



Draft Environmental Assessment

**Wayne Township Fire and Rescue
Fire Station Construction**

Wayne Township, Clermont County, Ohio
January 2010 Revised 02/04/2010

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ACRONYMS:

ADA	Americans with Disabilities Act
Amsl	above mean sea level
APE	Area of Potential Effects
ARRA	American Recovery and Reinvestment Act
BMP	Best Management Practices
BRRTS	Bureau for Remediation and Redevelopment Tracking System
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CWA	Clean Water Act
DB	Decibel
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMS	Emergency Medical Services
EO	Executive Order
EOC	Emergency Operations Center
ESA	Endangered Species Act
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
HSG	Hydrologic Soil Group
LDN	Day-Night Average Sound Level
NAAQS	National Ambient Air Quality Standards

NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NO2	Nitrogen Dioxide
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OAC	Ohio Administrative Code
O3	Ozone
OSHA	Occupational Safety and Health Administration
Pb	Lead
PM25	Particulate matter less than 2.5 microns
PM10	Particulate matter less than 10 microns
RCRA	Resource Conservation and recovery Act
SCG	Station Construction Grant
SHPO	State Historic Preservation Office
SHWIMS	Solid and Hazardous Waste Information Management System
SO2	Sulfur Dioxide
SWDV	Surface Water Data Viewer
SWPPP	Storm water Pollution Preventive Plan
THPO	Tribal Historic Preservation Office
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
VOC	Volatile Organic Compound
ODNR	Ohio Department of Natural Resources

SECTION 1: BACKGROUND

1.1 PROJECT AUTHORITY:

Wayne Township Fire and Rescue applied for a FY-2009 FEMA, Assistance to Firefighters Grant Program, Station Construction Grant. The Station Construction Grant (SCG) was established as part of the American Recovery and Reinvestment Act of 2009 (ARRA) to provide financial assistance for fire departments to build or modify fire stations, which will enhance the department response to their community.. Funding for the program was provided by the American Reinvestment and Recovery Act of 2009 (Pub. L. 111-5). 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

Wayne Township is a rural community located approximately 30 miles northeast of the City of Cincinnati, in southwestern Ohio. The new facility will be constructed at 6306 State Route 133, Goshen, Ohio 45122, which is the approximate center of Wayne Township and will provide Fire and EMS services for the citizens of Wayne Township and neighboring automatic and mutual aid communities. Wayne Township Fire and Rescue provides fire and EMS services for a 32 square mile service area with a population of more than 5500 people.

Alternative 2, Construction of the new Fire Station is the proposed action. The proposed project site is adjacent to the Wayne Township Hall located at 6320 State Route 133 and Project location maps showing proposed location for the new Fire Station are provided in Appendix A. Photographs of the proposed construction site are provided in Appendix B. Geographic coordinates of the proposed project site are 39°12'37.92"N by 84°03'07.38"W. The proposed project site is bordered by the Wayne Township Hall to the west, State Route 133 and residential area to the south, farmland and woods to the north and east. No wetlands, floodplains, or waterways are located adjacent to the project site. The nearest waterway is Stonelick creek which is located approximately one mile to the northwest.

1.3 PURPOSE AND NEED

The Station Construction Grant will help fund a new Fire Station to replace the current outdated facility. The new facility will meet the needs of emergency operations, firefighting and emergency medical services personnel and operations. The new facility is needed to provide the best possible response within the 32 square mile service area. The new facility also allows for the best possible response to all of our neighboring communities in support of automatic and mutual aid responses.

A needs assessment was prepared in 2004 by Wayne Township Fire and Rescue personnel. The proposed facility provides for, or corrects, the following needs and deficiencies recognized at the existing facility.

1. American with Disabilities Act (ADA) Accessibility: The current facilities are not ADA compliant and create a hazard for citizens with disabilities.
2. Apparatus Bay: Inadequate bay area for district equipment results in unsafe conditions for firefighter access during a response.
3. Surge Parking Area: There are insufficient parking spaces for surge events and the site is constrained from expansion.
4. Conference and Media Room: The facilities lack a separate space for these functions.
5. The current facility in Newtonsville does not allow for emergency vehicles leaving the station to completely leave the building before entering the roadway.
6. Overnight Sleeping Quarters: One facility has no sleeping quarters and the other facility only allows for one person to stay at the station.
7. The station in Edenton was built on a hillside which is causing the floor in the building to sink. An engineering service was employed to correct the situation but the repair has turned out to only be temporary and the floor continues to sink.
8. Response Times: The current facilities do not allow for adequate response times to all areas of the district.
9. Records Storage: The facilities have inadequate and insecure storage space.
10. Air Quality: No Diesel Fume Exhaust System exists in either facility.

1.4 EXISTING FACILITIES

The existing Wayne Township Fire Stations provide emergency services to a population of approximately 5500 in the Village of Newtonsville and Wayne Township covering 32 square miles. The Wayne Township Fire and Rescue plays an active role in providing public assistance and mitigation during community disasters. The existing facilities are located at 797 Wright Street in the Village of Newtonsville (39-10'- 47.18" N by 84-05'-20.71" W) and 6415 State Route 133 in Wayne Township (39-13'-31.57" N by 84-03'-03.90" W). The Newtonsville Station is a concrete block building with wood truss roof consisting of 5523 square feet built in 1954. The Newtonsville Station has six apparatus bays that must be stacked from the street side and there is no drive-through capacity. These bays are located 22 feet from the roadway. The building has a driveway on the west which is 16 feet wide and there is no room for expansion. To the east side of the building exists a creek which is 12 feet away from the building. The creek bank continues to erode and will eventually threaten the building. The Edenton Station is also a concrete block building with wood truss roof consisting of 3312 square feet which was built in 1975. Approximately 10 feet to the north side of the building is a ravine which is 28 feet deep. To the east is the State of Ohio right away for Stonelick Creek. To the east is the only parking area which is large enough for two vehicles which forces responding personnel to park on the side of the State Route. Due to the land restrictions there is no way to expand or improve this facility.

SECTION TWO: ALTERNATIVE ANALYSIS

2.1 ALTERNATIVE 1 - NO ACTION

Under the No Action Alternative, the Wayne Township Fire and Rescue would continue to operate from the two existing facilities. There would be no environmental impacts associated with the No Action Alternative, however; the needs identified in the needs assessment would not be addressed. Both existing facilities are outdated and there is no way to upgrade the facilities to meet the needs identified resulting in poor response times and inadequate facilities for firefighting and emergency medical services personnel.

2.2 ALTERNATIVE 2 - NEW FIRE STATION (PROPOSED ACTION)

The new facility at the proposed site will provide for current and future needs of the Fire and EMS Department. The new facility will provide the best response time throughout the 32 square mile district and better allow for mutual aid responses to neighboring communities.

The new Fire Station site is a 13.538 acre parcel located in the center of Wayne Township. The parcel is zoned residential and is located in a sparsely populated residential area. The parcel is bordered to the west by the Wayne Township Hall, to the south by State Route 133, to the north and east by agricultural and wooded land. The parcel has been approved by the Wayne Township Zoning Administrator for construction of the Fire Station.

The parcel was originally part of a 51-acre tract owned by Mr. Lloyd Conover, who used the property as pasture. In 1967, Conover split the 51-acre tract into three parcels, one of which is the parcel acquired for this undertaking. That parcel was sold in 1967 to Mr. Claude Wilson, who had planned to build on the property. His plans never materialized, leaving the parcel as open meadow. No one can recall any improvements on this parcel; the Township began mowing the property three years ago to improve the appearance next to the Township hall.

The proposed project consists of a single story fire station, 10,000 square feet in size. A paved parking lot and sidewalks will be placed around the building. New curb, gutter and storm sewer will be constructed to drain runoff from the parking lot. Storm water will be managed with .5 acre-feet of wet detention basin volume for storm events up to and including the 100 year event. The proposed design will provide adequate surge parking and flexible spaces that serve the needs of responding Fire and EM personnel making the best use of federal and local funds. The preliminary plan set for this alternative is provided as Appendix C.

The final location of the septic system is still under review. Current discussions with the architect and engineers suggest a site about 60 feet from the southwest corner of the new building. As required by the county, an above-ground Millennium Mound Septic Systems is specified. The system would contain a 1500 gallon Septic tank and a 1500 Gallon Dosing tank. The estimated area of ground disturbance includes: two 12' x 6' x 8' deep holes to install the two new tanks, a trench from the new building to the tanks approximately 60' long x 12" wide x 2" deep, and two 60' long x 12" wide x 2' deep trenches, one on each side of the mound.

The proposed project will be designed in accordance with the ADA, State of Ohio Building Code, Local Ordinances and Federal Regulations. The building will be equipped with smoke and carbon monoxide detectors and a fire suppression sprinkler system. The on-site emergency generator will power the entire facility if there is a power failure and will be set-up to run with a separate propane tank as fuel. The building will have a punch lock system providing access only to authorized personnel. The new facility will be designed to support the function necessary for both fire and EMS functions twenty four hours per day. The new facility consists of the following spaces:

1. Conference room: The conference room is located near the building administrative entrance. The conference room will be utilized for departmental meeting and training.
2. Exercise Room: In support of firefighter safety and health. The exercise room will provide a place for physical fitness and physical conditioning.
3. Offices for Command Staff: The building will have office space for the Fire Chief, Deputy and Assistant Fire Chief and the Officer Staff.
4. Restroom Facilities: ADA compliant Toilet and Showers will be available for fire and EMS Personnel and any public that need to use the facilities.
5. Overnight Sleeping Quarters: The Fire Department will have a dormitory area with day room and two bunk rooms which would allow up to eight members to be on-station.
6. Turnout Gear Locker Room: Provides an area in which turnout gear is stored and kept away from diesel exhaust and other hazards.
7. Drive through Apparatus Bays: The facility provides four drive through apparatus bays with fourteen foot doors.
8. Training Area: The facility provides a large training area in which fire and EMS training classes can be conducted allowing members to meet state mandated continuing education requirements

2.3 ALTERNATIVES CONSIDERED AND DISMISSED

The existing facilities are located at 797 Wright Street in the Village of Newtonsville and 6415 State Route 133 in Wayne Township. The Newtonsville Station is a 5500 square foot concrete block building with a wood truss roof built in 1954. The Newtonsville Station has six apparatus bays that must be stacked from the street side and there is no drive-through capacity. These bays are located 22 feet from the roadway. The building has a driveway on the west which is 16 feet wide and there is no room for expansion. To the east side of the building is a creek which is 12 feet away from the building. The creek bank continues to erode and will eventually threaten the building.

The Edenton Station is also a concrete block building with wood truss roof, approximately 3300 square feet and built in 1975. Approximately 10 feet to the north side of the building is a ravine which is 28 feet deep. To the east is the State of Ohio right away for Stonelick Creek. To the east is the only parking area which is large enough for two vehicles which forces responding personnel to park on the side of the State Route. Due to the land restrictions there is no way to expand or improve this facility.

Due to the land restrictions, the Newtonsville station cannot be added onto in order to provide the needed facilities that would allow the station to be used for 24 hours per day operations. The Edenton station has a significant structural defect that has resulted from the building being built on fill dirt trucked in and dumped over an embankment. This has resulted in a sinking of the foundation in the corner of the building. Previously attempts were made to stabilize the structure by driving a steel piling into the bedrock and then anchoring the foundation to the piling. This stabilized the foundation for a few years however, within the last two years the foundation has again started to sink causing cracking in the station concrete block walls and causing doors within the structures restrooms to not be able to close. Due to the structural problems with the building the building cannot be remodeled or rebuilt on this site.

SECTION THREE: AFFECTED ENVIRONMENT AND IMPACTS

3.1 PHYSICAL ENVIRONMENT

3.1.1 Geology, Seismicity, and Soils

The project area is in northeastern Clermont County, Ohio. The Illinoian Glacier (130,000 to 300,000 years ago) left the glacial deposits from which soils of this region were formed. The glacial deposits were made from limestone, sandstone or shale.

The soils are older than those from Wisconsin deposits, and are deeply worn by water. They often are acidic, poorly drained, and erosion commonly is a problem in hilly areas. The soils are low in natural fertility. The main agriculture of the region includes cash grain and general farming. More steeply sloping areas often are used for woodland or pasture. Rapid building and growth near cities is taking more and more land away from agricultural uses.

Soil of the flat flood plains is primarily Genesee silt loam and is at least five feet deep. Associated with the Genesee soil but on higher ground are Fox soils which are well drained, moderately permeable clay soils that have lime sand and gravel beneath. Fox soils are found in the project area. The general geology of the region consists of three different types of materials. On the surface are sedimentary deposits from streams, wind and glacial periods. These soils lie on a much older layer of bed rock which originated from deposits on the bottom of ancient seas. The third type of material is the hard core of igneous rocks known as basement complex and averages 3400 feet below the surface for this region.

According to the U.S. Geological Survey topographic map for the area, the approximate elevation of the proposed project site is about 901 feet above mean sea level (amsl). Surface topography is level. Soils are indicated to be flat. Since there are no slopes, slopes will not be a limiting factor to construction on the site.

The project area is a developed sparsely populated residential area. Under the Farmland Protection Policy Act, federal assistance and actions related to the renovation of existing structures and sites converted prior to the time of application for assistance are not subject to the Act (7 CFR Part 658.38).

ALTERNATIVE 1 – No Action

Under the No Action Alternative, no impacts to geology or soils would occur.

ALTERNATIVE 2 – New Fire Station (Proposed Action)

Under the Proposed Action Alternative, construction activities would not be deep enough to impact underlying geologic resources. Short-term impacts to soils would occur during the construction period and an estimated 20,000 SY of the site would be disturbed. Appropriate BMPs such as silt fence, prompt planting of vegetation, and completion of landscaping would be used to minimize runoff.

3.1.2 Water Resources and Water Quality (Surface Water)

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

Existing site topography is shown on the project map in Appendix C. The 13.538 acre project site currently is vacant and grass covered. The topography of the project site is flat and level.

The proposed project consists of a single story fire station, 10,000 square feet in size with a parking lot and sidewalks around the building. New curb, gutter, and storm sewer will be constructed to drain runoff from the parking lot. Sufficient storm water detention volume will be provided to compensate for new impervious area that is being constructed. Additional details are provided in Appendix E.

ALTERNATIVE 1 – No Action

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

ALTERNATIVE 2 – New Fire Station (Proposed Action)

Under the proposed Action Alternative, there would be no direct permanent impacts to surface waters. However, temporary short-term impacts to downstream surface waters could occur during the construction period because of soil erosion. To reduce impacts to surface water, the applicant would implement appropriate BMPs, such as installing silt fences and prompt replanting of bare soils. A storm water evaluation and report for this site was conducted by McCarty Associates 213 N. High Street, Hillsboro, Ohio 45133 in July 2006 and signed by Ryan C.

Jeter a Registered Professional Engineer in the State of Ohio. I have included in Appendix E the report.

3.1.3 Floodplain Management (Executive order 11988)

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. Specifically, EO 11988 prohibits federal agencies from funding construction in the 100-year floodplain unless there are no practicable alternatives. FEMA's regulations for complying with EO 11988 are promulgated in 44 CFR Part 9.

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, FIRM's were examined during the preparation of this EA using FEMA Floodplain mapping Viewer.

The project area is located within Zone C of the floodplain. Zone C is considered outside of the 100 year and 500 year floodplains. Flood hazards in Zone C are considered minimal. There are no local or federal flood regulations that apply to rehabilitation or construction in Zone C.

ALTERNATIVE 1 – No Action

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

ALTERNATIVE 2 – New Fire Station (Proposed Action)

Under the proposed Action Alternative, the project site is not in a floodplain and no impacts are anticipated.

3.1.4 Air Quality

The Clean Air Act (CAA) requires that states adopt ambient air quality standards. These standards have been established to protect the public from potentially harmful amounts of pollutants. Under CAA, the U.S. Environmental Protection Agency (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. The EPA has set national ambient air quality standards (NQS) for the following six criteria pollutants: ozone (O3), particulate matter (PM25, PM10), nitrogen dioxide (NO2), carbon monoxide (CO) sulfur dioxide (SO2), and lead (pb).

ALTERNATIVE 1 – No Action

Under the No Action Alternative, no impacts to the Air Quality would occur.

ALTERNATIVE 2 – New Fire Station (Proposed Action)

Under the Proposed Action excavation may result in temporary, localized dust, but will not result in a long term release of pollutants. No stationary sources of air pollution will be created by the project. Best management practices and reasonably available control measures (OAC Rule 3745-17-08(B)) shall be employed by the contractor to control fugitive dusts during construction activities. All appropriate OSHA regulations shall be followed to insure employee protection. Emissions from fuel burning engines (e.g. heavy equipment and earth moving machinery) could also temporarily increase the levels of some of the criteria pollutants, such as CO, NO₂, O₃, PM₁₀ and non-criteria such as VOC's. To mitigate these emissions, fuel-burning equipment run times would be kept to a minimum and equipment would be properly maintained.

3.2 BIOLOGICAL ENVIRONMENT

3.2.1 Terrestrial and Aquatic Environment

The proposed project site is an open grass field located next to 6306 State Route 133. The site and surrounding lands have been open field and woods for many years. The remaining land around the site to the east and north remains slightly wooded and open field. The homes in the area were built 1960 to 2002. The proposed site supports wildlife common to rural agricultural land, including some song birds, reptiles, amphibians, small mammals, and white tailed deer. Because the site and surrounding area has remained open field the area would be considered to have limited value for plant and wildlife species.

ALTERNATIVE 1 – No Action

Under the No Action Alternative, no impacts to the Air Quality would occur.

ALTERNATIVE 2 – New Fire Station (Proposed Action)

No endangered resources would be impacted, but some plants would be removed and some animals would be temporarily displaced. The site's new landscaping will include trees and bushes and a storm water pond that will provide habitat for wildlife.

3.2.2 Wetland (Executive Order 11990) / water of the U.S. Including Wetlands

The USACE regulates the discharge of dredged or filled material into waters of the U.S., including wetlands, pursuant to section 404 of the CWA. Additionally, EO 11990 (Protection of wetlands) requires Federal agencies to avoid, to the extent possible, adverse impacts on wetlands that may result from federally funded actions.

No wetlands or surface waters have been identified on-site or adjacent to it.

ALTERNATIVE 1 – No Action

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

ALTERNATIVE 2 – New Fire Station (Proposed Action)

Under the Proposed Alternative, no impacts to waters of the U.S., including wetlands, would occur because none are present on or near the proposed project site. Wetlands closest to the proposed site are outside of the area to be disturbed by grading or filling and would not be directly or indirectly impacted by construction. During the construction, the use of BMPs would minimize erosion at the site and mitigate potential impacts to the nearest water resources. Appropriate BMPs would be required at the construction site, including, but not limited to, the installation of silt fences and the re-vegetation of bare soils to minimize erosion.

3.2.3 Threatened and Endangered Species

The proposed project site is an open grass field located next to 6306 State Route 133. The site and surrounding lands have been open field and woods for many years. The remaining land around the site to the east and north remains slightly wooded and open field. The homes in the area were built 1960 to 2002. The proposed site supports wildlife common to rural agricultural land, including some song birds, reptiles, amphibians, small mammals, and white tailed deer. Because the site and surrounding area has remained open field the area would be considered to have limited value for plant and wildlife species.

In accordance with Section 7 of the Endangered Species Act (ESA) of 1973, the project area was evaluated for the potential occurrences of federally listed threatened and endangered species. The ESA requires any federal agency that funds, authorizes or carries out an action to ensure that their action is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitats. FEMA determined and the U.S. Fish and Wildlife Service concurred that the proposed action is not likely to adversely affect threatened or endangered species (Appendix D).

The project area is located within a developed area and will not result in extensive destruction or disturbance of natural habitat. An Ohio Natural Heritage Program records search was conducted on September 16, 2005 for the project area. Attached is the letter dated September 16, 2005, whereby Butch Grieszmer, Ecological Analyst, Ohio department of Natural resources has verified that upon checking the records that records of rare or endangered species in the project area exist. The site is located 0.3 mi. NNW of the junction of State Route 133 and Leuders road, Wayne Township, Clermont County, Newtonsville, Ohio, Quadrangle. *Botrychium biternatum*, Sparse-lobed Grape fern, is threatened in Ohio. A copy of the letter is included in Appendix D.

ALTERNATIVE 1 – No Action

Under the No Action Alternative, no impacts to threatened or endangered species would occur.

ALTERNATIVE 2 – New Fire Station (Proposed Action)

Under the Proposed Alternative, the site for the Fire Station is on property that is grass covered and mowed regularly. The project will require a minimum of disturbance to the vegetation; however, the contractor will be made aware of the potential Grape fern at the site. The site has been walked by Fire department personnel who were given pictures of the Grape fern and after an exhaustive search of the construction area, no Grape fern plants were found.

The natural habitat for the Sparse Lobed Grape fern include: a variety of moist, shaded conditions; low woods, mesic ravines, wooded floodplains and thickets. None of these habitats exist on the proposed construction site.

There are no existing or proposed state nature preserves at the project site. Further it is stated that they are unaware of any unique ecological sites, geological features, breeding or non-breeding animal concentrations, champion trees, state forests, scenic rivers, or wildlife areas within the project area.

3.3 HAZARDOUS MATERIALS

To identify potential hazardous materials sites in the vicinity of the project area, environmental databases were reviewed in 2005. No hazardous material sites are located on or near the proposed project site. Based upon database reviews, topographic maps and aerial photographs the following information is provided:

Thermal and Explosive Hazards: There is no bulk above ground storage of explosive or flammable materials in the vicinity of the project area and the project does not involve the construction of a hazardous facility. No further coordination is required with respect to 24 CFR Part 51 Subpart C.

Airport Hazards: The only nearby airport is a small landing strip located one mile south of the project area. The project area is not located within the clear zone or accident potential zones of the airport.

Hazardous Waste: Facilities generating, treating, storing, or disposing of hazardous wastes are regulated by the Resource Conservation and Recovery Act (RCRA). The project will not result in the generation of RCRA hazardous wastes. The project site is located in an area of residential development with no nearby RCRA Large Quantity Generators, or Treatment, Storage or Disposal Facilities.

No subsurface material testing was conducted in the project area as part of this analysis. Conclusions are based upon database reviews, topographic maps and aerial photographs.

ALTERNATIVE 1 – No Action

Under the No Action Alternative, no impacts related to hazardous materials or waste would occur.

ALTERNATIVE 2 – New Fire Station (Proposed Action)

Under the Proposed Alternative, no hazardous materials or waste-related impacts would be anticipated. Proposed construction activities would require excavation for storm water control, site grading, building foundation, but no hazardous materials are anticipated. Any hazardous materials discovered, generated, or used during construction would be handled and disposed of in accordance with applicable local, state, and federal regulations.

3.4 SOCIOECONOMICS

3.4.1 Zoning and Land Use / Transportation

The proposed project site is an open grass field located next to 6320 State Route 133. The site and surrounding lands have been open field and woods for many years. The remaining land around the site to the east and north remains slightly wooded and open field. The homes in the area were built 1960 to 2002. The proposed site is zoned residential and has been approved by the Zoning Administrator for construction of the Fire Station.

The site is located approximately 90 feet off of State Route 133. Construction on the site and sufficient are for the staging of vehicles and equipment would not impact traffic on State Route 133.

ALTERNATIVE 1 – No Action

Under the No Action Alternative, no impacts related zoning or transportation would occur.

ALTERNATIVE 2 – New Fire Station (Proposed Action)

Under the Proposed Alternative, there would be only minor temporary increases in the volume of construction related traffic in the immediate vicinity of the proposed project site. This would potentially result 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 construction. There is ample room at the site for equipment and material staging. Appropriate traffic control and signage would be utilized.

Upon completion of the proposed project no further impact to traffic is anticipated.

3.4.2 Noise

Noise can be considered unwanted sound and sound is typically measured in decibels (db). An average measure of sound is known as day-night average sound level (Ldn) and is used by agencies for estimating sound impacts and establishing guidelines for compatible land uses. An EPA document, *Information on levels of environmental Noise Requisite to Protect Public Health with an Adequate Margin of Safety* (EPA, 1974) provides a basis for State and local governments' judgments in setting standards. The document identifies a 24-hour exposure level of 70 db as the level of environmental noise that will prevent any measurable hearing loss over a lifetime. Also, levels of 55 db outdoors and 45 db indoors are identified as preventing interference and annoyance. These levels are considered those which will permit spoken conversation and other activities such as sleeping, working and recreation. The levels are not single event, or "peak" levels, but rather, they represent averages over long periods of time. An occasional higher noise levels would be consistent with a 24-hour average of 70 db, as long as a sufficient amount of relative quiet is experienced.

The sound level of a typical sound outdoors falls off in level at 6 db per doubling of distance. Assuming a typical siren is 115 db at a distance of 10 feet, at 20 feet it will be 109 db, at 40 feet it will be 103 db, at 80 feet it will be 97 db, at 160 feet it will be 91 db, at 320 feet it will be 85 db, at 640 feet it will be 79 db, at 1280 feet it will be 79 db, and at 2560 feet it will be 73 db. The proposed project site is located in a sparsely populated residential area.

ALTERNATIVE 1 – No Action

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

ALTERNATIVE 2 – New Fire Station (Proposed Action)

Under the Proposed Action Alternative, temporary short-term increases in noise levels would be anticipated during construction. To reduce noise levels during that period, construction activities would be restricted to normal business hours. Equipment and machinery utilized at the site would meet all local, State, and federal noise regulations.

Over the long term, vehicle traffic would increase at the proposed site, primarily when Fire and EMS personnel are training or responding to traffic accidents, fires, severe weather, or other emergency events. The increased traffic and sirens would increase noise level, but these increases would be very short in duration and would occur infrequently. It is anticipated that these noise peaks would not exceed the EPA's 24-hour exposure levels.

3.4.3 Public Service and Utilities

Public services to the proposed site are provided by a number of private businesses. Water service is provided by Western Water Co., Electric service is provided by Duke Energy, Propane Service is provided by Auxier Gas, Phone and data services are provided by Time Warner Cable, Sewage would be by an on-site septic system. Police service to the area is provided by the Clermont County Sherriff's office. Fire and EMS Service is provided by Wayne Township Fire and Rescue.

ALTERNATIVE 1 – No Action

Under the No Action Alternative, no impacts related to public services or utilities would occur.

ALTERNATIVE 2 – New Fire Station (Proposed Action)

Under the Proposed Action Alternative, all of the public service and utilities that are listed above would be provided to the new facility. The new facility however, would provide a significant improvement to the Fire and EMS delivery throughout the Township.

3.4.4 Environmental Justice (Executive Order 12898)

EO 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) mandates that Federal agencies identify and address, as appropriate, disproportionate 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.

U.S. Census data for Wayne Township, Clermont County, Ohio states that 98.3% of the population is White, 0.5% is African American, 0.2% American Indian or Alaska native, 0.1% Asian, 0.7% two or more races, and 0.0% some other race (U.S. Census Bureau 2000). No concentrations of minority or low-income populations are identified near the proposed project site.

ALTERNATIVE 1 – No Action

Under the No Action Alternative, there would be no disproportionately high or adverse impacts on minority or low-income populations.

ALTERNATIVE 2 – New Fire Station (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 would benefit all of the population within Wayne Township Fire and Rescue response district.

3.4.5 Safety and Security

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 Occupational Safety and Health Act (OSHA) regulations. EO 13045, Protection of children, requires Federal agencies to make 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 the safety of the population would occur. If an emergency event were to occur, area residents would continue to be served by the existing Wayne Township Fire and Rescue Stations.

ALTERNATIVE 2 – New Fire Station (Proposed Action)

Under the Proposed Action Alternative, construction of the new Fire Station would provide increased protection for area residents during an emergency.

Construction activities would present safety risks to those performing the activities. Access to the site would be restricted to protect the public and to minimize risks to safety and human health. 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.

3.5 HISTORIC AND CULTURAL RESOURCES

In addition to review under NEPA, consideration of effects to historic properties is mandated under Section 106 of the National Historic Preservation Act (NHPA), as amended, and implemented by 36 CFR Part 800. Requirements include identification of significant historic properties that may be affected by the Proposed Action. 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) (36 CFR 60.4).

As defined in 36 CFR Part 800.16(d), the Area of Potential effect (APE), "is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist."

In addition to identifying historic properties that may exist in the proposed project's APE, FEMA must also determine, in consultation with the appropriate State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO), what effect, if any, the undertaking will have on historic properties. Moreover, if the project would have an adverse effect on these properties, FEMA must consult with SHPO/THPO on ways to avoid, minimize, or mitigate the adverse effect.

ALTERNATIVE 1 – No Action

Under the No Action Alternative, no impacts related to Historical or Cultural Resources would occur.

ALTERNATIVE 2 – New Fire Station (Proposed Action)

Under the Proposed Action Alternative, construction of the new fire station has the potential to impact historic or cultural resources. Evaluation of the Proposed Action is described in Sections 3.5.1 through 3.5.3, below, with supporting documentation provided in Appendix D.

3.5.1 Historic Structures

Although the Ohio SHPO commented on this project in 2005, on January 26, 2010, Bill Palmer, Reviews Manager, requested further consultation regarding historic properties for this undertaking. In preparation for consultation, FEMA consulted Ohio's GIS Internet Mapping Framework, which provides the location of historic structures and sites of historic interest, including those listed on the National Register of Historic Places and the Ohio Historic Inventory. FEMA used this tool to investigate historic sites in Wayne Township and determined that no historic structures or sites are located within the project APE. FEMA also assessed the undertaking's potential to affect unidentified historic properties that might be present in the APE. On February 5, 2010, an application form, letter and supporting documentation were submitted to the Ohio SHPO with a request for comment on this federal undertaking. The request included a description of Alternative 3 and the APE. The documentation noted that FEMA identified no historic properties in the APE and found that there was no effect from this undertaking on historic properties.

3.5.2 Archaeological Resources

The SHPO considers known archaeological sites when commenting on a finding. Concurrence with a finding of no historic properties affected confirms that no known archaeological sites are present in the APE. However, in order to safeguard unidentified archaeological resources that may exist below ground within the APE, during construction all ground-disturbing activities will

be closely monitored. Should human remains or items of historic or archaeological interest be discovered during construction, all ground-disturbing activities will cease and FEMA, the SHPO and, in the case of human remains, the Coroner's office will be notified. Those responsible for the project site will take all reasonable measures to avoid or minimize harm to the property, and work will not resume until FEMA completes consultation with the SHPO and other affected consulting parties.

3.5.3 Tribal Coordination and Religious Sites

On February 5, 2010, requests for evaluation of the project area for sites of known archaeological, religious, or cultural significance, referred to as Traditional Cultural Properties (TCPs), were sent to federally-recognized tribes that may have an interest in projects located in Clermont County, Ohio. Those tribes included Absentee-Shawnee Tribe of Indians of Oklahoma, the Eastern Shawnee Tribe of Oklahoma and the Shawnee Tribe of Miami, Oklahoma. The communication requested a response within 30 days. The 30-day response period ended on March 7, 2010 without comment from these tribes regarding effects to TCPs from this undertaking.

Table 1: Impact and Mitigation Summary		
Affected Environment	Impacts	Mitigation
Geology and Soils	Alt 2: No impacts to geology, minimal, short-term impact to soils during construction digging and grading.	Appropriate BMPs: silt fence, prompt planting of vegetation and landscaping to minimize run off.
Water Quality (including Surface water and Ground water)	Alt 2: Short-term impacts to surface water are possible during construction. No impact to ground water resources. Potable water is supplied to the site from Western Water Co	A Storm water Management and erosion Control plan and implementation of storm water BMPs will minimize runoff.
Floodplains	Alt 2: No impacts anticipated	None
Air Quality	Alt 2: Short-term impacts from dust and emissions from equipment would occur during construction.	Dust control measures such as watering down construction areas would be implemented as needed. Fuel-burning equipment run times could be minimized and equipment properly maintained.
Terrestrial and Aquatic Environments	Alt 2: No impacts are anticipated to aquatic environments. Prior to construction of the structure, parking area, and storm water detention basin, about 10,000 SY of existing vegetation and topsoil will be stripped from the site.	Topsoil will be replaced in areas of the site and landscaping will include grasses, trees, bushes, and storm water basin. This will restore some of the terrestrial environment and create a new aquatic environment.
Waters of the U.S. Including Wetlands	Alt 2: No impacts anticipated	None
Threatened and Endangered Species	Alt 2: No impacts anticipated	Contractor will be made aware of the potential Grape fern at the site and advised to protect the plant in accordance with Ohio department of Natural Resources guidelines

Table 1: Impact and Mitigation Summary		
Affected Environment	Impacts	Mitigation
Hazardous Materials	Alt 2: No impacts anticipated	Any hazardous substances generated, or used would be handled and disposed of in accordance with applicable local, State and Federal regulations.
Zoning, Land Use, and Transportation	Alt 2: No impact to zoning and land use of the site. Short-term increase in the volume of construction related traffic in the vicinity of the site.	During construction, vehicles and equipment would be stored on-site to the extent possible. Traffic control and signage would be used as needed.
Noise	Alt 2: Short-term impacts from heavy equipment would occur during construction. Long-term impacts would include increased traffic and siren noise from fire and EMS vehicles.	Construction would be limited to normal business hours and equipment would meet local, State, and Federal noise regulations. The infrequent and short duration noise impacts from Fire and EMS vehicles would not cause 24-hr exposure levels to be exceeded
Public Services and Utilities	Alt 2: No impact anticipated.	None
Environmental Justice	Alt 2: No disproportionately high or adverse effect on minority or low-income populations are anticipated.	None
Public Health and Safety	Alt 2: No adverse impacts anticipated. Long-term improvements to public safety would result from improved facilities.	None
Historic and Cultural Resources	Alt 2: No impacts anticipated.	None.

SECTION FOUR: 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 and 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.

No proposed or occurring actions by others were identified in the vicinity of the proposed project site; therefore, no cumulative impacts are anticipated.

SECTION FIVE: PUBLIC PARTICIPATION

FEMA is the lead Federal agency for conducting the NEPA compliance process for the Wayne Township Fire and Rescue Station Construction Grant project in Wayne Township, Clermont 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 and responses received from the agencies. Agencies consulted are listed in Section 6. Agency responses are provided in Appendix D.

The proposed project has been discussed at numerous Wayne Township, Board of Trustees Meetings that are open to the public and usually well attended.

The Wayne Township Fire and Rescue will notify the public of the availability of the draft EA through publication of a public notice in a local newspaper. FEMA will conduct a public comment period commencing on the initial date of publication of the public notice.

SECTION SIX: AGENCY COORDINATION AND PERMITS

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

1. Ohio Department of Natural Resources, Mr. Butch Grieszmer, Ecological Analyst.

2. Ohio Historical Society, Ohio Historic Preservation Office, Mr. Bill Palmer.
3. Clermont Soil and Water Conservation District.
4. Wayne Township Board of Trustees.
5. Ohio Office of Housing and Community Partnerships, Mr. Timothy M. Allen, Environmental Review Specialist
6. Federally-recognized Native American Tribes

In accordance with applicable local, State, and federal 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 may be required prior to construction:

1. Building Permit
2. Driveway Construction Permit
3. EPA - Erosion Control and Storm water management Permit
4. EPA - Sanitary Sewer Permit.

SECTION SEVEN: REFERENCES

City-Data.com <http://www.city-data.com/township/Wayne-Clermont-OH.html>

FEMA Flood Insurance rate Map, Clermont County, Ohio, Panel 160

U.S. Department of Agriculture (USDA), Natural Resources Conservation Service, 2009.
<http://websoilsurvey.nrcs.usda.gov>. Accessed: June 2009.

U.S Fish and Wildlife Service (USFWS), 2009
http://wetlandfws.er.usgs.gov/imf/imf.jsp?site=NWI_CONUS

U.S. Environmental Protection Agency (EPA), 2009. Air Quality.
<http://www.epa.gov/airtrends/where.html>

U.S. Environmental Protection Agency (EPA), 2009.
<http://www.epa.gov/myenv/MYENVIEW.results2?pQuery=&minx=-84.17793&miny=39.15163&maxx=-84.04060&maxy=39.23146&mw=750&mh=290&ve=12,39.19145,-84.10920&pText=45122,OH>

U.S. Environmental Protection Agency (EPA), 1974.
Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate margin of Safety.

SECTION EIGHT: LIST OF PREPARERS

Preparation and quality control review of Draft and Final EA:

David G. Moulden, Fire Chief, Wayne Township Fire and Rescue

Amanda C. Ratliff, Regional Environmental Officer, FEMA RV

Nicholas Dorochoff, Historic Preservation Specialist, FEMA RV