

*APPENDIX A*  
*Figures*



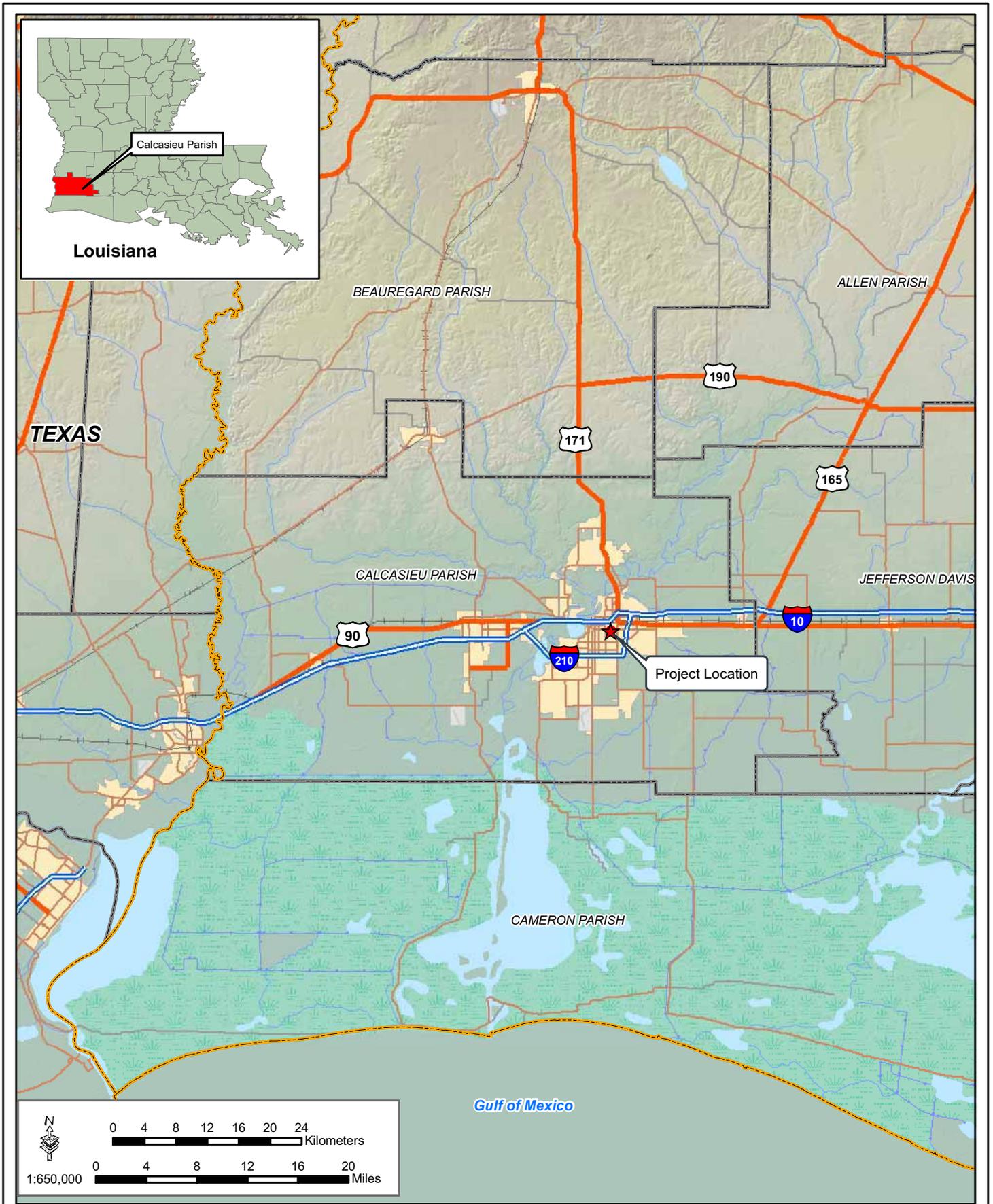


Figure 1: Vicinity Map



February 2009

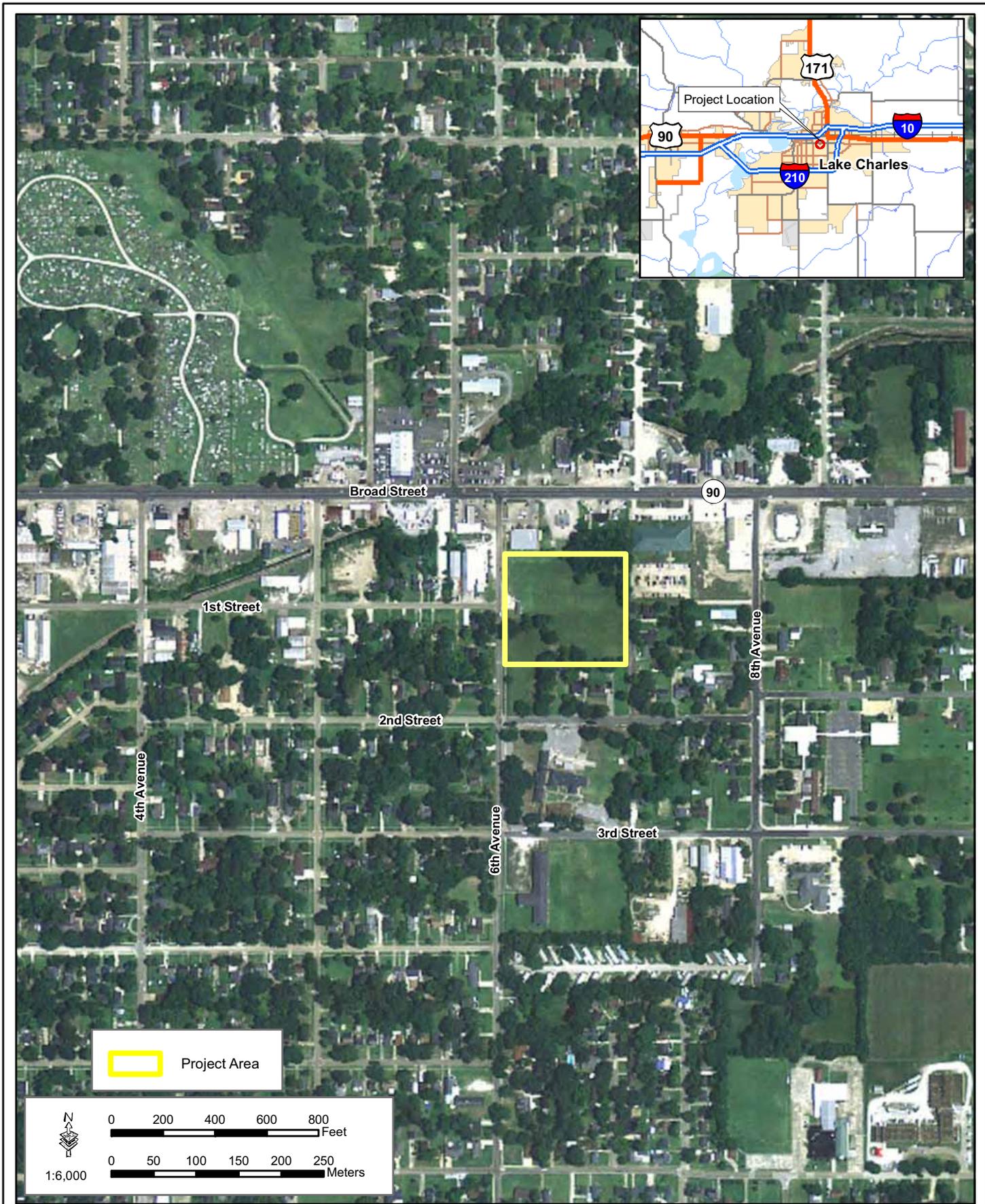


Figure 2: Project Area

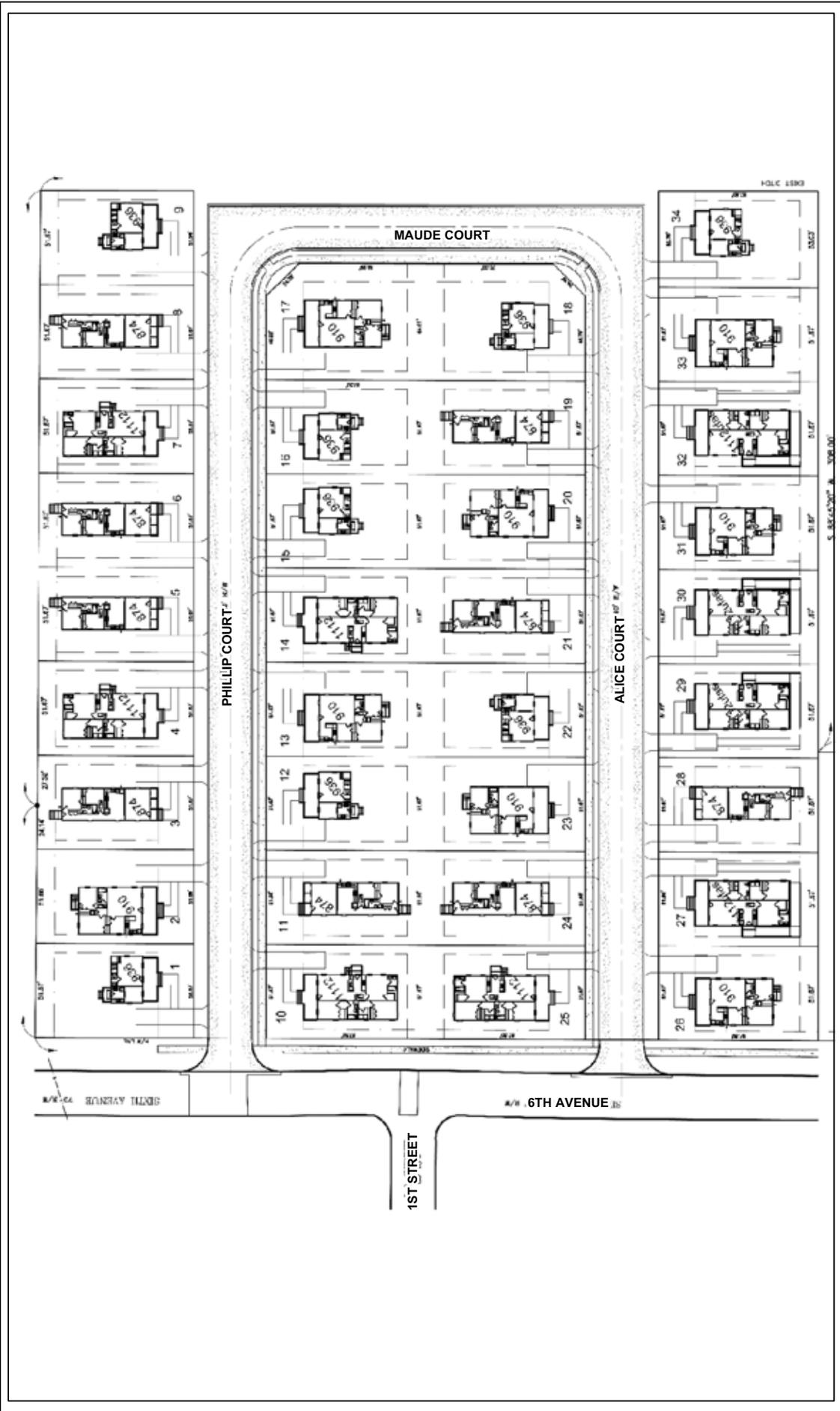


Figure 3: Draft Conceptual Site Plan

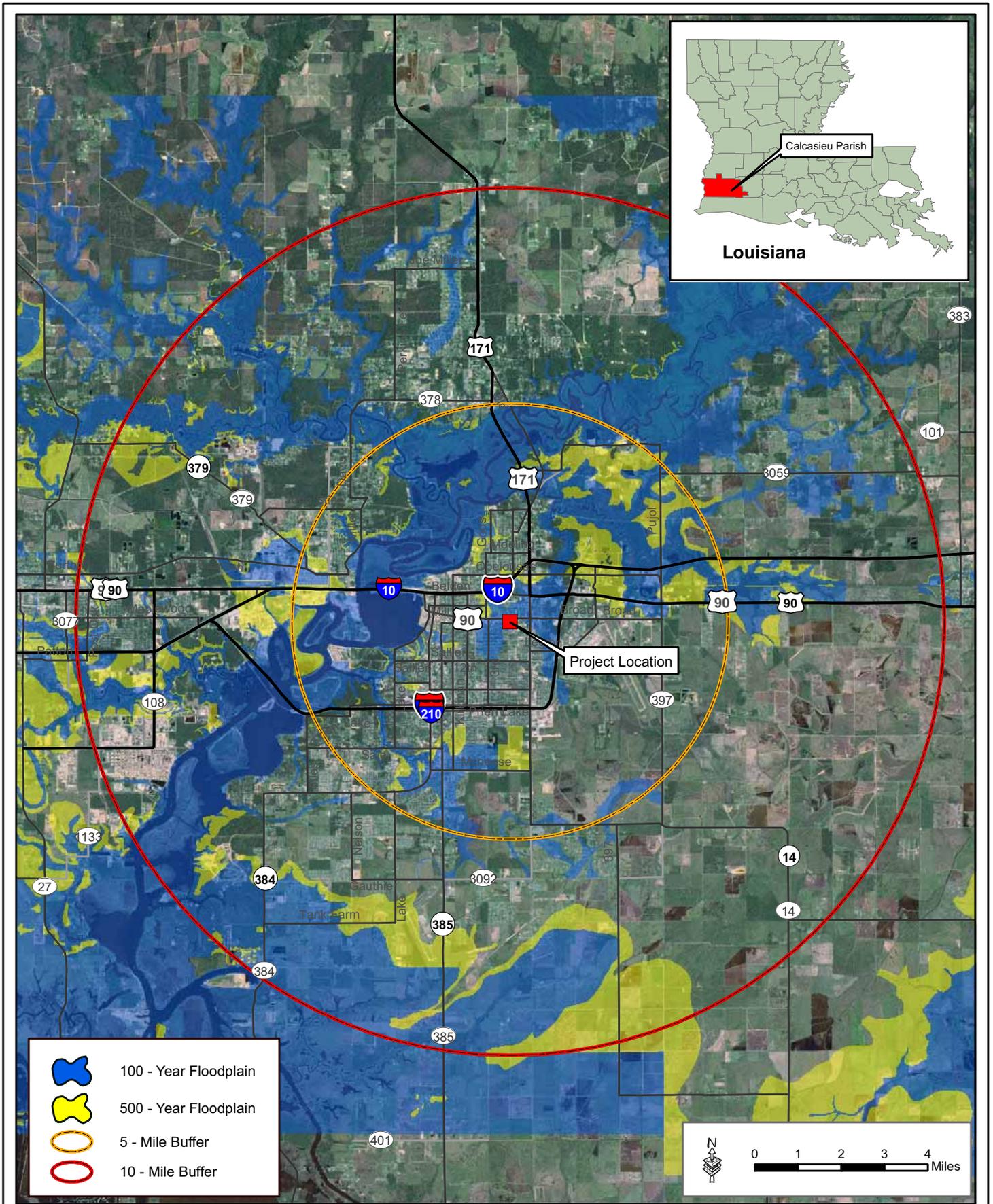


Figure 4: Lake Charles FEMA Floodplain Map

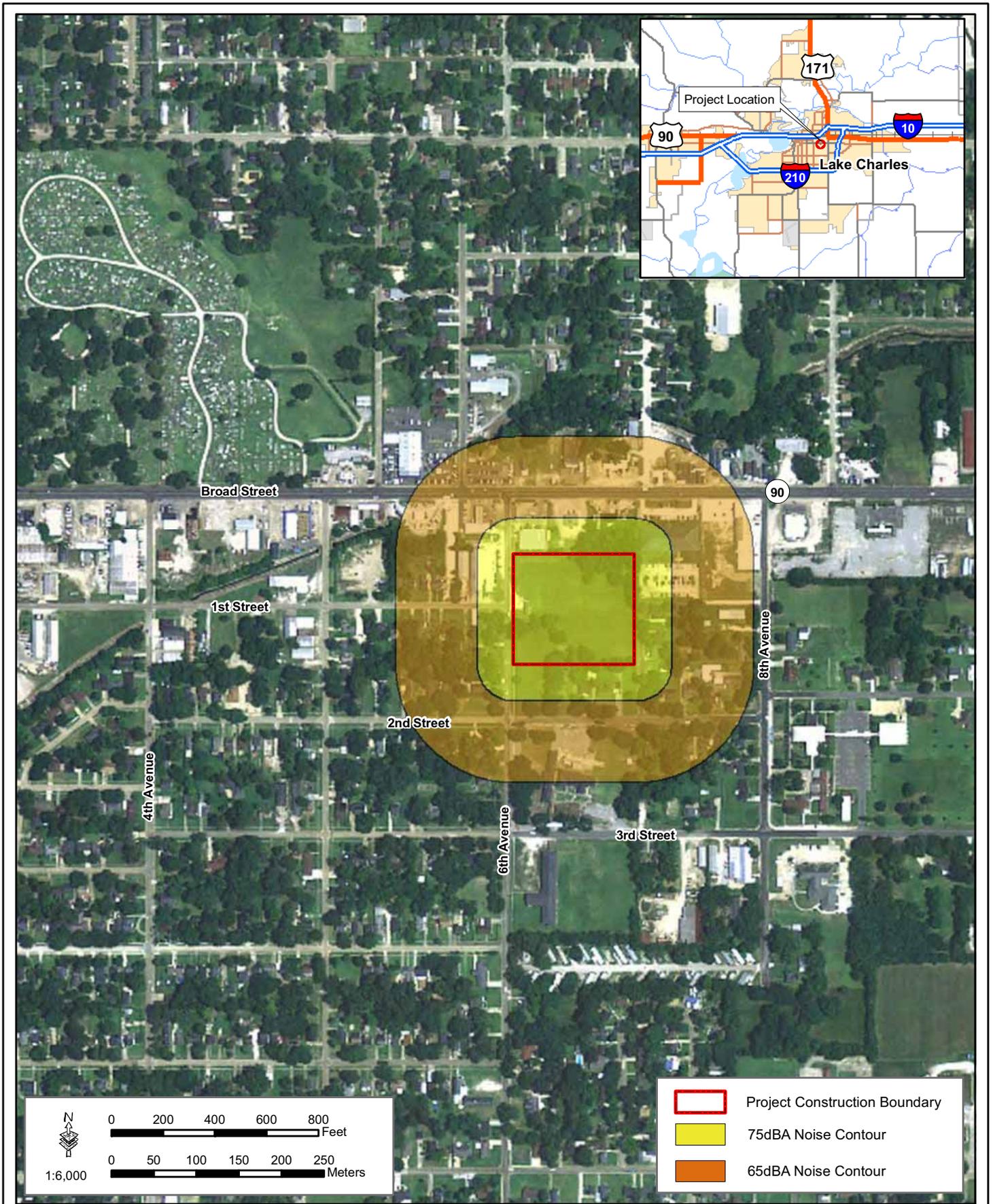


Figure 5: Lake Charles Noise Contours



February 2009

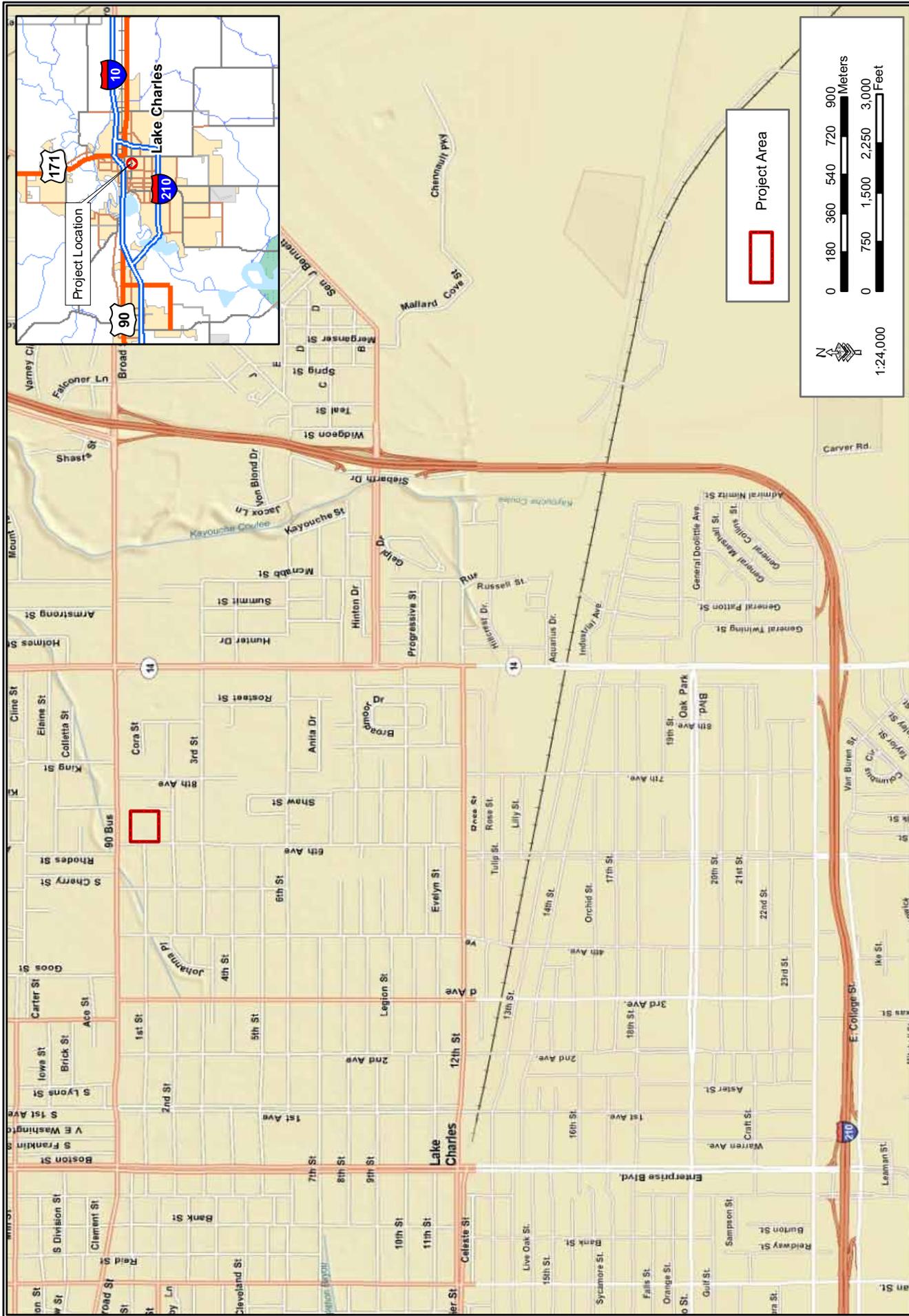


Figure 6: Lake Charles Transportation Map

*APPENDIX B*  
*Correspondence*





February 11, 2009

Josh Marceaux  
U.S. Fish and Wildlife Service  
646 Cajundome Boulevard, Suite 400  
Lafayette, LA 70506-4290

RE: Request for Project Review – Lake Charles Fields 6<sup>th</sup> Avenue Group Site,  
Calcasieu Parish, Louisiana Alternative Housing Pilot Program Group Housing  
Project

Dear Mr. Marceaux:

The Louisiana Recovery Authority (LRA) applied for federal funding from the Federal Emergency Management Agency (FEMA) for the purchase and construction of the Fields 6<sup>th</sup> Avenue, Calcasieu Parish, Louisiana Alternative Housing Pilot Program (AHPP) Group Housing Project.

Recognizing the extensive and complex housing challenges facing victims and communities as a result of the 2005 hurricane season and acknowledging the limitations on FEMA's ordinary statutory authority to provide non-temporary housing solutions, Congress appropriated funds to the Department of Homeland Security to support alternative housing pilot programs (Emergency Supplemental Appropriations Act, 2006, Public Law 109-234). The AHPP represents a one-time exception to FEMA's existing authority under the Stafford Act, which legally binds FEMA to a temporary housing mission reliant primarily on travel trailers and manufactured homes, by providing an opportunity to explore, implement, and evaluate innovative approaches to housing solutions, and to address ongoing housing challenges created by the 2005 hurricane season in the U.S. Gulf Coast region, including the State of Louisiana and Calcasieu Parish. As of January 2009, there are 144 mobile homes, 349 manufactured housing, and 25 park model houses still occupied by residents displaced by Hurricanes Katrina and Rita in Calcasieu Parish. Consequently, there maintains a need to provide a permanent housing solution.

The LRA proposes to utilize AHPP funding for the land acquisition and construction of 34 single-family, permanent housing units within an approximate 5.0-acre plot of land in Lake Charles, Calcasieu Parish, Louisiana. The proposed project site is located south of Highway 90 (Broad Street), north of 2<sup>nd</sup> Street, and east of 6<sup>th</sup> Avenue (Figure 1). The proposed site is partially bounded to the south, east and west by residential communities and to the north by commercial properties along the highway. The proposed project site consists of a previously developed subdivision with existing infrastructure including roads and municipal utility service. The proposed homesites consist of previously disturbed land, which has been filled, cleared, and graded and is predominately re-vegetated with grasses.

The proposed AHPP units are designed in the Louisiana Cottage-style and would consist of a mixture of units with living areas ranging from 888 square feet to 1,112 square feet. Project activities would include minimal grading, the tie-in of utilities to the cottages from existing lot site utilities, and the construction of driveways. Access to the proposed development would be from 6<sup>th</sup> Avenue. A site plan for the project is provided in Figure 2. The proposed site is within the 100 year floodplain and the base flood elevation (BFE) is approximately 13 feet above mean sea level. As required by the City of Lake Charles, the AHPP units would be built above the BFE. The proposed area has been previously developed and during that development fill material was used to elevate the Fields 6<sup>th</sup> Avenue homesites at or near the BFE. All AHPP cottage units would be installed on piers to ensure the BFE is met should the current development's elevation not be adequate to meet the BFE. FEMA is currently evaluating the potential floodplain impacts through both the NEPA process and the Eight-Step Planning Process as described in 44 Code of Federal Regulations Part 9, to ensure that its actions are consistent with Executive Order 11988.

Gulf South Research Corporation (GSRC) has been retained by FEMA to prepare an Environmental Assessment (EA) for the proposed project. In compliance with the National Environmental Policy Act (NEPA) of 1969, as amended, GSRC requests that your agency review the proposed project and provide comments and any available information or resources under your agency's jurisdiction within the project area. If you have any questions or need additional information, please contact Denise Rousseau Ford by phone: (225) 757-8088, email: [dford@gsrcorp.com](mailto:dford@gsrcorp.com), or by Fax: (225) 761-8077.

Sincerely,



Denise Rousseau Ford  
Project Manager

enclosures

RE: 80420001s

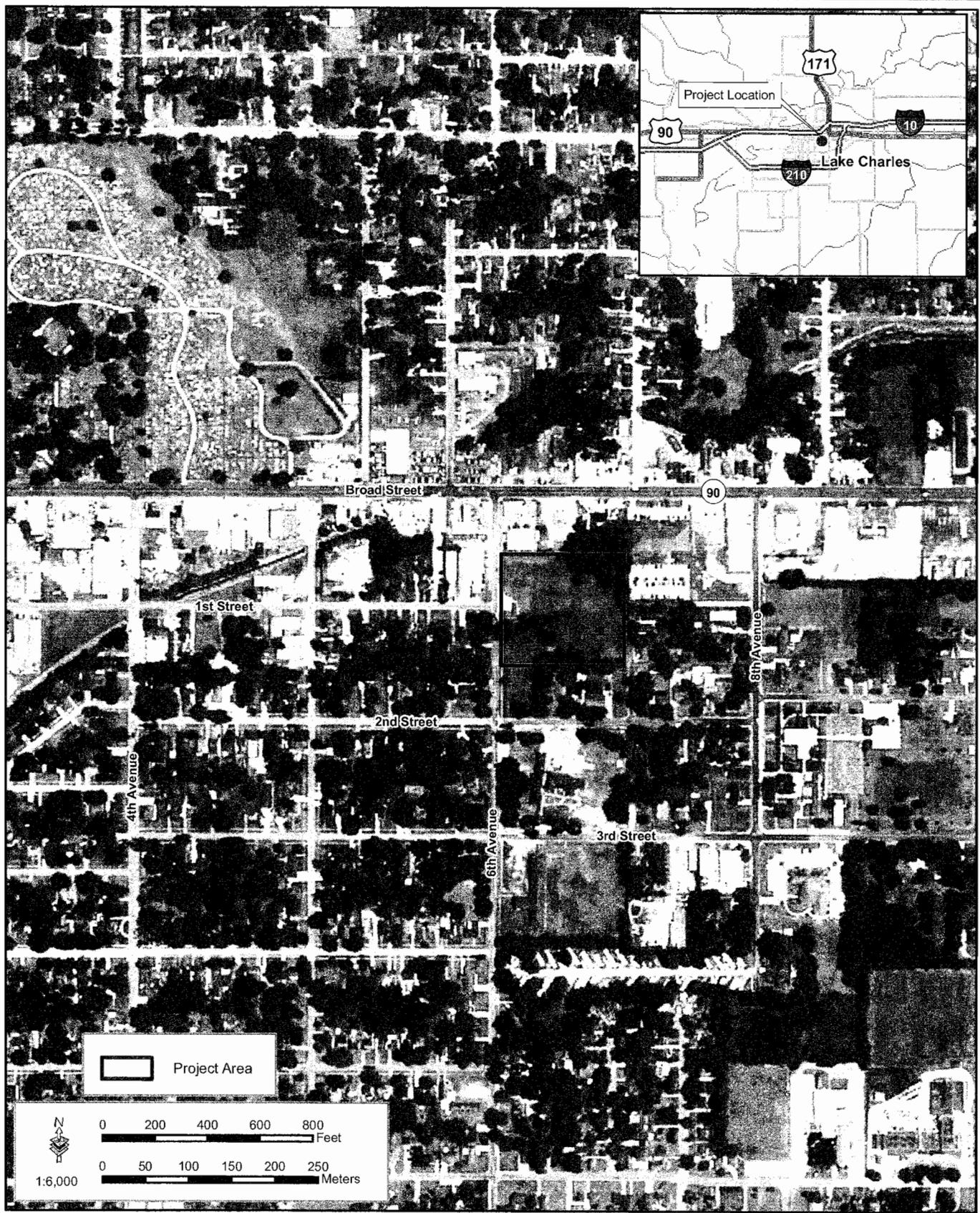


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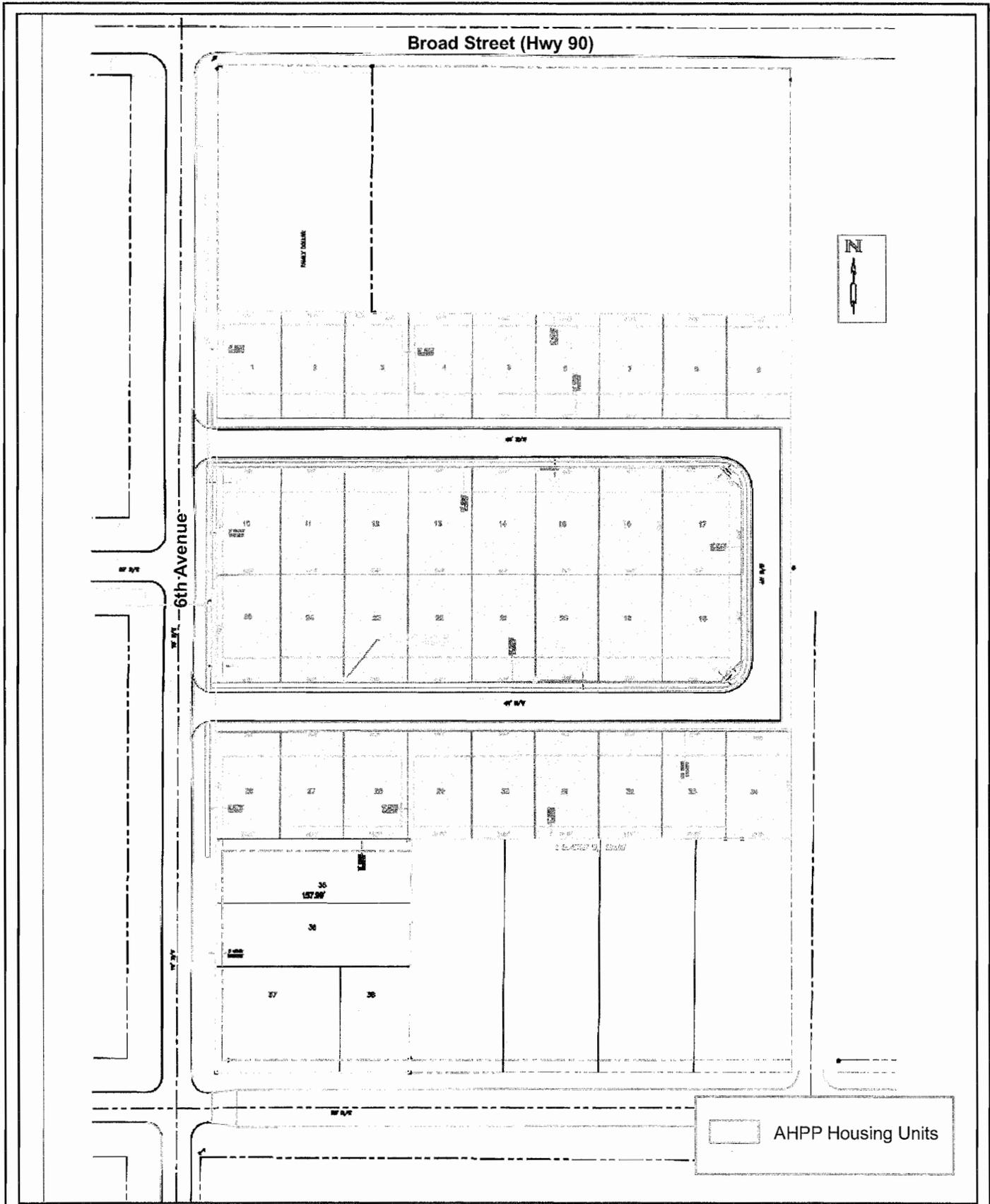


Figure 2: AHPP Housing Units



February 11, 2009

Richard Hartman  
National Oceanic and Atmospheric Administration  
NMFS CASC Route: Atmospheric Administration C/O LSU Center for Wetland Research  
Baton Rouge, LA 70803-7535

RE: Request for Project Review – Lake Charles Fields 6<sup>th</sup> Avenue Group Site,  
Calcasieu Parish, Louisiana Alternative Housing Pilot Program Group Housing  
Project

Dear Mr. Hartman:

The Louisiana Recovery Authority (LRA) applied for federal funding from the Federal Emergency Management Agency (FEMA) for the purchase and construction of the Fields 6<sup>th</sup> Avenue, Calcasieu Parish, Louisiana Alternative Housing Pilot Program (AHPP) Group Housing Project.

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Sincerely,



Denise Rousseau Ford  
Project Manager

enclosures

RE: 80420001s



February 11, 2009

Tammy Mick  
U.S. Environmental Protection Agency  
Fountain Place 11th Floor, MC 6WQ  
Dallas, TX 75202-2733

RE: Request for Project Review – Lake Charles Fields 6<sup>th</sup> Avenue Group Site,  
Calcasieu Parish, Louisiana Alternative Housing Pilot Program Group Housing  
Project

Dear Ms. Mick:

The Louisiana Recovery Authority (LRA) applied for federal funding from the Federal Emergency Management Agency (FEMA) for the purchase and construction of the Fields 6<sup>th</sup> Avenue, Calcasieu Parish, Louisiana Alternative Housing Pilot Program (AHPP) Group Housing Project.

Recognizing the extensive and complex housing challenges facing victims and communities as a result of the 2005 hurricane season and acknowledging the limitations on FEMA's ordinary statutory authority to provide non-temporary housing solutions, Congress appropriated funds to the Department of Homeland Security to support alternative housing pilot programs (Emergency Supplemental Appropriations Act, 2006, Public Law 109-234). The AHPP represents a one-time exception to FEMA's existing authority under the Stafford Act, which legally binds FEMA to a temporary housing mission reliant primarily on travel trailers and manufactured homes, by providing an opportunity to explore, implement, and evaluate innovative approaches to housing solutions, and to address ongoing housing challenges created by the 2005 hurricane season in the U.S. Gulf Coast region, including the State of Louisiana and Calcasieu Parish. As of January 2009, there are 144 mobile homes, 349 manufactured housing, and 25 park model houses still occupied by residents displaced by Hurricanes Katrina and Rita in Calcasieu Parish. Consequently, there maintains a need to provide a permanent housing solution.

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Sincerely,



Denise Rousseau Ford  
Project Manager

enclosures

RE: 80420001s



February 11, 2009

Amy Powell  
U.S. Army Corps of Engineers, New Orleans District  
PO Box 60267  
New Orleans, LA 70160

RE: Request for Project Review – Lake Charles Fields 6<sup>th</sup> Avenue Group Site,  
Calcasieu Parish, Louisiana Alternative Housing Pilot Program Group Housing  
Project

Dear Ms. Powell:

The Louisiana Recovery Authority (LRA) applied for federal funding from the Federal Emergency Management Agency (FEMA) for the purchase and construction of the Fields 6<sup>th</sup> Avenue, Calcasieu Parish, Louisiana Alternative Housing Pilot Program (AHPP) Group Housing Project.

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Sincerely,



Denise Rousseau Ford  
Project Manager

enclosures

RE: 80420001s



February 11, 2009

Quin Kinler  
Soil Conservationist  
Natural Resource Conservation Services  
Parker Coliseum, LSU Campus  
Baton Rouge, LA 70893

RE: Request for Project Review – Lake Charles Fields 6<sup>th</sup> Avenue Group Site,  
Calcasieu Parish, Louisiana Alternative Housing Pilot Program Group Housing  
Project

Dear Mr. Kinler:

The Louisiana Recovery Authority (LRA) applied for federal funding from the Federal Emergency Management Agency (FEMA) for the purchase and construction of the Fields 6<sup>th</sup> Avenue, Calcasieu Parish, Louisiana Alternative Housing Pilot Program (AHPP) Group Housing Project.

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Sincerely,



Denise Rousseau Ford  
Project Manager

enclosures

RE: 80420001s



February 11, 2009

Kyle Balkum  
Louisiana Department of Wildlife and Fisheries  
2000 Quail Drive  
Baton Rouge, LA 70808

RE: Request for Project Review – Lake Charles Fields 6<sup>th</sup> Avenue Group Site,  
Calcasieu Parish, Louisiana Alternative Housing Pilot Program Group Housing  
Project

Dear Mr. Balkum:

The Louisiana Recovery Authority (LRA) applied for federal funding from the Federal Emergency Management Agency (FEMA) for the purchase and construction of the Fields 6<sup>th</sup> Avenue, Calcasieu Parish, Louisiana Alternative Housing Pilot Program (AHPP) Group Housing Project.

Recognizing the extensive and complex housing challenges facing victims and communities as a result of the 2005 hurricane season and acknowledging the limitations on FEMA's ordinary statutory authority to provide non-temporary housing solutions, Congress appropriated funds to the Department of Homeland Security to support alternative housing pilot programs (Emergency Supplemental Appropriations Act, 2006, Public Law 109-234). The AHPP represents a one-time exception to FEMA's existing authority under the Stafford Act, which legally binds FEMA to a temporary housing mission reliant primarily on travel trailers and manufactured homes, by providing an opportunity to explore, implement, and evaluate innovative approaches to housing solutions, and to address ongoing housing challenges created by the 2005 hurricane season in the U.S. Gulf Coast region, including the State of Louisiana and Calcasieu Parish. As of January 2009, there are 144 mobile homes, 349 manufactured housing, and 25 park model houses still occupied by residents displaced by Hurricanes Katrina and Rita in Calcasieu Parish. Consequently, there maintains a need to provide a permanent housing solution.

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Sincerely,



Denise Rousseau Ford  
Project Manager

enclosures

RE: 80420001s



February 11, 2009

Jamie Phillippe  
Louisiana Department of Environmental Quality  
PO Box 4313  
Baton Rouge, LA 70821-4313

RE: Request for Project Review – Lake Charles Fields 6<sup>th</sup> Avenue Group Site,  
Calcasieu Parish, Louisiana Alternative Housing Pilot Program Group Housing  
Project

Dear Mr. Phillippe:

The Louisiana Recovery Authority (LRA) applied for federal funding from the Federal Emergency Management Agency (FEMA) for the purchase and construction of the Fields 6<sup>th</sup> Avenue, Calcasieu Parish, Louisiana Alternative Housing Pilot Program (AHPP) Group Housing Project.

Recognizing the extensive and complex housing challenges facing victims and communities as a result of the 2005 hurricane season and acknowledging the limitations on FEMA's ordinary statutory authority to provide non-temporary housing solutions, Congress appropriated funds to the Department of Homeland Security to support alternative housing pilot programs (Emergency Supplemental Appropriations Act, 2006, Public Law 109-234). The AHPP represents a one-time exception to FEMA's existing authority under the Stafford Act, which legally binds FEMA to a temporary housing mission reliant primarily on travel trailers and manufactured homes, by providing an opportunity to explore, implement, and evaluate innovative approaches to housing solutions, and to address ongoing housing challenges created by the 2005 hurricane season in the U.S. Gulf Coast region, including the State of Louisiana and Calcasieu Parish. As of January 2009, there are 144 mobile homes, 349 manufactured housing, and 25 park model houses still occupied by residents displaced by Hurricanes Katrina and Rita in Calcasieu Parish. Consequently, there maintains a need to provide a permanent housing solution.

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Sincerely,



Denise Rousseau Ford  
Project Manager

enclosures

RE: 80420001s

February 12, 2009



**FEMA**

Mr. Scott Hutcheson  
State Historic Preservation Officer  
Office of Culture, Recreation and Tourism  
Post Office Box 44247  
Baton Rouge, LA 70804

**RE: Section 106 Review Consultation, Hurricanes Rita and Katrina**

**Undertaking:** Construction of Alternate Housing Pilot Program Housing, Lake Charles Fields 6<sup>th</sup> Avenue Group Site, Calcasieu Parish, Louisiana

**Determination:** No Historic Properties Affected

Dear Mr. Hutcheson:

The Louisiana Recovery Authority (LRA) applied for federal funding from the Federal Emergency Management Agency (FEMA) for the purchase and construction of the Lake Charles Fields 6<sup>th</sup> Avenue, Calcasieu Parish, Louisiana Alternative Housing Pilot Program (AHPP) Group Housing Project.

Recognizing the extensive and complex housing challenges facing victims and communities as a result of the 2005 hurricane season and acknowledging the limitations on FEMA's ordinary statutory authority to provide non-temporary housing solutions, Congress appropriated funds to the Department of Homeland Security to support alternative housing pilot programs (Emergency Supplemental Appropriations Act, 2006, Public Law 109-234). The AHPP represents a one-time exception to FEMA's existing authority under the Stafford Act, which legally binds FEMA to a temporary housing mission reliant primarily on travel trailers and manufactured homes, by providing an opportunity to explore, implement, and evaluate innovative approaches to housing solutions, and to address ongoing housing challenges created by the 2005 hurricane season in the U.S. Gulf Coast region, including the State of Louisiana and Calcasieu Parish. As of January 2009, there are 144 mobile homes, 349 manufactured housing, and 25 park model houses still occupied by residents displaced by Hurricanes Katrina and Rita in Calcasieu Parish. Consequently, there maintains a need to provide a permanent housing solution.

The LRA proposes to utilize AHPP funding for the land acquisition and construction of 34 single-family, permanent housing units within an approximate 5.0-acre plot of land in Lake Charles, Calcasieu Parish, Louisiana. The proposed 5.0-acre Area of Potential Effect (APE) is located south of Highway 90 (Broad Street), north of 2<sup>nd</sup> Street, and east of 6<sup>th</sup> Avenue (Figure 1). The

APE is partially bounded to the south, east, and west by residential communities and to the north by commercial properties along the highway. The APE consists of a previously developed subdivision with existing infrastructure including roads and municipal utility service. The proposed homesites consist of previously disturbed land, which has been filled, cleared, and graded and is predominately re-vegetated with grasses.

The proposed AHPP units are designed in the Louisiana Cottage-style and would consist of a mixture of units with living areas ranging from 888 square feet to 1,112 square feet. Project activities would include minimal grading, the tie-in of utilities to the cottages from existing lot site utilities, and the construction of driveways. Access to the proposed development would be from 6<sup>th</sup> Avenue. A site plan for the project is provided in Figure 2. The proposed site is within the 100 year floodplain, and the base flood elevation (BFE) is approximately 13 feet above mean sea level. As required by the City of Lake Charles, the AHPP units would be built above the BFE. The proposed area has been previously developed and during that development fill material was used to elevate the Fields 6<sup>th</sup> Avenue homesites at or near the BFE. All AHPP cottage units would be installed on piers to ensure the BFE is met, should the current development's elevation not be adequate to meet the BFE.

FEMA is initiating Section 106 review in accordance with the Programmatic Agreement between FEMA, the Louisiana State Historic Preservation Officer (SHPO), the Louisiana Office of Homeland Security and Emergency Preparedness (LOHSEP), and the Advisory Council on Historic Preservation (ACHP) dated December 3, 2004.

A records search for previously reported sites and cultural resources surveys within one-mile of the proposed project area was conducted at the Louisiana Division of Archaeology in Baton Rouge, Louisiana. One archaeological survey conducted by Parsons Engineering (1998) for the Department of the Army was conducted within one-mile of the project area and reported no cultural resources. Additionally, the records search revealed no archeological sites or historic districts reported within one-mile of the project area. Within the City of Lake Charles, there are 11 National Register of Historic Places (NRHP)-registered properties and one historic district (Charpentier Historic District), however, none of the NRHP-listed structures are within 1 mile of the proposed project site. The closest is McNeese State University Auditorium which is approximately 3.4 miles away from the proposed project area (National Park Service 2008).

A site visit was conducted on January 28, 2009 by a Secretary of Interior qualified archeologist. It was noted that the landscape was highly disturbed in the process of the subdivision construction. No historic structures or other cultural resources were observed on the properties or in the immediate vicinity. If cultural resources ever were located on the proposed project property they were likely disturbed by the previous development episode. The likelihood of the ground disturbance required by the proposed action to impact intact cultural resources is minimal. The adjoining neighborhood consists of homes and commercial buildings of mixed construction ages. Within the view shed of the project area, defined as line of sight, the commercial buildings are of modern construction age. Older homes within view shed of the property are in excess of 50 years in age and fall within the Craftsman architectural style inspired by the Arts and Crafts Movement

of the early to mid 20<sup>th</sup> century. Houses of this style are very common to the area and have been well documented. These older houses within the viewshed are not eligible for the NRHP.

In the event that archaeological deposits, including but not limited to any Native American ceramics, stone tools, historic artifacts or human remains, are uncovered during the undertaking, the project would be halted. The contractor would stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archaeological findings would be secured and access to the sensitive area restricted. The contractor would inform FEMA immediately, and FEMA would consult with the SHPO or THPO and interested tribes. Work in sensitive areas would not resume until consultation is completed and appropriate measures have been taken to ensure that the project is in compliance with the National Historic Preservation Act (NHPA). As a result no impacts to cultural resources are expected.

Gulf South Research Corporation (GSRC) has been retained by FEMA to prepare an Environmental Assessment (EA) for the proposed project. In compliance with the National Environmental Policy Act (NEPA) of 1969, as amended, GSRC requests that your agency review the proposed project and FEMA requests concurrence with its finding of "No Historic Properties Affected". If you have any questions or need additional information, please contact Cynthia Teeter with FEMA by email [Cynthia.Teeter@dhs.gov](mailto:Cynthia.Teeter@dhs.gov), or by Fax: (504) 762-2670.

Sincerely,

Cynthia Teeter  
FEMA Deputy Environmental Liaison Officer  
FEMA/State Transitional Recovery Office  
1250 Poydras  
New Orleans, LA 70113

*Sources cited:*

National Park Service. 2008. National Register Information System (online resource) Internet URL: <http://www.nr.nps.gov/>. Last Accessed: November 2008.

Parsons Engineering Science. 1998. Archaeological Phase I Survey of Eight 90<sup>th</sup> Regional Support Command Facilities in Louisiana. Department of the Army 90<sup>th</sup> Regional Support Command, Office of the Engineer, Camp Pike Armed Forces Reserve, North Little Rock, Arkansas and Detachment 1/Human Systems Center, Occupational Environmental Health Directorate, Brooks Air Force Base, Texas.

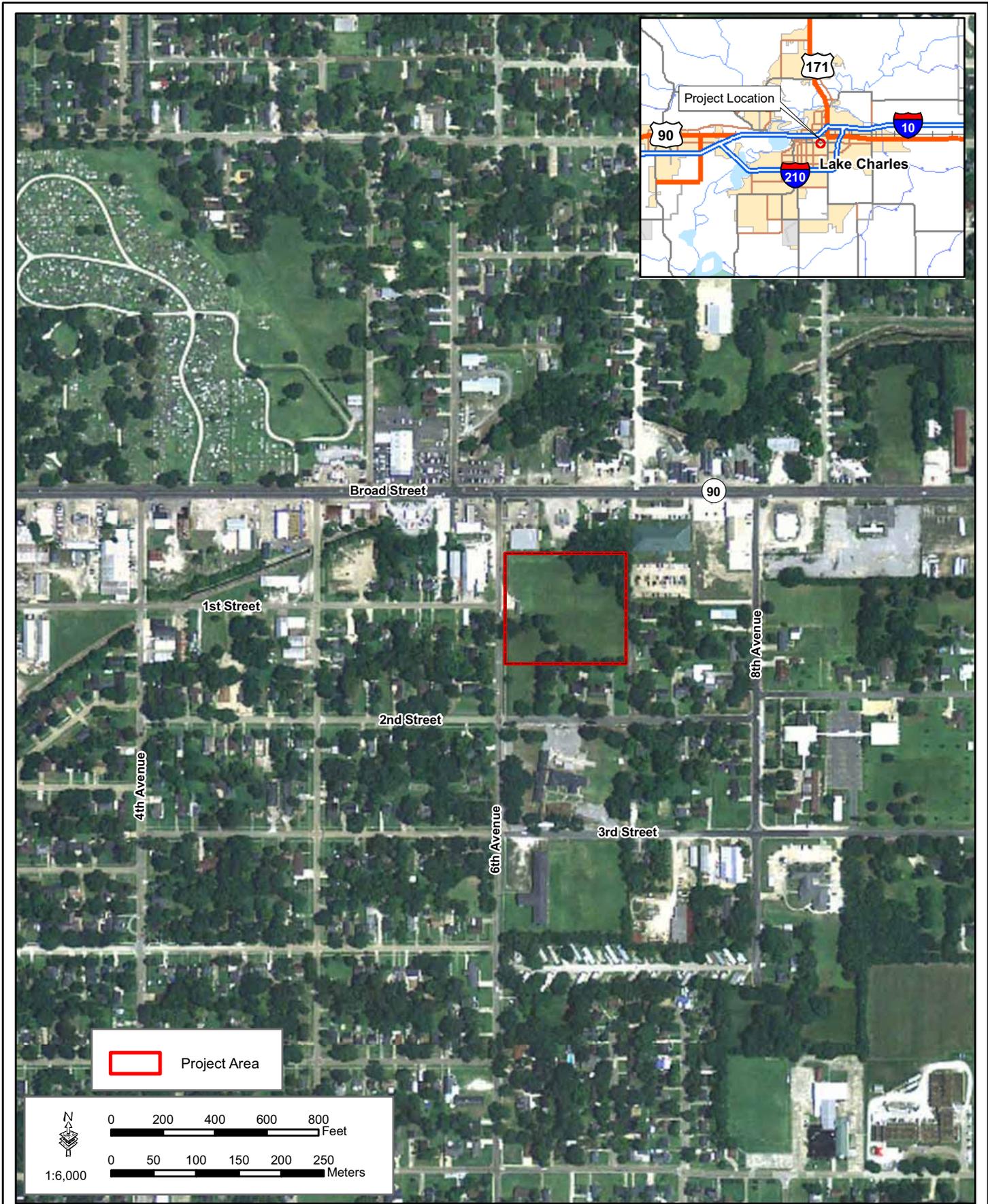


Figure 1: Project Area



**Federal Emergency Management Agency  
PUBLIC NOTICE  
Notice of Availability of the Draft Environmental Assessment  
for the Alternative Housing Pilot Program  
Lake Charles Fields 6<sup>th</sup> Avenue Group Housing Site, Calcasieu Parish, Louisiana**

Interested persons are hereby notified that the Federal Emergency Management Agency (FEMA) has prepared a draft Environmental Assessment (EA) to address the potential impacts on the human and natural environment resulting from FEMA's proposed implementation to provide permanent housing to displaced residents of Calcasieu Parish and other nearby southwestern parishes within Louisiana through the Alternative Housing Pilot Program (AHPP).

Background

Recognizing the extensive and complex housing challenges facing victims and communities as a result of Hurricanes Katrina and Rita, and acknowledging the limitations on FEMA's ordinary statutory authority to provide non-temporary housing solutions, Congress appropriated funds to the Department of Homeland Security to support alternative housing pilot programs (Emergency Supplemental Appropriations Act, 2006, Public Law 109-234). The AHPP represents a one-time exception to FEMA's existing authority under the Stafford Act, which legally binds FEMA to a temporary housing mission reliant primarily on a combination of mobile homes and manufactured homes, by providing an opportunity to explore, implement, and evaluate innovative approaches to housing solutions, and to address ongoing housing challenges created by the 2005 hurricane season in the states of the Gulf Coast region, including the State of Louisiana.

The Louisiana Recovery Authority (LRA) has applied for FEMA funding under the AHPP to provide a permanent housing solution for eligible applicant families displaced by Hurricanes Katrina and Rita. In efforts to provide permanent housing solutions in the southwestern Louisiana parishes and specifically Calcasieu Parish, the LRA proposes the construction of 34 Louisiana Cottage units in the Fields 6<sup>th</sup> Avenue Subdivision, an approximate 5-acre plot of land within the City of Lake Charles. The proposed project area is bordered on the west by 6th Avenue, on the north by commercial properties along Broad Street (Highway 90), on the east by 7<sup>th</sup> Avenue; and on the south by 2<sup>nd</sup> Street. The proposed project would place the AHPP cottages in a previously developed neighborhood with working utilities.

As required by the National Environmental Policy Act (NEPA) and FEMA's regulations implementing NEPA, FEMA has prepared a draft EA to evaluate the potential impacts on the environment of alternatives for implementing this project.

The draft EA may be viewed and downloaded on FEMA's website at <http://www.fema.gov/plan/ehp/envdocuments/ea-region6.shtm>. The draft EA will also be available at the following public library in Lake Charles, Louisiana.

Carnegie Memorial Library  
411 Pujos Street  
Lake Charles, Louisiana 70605  
Phone: (337) 721-7084

To request a hard copy, please contact via fax to the number below.

The 15-day comment period will start on February 20, 2009 and end on March 6, 2009. Written comments on the draft EA may be submitted by mail or fax to FEMA as follows:

Cynthia Teeter  
FEMA Deputy Environmental Liaison Officer  
FEMA Transitional Recovery Officer  
Environmental and Historic Preservation  
1250 Poydras, 14<sup>th</sup> Floor  
New Orleans, LA 70114  
FAX: (504) 762-2527

*APPENDIX C*  
*Floodplain Eight Step Planning Process and Public Notification*

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**FEMA AHPP Lake Charles Fields 6<sup>th</sup> Avenue Group Housing Site  
Eight-Step Planning Process for Floodplains and Wetlands**

<p><b>Step 1:</b> Determine whether the Proposed Action is located in a wetland and/or the 100-year floodplain, or whether it has the potential to affect or be affected by a floodplain or wetland.</p>	<p><b>Project Analysis:</b> According to the Flood Insurance Rate Map for the project site (Community Map Panel Number 2200400010E, effective July 07, 1997), the proposed AHPP group housing site is within the 100-year floodplain (Flood Zone AE).</p> <p>Based on a review of the national Wetlands Inventory (MWI) and a site visit, wetlands will not be impacted by the proposed AHPP housing project. The proposed site is in a developed urban setting which is not in area identified as a wetland.</p>
<p><b>Step 2:</b> Notify public at earliest possible time of the intent to carry out an action in a floodplain or wetland, and involve the affected and interested public in the decision-making process.</p>	<p><b>Project Analysis:</b> A public notice was issued by FEMA and the LRA notifying the public regarding the proposed action's floodplain impacts. In addition, FEMA and the LRA will notify the public of the availability of the draft Environmental Assessment (EA) which evaluates all natural resource impacts from the proposed project. The public notice will be provided in a newspaper of general circulation when the EA is made available for public review.</p>
<p><b>Step 3:</b> Identify and evaluate practicable alternatives to locating the Proposed Action in a floodplain or wetland.</p>	<p><b>Project Analysis:</b> The Applicant considered the following alternatives in selecting the proposed action:</p> <p><i>No Action Alternative:</i> Under the No Action Alternative, no AHPP housing would be provided for families displaced from their homes. Rental resources are very limited in the affected area, and people displaced by Hurricanes Katrina and Rita would remain in housing provided by family members or friends, in hotels, in temporary "dormitories" such as homeless shelters or churches, or in facilities damaged by the storm and determined structurally unsafe or unsanitary. Although no new construction would occur in the 100-year floodplain, permanent housing for Louisiana residents would remain inadequate.</p> <p><i>Proposed Action Alternative:</i> Under the Proposed Action Alternative, FEMA would purchase land and construct approximately 34 AHPP dwellings on an approximately 5.0-acre parcel of previously disturbed land located in</p>

<p><b>Step 3, continued</b></p>	<p>the eastern portion of Lake Charles, Louisiana. The cottages would be built on piers to bring them up to the required elevation, as necessary. Driveways would be constructed to facilitate access and parking for the AHPP cottages. The houses would tie into existing water and sewer infrastructure currently located near each lot site and utilities would then be installed to each individual cottage. The proposed site is wholly located in Zone AE within the 100-year floodplain.</p> <p><i>Build AHPP housing in other areas within Lake Charles (not included in EA because the sites had public opposition and/or funding issues):</i> The first site considered but dismissed was a 16-acre parcel of land owned by the City of Lake Charles and located in south Lake Charles, near the terminus of Clover Street and Sunset Drive. This site is in the 100-year floodplain in Zone A (no base flood elevation determined). The second site considered but dismissed was a 47-acre parcel of land located in south Lake Charles, east of 5<sup>th</sup> Avenue, approximately 0.5 mile north of East McNeese Street. Impacts to wetlands could occur, but were not fully evaluated.</p>
<p><b>Step 4:</b> Identify the full range of potential direct or indirect impacts associated with the occupancy or modification of floodplains and wetlands, and the potential direct and indirect support of floodplain and wetland development that could result from the Proposed Action.</p>	<p><b>Project Analysis:</b> Direct impacts to the floodplain include converting about 5 acres of 100-year floodplain to areas outside the floodplain. The loss of floodplain area in the vicinity of the project would generally be considered a considered a direct, permanent, however minimal adverse effect. The site was previously elevated by the subdivision developer to be approximately at or near the 13 foot Base Flood Elevation (BFE). Elevation of the proposed AHPP units to the BFE would be attained through the addition of fill material, the construction the AHPP units on piers, or through a combination of both. The proposed conversion of the project area to non-floodplain is not likely to result in an evident increase in flood velocities or elevations upstream or downstream.</p> <p>Although the project does not encourage additional development within the floodplain, the project will result in providing civic support to populations living in the floodplain which would be an indirect impact.</p>

<p><b>Step 4, continued</b></p>	<p>No direct or indirect impacts to wetlands are anticipated for the proposed project.</p>
<p><b>Step 5:</b> Minimize the potential adverse impacts from work within floodplains and wetlands (identified under Step 4), restore and preserve the natural and beneficial values served by wetlands.</p>	<p><b>Project Analysis:</b> To minimize impacts to the floodplain, the proposed AHPP cottages would be constructed on the proposed site which has already been filled and graded so that the AHPP group site development would be located outside the 100-year floodplain. The proposed AHPP units would be elevated above the BFE with a finished floor elevation at 13 feet above means sea level (amsl).</p>
<p><b>Step 6:</b> Re-evaluate the Proposed Action to determine: 1) if it is still practicable in light of its exposure to flood hazards; 2) the extent to which it will aggravate the hazards to others; 3) its potential to disrupt floodplain and wetland values.</p>	<p><b>Project Analysis:</b> The Proposed Action remains practicable as it increases permanent affordable housing in Louisiana, the minimal (if any) increase to flood elevations nearby, and abundant nearby floodplains retaining their natural values.</p>
<p><b>Step 7:</b> If the agency decides to take an action in a floodplain or wetland, prepare and provide the public with a finding and explanation of any final decision that the floodplain or wetland is the only practicable alternative. The explanation should include any relevant factors considered in the decision-making process.</p>	<p><b>Project Analysis:</b> Executive (EO) 11988 (Floodplain Management) requires Federal agencies to avoid direct or indirect support of development within the 100-year floodplain whenever there is a practicable alternative. FEMA applies the decision process described in 44 CFR Part 9, referred to as the Eight-Step Planning Process, to ensure that its actions are consistent with EO 11988.</p> <p>A public notice will be published informing the public of FEMA’s decision to proceed with the project. This notice will include rationale for floodplain impacts; a description of all significant facts considered in making the determination; a list of the alternatives considered; a statement indicating whether the action conforms to State and local floodplain protection standards; a statement indicating how the action affects the floodplain; and a statement of how mitigation will be achieved.</p>
<p><b>Step 8:</b> Review the implementation and post-implementation phases of the Proposed Action to ensure that the requirements of the EOs are fully implemented. Oversight responsibility shall be integrated into existing processes.</p>	<p><b>Project Analysis:</b> This step is integrated into the NEPA process and FEMA project management and oversight functions.</p>

## **FINAL PUBLIC NOTICE**

### **FEMA-1603-DR-LA AND FEMA-1607-DR-LA**

#### **Proposed Federal Funding in the 100-year Floodplain**

Public Notice is hereby given by the Federal Emergency Management Agency (FEMA) per 44 Code of Federal Regulations Part 9 (Floodplain Management and Protection of Wetlands), FEMA's implementing regulation for Executive Order 11988, Floodplain Management, of its intent to provide alternative pilot housing assistance under the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery of 2006, Pub. L. No. 109-234.

Recognizing the extensive and complex housing challenges facing victims and communities along the Gulf Coast region, as a result of the 2005 hurricane season, and acknowledging the limitations on Federal Emergency Management Agency's (FEMA) ordinary statutory authority to provide long-term and permanent housing solutions, the United States (U.S.) Congress appropriated funds to Department of Homeland Security (DHS) to support alternative housing pilot programs (Emergency Supplemental Appropriations Act, 2006, Public Law [P.L.] 109-234). The Alternative Housing Pilot Program (AHPP) represents a one-time exception to FEMA's existing authority under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). The Louisiana Recovery Authority (LRA), in conjunction with the State of Louisiana, has applied for FEMA funding under the AHPP to provide permanent housing solutions for eligible applicant families displaced by Hurricanes Katrina and Rita throughout the State of Louisiana, including within Calcasieu Parish.

After the Presidential disaster declarations FEMA-1603-DR-LA and FEMA-1607-DR-LA, FEMA published an initial floodplain notice providing information on the agency's disaster assistance actions in the 100-year floodplain (areas that have been determined to have a one percent probability of flooding in any given year).

*This publication provides final notice for the construction of alternative pilot housing projects that would be located in the 100-year floodplain, at the proposed Fields 6<sup>th</sup> Avenue Group Housing Site, in Lake Charles, Calcasieu Parish, Louisiana.* FEMA has determined that for the proposed action which consists of the acquisition of land and the installation of 34 cottage units, there are no practicable alternatives outside the floodplain because a large portion of the City of Lake Charles is within the floodplain. The LRA will ensure appropriate elevation of housing units through open works (columns, piers, piles, etc.) or fill. No additional fill would be needed for the proposed action due to the prior development of the subdivision in which fill was used to elevate the homesites to the base flood elevation. The applicant will ensure that construction meets the applicable State or local floodplain standards. Other mitigation measures may be incorporated on an action-by-action basis.

Maps of the area are available for public inspection upon request. Maps can also be accessed through the internet at <http://www.fema.gov/plan/ehp/noma/resources4.shtm#katrina> .

This constitutes final notice, and FEMA is accepting comments to its above determination. Written comments can be mailed to Environmental and Historic Preservation, 1250 Poydras Street, 14<sup>th</sup> Floor, New Orleans, LA 70114 or faxed to (504) 762-2527. The public comment period will be limited to the 15 days from February 20, 2009 to March 6, 2009.

*APPENDIX D*  
*Air Emission Calculations*

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CALCULATION SHEET-COMBUSTABLE EMISSIONS

Assumptions for Combustable Emissions						
Type of Construction Equipment	Num. of Units	HP Rated	Hrs/day	Days/yr	Total hp-hrs	
Water Truck	1	300	8	240	576000	
Diesel Road Compactors	1	100	8	90	72000	
Diesel Dump Truck	2	300	8	90	432000	
Diesel Excavator	1	300	8	90	216000	
Diesel Hole Trenchers	0	175	8	90	0	
Diesel Bore/Drill Rigs	0	300	8	90	0	
Diesel Cement & Mortar Mixers	1	300	8	240	576000	
Diesel Cranes	2	175	8	240	672000	
Diesel Graders	1	300	8	90	216000	
Diesel Tractors/Loaders/Backhoes	2	100	8	90	144000	
Diesel Bull Dozers	0	300	8	90	0	
Diesel Front End Loaders	1	300	8	90	216000	
Diesel Fork Lifts	2	100	8	90	144000	
Diesel Generator Set	6	40	8	90	172800	

Emission Factors						
Type of Construction Equipment	VOC g/hp-hr	CO g/hp-hr	NOx g/hp-hr	PM-10 g/hp-hr	PM-2.5 g/hp-hr	SO2 g/hp-hr
Water Truck	0.440	2.070	5.490	0.410	0.400	0.740
Diesel Road Compactors	0.370	1.480	4.900	0.340	0.330	0.740
Diesel Dump Truck	0.440	2.070	5.490	0.410	0.400	0.740
Diesel Excavator	0.340	1.300	4.600	0.320	0.310	0.740
Diesel Trenchers	0.510	2.440	5.810	0.460	0.440	0.740
Diesel Bore/Drill Rigs	0.600	2.290	7.150	0.500	0.490	0.730
Diesel Cement & Mortar Mixers	0.610	2.320	7.280	0.480	0.470	0.730
Diesel Cranes	0.440	1.300	5.720	0.340	0.330	0.730
Diesel Graders	0.350	1.360	4.730	0.330	0.320	0.740
Diesel Tractors/Loaders/Backhoes	1.850	8.210	7.220	1.370	1.330	0.950
Diesel Bull Dozers	0.360	1.380	4.760	0.330	0.320	0.740
Diesel Front End Loaders	0.380	1.550	5.000	0.350	0.340	0.740
Diesel Fork Lifts	1.980	7.760	8.560	1.390	1.350	0.950
Diesel Generator Set	1.210	3.760	5.970	0.730	0.710	0.810

CALCULATION SHEET-COMBUSTABLE EMISSIONS

Emission factors (EF) were generated from the NONROAD2005 model for the 2006 calendar year. The VOC EFs includes exhaust and evaporative emissions. The VOC evaporative components included in the NONROAD2005 model are diurnal, hotsoak, running loss, tank permeation, hose permeation, displacement, and spillage. The construction equipment age distribution in the NONROAD2005 model is based on the population in U.S. for the 2006 calendar year.

Emission Calculations									
Type of Construction Equipment	VOC tons/yr	CO tons/yr	NOx tons/yr	PM-10 tons/yr	PM-2.5 tons/yr	SO2 tons/yr	CO2 tons/yr		
Water Truck	0.279	1.314	3.485	0.260	0.254	0.470	340.227		
Diesel Road Paver	0.029	0.117	0.389	0.027	0.026	0.059	42.544		
Diesel Dump Truck	0.209	0.985	2.614	0.195	0.190	0.352	255.170		
Diesel Excavator	0.081	0.309	1.095	0.076	0.074	0.176	127.657		
Diesel Hole Cleaners/Trenchers	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Diesel Bore/Drill Rigs	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Diesel Cement & Mortar Mixers	0.387	1.473	4.621	0.305	0.298	0.463	336.228		
Diesel Cranes	0.326	0.963	4.236	0.252	0.244	0.541	392.636		
Diesel Graders	0.083	0.324	1.126	0.079	0.076	0.176	127.657		
Diesel Tractors/Loaders/Backhoes	0.294	1.303	1.146	0.217	0.211	0.151	109.669		
Diesel Bull Dozers	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Diesel Front End Loaders	0.090	0.369	1.190	0.083	0.081	0.176	127.633		
Diesel Aerial Lifts	0.314	1.231	1.358	0.221	0.214	0.151	109.622		
Diesel Generator Set	0.230	0.716	1.137	0.139	0.135	0.154	111.837		
<b>Total Emissions</b>	<b>2.324</b>	<b>9.105</b>	<b>22.396</b>	<b>1.854</b>	<b>1.805</b>	<b>2.869</b>	<b>2080.880</b>		

Conversion factors	
Grams to tons	1.102E-06

CALCULATION SHEET-TRANSPORTATION COMBUSTABLE EMISSIONS

Construction Worker Personal Vehicle Commuting to Construction Site-Passenger and Light Duty Trucks									
Pollutants	Emission Factors			Assumptions			Results by Pollutant		
	Passenger Cars g/mile	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of cars	Number of trucks	Total Emissions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	1.36	1.61	60	240	15	15	0.32	0.38	0.71
CO	12.4	15.7	60	240	15	15	2.95	3.74	6.69
NOx	0.95	1.22	60	240	15	15	0.23	0.29	0.52
PM-10	0.0052	0.0065	60	240	15	15	0.00	0.00	0.00
PM 2.5	0.0049	0.006	60	240	15	15	0.00	0.00	0.00

Heavy Duty Trucks Delivery Supply Trucks to Construction Site									
Pollutants	Emission Factors			Assumptions			Results by Pollutant		
	10,000-19,500 lb Delivery Truck	33,000-60,000 lb semi trailer rig	Mile/day	Day/yr	Number of trucks	Number of trucks	Total Emissions Cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	0.29	0.55	60	240	2	2	0.01	0.02	0.03
CO	1.32	3.21	60	240	2	2	0.04	0.10	0.14
NOx	4.97	12.6	60	240	2	2	0.16	0.40	0.56
PM-10	0.12	0.33	60	240	2	2	0.00	0.01	0.01
PM 2.5	0.13	0.36	60	240	2	2	0.00	0.01	0.02

Pollutants	Emission Factors			Assumptions			Results by Pollutant		
	Passenger Cars g/mile	Pick-up Trucks, SUVs g/mile	Mile/day	Day/yr	Number of Cars	Number of trucks	Total Emissions cars tns/yr	Total Emissions Trucks tns/yr	Total tns/yr
VOCs	1.36	1.61	30	240			-	0.00	-
CO	12.4	15.7	30	240			-	0.00	-
NOx	0.95	1.22	30	240			-	0.00	-
PM-10	0.0052	0.0065	30	240			-	0.00	-
PM 2.5	0.0049	0.006	30	240			-	0.00	-

Truck Emission Factor Source: USEPA 2005 Emission Facts: Average annual emissions and fuel consumption for gasoline-fueled passenger cars and light trucks. EPA 420-F-05-022 August 2005. Emission rates were generated using MOBILE.6 highway vehicle emission factor model.

CALCULATION SHEET-FUGITIVE DUST

Construction Fugitive Dust Emissions

Construction Fugitive Dust Emission Factors

	Emission Factor	Units	Source
General Construction Activities	0.19 ton PM10/acre-month	MRI 1996; EPA 2001; EPA 2006	
New Road Construction	0.42 ton PM10/acre-month	MRI 1996; EPA 2001; EPA 2006	

PM2.5 Emissions

PM2.5 Multiplier 0.10 (10% of PM10 emissions assumed to be PM2.5) EPA 2001; EPA 2006

Control Efficiency

0.50 (assume 50% control efficiency for PM10 and PM2.5 emissions) EPA 2001; EPA 2006

Project Assumptions

Construction Area (0.19 ton PM10/acre-month)	Conversion Factors
Duration of Construction Project 12 months	0.000022957 acres per feet
Length 0 miles	5280 feet per mile
Length (converted) 0 feet	
Width 0 feet	
Area 5.00 acres	

Staging Areas

Duration of Construction Project	0.00
Length 0 months	
Length (converted) 0 miles	
Width 0 feet	
Area 0.00 acres	

	Project Emissions (tons/year)		
	PM10 uncontrolled	PM10 controlled	PM2.5 uncontrolled
Construction Area (0.19 ton PM10/acr	11.40	5.70	1.14
Staging Areas	0.00	0.00	0.00
<b>Total</b>	<b>11.40</b>	<b>5.70</b>	<b>1.14</b>
			<b>0.57</b>
			<b>0.00</b>
			<b>0.57</b>

## Construction Fugitive Dust Emission Factors

### General Construction Activities Emission Factor

#### 0.19 ton PM10/acre-month

Source: MRI 1996; EPA 2001; EPA 2006

The area-based emission factor for construction activities is based on a study completed by the Midwest Research Institute (MRI) Improvement of Specific Emission Factors (BACM Project No. 1), March 29, 1996. The MRI study evaluated seven construction projects in Nevada and California (Las Vegas, Coachella Valley, South Coast Air Basin, and the San Joaquin Valley). The study determined an average emission factor of 0.11 ton PM10/acre-month for sites without large-scale cut/fill operations. A worst-case emission factor of 0.42 ton PM10/acre-month was calculated for sites with active large-scale earth moving operations. The monthly emission factors are based on 168 work-hours per month (MRI 1996). A subsequent MRI Report in 1999, Estimating Particulate Matter Emissions From Construction Operations, calculated the 0.19 ton PM10/acre-month emission factor by applying 25% of the large-scale earthmoving emission factor (0.42 ton PM10/acre-month) and 75% of the average emission factor (0.11 ton PM10/acre-month).

The 0.19 ton PM10/acre-month emission factor is referenced by the EPA for non-residential construction activities in recent procedures documents for the National Emission Inventory (EPA 2001; EPA 2006). The 0.19 ton PM10/acre-month emission factor represents a refinement of EPA's original AP-42 area-based total suspended particle (TSP) emission factor in Section 13.2.3 Heavy Construction Operations. In addition to the EPA, this methodology is also supported by the South Coast Air Quality Management District and the Western Regional Air Partnership (WRAP) which is funded by the EPA and is administered jointly by the Western Governor's Association and the National Tribal Environmental Council. The emission factor is assumed to encompass a variety of non-residential construction activities including building construction (commercial, industrial, institutional, governmental), public works, and travel on unpaved roads. The EPA National Emission Inventory documentation assumes that the emission factors are uncontrolled and recommends a control efficiency of 50% for PM10 and PM2.5 in PM nonattainment areas.

### New Road Construction Emission Factor

#### 0.42 ton PM10/acre-month

Source: MRI 1996; EPA 2001; EPA 2006

The emission factor for new road construction is based on the worst-case conditions emission factor from the MRI 1996 study described above (0.42 tons PM10/acre-month). It is assumed that road construction involves extensive earthmoving and heavy construction vehicle travel resulting in emissions that are higher than other general construction projects. The 0.42 ton PM10/acre-month emission factor for road construction is referenced in recent procedures documents for the EPA National Emission Inventory (EPA 2001; EPA 2006).

### PM2.5 Multiplier

PM2.5 emissions are estimated by applying a particle size multiplier of 0.10 to PM10 emissions. This methodology is consistent with the procedures documents for the National Emission Inventory (EPA 2006).

### Control Efficiency for PM10 and PM2.5

The EPA National Emission Inventory documentation recommends a control efficiency of 50% for PM10 and PM2.5 in PM nonattainment areas. Wetting controls will be applied during project construction (EPA 2006).

### References:

EPA 2001. *Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999*. EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States Environmental Protection Agency. March 2001.

EPA 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants*. Prepared for: Emissions Inventory and Analysis Group (C-339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.

MRI 1996. *Improvement of Specific Emission Factors (BACM Project No. 1)*. Midwest Research Institute (MRI). Prepared for the California South Coast Air Quality Management District, March 29, 1996.

CALCULATION SHEET-SUMMARY OF EMISSIONS

Proposed Action Construction Emissions for Criteria Pollutants (tons per year)							
Emission source	VOC	CO	NOx	PM-10	PM-2.5	SO2	
Combustable Emissions	2.32	9.10	22.40	1.85	1.80	2.87	
Construction Site-fugitive PM-10	NA	NA	NA	5.70	0.57	NA	
Construction Workers Commuter & Trucking	0.73	6.83	1.07	0.02	0.02	NA	
<b>Total emissions</b>	<b>3.06</b>	<b>15.94</b>	<b>23.47</b>	<b>7.57</b>	<b>2.39</b>	<b>2.87</b>	
De minimis threshold	NA	NA	NA	NA	NA	NA	