



Draft Environmental Assessment

Village of North Lewisburg Storm Shelter/Community Support Center

Champaign County, Ohio

PDMC-PJ-05-OH-2007-003

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FEMA

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Acronyms and Abbreviations

ACHP	Advisory Council on Historic Preservation
ACWM	asbestos-containing waste material
ADA	Americans with Disabilities Act
AHERA	Asbestos Hazard Emergency Response Act
amsl	above mean sea level
APE	Area of Potential Effect
BMP	Best Management Practice
BUSTR	Bureau of Underground Storage Tank Regulations
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CWA	Clean Water Act
dB	decibel
DNL	Day-Night Average Sound Level
DOW	Division of Wildlife
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
LUCRPC	Logan Union Champaign – Regional Planning Commission
LUST	Leaking Underground Storage Tank
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NESHAP	National Emission Standard for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O ₃	ozone
ODNR	Ohio Department of Natural Resources

Acronyms and Abbreviations

ODOC	Ohio Department of Commerce
OEMA	Ohio Emergency Management Agency
OHPO	Ohio Historic Preservation Office
OHS	Ohio Historical Society
OSHA	Occupational Safety and Health Administration
Pb	lead
PDM-C	Pre-Disaster Mitigation–Competitive
PM _{2.5}	particulate matter less than 2.5 microns
PM ₁₀	particulate matter less than 10 microns
RACM	regulated asbestos-containing materials
SO ₂	sulfur dioxide
THPO	Tribal Historic Preservation Officer
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
VOC	volatile organic compound

SECTION ONE INTRODUCTION

1.1 PROJECT AUTHORITY

The Village of North Lewisburg has applied to the Federal Emergency Management Agency (FEMA) for assistance with a Pre-Disaster Mitigation Project under application number PDMC-PJ-05-OH-2007-003. FEMA grants funds under the Pre-Disaster Mitigation–Competitive (PDM-C) program, under Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, for pre-disaster mitigation activities that reduce overall risks to the population and structures, as well as reliance on funding from actual disaster declarations.

In accordance with 44 Code of Federal Regulations (CFR) for FEMA, Subpart B, Agency Implementing Procedures, Part 10.9, an Environmental Assessment (EA) is being prepared 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). The purpose of the EA is to analyze the potential environmental impacts of the proposed project, and to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

1.2 PROJECT LOCATION

The Village of North Lewisburg is a rural community located in Champaign County in west central Ohio at the junction of State Routes 245 and 559 (see Figure 1, Appendix A). The Village of North Lewisburg has a total area of 0.89 square mile and a population of 1,588 (U.S. Census Bureau, 2000a).

The proposed project site is located at 77 East Street (latitude 40.2239, longitude -83.5532) and is within the village limits in the northeast quadrant of the intersection of East Street and Walnut Street (see photographs in Appendix B and Figure 2 in Appendix A). The 0.89-acre project site is an open space area of mowed grass, zoned R-2, medium density residential, adjacent to a village park and approximately 500 feet south of Spain Creek (LUCRPC, 2002).

1.3 PROJECT DESCRIPTION

The proposed project would construct a storm shelter/community support center compliant with FEMA 361, *Design and Construction Guidance for Community Safe Rooms* (FEMA, 2008a), to provide shelter during severe weather events to the residents of North Lewisburg.

SECTION TWO PURPOSE AND NEED

The Village of North Lewisburg is located within FEMA Wind Zone IV, which designates areas prone to having winds over 250 miles per hour (FEMA, 2008b).

The purpose and need for the proposed project is to provide an emergency facility to protect residents of North Lewisburg during severe weather events such as tornadoes.

The adopted and approved *Champaign County Natural Hazards Mitigation Plan* identified the risk of tornadoes and the lack of emergency shelters in North Lewisburg. The proposed project is consistent with the *State of Ohio Hazard Mitigation Plan*, which addresses the need for storm shelters throughout the state. The Village of North Lewisburg is in a rural area, which limits the alternatives available for nearby shelter. Currently, residents must rely on their own homes for safety and may endure extended periods of power outages during severe weather events. The construction of this storm shelter/community support center would provide protection for citizens and would reduce the risk of injury and death resulting from tornadoes and other adverse weather conditions. The facility would also provide residents with a safe place to stay in the event of an extended power outage or other emergency (Village of North Lewisburg, 2007).

SECTION THREE ALTERNATIVES

This section describes the alternatives that were considered in addressing the purpose and need stated in Section 2. Three alternatives were considered and dismissed, as discussed in Section 3.1. Two alternatives were evaluated: the No Action Alternative and the Proposed Action Alternative, which is the construction of a storm shelter/community support center. Alternatives evaluated are discussed in Section 3.2.

3.1 ALTERNATIVES CONSIDERED AND DISMISSED

The Village of North Lewisburg considered three alternatives that were eventually dismissed. First, an alternative building site for the storm shelter was considered; however, the site is within FEMA Flood Designation Zone A, which is not consistent with FEMA 361 guidance for locating a storm shelter. Further, this site became unavailable when it was selected as the preferred location for a proposed new fire station. Second, the Village considered remodeling and reinforcing nearby structures to better withstand natural hazards; however, there were no suitable structures available to retrofit. A third alternative to retrofit all homes and businesses in the area was also considered, but this option was deemed cost prohibitive.

3.2 ALTERNATIVES EVALUATED

3.2.1 Alternative 1: No Action

Under the No Action Alternative, an emergency facility would not be constructed in the Village of North Lewisburg. Residents would continue to rely on their own homes for protection during severe weather events.

3.2.2 Alternative 2: Construction of a Storm Shelter/Community Support Center (Proposed Action)

Under the proposed action, the Village of North Lewisburg proposes to construct a storm shelter/community support center within the Village limits.

The proposed 40-foot by 60-foot structure would be located in the northeast quadrant of the intersection of East Street and Walnut Street (see Figure 2, Appendix A). The construction of this facility would provide protection for residents in the event of a tornado or severe weather. The facility would include a safe room, restroom facilities, a kitchen, and an emergency backup generator. The facility's lower level would serve as the storm shelter and would be constructed partially below ground to a depth of approximately 5 feet. The lower level storm shelter would provide protection for approximately 400 residents. The facility's main level would function as a community support center and would provide a safe place for residents to stay during periods of extended power outages.

The storm shelter/community support center would be located on an abandoned school site owned by the Village. The former North Lewisburg High School (circa 1915) was demolished in the mid-1980s, with an estimated time frame of 1984 or 1985. The proposed facility would be located within the building footprint of the demolished school, as shown on Figure 2. The 0.89-acre project site is currently mowed, vacant land used as open space adjacent to a village park. A Veterans' memorial is located at the southwest corner of the site; this memorial will not be impacted by the proposed action. After construction, the remaining portion of the site will be reestablished with turf grass. The project site is surrounded by residential and commercial land

uses. The topography of the site is gently sloping. The project site is located approximately 500 feet south of Spain Creek.

Vehicular access to the storm shelter/community support center would be via Walnut Street from East Street. A paved parking area would provide a limited number of parking spaces for the facility. The site plan currently identifies 14 parking spaces. There would be two building entrances from East Street. A front entrance would provide direct access to the main level community support center and a side entrance would provide direct access to the lower level storm shelter.

Connections to existing nearby utilities would be determined during final design. At this time, it is anticipated that the sanitary sewer connection could be to an existing sewer line along East Street. However, if this is not feasible, a connection to an existing sewer line northeast of the project site, through the park could be made, as shown on Figure 2.

Construction of the proposed action would generate approximately 300 cubic yards of excess material that would be used to backfill the structure's foundation and would also be spread at the site. Excess material would be disposed of in a licensed landfill and would not be placed within a floodway, floodplain, or wetland.

The facility's lower level storm shelter would be compliant with FEMA 361 standards for storm shelters including capacity, design, and construction. Estimated construction costs at the time of final design would determine whether the upper level support center of the facility could also be built to FEMA 361 standards. The proposed project would be designed in accordance with the Americans with Disabilities Act (ADA), providing accessibility to all persons.

SECTION FOUR AFFECTED ENVIRONMENT AND IMPACTS

This section describes the potential impacts of the No Action Alternative and the Proposed Action Alternative. Where potential impacts exist, conditions or mitigation measures to offset these impacts are described. A summary table of impacts and mitigation measures associated with the Proposed Action Alternative is provided below.

Table 1: Proposed Action Alternative Impact and Mitigation Summary

Affected Environment	Impacts	Mitigation
Geology, Seismicity, and Soils	No impacts to geology or impacts related to seismicity; short-term impacts to soils during the construction period.	Appropriate Best Management Practices (BMPs), such as installing silt fences and revegetating bare soils immediately upon completion of construction to stabilize soils.
Surface Water	Temporary short-term impacts to downstream surface waters from stormwater runoff are possible during construction activities.	Appropriate BMPs, such as installing silt fences and revegetating bare soils, would minimize runoff.
Groundwater	No impacts to groundwater are anticipated.	None
Floodplains	No impacts to the floodplain are anticipated.	None
Waters of the U.S. Including Wetlands	No direct impacts to waters of the U.S., including wetlands, would occur because none are present on the proposed project site.	To mitigate potential impacts to water resources in the area during construction, appropriate BMPs would be required at the construction site. BMPs include, but are not limited to, the installation of silt fences and revegetating bare soils to minimize erosion.
Transportation	Minor temporary increase in the volume of construction traffic on roads in the immediate vicinity of the proposed project site.	Construction vehicles and equipment would be stored on site during project construction and appropriate signage would be posted on affected roadways.
Public Services and Utilities	No impacts to public services or utilities.	None
Public Health and Safety	No impacts to public health and safety are anticipated.	All construction activities would be performed using qualified personnel and in accordance with the standards specified in Occupational Safety and Health Administration (OSHA) regulations; appropriate signage and barriers should be in place prior to construction activities to alert

Affected Environment and Impacts

Affected Environment	Impacts	Mitigation
		pedestrians and motorists of project activities.
Hazardous Materials	No impacts to hazardous materials or wastes are anticipated.	Excavation activities could expose or otherwise affect subsurface hazardous wastes or materials; any hazardous materials discovered, generated, or used during construction would be disposed of and handled in accordance with applicable Federal, state and local regulations.
Socioeconomic Resources	No adverse socioeconomic impacts are anticipated.	None
Environmental Justice	No disproportionately high or adverse effect on minority or low-income populations is anticipated.	None
Air Quality	Short-term impacts to air quality would occur during the construction period.	Construction contractors would be required to water down construction areas when necessary; fuel-burning equipment running times would be kept to a minimum; engines would be properly maintained.
Noise	Short-term impacts related to noise would occur at the proposed project site during the construction period.	Construction would take place during normal business hours and equipment would meet all local, state, and federal noise regulations.
Biological Resources	Up to 0.89 acre of mowed grass would be cleared for construction of the shelter.	None
Cultural Resources	No impacts to archaeological or cultural resources are anticipated.	If cultural resources or human remains are discovered during the course of project implementation, the subgrantee would be required to stop project activities in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm until FEMA concludes consultation with Ohio Historic Preservation Office (OHPO), Ohio Emergency Management Agency (OEMA), or if warranted, other consulting parties and the subgrantee.

4.1 GEOLOGY, SEISMICITY, AND SOILS

The project area is located within the Central Lowlands Province of western Ohio and in a subdivision known as Till Plains. Till is a mixture of clay, silt, sand, and boulders deposited beneath the advancing Pleistocene glaciers (OHS, 2008). In this region, younger Silurian rocks are at the surface, overlying the older Ordovician strata (Coogan, 1996). The bedrock foundation underlying the project site is composed of dolomite, anhydrite, gypsum, salt, and shale. The depth at which bedrock occurs at the proposed project site is approximately 25 feet (Appendix C, Ohio Department of Natural Resources [ODNR] correspondence dated June 4, 2008).

Ohio is on the periphery of the New Madrid Seismic Zone. The west central counties of Ohio appear to be particularly susceptible to seismic activity. Shelby County and surrounding counties, including Champaign County, have experienced more earthquakes than any other area of the state. At least 40 felt earthquakes have occurred in this area since 1875. Although most of these events have caused little or no damage, earthquakes in 1875, 1930, 1931, and 1937 caused minor to moderate damage (ODNR, 2007).

The U.S. Department of Agriculture (USDA), Natural Resources Conversation Service (NRCS) online Web Soil Survey, indicates the proposed project site contains soils consisting of Crosby silt loam and Lippincott silty clay loam. Crosby is a gently sloping, very deep, somewhat poorly drained soil ranging from 2 to 6 percent slopes which is not considered to be a hydric soil. Lippincott is a nearly level, very deep, very poorly drained soil which is considered to be a hydric soil (USDA/NRCS, 2008a).

Soils in the proposed project area are classified as prime farmland (USDA/NRCS, 2008a), which is generally subject to the Farmland Protection Policy Act (FPPA). The FPPA states that Federal agencies must “minimize the extent to which Federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses...” Although the proposed project site contains soils classified as prime farmland, the land is already committed to urban development so the FPPA would not apply to the proposed action (USDA/NRCS, 2008b).

Alternative 1, No Action – Under the No Action Alternative, no impacts related to geology, seismicity, or soils would occur.

Alternative 2, Proposed Action – Under the Proposed Action Alternative, construction activities would not be deep enough to affect underlying geologic resources. To ensure building site suitability, soil borings would be taken prior to construction. Soil borings are required as part of the application process to obtain a building permit from Champaign County. Impacts related to seismicity are not anticipated as current building codes in Ohio relative to earthquake design standards for publicly owned structures mitigate potential for damage (Ohio Hazard Mitigation Plan, 2008). Short-term impacts to soils due to erosion may occur during the construction period. Appropriate BMPs would be used, such as installing silt fences and revegetating bare soils immediately upon completion of construction to stabilize soils.

4.2 WATER RESOURCES

4.2.1 Surface Water

The Clean Water Act (CWA), as amended in 1977, established the basic framework for regulating discharges of pollutants into waters of the United States.

The Village of North Lewisburg is located within the Darby Creek Watershed. The proposed project site is located approximately 500 feet south of Spain Creek. Monitoring has shown that all or parts of Spain Creek have good water quality and are attaining chemical and biological water quality standards (Dobbels et al., n.d.).

According to the United States Geological Survey 7.5-minute topographic map for the North Lewisburg quadrangle, the approximate elevation of the proposed project site is 1,080 feet above mean sea level (amsl). Stormwater runoff from the project site follows the gently sloping topography to the north and east.

Alternative 1, No Action – Under the No Action Alternative, no impacts to surface water would occur.

Alternative 2, Proposed Action – Under the Proposed Action Alternative, temporary short-term impacts to downstream surface waters could occur during the construction period due to stormwater runoff from the site. To reduce impacts to surface water, the applicant would implement appropriate BMPs, such as installing silt fences and revegetating bare soils.

4.2.2 Floodplains

Executive Order (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 uses Flood Insurance Rate Maps (FIRMs) to identify the regulatory 100-year floodplain for the National Flood Insurance Program (NFIP). Consistent with EO 11988, FIRMs were examined during the preparation of this EA (FEMA, 1985; Community Panel Number 390055 0075 B). The proposed project site is located in Zone C, areas outside the 100-year floodplain (see Figure 3).

Alternative 1, No Action – Under the No Action Alternative, no impacts to the floodplain would occur.

Alternative 2, Proposed Action – The proposed project site is located outside the 100-year floodplain and no impacts to the floodplain are anticipated.

4.2.3 Waters of the U.S. Including Wetlands

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or filled material into waters of the U.S., including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). Additionally, Executive Order 11990 (Protection of Wetlands) requires Federal agencies to avoid, to the extent possible, adverse impact of wetlands.

According to the National Wetlands Inventory (NWI) map, no wetlands are located on or adjacent to the proposed project site. The proposed project site is located approximately 500 feet south of Spain Creek. The nearest wetland is approximately 900 feet from the site.

During a site visit on January 9, 2008, a URS biologist confirmed that no wetlands are located on or in proximity to the project site.

Alternative 1, No Action – Under the No Action Alternative, no impacts to waters of the U.S., including wetlands, would occur.

Alternative 2, Proposed Action – Under the Proposed Action Alternative, no direct impacts to waters of the U.S., including wetlands, would occur because none are present on the proposed project site. A consultation letter, dated April 16, 2008, was submitted the USACE Louisville

District requesting agency review and comments regarding the proposed project (Appendix C). No response from the USACE was received.

During construction, minor adverse impacts to downstream waters of the United States, including wetlands, could occur due to soil erosion. Implementation of BMPs would minimize erosion at the project site. BMPs include, but are not limited to, the installation of silt fences and revegetating bare soils to minimize erosion.

4.3 TRANSPORTATION

The Village of North Lewisburg is located at the junction of State Routes 245 and 559. The proposed project site is located one block north of this junction in the northeast quadrant of the intersection of East and Walnut Streets.

Alternative 1, No Action – Under the No Action Alternative, there would be no changes to transportation.

Alternative 2, Proposed Action – Under the Proposed Action Alternative, there would be a minor temporary increase in the volume of construction traffic in the immediate vicinity of the proposed project site, potentially resulting in a slower traffic flow for the duration of the construction phase. To mitigate potential delays, construction vehicles and equipment would be stored on site during project construction and appropriate signage would be posted on affected roadways.

Over the long term, vehicle traffic would increase at the proposed project site only during severe weather and other emergency events, as some residents would drive to the shelter. It is anticipated that most residents would walk to the centrally located shelter, as it is within a 5-minute walk (¼-mile radius) for approximately 400 residents. The facility would have a paved parking area accessed via Walnut Street, and additional on-street parking is available on adjacent local streets. No significant adverse impacts to transportation, site access, or traffic levels are anticipated.

4.4 PUBLIC SERVICES AND UTILITIES

The Village of North Lewisburg provides water and sewer services to residents with its own water supply and treatment plant. The water distribution system consists of 9 miles of pipe. North Lewisburg also has its own wastewater facility (LUCRPC, 2002). Overhead electric lines serve the village.

Alternative 1, No Action – Under the No Action Alternative, there would be no changes to public services or utilities.

Alternative 2, Proposed Action – Under the Proposed Action Alternative, the Village-owned storm shelter/community support center would connect to existing public utilities and infrastructure. Connections to utilities would be determined during final design. At this time, it is anticipated that sanitary sewer connection could be to the existing sewer line along East Street or, as shown on Figure 2, through the park to an existing sewer line northeast of the project site.

The proposed facility would include an emergency backup generator, so if electrical power is lost during a storm, the facility would be a safe place for residents to stay during periods of extended power outages.

4.5 PUBLIC HEALTH AND SAFETY

This analysis includes health and safety issues of the area residents, the public at-large, and the protection of personnel involved in activities related to the implementation of the proposed construction of the storm shelter/community support center.

EO 13045, Protection of Children, requires Federal agencies to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children.

Alternative 1, No Action – Under the No Action Alternative, there would be no construction and no direct impacts to safety of the population would occur. If an emergency event were to occur, residents of the Village, including children, would continue to be at risk of injury and death during severe weather events such as tornadoes.

Alternative 2, Proposed Action – Under the Proposed Action Alternative, the storm shelter/community support center would provide protection for residents of the Village and surrounding area, including children, during severe weather events.

Construction activities could also present safety risks to those performing the activities. To minimize risks to safety and human health, all construction activities would be performed using qualified personnel trained in the proper use of the appropriate equipment, including all appropriate safety precautions. Additionally, all activities would be conducted in a safe manner in accordance with the standards specified in the OSHA regulations. The appropriate signage and barriers would be in place prior to construction activities to alert pedestrians and motorists of project activities. There would be no disproportionate health and safety risks to children.

4.6 HAZARDOUS MATERIALS

To determine the presence and approximate location of known hazardous materials in the vicinity of the project area, an Environmental Data Resources radius search was conducted in May 2008 (EDR, 2008) for the proposed project site. The database searches queried recorded Federal, state and local hazardous materials and underground storage tank (UST) criteria to identify sites of potential concern. No sites were located within the project area. One leaking underground storage tank (LUST) was identified approximately 0.25 mile from the project site on Gunn Street. The tank was removed in 1994 and the status of this site is closed and requires no further action (ODOC/BUSTR, 2008). There is one UST within 0.25 mile of the project site on Maple Street, but the presence of this tank does not pose any known existing environmental concerns to the proposed project.

Based on a review of available site information, it is possible that the project site may contain buried asbestos-containing waste material (ACWM). The project site encompasses the building footprint of a demolished school site. The former North Lewisburg High School (circa 1915) was demolished sometime in the mid-1980s. Although the exact date is unknown, it is estimated the time frame is around 1984 or 1985. Little is known about the disposition of school demolition debris, with some information suggesting the material remains buried within the former building footprint in the area of the former school's basement gymnasium. Local knowledge gathered by the subgrantee from residents and a former mayor suggests that the buried debris is limited to bricks and mortar from the building shell. The general consensus among residents and the former mayor was that abatements were performed and material of value within the school was scrapped.

Demolition debris, if present, could potentially include ACWM, since structures constructed prior to the 1970s were potentially built and/or insulated with products that contained asbestos. Additionally, given the time frame of construction of the school (1915), other hazardous building materials may be present, such as lead-based paint, polychlorinated biphenyl-containing electrical equipment, mercury switches, and refrigerants.

Alternative 1, No Action – Under the No Action Alternative, there would be no impacts related to hazardous materials or waste.

Alternative 2, Proposed Action – Under the Proposed Action Alternative, no hazardous materials or waste-related impacts are anticipated. The storm shelter/community support center has been sited to avoid areas where school demolition debris is suspected to be present. The demolition debris is suspected to be present in the area of the former school's basement gymnasium, which was located beyond the footprint of the proposed facility. Should demolition debris containing suspect ACWM be encountered during construction, the following actions shall be implemented:

- Temporarily stop work in the affected area;
- Secure area using tape, cones or other markers; label area for potential ACWM hazard;
- Notify Construction Project Manager or designated on-scene alternate, who in turn is to notify the Village of North Lewisburg; and
- Wet suspect material with an airless sprayer.

Village personnel will then:

- Report the incident to Ohio Environmental Protection Agency (EPA) officials;
- Mobilize an Asbestos Hazard Emergency Response Act (AHERA)-certified and Ohio-licensed asbestos inspector to the scene for visual inspection and sampling;
- Implement an Emission Control Plan;
- Isolate suspect ACWM and store material in accordance with applicable standards;
- If suspect ACWM appears friable, surrounding soils may also require removal and sampling; and
- Upon laboratory confirmation of regulated asbestos-containing materials (RACM), the debris will be managed, transported, and disposed in accordance with National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations, and other applicable Federal, state and local rules, under the supervision of an AHERA-certified asbestos site supervisor.

Any hazardous materials discovered, generated, or used during construction would be handled and disposed of in accordance with applicable Federal, state, and local regulations.

4.7 ENVIRONMENTAL JUSTICE

EO 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) mandates that Federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Socioeconomic and demographic data for the project area were analyzed to determine if a disproportionate number of

minority or low-income persons have the potential to be adversely affected by the proposed project. According to the U.S. Census, the Village has a minority population of 2.9 percent and a low-income population of 7.3 percent (U.S. Census, 2000b). These percentages are lower than those for Champaign County and the State of Ohio.

Alternative 1, No Action – Under the No Action Alternative, there would be no disproportionately high and adverse effects on minority or low-income populations. All populations could potentially be adversely affected by the lack of a storm shelter within the Village.

Alternative 2, Proposed Action – Under the Proposed Action Alternative, there would be no disproportionately high and adverse impacts on minority or low-income populations. Implementation of the Proposed Action Alternative would benefit all populations within the Village by providing protection from severe weather.

4.8 AIR QUALITY

The Clean Air Act (CAA) requires that states adopt ambient air quality standards. The standards have been established to protect the public from potentially harmful amounts of pollutants. Under the CAA, the U.S. EPA establishes primary and secondary air quality standards. Primary air quality standards protect the public health, including the health of “sensitive populations, such as people with asthma, children, and older adults.” Secondary air quality standards protect public welfare by promoting ecosystems health, and preventing decreased visibility and damage to crops and buildings. EPA has set national ambient air quality standards (NAAQS) for the following six criteria pollutants: ozone (O₃), particulate matter (PM_{2.5}, PM₁₀), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), and lead (Pb). According to the EPA, Champaign County is in attainment for all six criteria pollutants, meaning that criteria air pollutants do not exceed the NAAQS (EPA, 2008).

Alternative 1, No Action – Under the No Action Alternative, there would be no impacts to air quality because no construction would occur.

Alternative 2, Proposed Action – Under the Proposed Action Alternative, short-term impacts to air quality would occur during the construction of the proposed storm shelter/community support center. To reduce temporary impacts to air quality, the construction contractors would be required to water down construction areas when necessary to mitigate for fugitive dust. Emissions from fuel-burning internal combustion engines (e.g., heavy equipment and earthmoving machinery) could temporarily increase the levels of some of the criteria pollutants, including CO, NO₂, O₃, PM₁₀, and non-criteria pollutants such as volatile organic compounds (VOCs). To reduce the emission of criteria pollutants, fuel-burning equipment running times would be kept to a minimum and engines would be properly maintained.

4.9 NOISE

Noise is generally defined as unwanted sound. Sound is most commonly measured in decibels (dB) on the A-weighted scale, which is the scale most similar to the range of sounds that the human ear can hear. The Day-Night Average Sound Level (DNL) is an average measure of sound. The DNL descriptor is accepted by Federal agencies as a standard for estimating sound impacts and establishing guidelines for compatible land uses. EPA guidelines, and those of many other Federal agencies, state that outdoor sound levels in excess of 55 dB DNL are “normally

unacceptable” for noise-sensitive land uses such as residences, schools, or hospitals. The proposed project site is located within a residential area.

Alternative 1, No Action – Under the No Action Alternative, no impacts related to noise would occur.

Alternative 2, Proposed Action – Under the Proposed Action Alternative, temporary short-term increases in noise levels are anticipated during the construction period. To reduce noise levels during that period, construction activities would take place during normal business hours, and equipment and machinery installed at the proposed project site would meet all Federal, State, and local noise regulations.

4.10 BIOLOGICAL RESOURCES

The proposed project site consists of an area of mowed grass surrounded by a residential neighborhood and commercial uses.

The U.S. Fish and Wildlife Service (USFWS, 2008b) lists the following federally endangered (E) and threatened (T), candidate (C), or special concern (SC) species for species for Champaign County:

Scientific Name	Common Name	Federal Status	State Status
<i>Myotis sodalis</i>	Indiana bat	E	E
<i>Pleurobema clava</i>	clubshell (mussel)	E	E
<i>Sistrurus catenatus</i>	Eastern massasauga (snake)	C	E
<i>Villosa fabalis</i>	rayed bean (mussel)	C	E
<i>Epioblasma triquetra</i>	snuffbox (mussel)	SC	E

A site visit conducted by a URS biologist on January 9, 2008, confirmed that the proposed project site does not contain habitat for any federally listed flora and fauna species; therefore, it is unlikely that any threatened and endangered species are present.

Alternative 1, No Action – Under the No Action Alternative, no impacts to biological resources or protected species would occur.

Alternative 2, Proposed Action – Under the Proposed Action Alternative, up to 0.89 acre of mowed grass would be cleared for construction of the facility and parking lot.

URS requested the USFWS to comment on the proposed project with respect to potential impacts to federally threatened or endangered species or their critical habitat via letter on April 16, 2008. In a letter dated May 2, 2008 (see Appendix C), the USFWS responded that they were unable to conduct a project review. As an alternative, the guidance on the USFWS Region 3 Section 7 Technical Assistance Web site was followed to fulfill the requirements for consultation under Section 7 of the Endangered Species Act (USFWS, 2008a). Due to the project’s location within an urban setting and lack of on-site habitat, no federally listed species would be expected to occur within the project area.

The ODNR was contacted on April 16, 2008, and responded with comments on April 22, 2008, and June 4, 2008, with an inter-disciplinary review (see Appendix C). In a letter dated April 22, 2008, the ODNR Division of Natural Areas and Preserves concluded that there are no state nature preserves or scenic rivers at the project site and is unaware of any unique ecological sites, geologic features, animal assemblages, State parks, State forests, or State wildlife areas within a 1-mile radius of the project area.

In an electronic mail message dated June 4, 2008, the ODNR Division of Wildlife (DOW) stated that the project site is within the range of the clubshell, as well as several state-listed species, but is not likely to impact these species. Also, the project site is within the range of the Indiana bat; however, since no tree removal is proposed, construction of the proposed project would not impact this species.

Since the proposed action would not affect suitable habitat for listed species, no listed species or designated critical habitat is anticipated to be directly or indirectly affected. The proposed project would have no effect on state or federally listed species.

4.11 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act (NHPA), as amended, and implemented by 36 CFR Part 800, requires Federal agencies to consider the effects of their actions on historic properties and provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on Federal projects that will have an effect on historic properties prior to implementation. Historic properties are defined as archaeological sites, standing structures, or other historic resources listed in or eligible for listing in the National Register of Historic Places (NRHP).

The Area of Potential Affect (APE) for the undertaking was determined as the property at 77 East Street and the immediate adjacent environs, as well as any historic buildings or structures in the immediate adjacent area. The proposed project was reviewed in accordance with 36 CFR 800.4(d)(1). On September 10, 2008, FEMA submitted a letter to the Ohio Historical Society (OHS), OHPO, summarizing the project review process and included a determination of “no historic properties affected” (Appendix C). The OHPO reviewed the submittal and in a letter dated October 30, 2008, concurred with FEMA’s determination (see Appendix C).

Consultation letters were sent on September 11, 2008, to Tribes who have an interest in the State of Ohio. The process of identifying interested parties included accessing the Native American Consultation Database (NPS, 2006). Response letters were received from three Tribes (see Appendix C). A response letter, dated September 16, 2008, from the Miami Tribe of Oklahoma representative stated the Tribe has no objection to the proposed project at this time. A response letter, dated September 19, 2008, from the Seneca-Cayuga Tribe of Oklahoma representative indicated the Tribe has no comment at this time. In a response letter, dated October 25, 2008, the Catawba Indian Nation Tribal Historic Preservation Officer (THPO) deferred comment on the proposed project to those federally recognized Indian Tribes whose cultural and geographic affiliation to the project area are closer than their own.

Alternative 1, No Action – Under the No Action Alternative, no impacts to archaeological or cultural resources would occur.

Alternative 2, Proposed Action – Under the Proposed Action Alternative, no impacts to archaeological or cultural resources are anticipated.

To ensure that ground disturbing activities will not adversely affect any potential buried cultural resources, and in accordance with 36 CFR §800.13, provisions are set forth to deal with unexpected discoveries that may be historically significant but were not identified as part of the initial review process. As part of the PDM approval process, the OEMA will be required to advise the subgrantee of the requirements of these conditions and Ohio law regarding the discovery of human remains and will place documentation of this notification in the project file.

If human remains are discovered during the course of project implementation, OEMA will notify FEMA immediately and will require the subgrantee to stop project activities in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm until FEMA concludes consultation with OHPO, OEMA, or if warranted, other consulting parties and the subgrantee. The parties will consult to determine the appropriate treatment and disposition of the remains in accordance with the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA), PL 101-601, and State laws, as applicable.

SECTION FIVE CUMULATIVE IMPACTS

According to CEQ regulations, cumulative impacts represent the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).” In accordance with NEPA and to the extent reasonable and practical, this EA considered the combined effect of the Proposed Action Alternative and other actions occurring or proposed in the vicinity of the proposed project site.

One action identified by the subgrantee is the potential construction of a municipal fire station within the Village limits. This action is being considered on a site east of East Street, approximately two blocks north of the proposed project site and immediately north of Spain Creek. When added to the Proposed Action Alternative, the Village would be better able to serve and protect its residents. It is not anticipated that the Proposed Action Alternative and the fire station project together would have any significant adverse cumulative impacts.

SECTION SIX PUBLIC INVOLVEMENT

FEMA is the lead Federal agency for conducting the NEPA compliance process for the storm shelter/community support center in the Village of North Lewisburg, Champaign County, Ohio. It is the goal of the lead agency to expedite the preparation and review of NEPA documents and to be responsive to the needs of the community and the purpose and need of the proposed action while meeting the intent of NEPA and complying with all NEPA provisions.

Interagency reviews have been conducted in the form of agency consultation letters sent to the agencies listed in Section 7.

The Village of North Lewisburg will notify the public of the availability of the Draft Environment Assessment through publication of a public notice in a local newspaper (see Appendix D). FEMA will conduct a public comment period commencing on the initial date of publication of the public notice.

SECTION SEVEN AGENCY COORDINATION AND PERMITS

The following agencies and organizations were contacted to request a project review during the preparation of this EA. Responses received to date are included in Appendix C.

- U.S. Army Corps of Engineers, Louisville District
- U.S. Fish and Wildlife Service, Reynoldsburg Ecological Services Field Office
- Ohio Department of Natural Resources
- Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Ohio Natural Heritage Program
- Ohio Historical Society/OHPO

In accordance with applicable Federal, state, and local regulations, the applicant would be responsible for acquiring any necessary permits prior to commencing construction at the proposed project site. The following permits and approvals would be required prior to construction:

- Building permit for construction of the storm shelter/community support center (Champaign County Building Department)

SECTION EIGHT CONCLUSIONS

No impacts to geology, seismicity, groundwater, floodplains, public services and utilities, public health and safety, hazardous materials, socioeconomic resources, environmental justice, biological resources and cultural resources are anticipated with the Proposed Action Alternative. During the construction period, short-term impacts to soils, surface water, transportation, air quality, and noise are anticipated. All short-term impacts require conditions to minimize and mitigate impacts to the proposed project site and surrounding areas.

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