminated materials are discovered during construction activities, the work will cease until the appropriate procedures and permits are implemented.
2. The grantee and sub grantee will follow applicable mitigation measures as identified in Section 7 of the PEA to the maximum extent possible.
3. If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
4. The grantee and sub grantee must meet any project-specific conditions developed and agreed upon between FEMA and with environmental planning or historic preservation resource or regulatory agencies during consultation or coordination.
5. This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.

FINDING

Based upon the information contained in the Final PEA, the potential impacts resulting from the five alternatives analyzed in the PEA, and in accordance with FEMA's regulations at 44 CFR Part 10 and Executive Orders 11988 (Floodplain Management), 11990 (Protection of Wetlands), and 12898 (Environmental Justice). FEMA finds that the implementation of the proposed action will not have significant impacts to the quality of the human environment.

Therefore, an Environmental Impact Statement (EIS) will not be prepared. This FONSI is based upon proposed safe room projects fitting one of the project types described in the Final PEA and meeting all conditions prescribed for that particular project type.

APPROVAL



Jomar Maldonado
FEMA Environmental Officer

Date JUN 02 2011



Sandra K. Knight, PhD, PE, D.WRE
Deputy Federal Insurance and Mitigation
Administrator, Mitigation

Date 6/1/11

Section Seven Mitigation

FEMA will take the following measures to the extent practicable and applicable to avoid or further minimize impacts to the quality of the human environment. The general mitigation measures outlined in this section may be superseded by higher or more stringent standards required by the particular federal, or territory, tribe, or local government agency issuing a permit, license, or approval for the project.

7.1 Measures to avoid impacts to the human environment

1. Avoid sites areas characterized by susceptibility to seismic or volcanic activity, tsunamis, landslides, mudslides, structural instability, excessive erodibility, or steep slopes;
2. Avoid sites in the floodplain;
3. Avoid sites on important farmlands;
4. Avoid sites on or near TCPs;
5. Avoid sites in wetlands;
6. Avoid undertaking projects that adversely affect historic properties;
7. Avoid projects that adversely affect threatened and endangered or special status species or critical habitat.

7.2 Minimization Measures for ground-disturbing/construction activities

1. Follow applicable state, territory, tribal, and local permitting requirements for construction;
2. Water down construction site two to three times per day if dust emissions become a problem;
3. Enclose or water down exposed dirt storage piles;
4. Minimize the disturbed area and preserve vegetation to the maximum extent possible;
5. Maintain topsoil whenever possible;
6. Phase construction activities to the extent possible;
7. Control stormwater flowing to and through the project site;
8. Protect slopes by using measures such as erosion control blankets, bonded fiber matrices, turf reinforcement mats, silt fences (for moderate slopes), etc.;
9. Temporarily protect storm drain inlets until site is stabilized;
10. Retain sediment on-site and control dewatering practices by using sediment traps or basins for large areas (> 1 acre) when appropriate;
11. Establish stabilized construction entrances/exits (e.g. large crushed rocks, stone pads, steel wash racks, hose-down systems, pads);
12. Limit construction activities, including operation of heavy machinery, to normal business hours (M-F 7am-5pm);
13. Avoid engaging in construction activities within 200 feet of noise-sensitive receptors such as schools, hospitals, residential areas, nursing homes, etc.
14. Ensure adequate maintenance of equipment, including proper engine maintenance, adequate tire inflation, and proper maintenance of pollution control devices;

15. Ensure equipment at the project site uses the manufacturer's standard noise control devices (i.e., mufflers, baffling, and/or engine enclosures);
16. Reduce construction equipment idling to the maximum extent practicable;
17. Implement plans to eliminate and minimize oil or fuel spills from construction equipment;
18. Minimize the impacts of equipment staging areas;
19. Stabilize slopes promptly through temporary and permanent cover best management practices (BMPs). Following construction all remaining disturbed areas must be re-vegetated with locally acquired sources of native seeds and plants in a manner that returns the site to its pre-construction condition or better. Plantings are done during the optimum season for the species being planted. Any seeding carried out during the re-vegetation program is completed with commercially available seeds certified to be free of noxious weed seeds and other invasive species. If necessary, an irrigation system is installed to ensure establishment of the planted vegetation. The target for new plantings is an 80 percent survival rate at the end of 3 years. Invasive exotic plant species are controlled to the maximum extent practical to accomplish the re-vegetation effort. If the application of a chemical is required to control an invasive exotic plant species, the chemical is applied by a certified pesticide or herbicide applicator per labeled directions and in compliance with all federal, state, and local laws and regulations.
20. When applicable adopt measures to minimize traffic impacts during construction such as providing warning signage, limit the use of public right-of-ways for staging of equipment or materials, use of flagpersons when needed, and coordinate detours if traffic access points will be obstructed.
21. Avoid engaging in construction activities within 660 feet of a bald or golden eagle nest during nesting and fledging, as nesting eagles are quite sensitive to human activities during these times.
22. Establish an inspection and maintenance approach to ensure these measures are working adequately.
23. Avoid archeological sites by shifting ground disturbance in a particular area, when possible.

Appendix B
Agency Consultation



Coastal Coordination Council

P.O. Box 12873 ♦ Austin, Texas 78711-2873 ♦ (800) 998-4GLO ♦ FAX (512) 475-0680

Chairman

Jerry Patterson

Texas Land Commissioner



Members

Karen Hixon

Parks & Wildlife Commission
of Texas

Jose Dodier

Texas State Soil & Water
Conservation Board

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Texas Water Development Board

Ned Holmes

Texas Transportation Commission

Elizabeth Jones

Railroad Commission of Texas

H. S. Buddy Garcia

Texas Commission on
Environmental Quality

Robert R. Stickney

Sea Grant College Program

Robert "Bob" Jones

Coastal Resident Representative

Jerry Mohn

Coastal Business Representative

George Deshotels

Coastal Government
Representative

Bob McCan

Agriculture Representative



Kate Zultner

Council Secretary

Jesse Solis, Jr.

Permit Service Center
Corpus Christi
1-866-894-3578

Permit Service Center
Galveston
1-866-894-7664

May 31, 2011

Greg Pekar
State Hazard Mitigation Officer
Division of Emergency Management
Department of Public Safety
P.O. Box 4087
Austin, TX 78773-0226

Re: City of San Juan
Proposed Multipurpose Community Center – Community Safe Room
300 E. Ridge Road, San Juan, TX
CMP #: 11-0394-F5

Dear Applicant:

It has been determined that the project referenced above is outside the Texas Coastal Management Program (CMP) boundary. Therefore, it is not subject to review under the Texas CMP.

After review of the indicated location and the proposed action, it appears that no Permanent School Fund land under the jurisdiction of the Texas General Land Office (GLO) will be affected or impacted by this proposed action. In this regard, the GLO offers no comments to this proposal. If you have any additional questions or comments please concerning this determination contact Tony Williams at 512-463-5055 or by e-mail at tony.williams@glo.texas.gov.

Sincerely,

A handwritten signature in black ink that reads "Kate Zultner".

Kate Zultner
Consistency Review Coordinator
Texas General Land Office
kate.zultner@glo.state.tx.us
(512) 936-9581



Mayor: Pedro Contreras
Mayor Pro-Tem: Lupe Rodriguez
Commissioners: Roberto "Bob" Garza
Armando Garza, Jr.
Eddie Suarez

SHPO LETTER

March 29, 2011

RECEIVED

MAY 13 2011

History Programs Division

Mark Wolfe
State Historic Preservation Officer
P.O. Box 12276
Austin, TX 78711-2276

Mr. Wolfe:

Through a grant with the Federal Emergency Management Agency (FEMA), the City of San Juan plans to build a multi-purpose community center, approximately 20,000 square feet. The structure will also be a Community Safe Room to be used by students and residents against high winds and tornadoes. It will be located at 300 E. Ridge Road, San Juan, TX where the existing open lot is.

Our project will have no adverse affects on any cultural, environmental or historical aspects of the community due to the fact this is where the current open lot is located. In addition, this area is located directly adjacent to medium density population of public housing.

According to the guidelines for this project, a Section 106 Review by the Texas Historical Commission is necessary for an environmental assessment. We are asking for a review from the Texas Historical Commission declaring the land as not being a historical site. Included are pictures and a map of the current location.

If you have any comments or questions please feel free to contact us:

1. Tirso Garza – Emergency Management Coordinator
956-223-2470; tgarza@cityofsanjuantexas.com
2. Juan J. Rodriguez – City Manager
956-223-2200; jjrod@cityofsanjuantexas.com

Respectfully,

Tirso Garza
Emergency Management Coordinator – City of San Juan

NO HISTORIC
PROPERTIES AFFECTED
PROJECT MAY PROCEED

by
for Mark Wolfe
State Historic Preservation Officer
Date 7 June 2011

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 27, 2011

Mr. J.P. Dobbs
Mitigation Specialist
Texas Division of Emergency Management
P.O. Box 4087
Austin, TX 78773-0226

Re: TCEQ Grant and Texas Review and Comment System (TRACS) #2011-252, City of San Juan, Hidalgo County – Re: 300 E. Ridge Rd.

Dear Mr. Dobbs:

The Texas Commission on Environmental Quality (TCEQ) has reviewed the above-referenced project and offers following comments:

A review of the project for General Conformity impact in accordance with 40 CFR Part 93 and Title 30, Texas Administrative Code § 101.30 indicates that the proposed action is located in the City of San Juan, Hidalgo County, which is currently unclassified or in attainment of the National Ambient Air Quality Standards for all six criteria air pollutants. Therefore, General Conformity does not apply.

Although any demolition, construction, rehabilitation or repair project will produce dust and particulate emissions, these actions should pose no significant impact upon air quality standards. Any minimal dust and particulate emissions should be easily controlled by the construction contractors using standard dust mitigation techniques.

We do not anticipate significant long term environmental impacts from this project as long as construction and waste disposal activities associated with it are completed in accordance with applicable local, state, and federal environmental permits and regulations. We recommend that the applicant take necessary steps to insure that best management practices are utilized to control runoff from construction sites to prevent detrimental impact to surface and ground water.

Thank you for the opportunity to review this project. If you have any questions, please contact Ms. Tangela Niemann at (512) 239-3786 or tangela.niemann@tceq.texas.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Harrison".

Jim Harrison, Director
Intergovernmental Relations Division

United States Department of Agriculture



Natural Resources Conservation Service

101 S. Main Street
Temple, TX 76501-6624
Phone: 254-742-9826
FAX: 254-742-9859

August 24, 2012

FEMA Region 6
909 N. Loop 288
Denton, Texas 76209

Attention: Dorothy Weir

Subject: LNU-Farmland Protection
San Juan Community Safe Room
Hildago County, Texas

We have reviewed the information provided in your email dated August 24, 2012 concerning the proposed community safe room construction in Hildago County, Texas. This review is part of the National Environmental Policy Act (NEPA) evaluation for FEMA. We have evaluated the proposed site as required by the Farmland Protection Policy Act (FPPA).

The proposed project does contain soils classified as Important Farmland Soils. We have completed Parts II, IV, and V of the Farmland Conversion Impact Rating (Form AD-1006). The relative value of farmland in Part V should be used in your calculation for Part VII.

To meet reporting requirements of section 1546 of the Act, 7 U.S.C 4207, and for data collection purposes, after your agency has made a final decision on a project in which one or more of the alternative sites contain farmland subject to the FPPA, NRCS is requesting a return copy of the (Form AD-1006), which indicates the final decision. We encourage the use of accepted erosion control methods during the construction of this project.

If you have any questions, please contact me at (254) 742-9855, Fax (254) 742-9859 or by email at wayne.gabriel@tx.usda.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne Gabriel", is written over a faint, larger version of the same signature.

Wayne Gabriel
NRCS Soil Scientist

Attachment

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency) Date Of Land Evaluation Request 8/24/12

Name Of Project City of San Juan Community Safe Room Federal Agency Involved FEMA

Proposed Land Use Building Construction County And State Hidalgo County, Texas

PART II (To be completed by NRCS) Date Request Received By NRCS 9-10-2012

Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply -- do not complete additional parts of this form). Yes No Acres Irrigated 177478 Average Farm Size 992

Major Crop(s) Grain Sorghum Farmable Land In Govt. Jurisdiction Acres: 639936 % Amount Of Farmland As Defined in FPPA Acres: 521634 %

Name Of Land Evaluation System Used LESA Name Of Local Site Assessment System NA Date Land Evaluation Returned By NRCS 10-12-2012

PART III (To be completed by Federal Agency)

	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	3.5			
B. Total Acres To Be Converted Indirectly	0.0			
C. Total Acres In Site	3.5	0.0	0.0	0.0

PART IV (To be completed by NRCS) Land Evaluation Information

A. Total Acres Prime And Unique Farmland	<u>3.5</u>			
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	<u>0.005</u>			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	<u>38.90</u>			

PART V (To be completed by NRCS) Land Evaluation Criterion
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points) 93 0 0 0

PART VI (To be completed by Federal Agency)

Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))	Maximum Points				
1. Area In Nonurban Use	15	4			
2. Perimeter In Nonurban Use	10	4			
3. Percent Of Site Being Farmed	20	0			
4. Protection Provided By State And Local Government	20	0			
5. Distance From Urban Builtup Area	15	0			
6. Distance To Urban Support Services	15	0			
7. Size Of Present Farm Unit Compared To Average	10	0			
8. Creation Of Nonfarmable Farmland	10	0			
9. Availability Of Farm Support Services	5	5			
10. On-Farm Investments	20	0			
11. Effects Of Conversion On Farm Support Services	10	0			
12. Compatibility With Existing Agricultural Use	10	4			
TOTAL SITE ASSESSMENT POINTS	160	17	0	0	0

PART VII (To be completed by Federal Agency)

Relative Value Of Farmland (From Part V)	100	<u>93</u>	0	0	0
Total Site Assessment (From Part VI above or a local site assessment)	160	17	0	0	0
TOTAL POINTS (Total of above 2 lines)	260	17	0	0	0

Site Selected: _____ Date Of Selection _____ Was A Local Site Assessment Used? Yes No

Reason For Selection: _____

Farmland Classification—Hidalgo County, Texas



98° 9' 19"



Map Scale: 1:1,230 if printed on A size (8.5" x 11") sheet.



98° 9' 19"

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Soil Ratings

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available

Political Features

 Cities

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads
 Local Roads

MAP INFORMATION

Map Scale: 1:1,230 if printed on A size (8.5" x 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 14N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hidalgo County, Texas
 Survey Area Data: Version 8, Oct 27, 2009

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Farmland Classification— Summary by Map Unit — Hidalgo County, Texas (TX215)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
28	Hidalgo sandy clay loam, 0 to 1 percent slopes	All areas are prime farmland	4.3	100.0%
Totals for Area of Interest			4.3	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

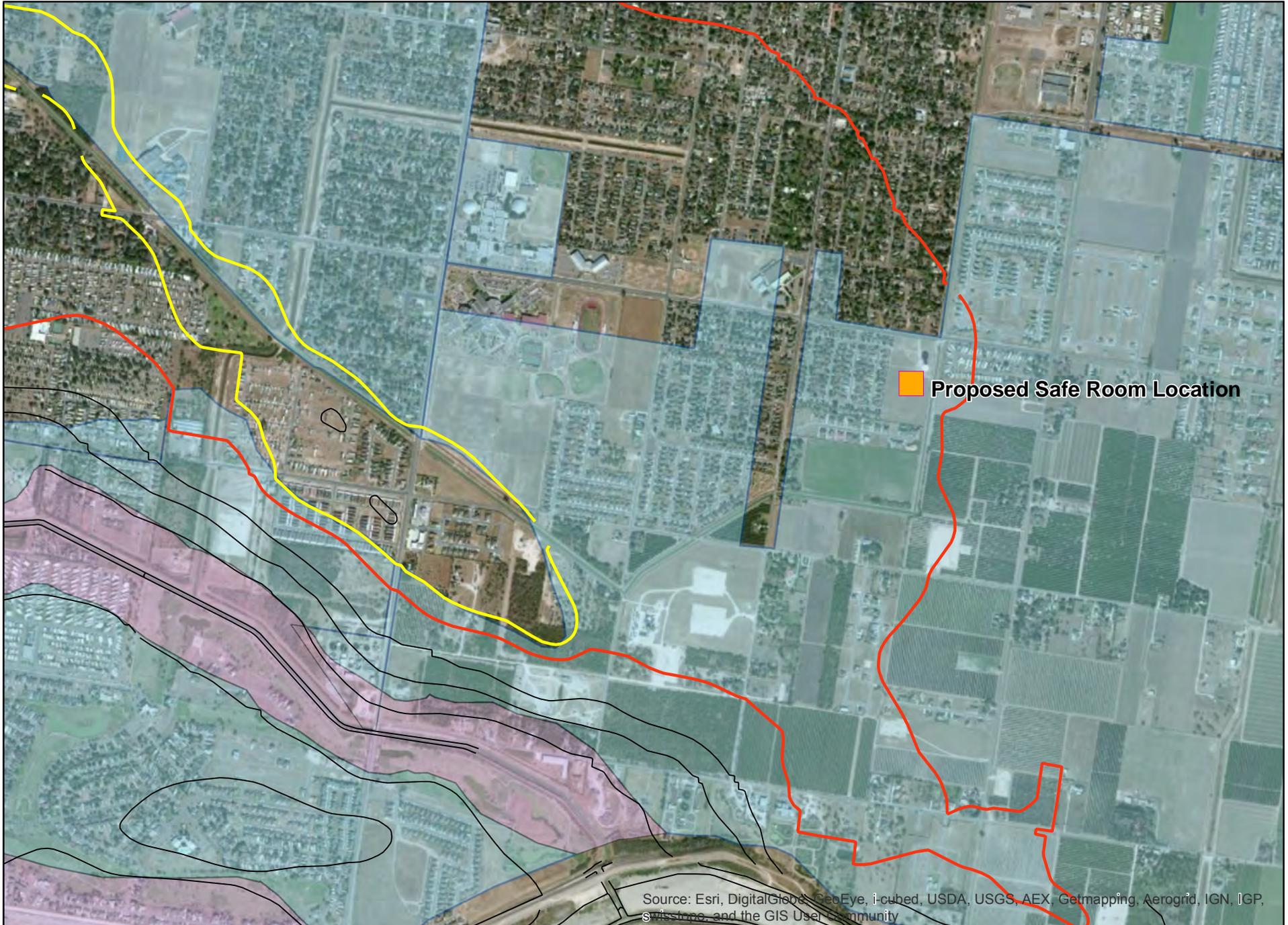
Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Appendix C

500-Year Elevation Determination

Hidalgo County Safe Room Location



CRUZ-HOGAN *Consultants, Inc.*

Engineers • Planners • Consultants

McAllen • Harlingen
TBPE Firm Reg. No. F-4860

August 12, 2013

Michael Ku
Mitigation Specialist
Texas Division of Emergency Management

Re: City of San Juan TSSI Community Safe Room Application
500-Year Flood Study

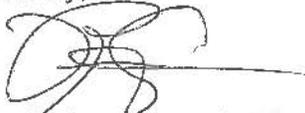
Dear Mr. Ku:

The City of San Juan has submitted an application for a TSSI Safe Room. The site identified by the City of San Juan is ideal since they are the owners of the 3.50 acre tract of land. This parcel is part of the City Master Plan which will include a new Fire Station, a new Police Station, and recreation facilities. Parking areas for all buildings and facilities will be shared. All infrastructure is available to the site. The physical location is 300 East Ridge Road with geographical coordinates of Latitude 26.1747222, Longitude -98.153889. The site for the shelter lies in Zone "B" according to Firm Community Panel No. 480334 0425C dated November 16, 1982. Zone "B" are areas between limits of the 100-Year Flood and 500-Year Flood.

The elevations for the contours were established using Flood Insurance Rate Map Datum, a TNRIS Contour Map from the Texas Water Development Board, and an International Boundary Commission Contour Map. The contours are one foot contour lines. The existing ground elevations of the site are 111.00 feet. The topography of the area within one mile in all directions of the site are 115.00 feet to the west, 105.00 feet to the north, and 104.00 feet towards the east. Overland flow is towards the east. One mile south of the site is the main floodway which is protected by levees. The top of the left levee directly south of the site has an elevation of 101.60 feet with an existing freeboard of 1.92 feet. Based on all data obtained, the elevation was established to be 115.00 feet, which is above the 500-Year base flood elevation.

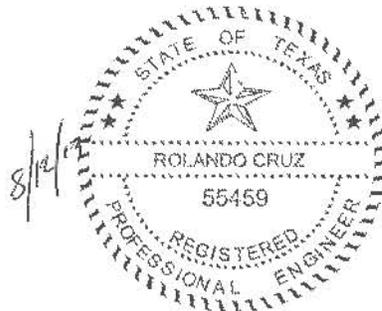
Please feel free to contact me should you have any questions.

Sincerely,



Ronnie Cruz, P.E., CFM
Vice-President

RC/lg



U N I T E D S T A T E S

LOWER RIO GRANDE FLOOD CONTROL PROJECT
**PLAN FOR
 REPAIRS AND IMPROVEMENT**
 FOUR POINTS OF INTEREST

1. Mission Floodway	7. Retamal Dam
2. Hackney Weir	8. Floodway Divisor Dike
3. Hackney Floodway	9. North Floodway Sill
4. Hidalgo Loop Levee & Bridge Protection	10. Camascuas Siphon
5. Highway 336 Bridge	11. Camascuas Levee Setback
6. Pharr-San Juan Siphon	12. Arroyo Colorado at Harlingen
-- McAllen Siphon	

FLOOD DISCHARGES
 BEULAH (FREQUENCY) - 220,000 C.F.S.
 NEW CRITERIA - 250,000 C.F.S.

FLOOD DISCHARGES
 BEULAH (FREQUENCY) - 20,000 C.F.S.
 NEW CRITERIA - 20,000 C.F.S.

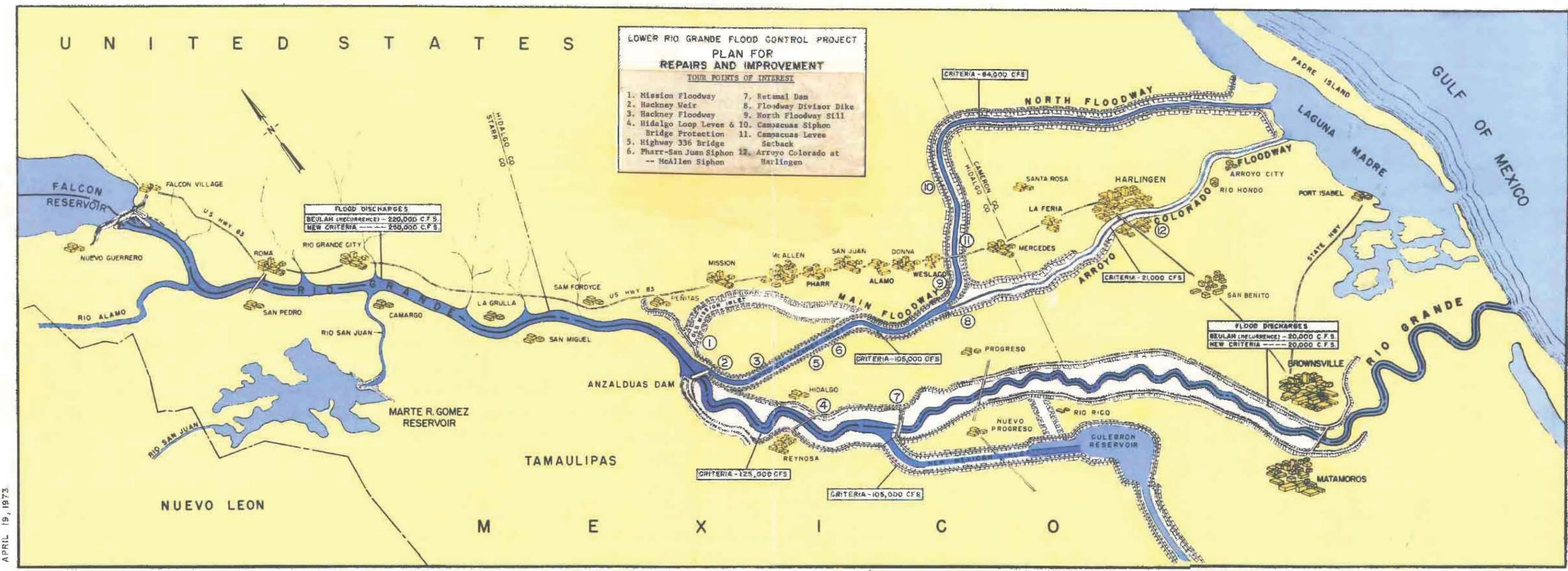
CRITERIA - 125,000 C.F.S.

CRITERIA - 105,000 C.F.S.

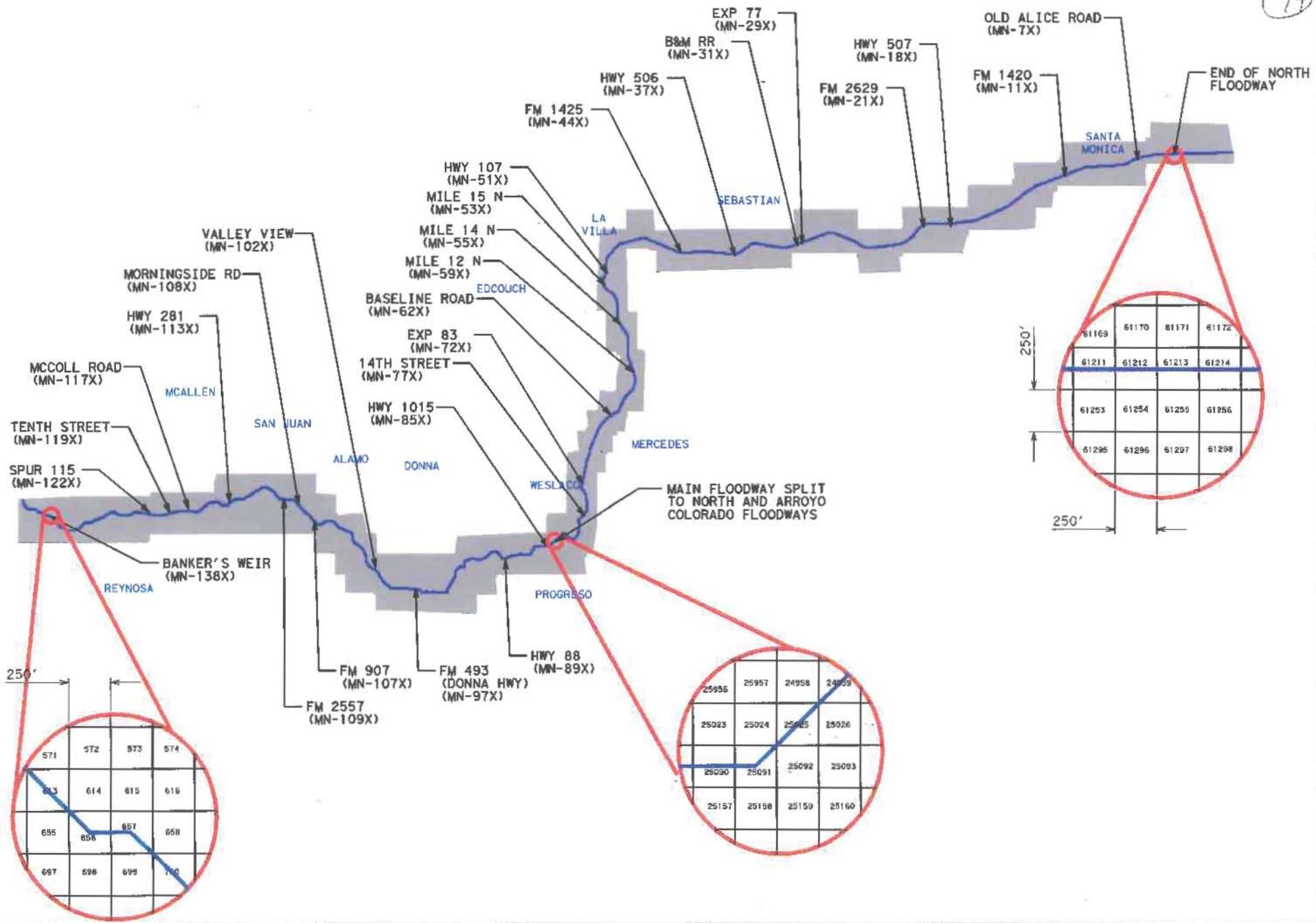
CRITERIA - 105,000 C.F.S.

CRITERIA - 2,000 C.F.S.

CRITERIA - 84,000 C.F.S.



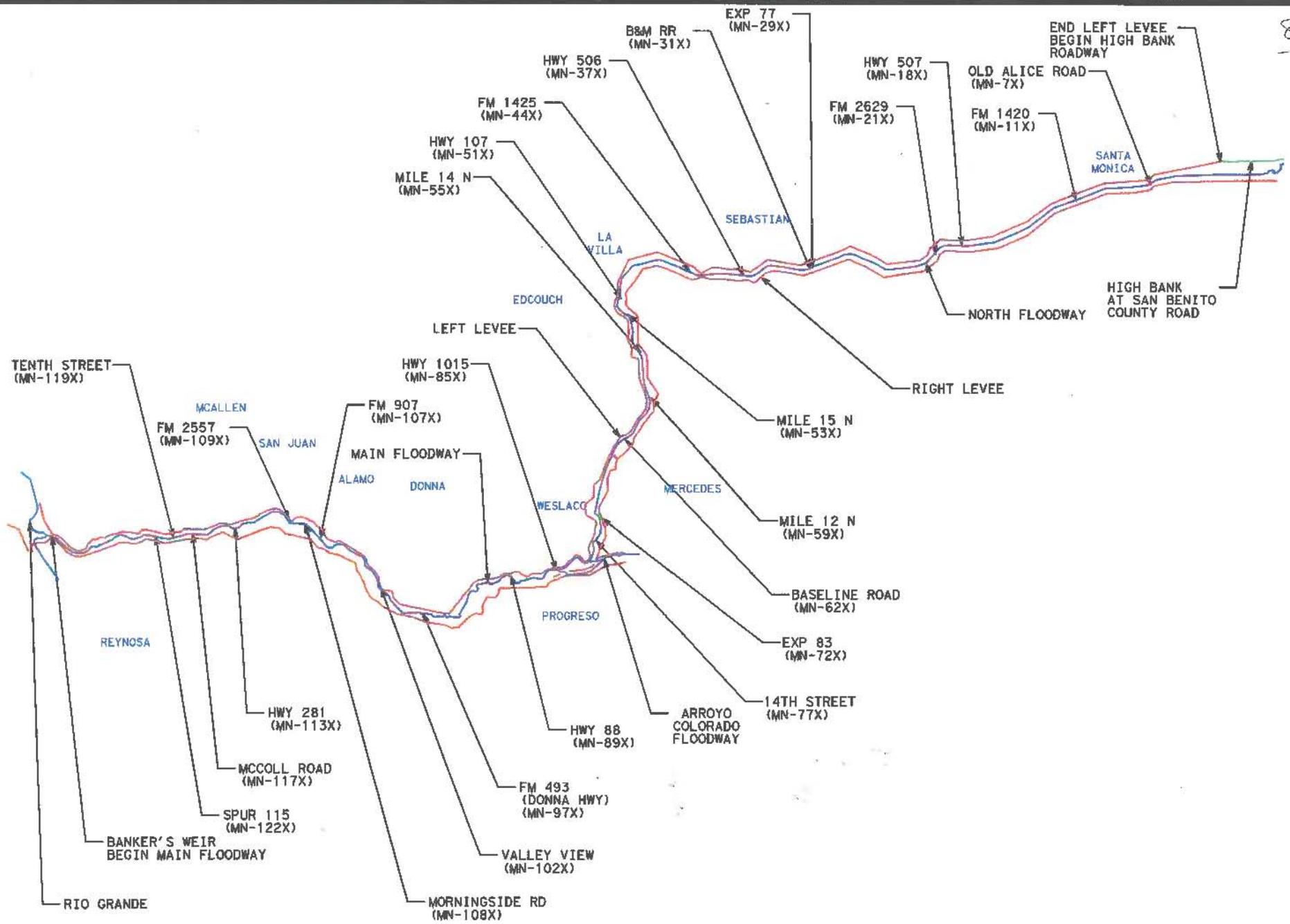
APRIL 19, 1973



**MAIN & NORTH FLOODWAYS
FLO-2D GRID LAYOUT**

**EXHIBIT 2-2
SCALE : 1" = 30,000'**





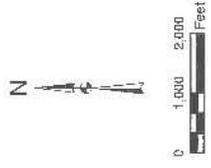
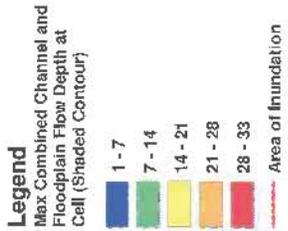
S&B



**MAIN & NORTH FLOODWAYS
LEVEE LAYOUT**

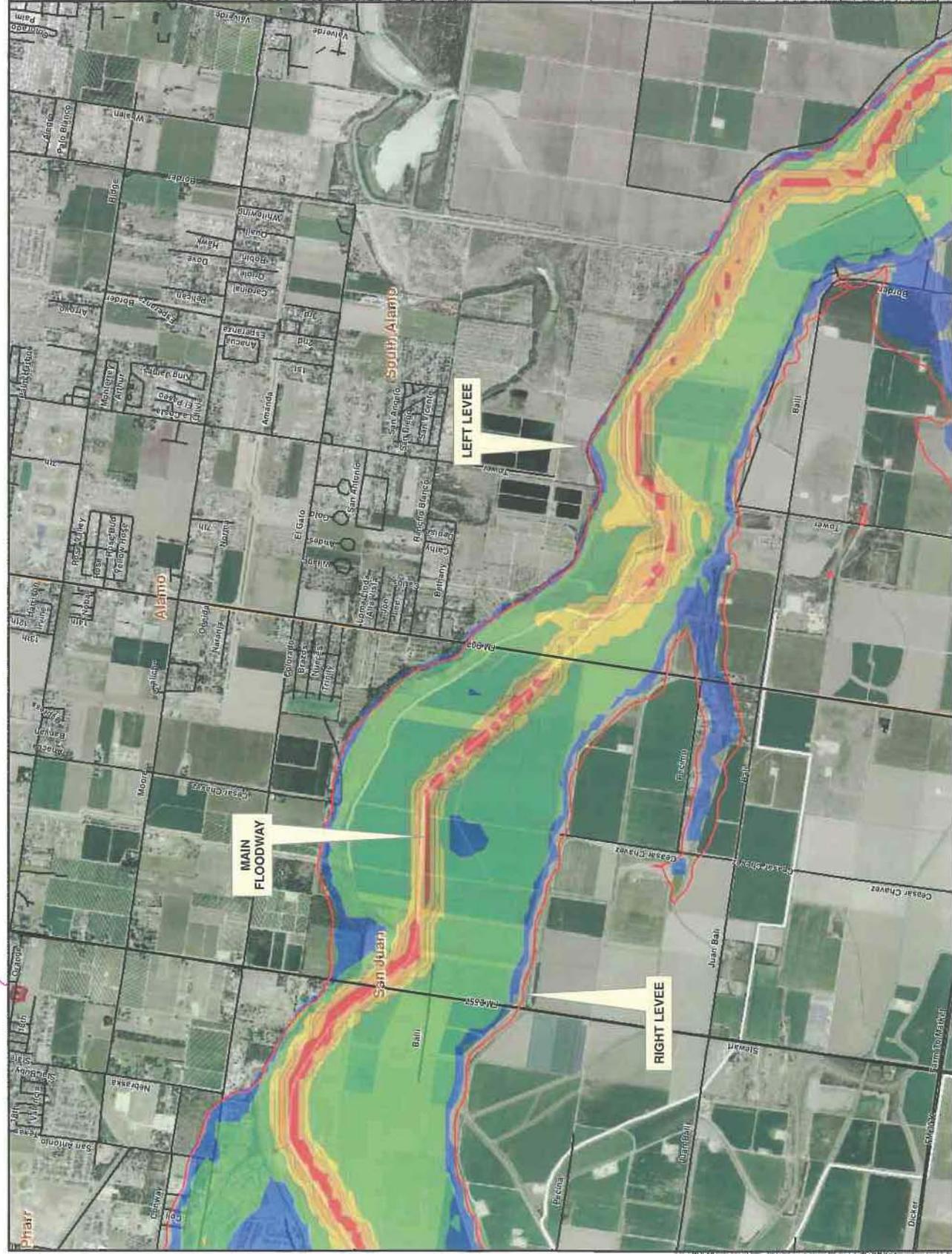
EXHIBIT 3-2
SCALE : 1" = 30,000'





**FLOOD SIMULATION
 AREA OF INUNDATION
 FOR
 MAIN & NORTH
 FLOODWAY**

DRAWN BY:	EM	DATE:	10/20/11	SHEET NO.:	1
PROJECT NO.:	10-100-001	SCALE:	AS SHOWN	PROJECT NAME:	RELANDING OF MAIN & NORTH FLOODWAYS
APPROVED BY:	CON	DATE:	10/20/11	PROJECT NO.:	10-100-001
PROJECT NO.:	10-100-001	DATE:	10/20/11	PROJECT NAME:	RELANDING OF MAIN & NORTH FLOODWAYS
CITY:	RELANDING OF MAIN & NORTH FLOODWAYS	COUNTY:	ALAMEDA	PROJECT NAME:	RELANDING OF MAIN & NORTH FLOODWAYS
STATE:	CALIFORNIA	CITY:	ALAMEDA	PROJECT NAME:	RELANDING OF MAIN & NORTH FLOODWAYS
PROJECT NO.:	10-100-001	CITY:	ALAMEDA	PROJECT NAME:	RELANDING OF MAIN & NORTH FLOODWAYS
PROJECT NAME:	RELANDING OF MAIN & NORTH FLOODWAYS	CITY:	ALAMEDA	PROJECT NAME:	RELANDING OF MAIN & NORTH FLOODWAYS
PROJECT NO.:	10-100-001	CITY:	ALAMEDA	PROJECT NAME:	RELANDING OF MAIN & NORTH FLOODWAYS



SITE

TABLE 2-2
 MAIN AND NORTH FLOODWAYS
 LEFT LEVEE FREEBOARD SUMMARY

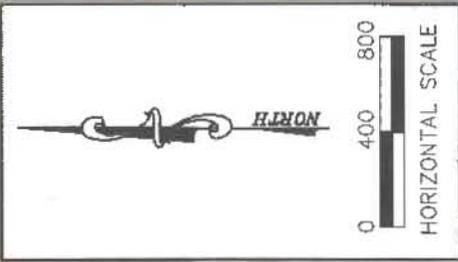
LOCATION	FLO-2D/HEC-RAS XS NAME	GRID ELEMENT	EXISTING LEVEE	WATER SURFACE	EXISTING	REQUIRED
			ELEVATION	ELEVATION	FREEBOARD	FREEBOARD
			(ft)	(ft)	(ft)	(ft)
		8779	102.69	99.84	2.85	2
		8780	102.60	99.84	2.76	2
		8781	102.51	99.82	2.69	2
		8723	102.42	99.82	2.60	2
		8724	102.32	99.77	2.55	2
		8725	102.23	99.77	2.46	2
		8667	102.14	99.75	2.39	2
		8668	102.05	99.74	2.31	2
		8610	101.96	99.73	2.23	2
		8611	101.87	99.73	2.14	2
		8612	101.78	99.70	2.08	2
		8613	101.69	99.68	2.01	2
SOUTH OF SAN JUAN, TEXAS	MN-110.5X	8555	101.6	99.68	1.92	2
		8556	101.64	99.64	2.00	2
		8657	101.68	99.61	2.07	2
		8499	101.72	99.58	2.14	2
		8500	101.76	99.58	2.18	2
		8501	101.80	99.54	2.26	2
		8502	101.84	99.51	2.33	2
		8444	101.88	99.46	2.42	2
		8445	101.92	99.44	2.48	2
		8446	101.96	99.40	2.56	2
		8388	102.00	99.36	2.64	2
		8389	102.04	99.34	2.70	2
		8390	102.08	99.31	2.77	2
		8391	102.12	99.28	2.84	2
		8333	102.16	99.28	2.88	2
		8534	102.20	99.26	2.94	2
	MN-110X	8335	102.24	99.23	3.01	2
		8336	101.87	99.21	2.66	2
		8337	101.50	99.18	2.32	2
		8395	101.13	99.18	1.95	2
		8396	101.13	100.11	1.02	2
		8397	104.97	100.11	4.86	2
		8398	104.97	99.09	5.88	2
		8456	105.55	89.83	5.72	2
		8457	105.55	99.02	6.53	2
		8515	103.39	98.98	4.41	2
		8516	103.39	98.97	4.42	2
		8574	101.15	98.94	2.21	2
		8575	101.15	98.86	2.29	2
		8633	101.56	98.86	2.70	2
		8634	101.56	98.78	2.78	2
		8692	99.33	98.78	0.55	2
		11601	99.33	98.78	0.55	2
		11639	97.05	98.67	-1.62	2
		11640	97.11	98.67	-1.56	2
		11678	95.4	98.67	-3.27	2
		11735	94.81	98.50	-3.69	2
FM 2557 BR (STEWART RD)	MN-109X	11792	94.44	97.68	-3.24	2
		11793	94.88	97.59	-2.71	2
		11794	95.32	97.69	-2.37	2
		11795	95.75	97.75	-2.00	2
		11796	96.19	97.72	-1.53	2
		11797	96.63	97.25	-0.62	2
		11798	97.07	97.15	-0.08	2
		11741	97.51	97.13	0.38	2
		11742	97.94	97.14	0.80	2
		11685	98.38	97.12	1.26	2
		11686	98.82	97.11	1.71	2
		11648	99.26	97.09	2.17	2
		11649	99.70	97.11	2.59	2

TABLE 2-2
 MAIN AND NORTH FLOODWAYS
 LEFT LEVEE FREEBOARD SUMMARY

LOCATION	FLO-2D/HEC-RAS XS NAME	GRID ELEMENT	EXISTING LEVEE	WATER SURFACE	EXISTING	REQUIRED
			ELEVATION	ELEVATION	FREEBOARD	FREEBOARD
			(ft)	(ft)	(ft)	(ft)
		11611	100.14	97.07	3.07	2
		11612	100.57	97.07	3.50	2
		11613	101.01	97.06	3.95	2
		11614	103.9	97.04	6.86	2
		11615	103.9	97.03	6.87	2
		11616	105.7	97.02	8.68	2
		11654	105.7	97.02	8.68	2
		11655	103.20	97.00	6.20	2
MORNINGSIDE RD BR (CESAR CHAVEZ)	MN-108X	11656	103.64	96.98	6.66	2
		11657	103.52	96.95	6.57	2
		11695	103.40	96.95	6.45	2
		11696	103.28	96.93	6.35	2
		11697	103.16	96.93	6.23	2
		11698	103.03	96.91	6.12	2
		11699	102.91	96.89	6.02	2
		11700	102.79	96.89	5.90	2
		11757	102.67	96.89	5.78	2
		11758	102.55	96.87	5.68	2
		11815	102.43	96.87	5.56	2
		11816	102.31	96.85	5.46	2
		11873	102.19	96.85	5.34	2
		11874	102.06	96.81	5.25	2
		11931	101.94	96.81	5.13	2
		11932	101.82	96.79	5.03	2
		11989	101.70	96.79	4.91	2
		11990	101.58	96.78	4.80	2
		12047	101.46	96.78	4.68	2
		12048	101.34	96.75	4.59	2
		12105	103.33	96.75	6.58	2
		12106	103.35	96.75	6.60	2
		12163	103.35	96.74	6.61	2
		12220	100.85	96.72	4.13	2
		12277	100.73	96.68	4.05	2
		12334	100.61	96.65	3.96	2
		12335	100.49	96.62	3.87	2
		12392	101.42	96.62	4.80	2
		12393	103.2	96.61	6.59	2
		12394	102.73	96.59	6.14	2
		12451	102.73	96.59	6.14	2
		12452	99.88	96.57	3.31	2
		12509	99.76	96.55	3.21	2
FM 907 BR (ALAMO RD)	MN-107X	12566	99.64	96.55	3.09	2
SOUTH OF ALAMO, TEXAS		12567	99.71	96.51	3.20	2
		12624	99.79	96.52	3.27	2
		12681	99.86	96.47	3.39	2
		12682	99.93	96.45	3.48	2
		12739	100.00	96.46	3.54	2
		12740	100.08	96.41	3.67	2
		12797	100.15	96.41	3.74	2
		12798	100.22	96.41	3.81	2
		12855	100.29	96.37	3.92	2
		12912	100.37	96.33	4.04	2
	MN-106X	12913	100.44	96.30	4.14	2
		12914	100.39	96.28	4.11	2
		12971	100.35	96.22	4.13	2
		12972	100.30	96.22	4.08	2
		12973	100.26	96.17	4.09	2
		12974	100.21	96.17	4.04	2
		13031	100.17	96.17	4.00	2
		13032	100.12	96.15	3.97	2
		13033	100.08	96.10	3.98	2

TABLE 2-3
MAIN NORTH FLOODWAYS
RIGHT LEVEE FREEBOARD SUMMARY

LOCATION	FLO-2D/HEC-RAS XS NAME	GRID ELEMENT	EXISTING LEVEE ELEVATION	WATER SURFACE ELEVATION	EXISTING FREEBOARD	REQUIRED FREEBOARD
			(ft)	(ft)	(ft)	(ft)
		9704	103.55	99.08	4.4725	2
		9705	103.49	99.08	4.4100	2
		9647	103.43	99.04	4.3875	2
		9648	103.37	98.99	4.3750	2
		9649	103.30	98.95	4.3525	2
	MN-117X	9591	103.24	98.95	4.2900	2
		9592	103.13	98.92	4.2136	2
		9593	103.03	98.86	4.1673	2
		9594	102.92	98.79	4.1309	2
		9536	102.81	98.79	4.0245	2
		9537	102.71	98.75	3.9582	2
		9538	102.60	98.66	3.9418	2
		9539	102.50	98.60	3.8955	2
		9481	102.39	98.60	3.7891	2
		9482	102.28	98.57	3.7127	2
		9483	102.18	98.50	3.6764	2
SOUTH OF SAN JUAN TEXAS	MN-110.5X	9484	102.07	98.46	3.6100	2
		9426	102.07	98.46	3.6070	2
		9427	102.06	98.43	3.6340	2
		9428	102.06	98.38	3.6810	2
		9429	102.06	98.36	3.6980	2
		9371	102.06	98.36	3.6950	2
		9372	102.05	98.34	3.7120	2
		9373	102.05	98.31	3.7390	2
		9374	102.05	98.29	3.7560	2
		9375	102.04	98.26	3.7830	2
	MN-110X	9376	102.04	98.24	3.8000	2
		9377	101.90	98.21	3.6871	2
		9378	101.75	98.18	3.5743	2
		9379	101.61	98.14	3.4714	2
		9380	101.47	98.12	3.3486	2
		9381	101.33	98.10	3.2257	2
		9439	101.18	98.10	3.0829	2
FM 2557 BR (STEWART RD)	MN-109X	9440	101.04	98.07	2.9700	2
		9441	101.06	98.03	3.0307	2
		9442	101.08	97.91	3.1714	2
		9500	101.10	97.86	3.2421	2
		9501	101.12	97.83	3.2928	2
		9559	101.14	97.80	3.3434	2
		9560	101.16	97.78	3.3841	2
		9618	101.18	97.75	3.4348	2
		9619	101.21	97.74	3.4655	2
		9677	101.23	97.72	3.5062	2
		9678	101.25	97.71	3.5369	2
		9736	101.27	97.71	3.5576	2
		12589	101.29	97.69	3.5983	2
		12590	101.31	97.67	3.6390	2
		12591	101.33	97.62	3.7097	2
		12592	101.35	97.60	3.7503	2
		12593	101.37	97.57	3.8010	2
		12650	101.39	97.57	3.8217	2
		12651	101.41	97.54	3.8724	2
		12652	101.43	97.51	3.9231	2
		12653	101.45	97.47	3.9838	2
		12654	101.47	97.44	4.0345	2
		12711	101.50	97.42	4.0752	2
		12712	101.52	97.42	4.0959	2
		12713	101.54	97.33	4.2066	2
		12714	101.56	97.28	4.2772	2
		12715	101.58	97.24	4.3379	2
		12772	101.60	97.24	4.3586	2
		12773	101.62	97.19	4.4293	2



SITE
LAT: 26.1747222
LONG: -98.1538889

TNRIS MAP

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

HIDALGO
COUNTY,
TEXAS
(UNINCORPORATED AREA)

PANEL 425 OF 525
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
480334 0425 C

MAP REVISED:
NOVEMBER 16, 1982



federal emergency management agency

"E" FRAME

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ICE MARKS

DESCRIPTION OF LOCATION

3.6 miles south of U.S. Expressway 83 going the third Levee road. An IBWC plate on the

entrance flood of the southeast corner of a 2nd Street 1.3 miles south of U.S. Express-

a power pole on the southeast corner of the 281 and Moore Road 1.5 miles south of

in a power pole on the northeast corner of the Kingside Road and Sioux Road, 1.3 miles

in a power pole on the southeast corner of the Far Road and the entrance road to Alamo's

with along Tower Road from the junction with at Alamo, Hidalgo County, thence 1.0 mile Road to the Donna Main Canal, a square cut corner of a concrete structure.

a power pole on the southwest corner of the

KEY TO MAP

- 500-Year Flood Boundary —————
- 100-Year Flood Boundary —————
- Zone Designations* With Date of Identification e.g., 12/2/74
- 100-Year Flood Boundary —————
- 500-Year Flood Boundary —————
- Base Flood Elevation Line With Elevation in Feet** 513
- Base Flood Elevation in Feet Where Uniform Within Zone** (EL 987)
- Elevation Reference Mark RM7 X
- River Mile • M1.5

** Referenced to the National Geodetic Vertical Datum of 1929

***EXPLANATION OF ZONE DESIGNATIONS**

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

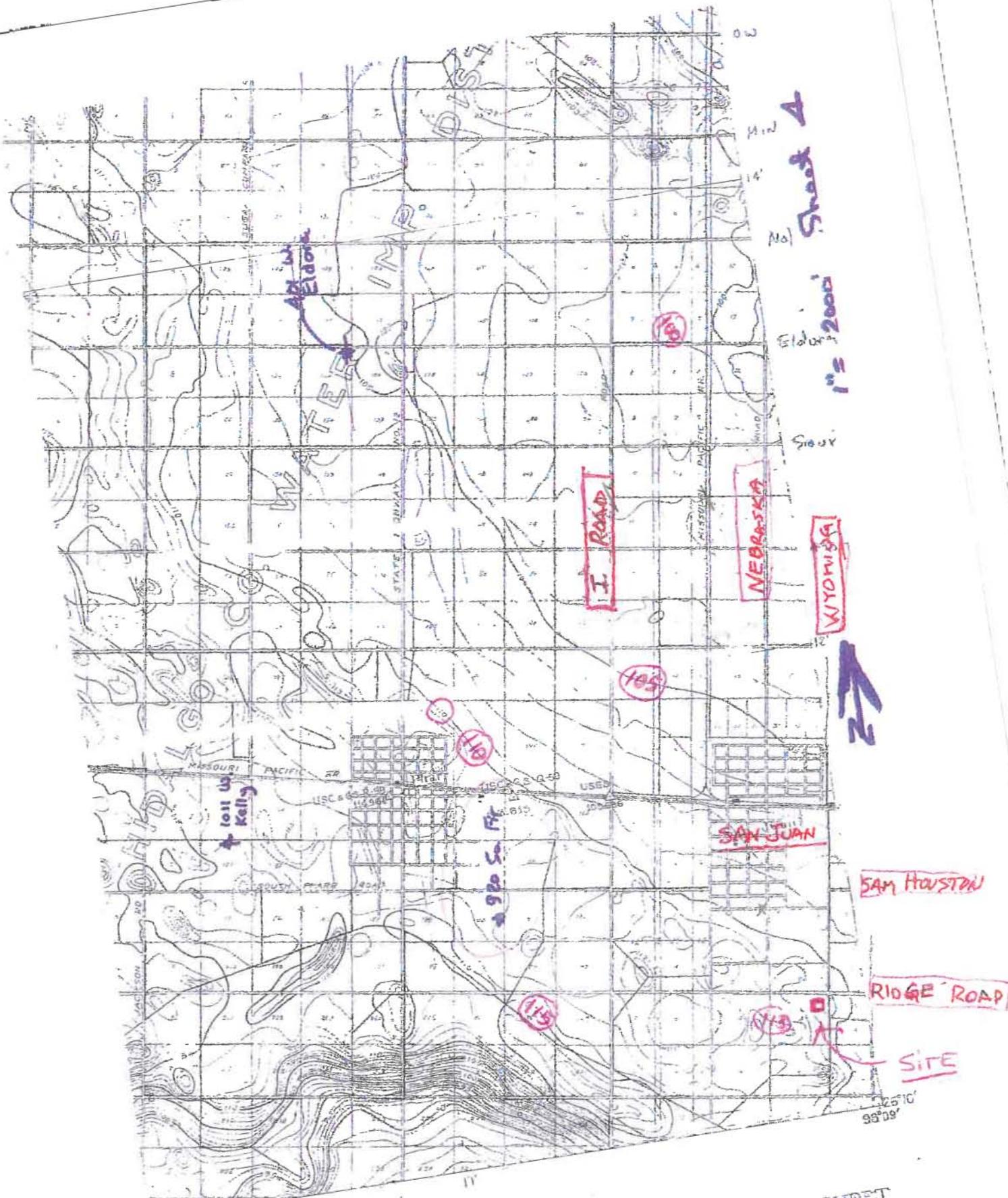
Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

Levee

INITIAL IDENTIFICATION:
MAY 23, 1978



Sheet A

1" = 2000'

I. ROAD

NEBRASKA

WYOMING

SAN JUAN

SAM HOUSTON

RIDGE ROAD

SITE

Topography by Int. Boundary Commission,
 Water Control & Imp. Dist. Nos 12, 36 & 7,
 United Irrigation Dist. Rio Bravo
 Plantation Co. & State Reclamation Dept.
 Control by U.S. Geological Survey, U.S.
 Coast & Geodetic Survey and Texas
 Geodetic Survey

Mc ALLEN SHEET

