Hurricane Wind Retrofit: Information Required for Environmental Review

This Job Aid is to help communities applying for Hazard Mitigation Assistance (HMA) grants for wind retrofit mitigation projects. It outlines the required documentation needed for FEMA to carry out an Environmental Planning and Historic Preservation review of a project.

ABOUT THIS RESOURCE

It is required by law that all projects funded with Hazard Mitigation Assistance (HMA) grants comply with Environmental Planning and Historic Preservation (EHP) laws, regulations and Executive Orders (EOs). During the EHP review process, FEMA evaluates the potential impacts of the project on the human and natural environment.

Figure 1. Photo of a house with tarps covering missing roof shingles.

FEMA begins the EHP review process once the project application is submitted. It is your responsibility as the subapplicant to provide documentation that accurately describes the project, its purpose, location, existing environmental conditions in the project area, potential project impacts, best management practices (BMPs), different alternatives considered for the project and mitigation strategies to address environmental impacts of the project.

FEMA will assess the potential impacts of the project. The applicant must wait until the EHP review has been completed by FEMA before starting work on the project. FEMA will also conduct a technical review to verify your project's technical feasibility and cost-effectiveness. Refer to the Hurricane Wind Retrofit Technical Review Job Aid.

Table of Contents

What is the EHP Review?

During the EHP review, FEMA assesses the potential impacts of your project on nearby physical, cultural (historic and archeological), biological and social resources. The National Environmental Policy Act (NEPA) requires FEMA and other federal agencies to assess the environmental impacts of proposed federal actions prior to making decisions. FEMA must also ensure your project is compliant with various federal laws and presidential EOs, such as the Clean Water Act (CWA), the Endangered Species Act (ESA), the National Historic Preservation Act (NHPA), EO 11988 on floodplains and EO 11990 on wetlands. The EHP review may include consultation with other federal and state agencies, which may add time to the review process.

Projects with less potential for impacts may be covered by a Categorical Exclusion (CATEX) under NEPA. Complex projects may need more extensive review through the preparation of an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). For your project, FEMA will prepare or provide support for the development of the NEPA-required documentation, and you can help by providing the information discussed in this Job Aid.

FEMA has predetermined that projects complying with certain criteria do not have significant environmental impacts and may be covered by a CATEX for NEPA compliance. Some wind retrofit projects will meet the criteria for CATEX N7 *Federal Assistance for Structure and Facility Upgrades*. CATEX N7 covers actions involving the reconstruction, elevation, retrofitting, upgrading to current codes and standards, and improvements of pre-existing facilities in existing developed areas with substantially completed infrastructure, when the immediate project area has already been disturbed, and when those actions do not alter basic functions, do not exceed capacity of other system components, or modify the intended land use.

What Information is Required for the EHP Review of Hurricane Wind Retrofit Projects?

This section outlines information that should be included in your application so that FEMA can review your project for EHP compliance. FEMA HMA program staff will conduct a review to make sure the project complies with HMA program eligibility. For each item, there is an explanation as to why it is needed, where you can find this information and an example of how the information should be provided to FEMA. Each piece of information requested is needed to develop a comprehensive project description to be included with your application.

1. SCOPE OF WORK
1A: What are you proposing to do?

☐ Describe your wind retrofit project's scope of work – what you are proposing to do and how (i.e., a description of all external elements on or outside structures that will be updated or replaced at your project site):

- Roof cover replacement
- Any external fasteners and anchors
- Items used to strengthen overhangs
- Any outdoor window, door, and vent retrofit
- Exterior wall coverings
- Planting of wind-resistant trees or removal of hazardous trees

☐ If the project would disturb the ground for any reason (e.g., clearing a staging area), describe the activities (both temporary and permanent) that would require ground disturbance and show the locations on a map or plan view; include the length, width and depth of the ground disturbance.

☐ Describe the existing condition of the ground surface (e.g., pavement, landscape shrubs and trees, previously undisturbed soils with vegetation) that would be disturbed.

Why It's Needed: Wind retrofit projects are intended to strengthen structures to protect them from damage caused by extensive winds. A complete project description is essential for FEMA to understand how the project may impact human, environmental or cultural resources. The methods used to construct a wind retrofit project may temporarily increase erosion and sedimentation, impact species or affect human communities. Changing the exterior character of structures and buildings may also change the cultural value of a building. This could have a negative impact on structures, buildings, sites, objects or historic districts that may be eligible for listing or listed in the National Register of Historic Places. FEMA will use this information to evaluate the impacts and it may affect the complexity of the EHP review.

Potential Sources: Project architects, engineers, contractors

EXAMPLE:
The City of Oceanside will replace the asphalt roof on the public works maintenance warehouse with a metal panel system. Removal of the current roof covering, and underlayment system will be followed by installation of Type II felt underlayment, and an interlocking, standing-seam, hydrostatic system will be installed and fastened to the building using 1-foot, 8-inch O.C. stitch fasteners at 3-foot intervals. Besides the roof, the project would install (1) removable external metal shutters and external clamps at every window and door with clamps on the corners of the window and door frames, and (2) manually operated pull metal garage doors that will have anchored tracks on each side of the garage entrance.

1B: How would the project area be accessed and where would the staging areas be located?

- ☐ Describe how the project area would be accessed. Show the boundaries of the access routes or points on a map or plan view of the project area and describe the surface type (e.g., asphalt, dirt, gravel).
- ☐ If any new access routes would need to be created for the work to be completed, show where the routes would be located on a map or plan view of the project area.
- ☐ Describe where materials and equipment would be stored and staged during construction. Show the boundaries of the staging areas on a map or plan view of the project area and describe the surface type (e.g., asphalt, dirt, gravel).
- ☐ If the creation of new access routes or staging areas would require ground disturbance or vegetation removal, describe the extent of the ground disturbance (see Item 1A) and vegetation removal (see Item 3H).
- ☐ Describe the vehicles and equipment that would be used to implement the project.
- ☐ Describe any local restrictions on equipment use (e.g., seasonal or daily restrictions, work hours, local noise ordinances).

Why It's Needed: Construction of the project may require a new access point or leveling a staging area for construction. FEMA will evaluate the potential for impacts from activities that disturb the ground or remove vegetation. Some types of equipment may have impacts related to erosion, noise, air pollution or accidental releases of fuel and lubricants. Vehicle and equipment use may cause ground disturbance that could impact archaeological resources.

Potential Sources: Project planners, construction contractors, engineers

EXAMPLE:
Handheld power tools would be used for the roof replacement. Light-duty trucks and vans would be used to transport work crews, and for tool and material storage. Vehicles would be operated on existing roads. Some landscape shrubs would need to be removed so that a dump truck could reach the back of the building.

1C: What are alternatives to the project?

- ☐ Describe what would happen if the project were not implemented.
- ☐ If any other alternatives were developed, describe how they would have achieved the same goal and explain why those options were dismissed. If the public (including groups and agencies) provided input on the alternative(s), include the feedback you received.

Why It's Needed: FEMA may need to compare the impacts of the project with the impacts of alternatives (including any alternatives that were dismissed).

Potential Sources: Project planners, public outreach meetings, board meeting notes, preliminary designs

EXAMPLE:
The City of Oceanside developed three alternatives to protect the library from future wind damage. Besides the proposed alternative, removing all trees within 30 feet of the library or adding a wind fence around the library were considered. The proposed project was selected because it was the most cost-effective solution.

1D: What is the project schedule?

☐ Provide a schedule that includes construction, operation and maintenance activities, including the months or seasons when work would occur.

Why It's Needed: FEMA will use information on the timing and duration of different activities to evaluate the significance of impacts on people and the environment.

Potential Sources: Project engineer

EXAMPLE:
The project is expected to take six weeks to construct. Window removal would take two weeks, installation of new wind-resistant windows and shutters would take three weeks and anchoring of gables would take one week. All work is expected to occur within July and August of this year. See the attached project schedule (GANTT chart) for additional details.

2. PROJECT AREA AND STRUCTURE INFORMATION
2A: Where is the structure(s) located?

☐ Provide the geographic coordinates (latitude and longitude) and the physical site address of the project area.

☐ Provide a geographic information system (GIS), computer-aided design (CAD), Google Earth files (.kmz), or map or image that clearly shows the boundaries of the project area. If your project area has a complex boundary, a GIS or .kmz file is preferred. The information provided should show the boundaries of all temporary and permanent project activities including staging areas, access routes, any vegetation removal and the affected structure(s).

☐ Provide an estimate of the area of ground disturbance in acres or square feet.

☐ Provide a few representative photographs of the surrounding area to the north, south, east and west of the project area.

☐ Provide engineering drawings, if applicable.

Why It's Needed: FEMA needs the project location and boundaries to evaluate existing conditions in the project area and potential project impacts.

Potential Sources: Municipal GIS or CAD data or Google Earth files developed for the project design, local building inspectors, tax assessor records, property deeds, and engineering plans. The geographic coordinates of your project area can be obtained using software such as GIS or Google Earth,

websites such as Google Maps, Bing Maps or latlong.net, smartphone mapping apps or with a Global Positioning System (GPS) device.

EXAMPLE:
The project area encompasses the two acres making up the City of Oceanside Public Library. The general physical address for the library is 100 Atlantic Boulevard, Oceanside, NC 27948. The center of the project area is at latitude, longitude: 36.016914, -75.670155. The map and GIS shapefile included with the application show the project area boundary, access routes, equipment staging locations and the library structure footprint.

Photo of south and east side of building

Photo of north and west side of building

Photo of neighborhood context for building

Figure 2. Photos showing the structure in the project area. Photos include all sides of the building from different cardinal directions.

2B: Describe the structures in the project area.

- ☐ Provide a description of the type, number, size and dimensions of structure(s) that would be protected by the wind retrofit project, including photographs of all sides and the year they were originally constructed.
- ☐ Describe adjacent structures, including photographs and the year they were originally constructed.
- ☐ Describe any prior improvements or additions that have been made to the structure(s) to be protected (e.g., new windows, change in roofing material from original construction), changes to the original location (i.e., relocation) of the structure(s) or other changes to the original design of the structure(s).
- ☐ If the structure(s) is designated as historic or is in a designated historic district, provide information on the known historic property/district, as applicable.

Why It's Needed: FEMA will use the date of construction to screen whether affected structures might be historic and to help determine the effect the property may have on historic properties. Structures that are 45 years or older at the time of application may be eligible for listing in the National Register of Historic Places. Older structures may require additional EHP review. Photographs of the structure(s) may allow FEMA to make a determination without needing to visit the site. Actions that change the character or setting of structures and buildings may also change the cultural value of a building. This could have a negative impact on structures, buildings, sites, objects or

historic districts that may be eligible for listing or be listed in the National Register of Historic Places.

Potential Sources: Tax assessor data (provide the URL for the tax assessor if possible), GIS-based tax assessor database

EXAMPLE:
The schoolhouse is a one-story square brick elementary school that is 160 feet by 225 feet with a basement foundation that goes to a depth of eight feet. The adjacent maintenance shed is a metal prefabricated storage shed 10 feet by 12 feet with no foundation anchored by four shed eye anchors. The school was built in 1948, and the maintenance shed was added in 1989.

3. POTENTIAL IMPACTS ON PEOPLE, THE ENVIRONMENT AND CULTURAL RESOURCES
3A: Has the public been notified or provided input?

☐ Explain any controversy that exists or could exist related to the project.

☐ Describe any existing or planned public engagement activities for the project.

Why It's Needed: If there is or could be controversy around a project, FEMA may need to use a higher level of NEPA documentation. Public input can help identify potential impacts on environmental and cultural resources or low-income and minority communities. You may also be involved in the publication of public notices, in accordance with FEMA procedures.

Potential Sources: Notices in the local newspapers, public outreach meetings, website postings, project planners

EXAMPLE:
One public meeting is built into the grant application and public input will be solicited following award of the grant and prior to construction of the roof retrofit. A public notice describing the proposed project and public engagement process was circulated in the Ocean County Herald on March 2. A copy of the notice is included with the application materials.

3B: Did you coordinate with or consult regulatory agencies?

☐ Describe any agency coordination and permits you obtained from federal, state or local agencies to implement the project. Provide copies of any coordination materials, permit applications or approvals.

Why It's Needed: If you have already coordinated with an agency, then FEMA may be able to avoid duplication of effort. FEMA also may coordinate with state or federal agencies that have issued permits and approvals to confirm findings, identify BMPs or determine mitigation measures for project impacts. Many agencies, including the U.S. Army Corps of Engineers, offer a pre-application process where you can learn more about the permits and conditions that may be required for your project.

Potential Sources: Project planners

EXAMPLE:
In December 2019, the City of Oceanside obtained a nationwide permit from the U.S. Army Corps of Engineers (USACE) and a state wetland fill permit from the respective state's environmental agency for impacts on 0.4 acres of wetlands. See the attached permit application, permit approvals, and related correspondence.

3C: Were environmental or cultural studies conducted?

☐ If any environmental or cultural studies were completed either for this project or for other projects in the same area by local, state or federal entities, please provide copies. Studies could include evaluations of cultural resources (e.g., historic, archaeological) or environmental resources (e.g., threatened and endangered species, wetlands, hydrology, geotechnical).

Why It's Needed: FEMA may use the findings during the EHP review to avoid duplicating efforts.

Potential Sources: Project contractor or engineer, EHP studies required by state law or local ordinances, environmental studies completed within or near the project area

EXAMPLE:
For a prior project along the State Route 60 corridor through the project area, the County Department of Transportation conducted a biological survey for the threatened California red-legged frog and an architectural and archaeological survey. The reports from those studies are attached. Those prior studies overlap with current project area and cover about half the project area. In addition, in anticipation of this project, the county conducted a wetland delineation to locate wetlands within the entire project area. The wetland delineation report is attached.

3D: Would your project encroach on floodplains?

☐ Describe the project activities in the floodplain, if applicable.

Why It's Needed: FEMA needs to understand whether your proposed project will physically impact a floodplain or whether the project could be impacted by flooding pursuant to EO 11988 – Floodplain Management. If the project has the potential to impact floodplains, you may be involved in the publication of public notices required by FEMA regulation.

Potential Sources: Local floodplain agency/administrator, history of flooding/flood claims, FEMA Flood Map Service Center

EXAMPLE:
Based on a review of FIRM Map #06087C0357F effective 9/27/2017, a 0.5-acre portion of the project area is in Flood Zone AE (100-year floodplain). The project would be limited to the installation of wind resistant windows on a structure located in the floodplain and would not involve the placement of fill in those areas.

3E: Are there surface waters or wetlands in the project area?

- ☐ Describe any surface waters in or near the project area (e.g., ponds, lakes, rivers, streams, wetlands, other waterbodies).
- ☐ Describe any measures that would be used to avoid waterbodies or avoid impacting water (e.g., setbacks, cofferdams, silt fence).
- ☐ Provide any permits or applications that were developed related to project impacts on surface waters.

Why It's Needed: FEMA needs to evaluate existing conditions and potential project impacts on water resources regulated by the CWA, the Coastal Zone Management Act, and EO 11990 – Protection of Wetlands. If the project has the potential to impact wetlands, you may be involved in the publication of public notices required by FEMA procedures. Temporary construction measures, such as silt fencing, and their manner of placement, may cause ground disturbance and could affect archaeological resources or Waters of the U.S.

Potential Sources: CWA permits and approvals, wetland delineations of the site, National Wetlands Inventory (NWI) Mapper

EXAMPLE:
Three freshwater wetlands were identified in the project area through a review of NWI Mapper and a wetland delineation completed in October. The roof retrofit would stay within the footprint of building and staging of all equipment and debris is on the driveway in front. BMPs required by the local environmental protection ordinance would be implemented to mitigate against runoff while the retrofit is being constructed.

3F: Would your project have an impact on hazardous or contaminated materials?

- ☐ Describe any known hazardous or contaminated materials that may be present in the project area or that are needed to implement the project.
- ☐ If your project would use any hazardous materials, describe the BMPs that would be used to minimize exposure of people and the environment to those materials and how the materials would be discarded.

Why It's Needed: The presence, management, use or generation of hazardous materials can impact the natural and human environment. FEMA needs to evaluate potential project impacts from (or use of) hazardous and contaminated materials regulated by federal and state law, including the Comprehensive Environmental Response, Compensation, and Liability Act and the Resource Conservation and Recovery Act.

Potential Sources: Environmental site assessments, site visits, state environmental agency/databases, EPA Envirofacts

EXAMPLE:
Owing to its age, the project building may have asbestos; a licensed abatement specialist would inspect the site prior to roof removal. If asbestos is found, it would be abated and hauled off-site by licensed professionals. The old composite roof shingles will be hauled to the municipal landfill, which is authorized to accept them.

3G: Would your project use imported fill?

☐ If your project involves the use of fill, describe the type and source of the fill material.

Why It's Needed: FEMA needs to confirm that the fill used is free from contaminants and is compliant with federal and state hazardous and contaminated materials laws. FEMA also needs to evaluate the source of fill for potential effects to historic properties. If a borrow site is being used, it is also important to ensure that the area is not archaeologically sensitive.

Potential Sources: Project planner or engineer, and similar completed projects

EXAMPLE:
Foundation work would require excavation around the exterior walls. On-site fill would be used to backfill the excavation. If any additional fill is required, it would be obtained from Joe's Backfill Lot Inc.

3H: Is vegetation removal required?

☐ If the project would remove vegetation for any reason, describe the type and amount or area of vegetation (e.g., two oak trees).

☐ Describe how vegetation would be removed, if applicable (e.g., root ball removal, flush cut, dug up).

☐ Provide photographs of the vegetation to be removed in the project area.

☐ Would you restore vegetation after the project is complete or does the project include planting or seeding of vegetation? If so, describe where and how it will be planted (e.g., by hand, with machinery, broadcast seeding) and the types (e.g., grasses, trees, shrubs) and species of vegetation that would be planted.

☐ Would any special techniques be used to ensure survival of the plants/seeds (e.g., mulch, irrigation, protective fencing)?

Why It's Needed: Vegetation removal could cause the loss of habitat for wildlife species including endangered or threatened species. Root ball removal could also impact archaeological resources that may be present within the root system. FEMA will evaluate the impact vegetation removal has on environmental and cultural resources.

Potential Sources: Project planner or engineer, landscape architects, and similar completed projects

EXAMPLE:
Three fir trees with a diameter of two feet each require removal from the southwest corner of the main building. The trees will be removed by a licensed arborist and chipped into the wooded area just south of where the trees are located. The arborist will also grind the roots up with a motorized grinder and chip them at the same location. The area where the trees were located will be replaced with native grasses.

3I: What Best Management Practices would the project use?

☐ List all BMPs to be implemented, as part of the project, to reduce potential impacts.

Why It's Needed: Most projects require BMPs to limit noise, dust and erosion while the project is being implemented. FEMA needs to document BMPs that will be used to ensure the project's environmental impacts will be avoided and minimized, where possible, in compliance with federal and state environmental laws.

Potential Sources: Project engineers, BMP guidance provided by federal, state, or local environmental agencies, BMPs specified in permit approvals issued by federal, state or local agencies

EXAMPLE:
The city would implement the following BMPs during project implementation:

Air Quality: The selected contractor would keep vehicle and mechanical equipment running times to a minimum and all engines would be properly maintained.

Water Quality: A silt fence would be installed prior to foundation excavation to minimize the impact of soil erosion while the project is being implemented.

Hazardous Materials: Equipment and vehicles would be inspected daily for fuel and fluid leaks. Any spills or leaks would promptly be contained and cleaned up and the equipment would be repaired. A spill prevention plan would be developed for hazardous materials to be used during project implementation. Storage and handling of hazardous and toxic materials would occur at least 150 feet away from streams and waterbodies.

Noise: No project activities would occur between the hours of 10:00 p.m. to 7:00 a.m., in compliance with the town's noise ordinance.

What Happens Next?

The EHP review process occurs throughout the life cycle of the HMA project and has three specific steps where different aspects of the review process occur. The three steps are detailed below.

☐ Pre-Award: This is the information and documentation gathering stage of the EHP grant review process. Following the directions provided in this Job Aid will help you create a comprehensive application that includes all foreseeable required information needed for the EHP review. Providing this information as quickly and as accurately as possible will help expedite the next steps and reduce the need for FEMA to request additional

information. The need for additional information may significantly impact the length of time for the EHP review by up to 60 days, if not more, for every request for information sent.

- ☐ **Formal EHP Review:** Once the required information and documentation is gathered, FEMA will review the project to ensure it is compliant with all EHP-related laws, EOs and regulations. The level of EHP review necessary for a particular project will depend on the type of project, its complexity and the potential impacts it may have on the human and natural environment. Less complex projects with no potential impacts may undergo a short EHP review, while more complex projects with several potential impacts may take longer to review and may require consultation with other federal/state agencies and/or the creation of an EA or EIS. At the end of this process, a Record of Environmental Consideration (REC) will be completed, itemizing the project conditions that will be included with your award packet. These conditions could include measures such as reaching out to other federal agencies for potential permits, ensuring proper documentation is followed during waste disposal and stopping work if a sensitive historic resource is discovered. You will want to carefully review all the conditions in your award packet during project implementation to remain compliant with the grant.
- ☐ **Closeout:** Once the project is complete, the applicant (State/Tribe) will request project closeout from FEMA. FEMA will begin closing out the project and, during this time, will follow up on all the conditions stipulated in the REC. If any condition required you to document activities or outcomes, FEMA will request that documentation during closeout. If FEMA discovers that any of the conditions were not met, the project could be found noncompliant, and FEMA may seek to recover the grant money.

If deviations from the proposed scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation or result in any other unanticipated changes to the physical environment, you must contact FEMA, and a re-evaluation under NEPA and other applicable environmental laws would be conducted.

ADDITIONAL RESOURCES:

- Supplemental Job Aid – Hurricane Wind Retrofit Technical Review
- FEMA's Office of Environmental and Historic Preservation – Home page of FEMA's EHP office
- HMA EHP At-a-Glance Guide – Provides a general overview of EHP review considerations
- FEMA Directive 108-1 – Legal document that directs how FEMA EHP reviews projects
- DHS Instruction Manual 023-01-001-01, Rev 01 – Appendix A lists CATEXs

Scope of Work Checklist

Below is a summary checklist of all the questions from the previous sections. Use this checklist to help you as you complete your information packet.

1. SCOPE OF WORK

- ☐ Describe your wind retrofit project's scope of work – what are you proposing to do and how (i.e., a description of all external elements on or outside structures that will be updated or replaced at your project site): roof cover replacement type; any external fasteners and anchors; items used to strengthen overhangs; any outdoor window, door, and vent retrofit; exterior wall coverings; planting of wind-resistant trees or removal of hazardous trees.
- ☐ If the project would disturb the ground for any reason (e.g., clearing a staging area), describe the activities (both temporary and permanent) that would require ground disturbance and show the locations on a map or plan view; include the length, width and depth of the ground disturbance.
- ☐ Describe the existing condition of the ground surface (e.g., pavement, landscape shrubs and trees, previously undisturbed soils with vegetation) that would be disturbed.
- ☐ Describe how the project area would be accessed. Show the boundaries of the access routes or points on a map or plan view of the project area and describe the surface type (e.g., asphalt, dirt, gravel).
- ☐ If any new access routes would need to be created for the work to be completed, show where the routes would be located on a map or plan view of the project area.
- ☐ Describe where materials and equipment would be stored and staged during construction. Show the boundaries of the staging areas on a map or plan view of the project area and describe the surface type (e.g., asphalt, dirt, gravel).
- ☐ If the creation of new access routes or staging areas would require ground disturbance or vegetation removal, describe the extent of the ground disturbance (see Item 1A) and vegetation removal (see Item 3H).
- ☐ Describe the vehicles and equipment that would be used to implement the project.
- ☐ Describe any local restrictions on equipment use (e.g., seasonal or daily restrictions, work hours, local noise ordinances).
- ☐ Describe what would happen if the project were not implemented.
- ☐ If any other alternatives were developed, describe how they would have achieved the same goal and explain why those options were dismissed. If the public (including groups and agencies) provided input on the alternative(s), include the feedback you received.
- ☐ Provide a schedule that includes construction, operation and maintenance activities, including the months or seasons when work would occur.

2. PROJECT AREA AND STRUCTURE INFORMATION

- ☐ Provide the geographic coordinates (latitude and longitude) and the physical site address of the project area.
- ☐ Provide a geographic information system (GIS), computer-aided design (CAD), Google Earth files (.kmz), or map or image that clearly shows the boundaries of the project area. If your project area has a complex boundary, a GIS or .kmz file is preferred. The information provided should show the boundaries of all temporary and permanent project activities including staging areas, access routes, any vegetation removal and the affected structure(s).
- ☐ Provide an estimate of the area of ground disturbance in acres or square feet.
- ☐ Provide a few representative photographs of the surrounding area to the north, south, east and west of the project area.
- ☐ Provide engineering drawings, if available.
- ☐ Provide a description of the type, number, size and dimensions of structure(s) that would be protected by the wind retrofit project, including photographs of all sides and the year they were originally constructed.
- ☐ Describe adjacent structures, including photographs and the year they were originally constructed.
- ☐ Describe any prior improvements or additions that have been made to the structure(s) to be protected (e.g., new windows, change in roofing material from original construction), changes to the original location (i.e., relocation) of the structure(s) or other changes to the original design of the structure(s).
- ☐ If the structure(s) is designated as historic or is in a designated historic district, provide information on the known historic property/district, as applicable.

3. POTENTIAL IMPACTS ON PEOPLE, THE ENVIRONMENT AND CULTURAL RESOURCES

- ☐ Explain any controversy that exists or could exist related to the project.
- ☐ Describe any existing or planned public engagement activities for the project.
- ☐ Describe any agency coordination and permits you obtained from federal, state or local agencies to implement the project. Provide copies of any coordination materials, permit applications or approvals.
- ☐ If any environmental or cultural studies were completed either for the project or for other projects in the same area by local, state or federal entities, please provide copies. Studies could include evaluations of cultural resources (e.g., historic, archeological) or environmental resources (e.g., threatened and endangered species, wetlands, hydrology, geotechnical).
- ☐ Describe the project activities in the floodplain, if applicable.
- ☐ Describe any surface waters in or near the project area (e.g., ponds, lakes, rivers, streams, wetlands, other waterbodies).
- ☐ Describe any measures that would be used to avoid waterbodies or avoid impacting water (e.g., setbacks, cofferdams, silt fence).

- ☐ Provide any permits or applications that were developed related to project impacts on surface waters.
- ☐ Describe any known hazardous or contaminated materials that may be present in the project area or that are needed to implement the project.
- ☐ If your project would use any hazardous materials, describe the BMPs that would be used to minimize exposure of people and the environment to those materials and how they would be discarded.
- ☐ If your project involves the use of fill, describe the type and source of the fill material.
- ☐ If the project would remove vegetation for any reason, describe the type and amount or area of vegetation (e.g., two oak trees, one-quarter acre of turf grass).
- ☐ Describe how vegetation would be removed, if applicable (e.g., root ball removal, flush cut, dug up).
- ☐ Provide photographs of the vegetation to be removed in the project area.
- ☐ Would you restore vegetation after the project is complete or does the project include planting or seeding of vegetation? If so, describe where and how it will be planted (e.g., by hand, with machinery, broadcast seeding) and the types (e.g., grasses, trees, shrubs) and species of vegetation that would be planted.
- ☐ Would any special techniques be used to ensure survival of the plants/seeds (e.g., mulch, irrigation, protective fencing)?
- ☐ List all BMPs to be implemented as part of the project to reduce potential impacts.