Draft Environmental Assessment
Mercy Hospital Joplin
Permanent Medical Facilities
Joplin, Newton County Missouri
FEMA-1980-DR-MO
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FEMA

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Table of Contents

1.0 Introduction 1
1.1. Purpose and Need for Action 2
1.2. Determination of Environmental Significance 3
2.0 Proposed Action and Project Alternatives 4
2.1 Sites Considered and Dismissed 4
2.1.1 Reuse of the Existing Site 4
2.1.2 Other Sites Considered and Dismissed 4
2.2 No Action Alternative 7
2.3 Proposed Action (Permanent Medical Facilities on the 120-Acre Site) 7
2.4 Project Location 7
2.5 Site Description 7
2.6 Project Description 8
3.0 Affected Environment and Environmental Consequences 10
3.1 Geology and Soils 13
3.1.1 Proposed Action 14
3.1.2 No Action Alternative 14
3.2 Hydrology and Floodplains 14
3.2.1 Proposed Action 14
3.1.2 No Action Alternative 14
3.3 Wetlands 14
3.3.1 Proposed Action 15
3.3.2 No Action Alternative 15
3.4 Water Quality 15
3.4.1 Proposed Action 15
3.4.2 No Action Alternative 16
3.5 Air Quality 16
3.5.1 Proposed Action 16
3.5.2 No Action Alternative 17
3.6 Vegetation and Wildlife 17
3.6.1 Proposed Action 17
3.6.2 No Action Alternative 17
3.7 Threatened and Endangered Species 17
3.7.1 Proposed Action 18
3.7.2 No Action Alternative 19
3.8 Cultural Resources 19
3.8.1 Proposed Action 19
3.8.2 No Action Alternative 20
3.9 Socio-economic 20
3.9.1 Proposed Action 20
3.9.2 No Action Alternative 21

3.10 Environmental Justice 21
3.10.1 Proposed Action 22
3.10.2 No Action Alternative 22
3.11 Noise 22
3.11.1 Proposed Action 23
3.11.2 No Action Alternative 23
3.12 Safety and Security 23
3.12.1 Proposed Action 23
3.12.2 No Action Alternative 24
3.13 Hazardous Materials and Toxic Wastes 24
3.13.1 Proposed Action 24
3.13.2 No Action Alternative 25
3.14 Traffic and Transportation 25
3.14.1 Proposed Action 25
3.14.2 No Action Alternative 26
4.0 Cumulative Impacts 27
4.1 Proposed Action 27
4.2 No-Action Alternative 28
5.0 Mitigation 31
5.1 Geology and Soils 31
5.2 Hydrology and Floodplains 31
5.3 Wetlands 31
5.4 Water Quality 31
5.5 Air Quality 31
5.6 Vegetation and Wildlife 32
5.7 Threatened and Endangered Species 32
5.8 Cultural Resources 32
5.9 Socio-economic 32
5.10 Environmental Justice 32
5.11 Noise 33
5.12 Safety and Security 33
5.13 Hazardous Materials and Toxic Wastes 33
5.14 Traffic and Transportation 33
6.0 Public Involvement 35
6.1 Website 35
6.2 Public Meetings 35
6.2.1 August 16, 2011 Open House 35
6.2.3 September 20, 2011 Open House 35
6.2.4 October 4, 2011 Open House 35
6.2.5 October 10, 2011 Public Hearing 36
6.2.6 October 17, 2011 Public Meeting 36
6.2.7 October 21, 2011 Public Hearing 36

6.2.8 November 7, 2011 Public Hearing 36
6.2.9 December 12, 2011 Public Hearing 36
6.2.10 December 12, 2011 Public Hearing 37
6.2.11 January 3, 2012 Public Hearing 37
6.2.12 January 3, 2012 Public Hearing 37
6.2.13 January 17, 2012 Public Meeting 37
6.2.14 January 20, 2012 Public Hearing 37
6.2.15 Other Communications in the Local Community 37
7.0 Agencies Consulted 38
8.0 List of Preparers 39
9.0 References 40

Tables

1 Affected Environment and Environmental Consequences, Joplin, Missouri 11

Appendices

A. Correspondence 41

Acronyms and Abbreviations

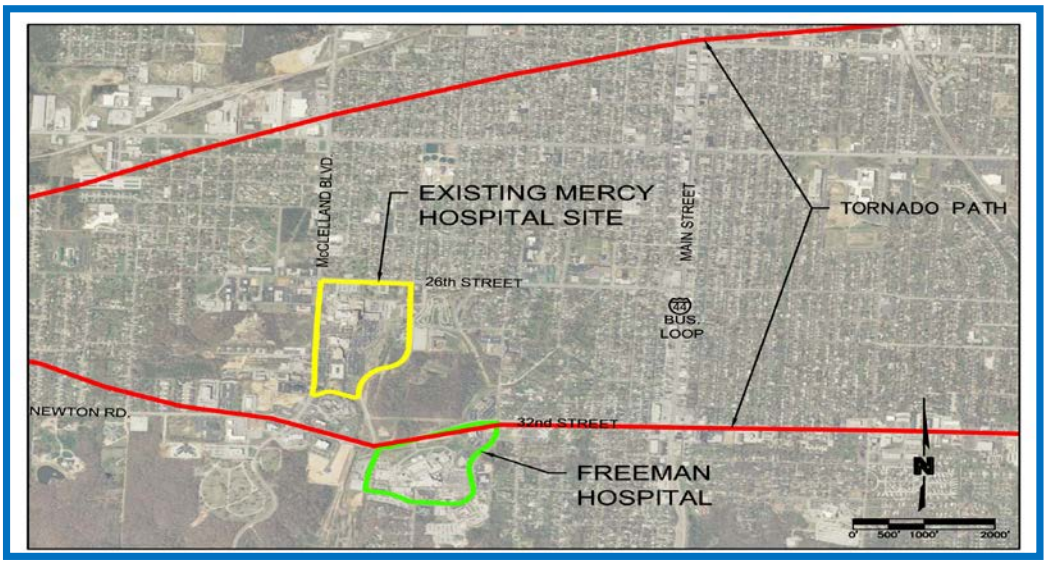
AMSL	Above Mean Sea Level
BMP	Best Management Practices
CFR	Code of Federal Regulations
DEA	Draft Environmental Assessment
DHS	U.S. Department of Homeland Security
EA	Environmental Assessment
EDR	Environmental Data Resources, Inc.
FEMA	Federal Emergency Management Agency
FINDS	Facility Index System
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
GIS	Geographic Information System
LUST	Leaking Underground Storage Tank
MDC	Missouri Department of Conservation
MDNR	Missouri Department of Natural Resources
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
RCRA	Resource Conservation and Recovery Act
SHPO	State Historic Preservation Office
SQG	Small-Quantity Generator
SWHS	State Hazardous Waste Site
TCP	Traditional Cultural Properties
UFAS	Uniform Federal Accessibility Standards
USFS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1.0 Introduction

This project is being requested for Federal Emergency Management Agency (FEMA) funding under the Public Assistance Grant Program. This Draft Environmental Assessment (EA) documents the results of a study of the proposed action's potential environmental impacts and has been prepared in compliance with the National Environmental Policy Act (NEPA) of 1969; the President's Council on Environmental Quality regulations implementing NEPA (Title 40 of the Code of Federal Regulations [CFR], Part 1500-1508 [49 CFR 1500-15008]); and the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regulations implementing NEPA (44 CFR 10.9).

FEMA is working with partners at the local and state levels and with other Federal agencies to coordinate the response to the devastating tornado that struck Joplin, Jasper County, Missouri on May 22, 2011. The tornado was a massive EF5 multiple vortex tornado with winds over 200 mph (peaking at 225 to 250 mph). According to the local branch of the American Red Cross, approximately 25% of the City of Joplin was destroyed. The Missouri Emergency Management Agency reported more than 990 injured. To date, the death toll from the tornado is 157. In addition to the tornado deaths, a policeman was struck by lightning and killed while assisting with recovery and cleanup efforts the day after the storm. Mercy Hospital Joplin (formerly known as St. John's Regional Medical Center) was severely damaged by the tornado and suffered five patient fatalities as a direct impact. Before the tornado on May 22, 2011, Mercy Hospital Joplin was a 367 bed acute care facility that provided state-of-the-art comprehensive healthcare services for 19 surrounding counties in Missouri, Oklahoma, Kansas, and Arkansas. Moreover, the close proximity between Mercy Hospital Joplin and Freeman Health System could have made this tragedy even worse. Had the path of the tornado shifted slightly, Freeman could have been similarly impacted as was Mercy Hospital Joplin (Figure 1-1).

Figure 1-1 Existing Hospital Site

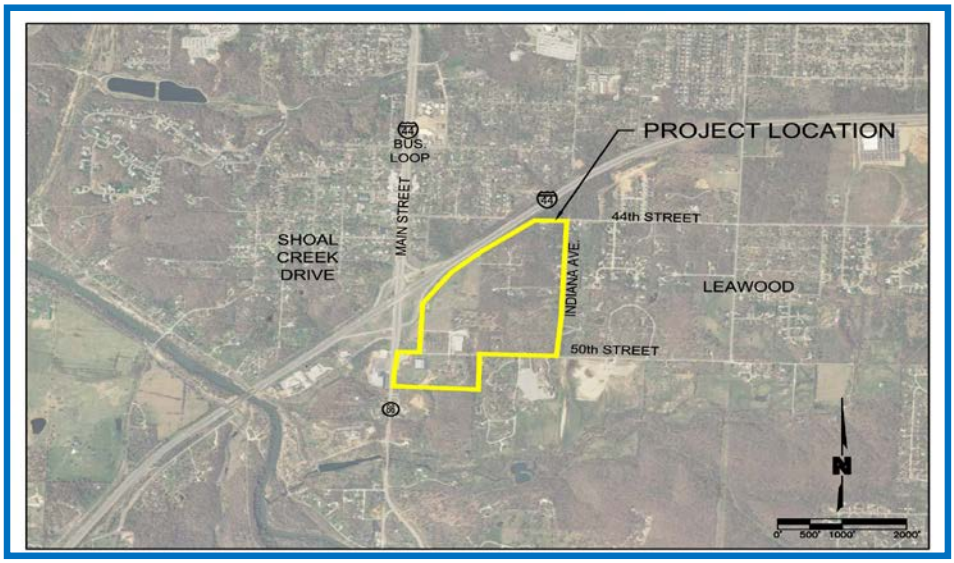


Mercy

1.1. Purpose and Need for Action

On May 23, 2011, the federal disaster declaration FEMA-1980-DR-MO, which was signed by President Obama on May 9, 2011, was extended to authorize FEMA to provide federal assistance to the Joplin Tornado Recovery. FEMA is authorized to provide disaster assistance funds in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 USC 5121-5206, as amended (Stafford Act, Public Law 93-288). Assistance authorized by the statute is available to individuals, families, state and local governments, and certain nonprofit organizations. The purpose of this project is to assist Mercy Hospital Joplin in constructing permanent medical facilities at a new location so health professionals can continue to provide vital medical and health related services and facilities to the residents of Joplin and the surrounding region and to relieve the burden that the loss of the hospital has placed on the remaining medical facilities in the region. The proposed site location for the new medical and health care facilities is shown below in Figure 1-2.

Figure 1-2 Project Location Map



Mercy

Mercy Hospital Joplin provided temporary services starting one week after the tornado utilizing a Disaster Medical Assistance Team (DMAT) medical facility tent for three months. Mercy Hospital Joplin moved to its current temporary location at 2817 St. John's Blvd., Joplin, MO, a modular facility with 36 Medical Surgical Beds and 10 Intensive Care beds. The limited service available in the area has caused some patients to be forced to travel outside of the area for medical treatment or wait longer for patient care (diagnostics and treatment) or to forego care all together. This situation has significantly reduced the quality of medical care available to a substantial portion of the region, including the indigent, the uninsured, the elderly, as well as private pay patients, and has further resulted in the reduction of access to medical care for all residents in Joplin and surrounding counties. This EA incorporates by reference, the Final Environmental Assessment for Temporary Medical Facilities and Finding of No Significant Impacts (FONSI) issued by FEMA for design,

construction and operation of temporary medical facilities to provide immediate and necessary medical and health care services to the people of Joplin and surrounding area.

Mercy Hospital Joplin is one of two Level II Trauma centers serving this region. The other facility, Freeman Health System, is not equipped to be sole service provider to the region for tertiary care. Both Mercy Hospital Joplin and Freeman are Level II trauma centers and without this designation critical patients would likely have to leave the area for treatment, causing unnecessary delays in care. This service area is comprised of 37% governmental payers and 18% uninsured, leaving less than half of the area covered by private insurance. Freeman Health System is expanding bed capability, but it will not address the need for services in the community in its entirety (e.g., behavioral health beds). Certain patient care needs are not presently being met; as an example certain patients are going untreated for chronic conditions.

1.2. Determination of Environmental Significance

The CEQ NEPA Implementing Regulations (40 CFR 1508.27) define significance in terms of context and intensity. For context, FEMA took into account the location and physical setting of the proposed site. For intensity, FEMA took into account the following factors from the CEQ NEPA Regulations:

1. Unique characteristics of the geographic area such as proximity to historic or cultural resources;
2. Whether the action is related to other actions with individually insignificant but cumulative significant impacts;
3. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources, and;
4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

Significance threshold criteria are fully described in Section 3.0 as applied to each natural and human impact area evaluated in the EA. The purpose of these criteria is to provide an objective standard that would be clear and transparent to the general public.

2.0 Proposed Action and Project Alternatives

NEPA requires the investigation and evaluation of reasonable project alternatives as part of the project environmental review process. Two alternatives are addressed in this EA: the No Action Alternative 1, where FEMA would not provide funding for the construction of medical facilities and Alternative 2, the Proposed Action, where FEMA would fund the construction of Mercy Hospital Joplin permanent medical facilities in Joplin, Newton County, Missouri.

2.1 Sites Considered and Dismissed

2.1.1 Reuse of the Existing Site

Consideration was given to using more of the damaged facility; however, due to the potential for biohazards, the widespread damage, the need for demolition access to the existing hospital site and associated infrastructure, and the need to use the existing parking lots for vehicles, this alternative was dismissed. Another concern for this site is the close proximity to Freeman in the event of another natural disaster.

Moreover, the original site of the hospital has significant geotechnical problems that make rebuilding difficult. According to a Phase I Geological/Geotechnical Report prepared by Palmerton and Parrish in June of 2009 for St. John's Regional Medical Center, the campus had significant mine features under many of the buildings. A major underground mine was plotted below the following buildings: Oncology Clinic Addition (which was footing supported), the edge of the Main Hospital Building and Chapel Mechanical Room, the southeast portion of the Surgery Building Addition (footing supported). Before the tornado in 2011, a parking garage constructed in 1990 had to be demolished (well before the conclusion of its useful life) due to settlement causing structural problems. Another major mine is plotted below medical office buildings 1 and 2.

2.1.2 Other Sites Considered and Dismissed

2.1.2.1 Site Selection Criteria

A Site Selection Committee was formed to develop a logical process to quickly and efficiently identify and analyze potential locations to rebuild the hospital. By the end of the process, the Site Selection Committee evaluated thirteen possible locations in Joplin to rebuild the hospital.

The Site Selection Committee engaged the services of several local real estate brokers and the committee and brokers began working on a list of potential land parcels. The Committee began by identifying one of the most important attributes needed for a new location. The research indicated the population of Joplin swells from approximately 50,000 to almost 140,000 during the day. The population of communities receiving services from Mercy Hospital Joplin is over 363,000. Based on this strong daily influx of a commuting population, it was deduced a strong consideration should be given to potential locations which offered major roadway

and arterial access because of the traveling population. The Site Selection Committee then identified the additional site traits which would factor into determining which of the sites would be the most advantageous. The additional criteria were:

- Ease of patient access
- Proximity to population bases
- Visibility of hospital created by the site
- Environmental considerations
- Congruency with city planning objectives
- Topography
- Available utility infra-structure improvements
- Potential mining remnants and geological problems from previous mining

2.1.2.2 Sites Considered and Dismissed

The Site Selection Committee engaged several local real estate brokers and along with the committee began working on a list of potential land parcels based on the criteria discussed previously. The Site Selection Committee and the Real Estate Brokers assembled a list of thirteen potential sites for consideration.

2.1.2.3 Modification of Alternatives Based on Public or Consulting Party Input

When Mercy Hospital Joplin leadership established the Site Selection Committee there was a focus placed on establishing a membership which represented the local government, civic leaders and leaders in local industry. The Site Selection Committee reviewed and discussed the thirteen sites. Based on the site selection criteria, the committee was able to narrow the options down to the three best sites. The Site Selection Committee then listed the attributes and challenges associated with each of the sites.

- Option 1 – Located south of I-44 and east of Main Street – 120 acres

  Attributes: Prominent visibility-elevated grade; prominent visibility-future development; easy access from major highways; no mining subsoil issues; site egress (3 sides); topography allows walkout design; strong traffic counts on main and I-44; allows for lower costs at temp hospital; controlled geography; and minimal grading/retention issues.

  Challenges: Two of six land owners were motivated sellers; utility upgrades needed; property bisected by 50th Street.

- Option 2 – Located south of I-44 and east of Range Line – 90 acres

  Attributes: Moderate visibility-elevated grade; high Buxton score; easy access from major highways; no mining subsoil issues; site egress (3 sides); 44th Street planned for 4 lanes; strong car counts on Range Line and I-44; and likely less utility expense.

  Challenges: Difficult owner, multifamily Entity; Uncertain Parcel Division;

Visibility Risk Future Development; Flood plain on a portion of the property; construction would require impacts to stream on site.

- Option 3 – Located SE of intersection of Zora and M-249 – 500 acres

Attributes: Moderate visibility-elevated grade; high Buxton score; easy access from major highways; no mining subsoil issues; site egress (3 sides); 44th street planned for 4 lanes; high car counts on Range Line and I-44; and likely less utility improvement expense.

Challenges: Extensive underground mining in the area; difficult owner, multi-family entity; uncertain parcel division; visibility risk future development; and flood plain on a portion of the property, require grading and fill.

2.1.2.4 Conclusions

The review of the options by the Site Selection Committee led to a decision that option number one offered the best site attributes. Primarily, option number one offered the same benefits as options two and three; however, the potential impacts to the natural and physical environment were negligible compared to options two and three. The second and third options were not chosen because of the factors explained below.

- The second site option was not chosen because of several factors. The most heavily weighted factor in dismissing this location was the potential for adverse environmental impacts. Part of the site falls in a flood plain and incorporates blue stream areas. The implications of this mean it would be very expensive site work and grading to prepare the location, far more than the other options. Because of the floodplain, part of the site would be undevelopable. Additionally, the presence of blue stream requires consulting and analysis by the Army Corp of Engineers and would greatly increase mitigation requirements and extend timeframes. It was an important goal to get the hospital rebuilt as quickly as possible. Lastly, the land is owned by 16 family members who had differing opinions about all issues. After working with the family for almost a month, we could not get an answer regarding the size of the parcel they would sell or pricing.
- The third option was not chosen because the site is located in an area which has been heavily mined for lead. The potential for underground mines lead to greater uncertainty and long-term stability of the site. Although the aerial photos show much of the mine chert has been removed, there will likely be soil contamination issues to be dealt with which will increase costs and liability greatly. The group felt it did not make sense to put a hospital in an area which had potential environmental challenges. From a practical standpoint, few of the mines in the Joplin area have ever been filled. There was concern that solid bedrock would be found to build on in this area. Also, the group also felt freeway access and visibility was not as good as the first option.

2.2 No Action Alternative

The tornado severely damaged Mercy Hospital Joplin. Although a second facility, the 193-bed Freeman Hospital, serves local and regional residents, the loss of 367 hospital beds (67 % of local hospital bed capacity) at Mercy Hospital Joplin has stressed the remaining medical facilities and health care systems, as well as medical professionals and staff, both in Joplin and in surrounding communities such as Carthage and Springfield, Missouri. As of the end of April, 2011, Mercy treated 15,310 inpatients and 124,307 outpatients, on an annualized basis. The no-action alternative would result in the continued stress on health care systems as well as medical professionals and staffing. Citizens from the Joplin and regional area would not receive an adequate level of routine, specialized, or emergency health care services. In addition there would be an economic stress on the area from the loss of employment opportunities at the facility. All of this would result in further health, economic and personal hardships for residents of the area, and would further strain the city and county's social and economic infrastructure.

2.3 Proposed Action (Permanent Medical Facilities on the 120-Acre Site)

In considering the "range of reasonable alternatives," the hospital considered their immediate options, including use of the existing, damaged, facilities. In the aftermath of the destruction, it was necessary the hospital set up a field hospital on an outlying portion of the facility, opposite S. Pitcher Avenue. Consideration was given to using more of the facility, however, due to the potential for biohazards, the widespread damage, and the need for demolition access to the existing hospital site and associated infrastructure, and the need to use the existing parking lots for vehicles, this alternative was dismissed. The region lost a 367-bed facility with a full range of services and timing became a crucial factor. The Proposed Action provides a more complete medical facility for people within the local and regional communities. Under this alternative the medical facilities would be located at 50th and Main, south of I-44 about four miles away from the old Mercy Hospital Joplin location. The new medical facilities proposed site ("site") is 120 acres in size and would provide facilities necessary to provide an increased level of medical services and health care to people and families within the local and regional communities.

2.4 Project Location

The site is bordered on the north by Interstate 44, to the east by Indiana Ave, on the south by 50th Street, and to the west by Hearnes Boulevard/ US Highway 86. In addition a separate tract of land lies south of 50th Street, bound to the north by 50th Street to the east by residential community in the City of Leawood, to the south by vacant and commercial property, to the west by Hearnes Boulevard/US Highway 86 (Figure 1-1 Proposed Location Map). The proposed site is located in Section 26, Township 27 north, Range 33 West, City of Joplin, Newton County, Missouri (Latitude 37o02'06" N and Longitude 94o30'34" W).

2.5 Site Description

The site lies at elevations from approximately 968 to 1028 feet AMSL and consist of land that is currently being cleared, existing structures and utilities removed, and re-graded to support future development. The proposed site is split between two tracts, as described in Section 2.3, with approximately 100 acres north of 50th Street and an additional 16 acres south of 50th. The site is

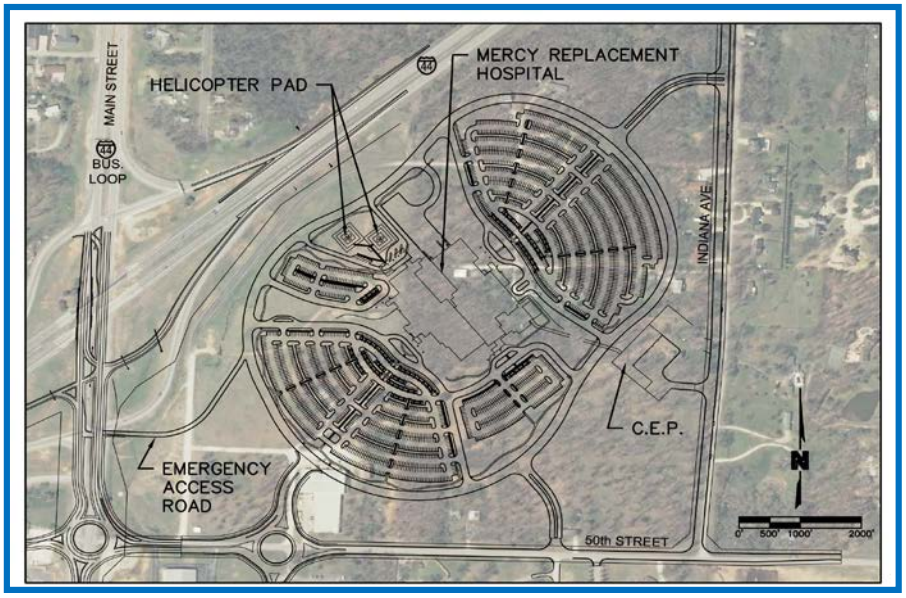
owned by Mercy Health Southwest Missouri/Kansas Communities f/k/a Mercy Health System-Joplin, Inc., a Missouri not-for-profit Corporation. In general, the northern tract is made up of a high point toward the center of the site sloping equally in all directions towards the tract boundary. The southern tract consists of a high point along the northern boundary along 50th Street, sloping southerly toward the south and southeast. No existing flood plains, wet lands, or jurisdictional waters have been identified on the proposed property.

2.6 Project Description

The Proposed Action would involve the development of a new 308 bed hospital with a full range of inpatient and outpatient diagnostic and treatment services. The facility also integrates an outpatient based clinic building for specialty physicians and service lines. The clinic is directly linked to the hospital allowing for efficient delivery of health care services and the collaboration of both the medical staff and physicians. The facility design allows for growth in critical diagnostic departments as well as recruitment of support and medical staff. Detached buildings housing Behavioral Health and Hospice service lines are positioned on the campus so the main hospital/clinic resources can be shared. Future building sites are created to accommodate growth of the community and additional health care services. The 120 acre campus includes adequate parking resources located adjacent to main entry points allowing visitors and staff to efficiently gain building access. An internal loop road system provides access to the parking fields while creating a safe environment for pedestrians circulating to building entries. Emergency vehicle traffic is clearly separated from the general traffic to improve access times and increase safety for all site users.

Site preparation would require grading to construct building pads, roads, parking lots, helipads, walkways, and all utilities related to the infrastructure of the complex. Utility services including water, sewer, electric, and telephone would be extended to the site from adjacent areas. In addition, storm water management facilities would be constructed in accordance with local, state and Federal requirements. Best management practices (BMPs) would be implemented to reduce or eliminate runoff impacts during proposed construction activities and to reduce the potential for soil erosion after construction. A safety fence would be installed and maintained around the site perimeter during construction. The facilities would include the development of temporary gravel pads or concrete footings for foundations, gravel and asphalt roadways, parking, walkways waterline installation, phone and cable, electric, and modular components for the structures. The contractor will ensure that the new utility infrastructure is compatible with the capacity needed for the remainder of the city and/or county. Access to the site from surrounding roads along with internal circulation will also be designed in coordination with applicable city and/or county staff. The hospital footprint includes: for the main building, behavioral health and hospice structures, helipad, parking, and roads/walkways. The existing acreage cleared/graded area would be fully utilized, thereby reducing the extent of further clearing that is necessary to construct the facilities. The attached Figure 2-1 depicts the estimated footprint of the project.

Figure 2-1 Proposed Hospital Site



Mercy

3.0 Affected Environment and Environmental Consequences

In order to meet the proposed purpose and need of permanent medical facilities, an environmental review process was conducted to analyze all natural and human environmental issues associated with the proposed site. The environmental review process included field reconnaissance at the site, background research, and agency consultation. The field reconnaissance was conducted on July 27, 2011; September 07, 2011 and January 09, 2012. Background research consisted of a review of census statistics, wetlands maps, FEMA floodplain maps, hazardous materials databases, archaeological and historic structures databases, threatened and endangered species information, soil surveys, and other available information. Agency consultation through verbal and written communications was conducted with the Environmental Protection Agency (EPA), Natural Resources Conservation Service (NRCS), U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), Missouri Department of Conservation (MDC), Missouri Department of Natural Resources (MDNR) and Missouri State Historic Preservation Office (SHPO).No significant concerns were expressed by these agencies.

The following table (Table 1) summarizes the results of the environmental review process for the various resource areas (e.g., water quality, air quality, etc.). Definitions of the impact intensity are described below:

Negligible: The resource area would not be affected, or changes would be either non-detectable or if detected, would have effects that would be slight and local. Impacts would be well below regulatory standards, as applicable.

Minor: Changes to the resource would be measurable, although the changes would be small and localized. Impacts would be within or below regulatory standards, as applicable. Mitigation measures would negate any potential adverse effects.

Moderate: Changes to the resource would be measurable and have both localized and regional scale impacts. Impacts would be within or below regulatory standards, but historical conditions are being altered on a short-term basis. Mitigation measures would be necessary and would reduce any potential adverse effects.

Major: Changes would be readily measurable and have substantial consequences on a local and regional level. Impacts would exceed regulatory standards. Mitigation measures to offset the adverse effects would be required to reduce impacts, though long-term changes to the resource would be expected.

Table 1 Affected Environment and Environmental Consequences

Affected Environment/ Resource Area	Impact				Mitigation	Agency Coordination/ Permits	Comments
	Negligible	Minor	Moderate	Major			
Geology & Soils	X				BMPs		The implementation of construction BMPs will reduce sedimentation.
Hydrology & Floodplains (Executive Order 11988)	X				None		Site is outside designated FEMA 100 year floodplain according to FEMA floodplain maps.
Wetlands (Executive Order 11990)	X				None		The site does not contain Jurisdictional wetlands.
Water Quality		X			Implement construction BMPs. Install silt fences/straw bales to reduce soil erosion and sedimentation. Construction contractor to cover any fill stored on site and implement requirements of NPDES stormwater discharge permit, if required.	NPDES stormwater permit or waiver to be obtained by construction contractor.	Stormwater plans/ drainage system will be required to meet State and local and local requirements.
Air Quality		X			Periodic wetting during construction and home removal would reduce fugitive dust.		County air shed is in attainment for criteria pollutants per the Clean Air Act.
Vegetation & Wildlife		X			None		Extent of vegetation removal would be minimized to accommodate only what is necessary for facility. Disturbed areas to be stabilized and seeded when construction is complete.
Threatened & Endangered (Endangered Species Act Section 7)	X				None	USFWS (1/11/12) and MDC (1/30/12) determinations.	No State or Federally Listed Endangered Species at this site. No Effect.
Cultural Resources (National Historic preservation Act Section 106)	X				There are no historic or archaeological issues associated with the Proposed Action, therefore mitigation measures are not required. In accordance with the NHPA, if unanticipated historic or cultural materials are discovered during construction, all construction activities shall immediately cease within 100 feet of the materials until their cultural affiliation and ultimate	SHPO determination (10/11/11).	No effect

Table 1 Continued

Affected Environment/ Resource Area	Impact				Mitigation	Agency Coordination/ Permits	Comments
	Negligible	Minor	Moderate	Major			
Socioeconomic	X				None		
Environmental Justice	X				None		
Noise		X			If necessary, noise reduction measures associated with construction would be instituted including: 1) restricting the 24-hour construction schedule; 2) using a 7 a.m. to 7 p.m. construction schedule; and/or 3) completing noisier activities during the day if using a 24-hour schedule.	Contractor shall coordinate with the designated hospital POC.	
Safety & Security		X			Implement BMPs for construction. Appropriate construction fencing and signage.	The contractor will coordinate with city, county and state governments to obtain required permits.	All activities will be conducted in a safe manner in accordance with the standards specified in OSHA regulations.
Hazardous Materials	X				If hazardous materials are found between start of construction and final site closure, the materials shall be remediated, abated, or disposed of as appropriate and handled in accordance with applicable local, state, and federal laws and regulations.		No potential environmental hazards were observed during field reconnaissance on September 7, 2011.
Traffic & Transportation		X			The construction contractor would need to work with city and county staff to assure that the local level of service on the roadway remains adequate. The contractor should design the roadways for multiple ingress and egress to site. The road and lane widths should be designed to allow ample room for emergency vehicles to pass.	The construction contractor will coordinate with hospital, city and county staff.	

3.1 Geology and Soils

Jasper County lies on the northwest portion of the Ozark Plateau. The Ozark Plateau is an elliptical uplifted geologic dome. Bedrock units in the Ozark Plateau have been tilted and faulted by multiple cycles of uplift and erosion since the Precambrian era (before 542 million years ago). The project site is situated on the Springfield Plateau of the Ozark Uplift. The Springfield Plateau is underlain by limestone and chert, a flint-like rock. Since limestone is easily dissolved by water, cave and solution or karst features are prominent. Surface water may drain directly into channels in limestone, where it can move rapidly and without filtration to the surface as a spring, at a location that is unpredictable without extensive testing. A geotechnical investigation of the site was completed in September 2011, during which 26 borings were advanced to assess subsurface conditions at the site. The results of the geotechnical investigation generally confirm the regional description of the geology, that is limestone bedrock overlain by chert and soil and chert materials. Depth to bedrock varies across the site, with the bedrock surface generally trending with the ground surface, but also having great variation over short distances. This variation in the depth to bedrock is indicative of limestone pinnacles that are common in the Joplin area. Pinnacles are columns or cones of limestone left by dissolution of the surrounding rock.

Bedrock is overlain by weathered chert and gravelly or cherty clays. Weathered chert and clay-chert material ranges in thickness from 40 to more than 50 feet across the site, with weathered chert more prominent in the deeper layers (typically below 40 feet) in transition to bedrock. According to drilling logs, the clay-chert material is described as dense, red brown, very moist clayey chert or gravel with sand. The boundary between soil and bedrock is rarely distinct.

The Natural Resources Conservation Service lists soils at the project site as Clarksville extremely gravelly silt loam with 15 to 50 percent slopes over approximately 54 percent of the site, and Nixa very gravelly silt loam along the ridge running from northeast to southwest across the middle of the site. The NRCS soil survey data qualifies their listing of the soils with understanding of great variation of soils in the area, and that this area is near an urban center. Descriptions of the soil as silt loam varies from the geotechnical borings that describe stiff, clayey soils, even at the surface. Following the NRCS descriptions, however, these soils are listed as having moderate (Nixa series) to severe (Clarksville) erosion potential and both soils are unsuitable for excavation due to unstable or soft soils when wet. Neither the Clarksville nor Nixa series are considered hydric, nor is either soil considered prime farmland. The Nixa silt loam, however, is considered a “Farmland of Statewide Importance.” Farmland of Statewide Importance is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. Records indicate that the project site was not used for agricultural production within the last several years.

3.1.1 Proposed Action

The proposed action will have no adverse impact on site geologic features or soils.

3.1.2 No Action Alternative

The No Action Alternative would have no construction on the site, and therefore would also result in no adverse impact to site geology and soils.

3.2 Hydrology and Floodplains

Hydrology is the study of the distribution, conservation, use, and effects of water of the earth and its atmosphere, particularly at the land surface. Understanding the hydrology of a project site is important in understanding the potential impacts a proposed project may have on water quality, vegetation, wildlife and the human environment. A project may potentially impact floodplains and require stream buffers and construction setbacks in urban areas. Floodplains are relatively flat land areas adjacent to a stream and subject to periodic inundation by the stream.

3.2.1 Proposed Action

The proposed project site is situated on uplands above Shoal Creek and its tributary streams. The West Joplin US Geological Survey (USGS) quadrangle map of the site shows that the site elevation is approximately 1020 feet above mean sea level (msl), and grades to approximately 970 ft above msl on the east side, to approximately 950 feet above msl on the northwest, and approximately 930 feet above msl on the far west side. Drainage from the site is to a small, intermittent tributary stream east of the site that drains to Silver Creek; directly south to Silver Creek; and west to Shoal Creek via an intermittent drainage path on the northwest portion of the property.

Examination of FEMA floodplain map (https://hazards.fema.gov/femaportal/wps/) shows that the proposed site is outside of floodplain areas. Construction of the proposed project will increase the amount of impervious surface of the site, increasing the volume of stormwater runoff draining to the nearby intermittent drainage channels, and ultimately to Silver Creek and Shoal Creek. The volume increase in runoff is dependent on the increase in impervious area covering the site on final construction, and measures to reduce or eliminate increased offsite runoff. The potential for increased site runoff can result in degraded water quality emanating from the site, and destabilization and erosion of the drainages and streams receiving increased runoff. Construction of the proposed project would not affect floodplains of Silver Creek or Shoal Creek.

3.1.2 No Action Alternative

The No Action Alternative would result in no construction of the proposed project, and therefore no increase of impervious area that would affect runoff volumes and altered hydrology of nearby streams. Therefore, the No Action Alternative would have no adverse impact on hydrology or floodplains.

3.3 Wetlands

Wetlands consist of lands where saturation with water is the dominant factor determining the

nature of soil development and the types of plant and animal inhabitants. For regulatory purposes under Section 404 of the Clean Water Act, the term wetland is defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas." Wetlands are valuable biological resources that perform many functions, including groundwater recharge, flood flow attenuation, erosion control, and water quality improvement. Wetlands also provide habitat for many plants and animals, including threatened and endangered species. Executive Order 11990 "Protection of Wetlands" directs all federal agencies to "minimize the destruction, loss or degradation of wetlands."

3.3.1 Proposed Action

A review of the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory Maps (NWI) did not identify any wetlands within the proposed site. Soils at this site are mapped by the Natural Resources Conservation Service (NRCS) as somewhat excessively drained or moderately well drained, indicating a lack of hydrology near the soil surface. A field reconnaissance of the site conducted on July 27th and September 7th, 2011, resulted in no observations of wetlands. There are also no regulated, also known as jurisdictional, streams, swales, or drainages of floodplains on the subject property. Construction of medical facilities on this property would result in no impacts to jurisdictional wetlands or other water features.

3.3.2 No Action Alternative

The No Action Alternative would entail no construction sites for medical facilities; therefore, there would be no impacts to any jurisdictional wetlands.

3.4 Water Quality

Water quality is a measure of the condition of water relative to the needs biotic species, including human. Water quality is typically evaluated relative to the health of ecosystems, safety of human contact and drinking water. Significant water resources such as high quality streams and wellhead areas that may require special protection measures during or after construction are considered in the project area for potential impacts.

3.4.1 Proposed Action

A small, ephemeral tributary drainage courses along the northwest boundary of the proposed project site, according to the USGS West Joplin Quadrangle topographic map. This drainage captures runoff from Interstate Highway 44 and areas north of the road, as well as runoff from the project site. This drainage, as well as other drainage channels near the site will be affected by altered hydrology of the proposed project, as described in the Hydrology and Floodplains section of this report.

Water quality emanating from the site will likely reflect potential erosion and sediment flow from the construction site, and post construction pollutants associated with stormwater

runoff, including sediments, salts, and possible metals. The amount of runoff is dependent on the amount of impervious surface of the post construction site, and stormwater management strategies to control and filter runoff.

The proposed action will result in construction period increases in sediments in stormwater runoff from the proposed project site that will adversely affect water quality. The proposed action will also result in post construction water quality impairment from pollutants related to sediments, salts, and metals, and possibly minor oils and greases, emanating from traffic areas and parking lots. It is anticipated that minor water quality impacts will occur with the proposed action.

3.4.2 No Action Alternative

The No Action Alternative will result in no construction of the proposed project, and therefore, no adverse impacts.

3.5 Air Quality

This section discusses the potential effects of the proposed action and no action alternatives on air quality. Air quality is regulated by the U.S. Environmental Protection Agency (EPA) under jurisdiction of the Federal Clean Air Act of 1970 and its amendments. Three sets of air pollutants would be of concern with regards to the alternatives: Criteria pollutants regulated under the National Ambient Air Quality Standards (NAAQS), Mobile Source Air Toxics (MSATs), and general carbon emissions from motor vehicles. The NAAQS were formulated to protect public health, safety, and welfare from known or anticipated air pollutants. The most recent amendments to the Clean Air Act contain criteria for sulfur dioxide (SO2), particulate matter (PM10, ten-micron, and smaller; and PM2.5, 2.5 micron, and smaller) carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), and lead (Pb). Table 3.11.1 shows the NAAQS as of December 2008. Locations that do not meet these standards are designated by the EPA as "nonattainment" areas for each pollutant that does not meet the standards. Amendments to the Clean Air Act have established time schedules for the states to reduce pollutant levels to comply with the NAAQS in nonattainment areas. Within the proposed facility area, air quality programs are coordinated with the MDNR and Region VII of the USEPA. According to the EPA Green Book, Nonattainment Status for Each County by Year for Missouri http://www.epa.gov/airquality/greenbk/anayo_mo.html) Newton County is considered an attainment area for all criteria air pollutants.

3.5.1 Proposed Action

The Proposed Action would include activities that would produce a minor, temporary, and localized impact from vehicle emissions and dust particles. Construction equipment would be required for site preparation. Equipment use would temporarily increase emissions; however, no long-term air quality impacts are anticipated. It is not anticipated that Federal or state air quality attainment levels would not be exceeded. Construction activity associated with the Proposed Action would produce pollutant emissions. Heavy equipment would produce small amounts of hydrocarbons and exhaust fumes. It would be expected that some air pollutants would increase in the project areas; however, the

concentrations of these pollutants would not cause the region to reach nonattainment status. The construction contractor would be required to maintain the vehicles on the sites in good working order to minimize pollutant emissions. Fugitive dust would also result from proposed construction activities. The contractor would be required to address dust suppression activities. Adverse impacts to air quality resulting from the proposed activity would be short term and temporary during construction only.

3.5.2 No Action Alternative

The No Action Alternative would result in fewer emissions overall and less impact to air quality.

3.6 Vegetation and Wildlife

The proposed site consists of a mix of previously cleared land and large forested residential lots. The Proposed Action would result in the clearing of approximately 50 acres of forest. A majority of the site will be graded.

3.6.1 Proposed Action

The Proposed Action area is located within the city limits of Joplin and is surrounded by forested land and features including schools, churches, roads, and residential areas, with surrounding or nearby utilities. Site preparation for construction of the Proposed Action would require clearing and grading the majority of the site. Maximum clearing limits would encompass approximately 45 acres of forest, consisting of mixed hardwoods including oak, elm, sycamore, black cherry, walnut, hickory, sassafras, and other species, as well as shrubs and herbaceous vegetation, providing habitat for both terrestrial and avian wildlife. The presence of deer and bobcat was noted during a site visit to the property on January 11, 2012. Overall, habitat quality in the immediate project area is high related to plant species composition. The highest quality forest habitat is near the northern boundary of the project site. The quality of the forest decreases to the south. The forested areas on the southern half of the project site are a mix of large and medium sized oaks in the canopy and scrubby successional plants in the understory including multiflora rose, buckbrush, and green briar. The understory of this area appears to have been cleared in the past and has not been maintained for a long period of time. There are no perennial streams, intermittent streams, or riparian corridor on the site. The site does not act as a wildlife corridor from one high quality area to another. Currently, there are highways to the north and west of the site. The Proposed Action would result in the loss of some wildlife habitat, but would have minimal impact on wildlife populations and overall minor impacts to vegetation.

3.6.2 No Action Alternative

The No Action Alternative would entail no construction or preparation of sites for medical facilities; therefore, there would be no impacts to either vegetation or wildlife.

3.7 Threatened and Endangered Species

The Endangered Species Act (ESA) of 1973 assigned the Department of the Interior, U.S. Fish &

Wildlife Service (USFWS) to establish a list of federally protected species. The ESA states that each federal agency must insure that "any action authorized, funded, or carried out" by that agency "is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification" of officially designated critical habitat of these species. The Missouri Department of Conservation (MDC) is responsible for the determination of the state-level protection status of wildlife and plants in Missouri. The MDC maintains a Natural Heritage Database for occurrences of natural heritage resources, including habitats of rare, threatened, or endangered plant and animal species, and unique or exemplary natural communities. According to various on-line databases including the MDC Natural Heritage Database and the USFWS Threatened and Endangered Species System (TESS), a variety of threatened and endangered species are listed for Newton and Jasper Counties in Missouri.

Threatened and Endangered (T&E) species located in Newton and/or Jasper County Missouri. (related to resources found on project site)				
Species	**Newton County**	**Jasper County**	**State T&E Listing**	**Federal T&E Listing**
	E= Extant Populations (seen within 25 years) H=Historic populations (not seen in 25 year) NP= No populations present		T= Threatened E= Endangered	R=Rare NL=Not listed
Insect				
American Burying beetle	H	NP	E	E
Fish				
Ozark Cavefish	E	E	E	T
Birds				
Greater Prairie-chicken	E	E	E	NL
Mammals				
Grey Bat	E	E	E	E
Plains Spotted Skunk	E	E	E	NL
Black Tailed Jackrabbit	E	E	E	NL
Swamp Rabbit	NP	H	NL	NL

Data collect from: Missouri Natural Heritage Program. 2012. Missouri species and communities of conservation concern checklist. Missouri Department of Conservation. Jefferson City, Missouri. pp. 51.

And from: Missouri Department of Conservation, 2000. Missouri Animals of Conservation Concern

3.7.1 Proposed Action

The project's effect on threatened and endangered species has been determined to be negligible. Both the USFWS and MDC were contacted by email and requested to evaluate the site for potential use by federally listed or state listed threatened and/or endangered species with potential to occur in Newton County. The USFWS responded on January 11, 2012, by stating that "This project is outside any known habitat buffer for the Indiana bat. If a project involves clearing forested habitat greater than 10 acres, even outside of the

habitat buffer, normally a habitat assessment would be required to evaluate potential Indiana bat habitat. Two project biologists were at the site recently and reported that no suitable habitat for the Indiana bat occurs there. Therefore, there is no effect on the Indiana bat and the clearing of the forested habitat can proceed.

The MDC provided a response on January 30, 2012 stating that "there are no state endangered species or natural communities of conservation concern known to occur on the area." MDC identified two natural communities more than one mile from the site and advised water quality best management practices be implemented for the protection of these sites. MDC also identified a rare but not federally listed species, known as the Great Plains Skink, to potentially be in the county. Based on the information in the database and the description of the area, it is unlikely there will be impacts to state-listed species.

3.7.2 No Action Alternative

The No Action Alternative would entail no construction or preparation of sites for medical facilities; therefore, there would be no impacts to threatened or endangered species.

3.8 Cultural Resources

This section discusses whether the proposed action and no action alternatives will affect properties that are or may be eligible for the National Register of Historic Places (NRHP); or, adversely affect significant historic or prehistoric resources.

3.8.1 Proposed Action

Historic and archaeological resources are protected by a number of statutes and regulations at all levels of government and must be taken into consideration during the NEPA process. Prior to the implementation of a Proposed Action, potential impacts to historic and archaeological resources must be reviewed. Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of Proposed Actions on historic properties. Historic properties must also be given consideration under NEPA, and Section 106 encourages maximum cooperation with NEPA. The National Register of Historic Places (NRHP) is a federally maintained list of districts, sites, buildings, structures, objects, and landscapes significant in American history, prehistory, architecture, archaeology, engineering, and culture. Archaeological sites are places where past peoples left physical evidence of their occupation. Sites may include ruins and foundations of historic-era buildings and structures. Native American cultural resources may include human skeletal remains, funerary items, sacred items, and objects of cultural patrimony. Historic properties can also include traditional cultural properties (TCPs). The site of the Proposed Action is located in the City of Joplin, Newton County, Missouri, east of Highway 86, south of Interstate 44, north of East 50th Street and west of Indiana Avenue. Coordination was initiated with the Missouri State Historic Preservation Office (SHPO) on September 29, 2011. The Missouri SHPO issued a response on October 11, 2011, that provided written documentation that there are no historic or cultural resources sites within the project site. The Missouri SHPO's response provides a determination that the Proposed Action will have No Effect on historic properties.

3.8.2 No Action Alternative

The No Action Alternative would entail no construction of permanent medical facilities; therefore, there would be no impact to any known properties listed; on or eligible properties for listing on the NRHP.

3.9 Socio-economic

Evaluation of social impacts includes consideration of elements such as potential changes in neighborhoods or community cohesion; affordable housing; changes in travel patterns and accessibility; impacts on community facilities; impacts on traffic safety/public safety; and impacts on any special groups such as elderly, handicapped, minority, and transit-dependent persons. Evaluation of economic impacts includes consideration of cost estimates of the proposed action and its alternatives; applicable effects on economic development trends and viability; effects on employment opportunities; effects on highway-dependent businesses; effects on existing and planned business development; and effects on tax revenues.

3.9.1 Proposed Action

The Proposed Action is located in the southwestern corner of Missouri, in the City of Joplin, Newton County. Based on the U.S. Census 2010 data, there were 114,756 people, 43,625 households, and 28,982 families residing in the county. Prior to the storms, the population density was 179 persons per square mile. The racial makeup of the county was 92.1 percent White, 1.7 percent Black or African American, 1.3 percent Native American, 0.9 percent Asian, 1.7 percent from other races, and 2.3 percent from two or more races. Hispanic or Latino, of any race, comprised 3.2 percent of the population. There were 28,982 households, out of which 32.4 percent had children under the age of 18 living with them, 49.5 percent were married couples living together, 13.0 percent had a female householder with no husband present, and 33.6 percent were non-families. Of the households, 27.3 percent were made up of individuals and 11.0 percent had someone living alone who was 65 years of age or older. The average household size was 2.57 and the average family size was 3.13. The median age was 34.4 years. The median income for a household in the county was $37,294, and the median income for a family was $43,710. The per capita income for the county was $19,513. About 14.6 percent of families and 18.4 percent of the population were below the poverty line, including 25.1 percent of those under age 18 and 10.2 percent of those aged 65 or older. The labor force in Jasper County totaled approximately 57,069 in 2010, which represents a decline of 6.2 percent from 2005.

Industries providing employment are:

- Management, professional, and related occupations (26.1 percent).
- Sales and office occupations (25.7 percent)
- Production, transportation, and material moving occupations (19.3 percent)

The Jasper County unemployment rate in 2010 was 8.0 percent. In 2010, the types of workers were:

- Private wage or salary: 83.4 percent
- Government: 8.9 percent
- Self-employed, not incorporated: 7.7 percent
- Unpaid family work: 0.1 percent

The Proposed Action would result in significant social and economic improvements. The proposed action would have a positive impact on public health and safety, community cohesion, and employment in the area. The negative impacts from the loss of the Mercy Hospital Joplin, a critical medical facility, would be significantly lessened by the construction of the permanent replacement hospital and related services. During site development, staging, and construction, short-term negative impacts would likely occur such as an increase in noise levels, an increase air emissions and an increase traffic volume. Safety concerns related to potential increases in traffic volume can be attenuated through the appropriate placement of construction and safety signage.

3.9.2 No Action Alternative

The No Action Alternative would entail no construction or preparation of the site for the permanent replacement hospital facilities. The residents and the City of Joplin would not have the benefit of the permanent medical facilities, and alternate facilities would face overcrowding. In addition, many would go without health care due to the shortage of health care services in the community.

3.10 Environmental Justice

Environmental Justice Regulations were established to address disproportionately high and adverse human health or environmental effects that projects funded by the federal government may have on minority and low-income populations. The Environmental Justice requirements were established by Executive Order 12898 entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" in 1994. This mandates that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of proposed projects on minority and low-income populations. Environmental Justice builds on Title VI of the Civil Rights Act of 1964 which declares that discrimination on the basis of race, color, or national origin shall not occur in connection with programs and activities receiving federal funding assistance. Environmental Justice has three guiding principles:

- Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental impacts, including social and economic effects on minority and low-income populations.
- Ensure full and fair participation by all potentially affected communities in the decision-making process.
- Prevent the denial of, reduction in or significant delay in the receipt of benefits by minority and low-income populations.

3.10.1 Proposed Action

The Proposed Action would not have disproportionately high and adverse impacts on minority or low-income populations. In fact, this action provides benefit to low-income populations. In addition, the new location provides better access and convenience for the residents of the 19 counties in four states that Mercy serves with its location right off of I-44. In addition, some local mass transit was available at the hospital and will be available to the replacement hospital. In addition, the new hospital will be built to current code and American with Disabilities Act (ADA) standards and will be more easily accessed for persons with limited mobility. Mercy responds to the needs of the community it serves regardless of socio-economic status.

3.10.2 No Action Alternative

The No Action Alternative would entail no construction or preparation of sites for medical facilities; however failure to permanently replace the hospital would have adverse impacts on all members of the community now served with greater adverse impact on minority and low income populations who have fewer alternatives when they seek health care. In fiscal year 2011 (year end June 30, 2011), Mercy Hospital Joplin provided services to 1,500 charity patients and provided over $5 million dollars in unpaid costs to indigent persons without insurance, unpaid costs of Medicaid and other community benefits. Much of the charity care would simply not be available to indigent persons, who would likely go without health care. In addition, Mercy Hospital Joplin before the tornado operated an inpatient behavioral health unit with 41 beds which represented approximately two thirds of the behavioral health beds in the community. Inpatient behavioral health services are in short supply through -out the state of Missouri. The traumatic stress caused by the tornado has increased the needs for behavioral health care. In order to respond to the dire need for behavioral health services, the State contacted Mercy Hospital Joplin shortly after the tornado and presented the idea of purchasing a residential care facility in Joplin that was under construction. Mercy completed this purchase in July of 2011 and as of October 2011 began operating the facility with 32 beds. The building does not meet state code for inpatient behavioral health and cannot be permanently licensed; however the state was willing to waive certain requirements until the permanent hospital can be constructed in order to meet this significant health care need in the Joplin community. Note that even with the 32 beds, inpatient behavioral health capacity in the community is compromised by nine less beds. Currently, Mercy plans to have an inpatient behavioral health unit at the permanent replacement hospital with 45 beds. It's worth noting that while Freeman Medical Center has added beds in others areas of its facility it has not added behavioral health beds since the tornado. This is a vital service line that will be greatly underserved if the permanent replacement hospital is not constructed.

3.11 Noise

Noise is defined as "sound undesirable because it is intense and/or loud enough to damage hearing, interferes with speech communication and sleep, or is annoying. Sound varies

simultaneously in level (or loudness) and frequency content (pitch), as well as in time of occurrence and duration. The fundamental measure of sound level is expressed in unit of decibels (dB)) using a logarithmic scale.

It is the policy of Federal agencies to assess long-term, cumulative exposure to environmental noise in terms of day-night average sound level (DNL). The Federal Interagency Committee on Urban Noise has developed land use compatibility guidelines for noise. DNL values of 65 dBA and less are normally compatible with residential land uses.

3.11.1 Proposed Action

Potential noise impacts associated with construction of the Proposed Action will be reduced to the maximum extent possible. The design of the site includes significant buffer areas to minimize noise impact to neighboring property owners. Once the medical facilities are established, some additional noise would be generated from the vehicles, emergency vehicles such as ambulances such additional noise will not result in any significant long-term adverse impacts to residents who redevelop their homes in the adjacent areas. Noise producing operations include Ambulance, Helicopter, Emergency Generators, HVAC Air Handling units, Boilers, Trash compactors/dumpster delivery, lawn care and snow removal equipment. These operational activities are periodic. Other than ground and air ambulance, normal operational activities are required only during normal daytime business hours.

3.11.2 No Action Alternative

The No Action Alternative would entail no construction or preparation of the site; therefore, there would be no noise impacts.

3.12 Safety and Security

Safety and security issues analyzed as part of the Proposed Action include the health and safety of the individuals working on site development activities, transporting hospital units to the site, and the well-being of the people living in or adjacent to the site.

3.12.1 Proposed Action

For implementation of the Proposed Action, the contractor's construction engineer will identify and rectify potential safety hazards prior to and during site staging and construction activities. Safety during construction is a high priority for both the personnel constructing the sites, and residents associated with the Proposed Action. In addition, security is of paramount importance for the hospital when it is operating.

Construction is anticipated to be performed in phases to better manage safety considerations. First aid and other medical services would be readily available throughout the duration of site development. To assure safety, the contractor will develop and obtain approvals of a construction management plan, a quality plan, an accident prevention plan, and an environmental protection plan. The construction management plan should include

steps to ensure that areas where grading or construction would occur in the vicinity of mine features are investigated prior to performing work. Chain-link fences will be provided for site security and safety. The site for the Proposed Action will be designed to meet the guidelines established by the Uniform Federal Accessibility Standards (UFAS) standards.

Fire and police protection would be provided by the local fire departments and law enforcement. The permanent replacement hospital will be secured by both electronic and conventional means. There will be outdoor lighting to provide safe passage to and from the parking lots to the facility. Cameras will be in place providing a 360 degree view of the campus. A badging system will limit ingress and egress to and from restricted areas of the hospital. A security force will operate seven days a week, 24 hours a days and will monitor both the inside and outside of the facility. Security officers can be dispatched rapidly to any area of the hospital campus. Adverse impacts resulting from the safety and security issues associated with this project would be minor.

3.12.2 No Action Alternative

The No Action Alternative would entail no construction or preparation of the site for permanent replacement medical facilities; therefore, there would be no safety or security impacts.

3.13 Hazardous Materials and Toxic Wastes

Hazardous wastes as regulated by the Environmental Protection Agency (EPA) are defined as "waste with properties that make it dangerous or potentially harmful to human health or the environment. Hazardous wastes can be liquids, solids, contained gases, or sludges. They can be the by-products of manufacturing processes or simply discarded commercial products, like cleaning fluids or pesticides". In order for a waste to be considered hazardous, it must exhibit at least one of the four characteristics of hazardous waste: ignitability, corrosivity, reactivity, or toxicity. If the waste exhibits just one of these characteristics, it is given the title of hazardous waste.

3.13.1 Proposed Action

A Phase I Environmental Site Assessment (ESA) was completed for the property in conformance with the scope and limitations of ASTM Practice E 1527-05. Review of documents and records indicated that neither hazardous materials nor toxic wastes were ever managed or disposed of on or near the site. A site reconnaissance conducted on September 7, 2011, however, revealed the presence of two possible environmental conditions that warranted further investigation to determine if potential contamination of soil has occurred. These two areas included discarded tires, machinery, and empty containers ranging in size from 5-gallon to 55-gallon drums. The areal extent of each of these areas is small, and it is likely that if potential contaminants existed, the occurrence is limited.

Soil samples from each of the two sites identified in the Phase I ESA were collected on November 7, 2011. The soil samples collected revealed a very limited presence of target

compounds (mercury, barium, chromium, lead, and selenium) in the soil, all of which are below regulatory and safe exposure thresholds. The results of the sample analyses and conclusions of the Phase I/Phase II ESA indicates that environmental concerns from hazardous or toxic materials are not present at the assessment property. If clearing of the property for site construction is to occur, and if elevated levels of metals or other compounds are found, the U.S. Environmental Protection Agency recommends that disturbed areas be placed into "remediated" status during construction activities.

3.13.2 No Action Alternative

The No Action Alternative would result in no construction or disturbance of the subject property, and because no concentrations of hazardous or toxic compounds were detected above regulatory thresholds, there would be no impacts from hazardous materials.

3.14 Traffic and Transportation

This section discusses traffic circulation and volumes. Traffic impacts can be felt during construction at the proposed project area and site. However, if not properly considered the impacts to the community and operations of the medical facilities can lead to issues of safety and congestion

3.14.1 Proposed Action

Large vehicle traffic within the project area will increase due to ingress and egress of construction equipment. These traffic impacts will be limited to the duration of the project construction.

There will be varying degrees of increased passenger vehicle and bus traffic due to construction activities and roadway construction phasing. The roadway construction phasing will include temporary traffic control measures to address driver safety during construction. During roadway construction, road closures will be necessary, but all properties will maintain access. Traffic control measures and road closures will be coordinated between the Missouri Department of Transportation (MoDOT) and the surrounding jurisdictions to ensure adequate roadway operations. During construction of the western portion of 50th Street, traffic will increase along 50th Street to the east of the Joplin Middle School. Once roadway improvements along 50th Street are complete, traffic volumes along Indiana Avenue and 50th Street east of the Joplin Middle School should return to normal.

After the hospital is constructed and operating, there will be a permanent increase in traffic around the project due to hospital related business. Traffic volume increases associated with the proposed action include the hospital and medical office buildings. The total daily trip generation from the proposed action is estimated at 22,320 daily trips, with an estimated 1,540 trips occurring in the a.m. peak hour and 2,100 trips occurring in the p.m. peak hour. The projected traffic distribution to and from the site are as follows:

- North Route 86/Hearnes Boulevard 28%

- North Route 86/Hearnes Boulevard 10%
- West Interstate 44 15%
- East Interstate 44 35%
- North Connecticut 5%
- East 44th Street 5%
- Glendale Avenue 2%

3.14.2 No Action Alternative

The No Action Alternative would include no construction and therefore no traffic or transportation impacts.

4.0 Cumulative Impacts

"Cumulative impact" is 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 (CEQ regulations 40 CFR 1507).

This section analyzes cumulative impacts, including direct and indirect effects that may be associated with the Proposed Action and the No Action alternative. The analysis involves identifying resources with the potential to experience cumulative impacts, and establishing a geographic scope and time frame.

The affected environment includes those human and natural environmental resources subject to a potential impact analysis in Section 3.0. In reviewing these, socioeconomic resources were identified as having the most potential to experience significant cumulative effects. The geographic scope includes Joplin and surrounding communities that were previously serviced by Mercy Hospital Joplin medical services. The time frame is projected at three to five years from May 22, 2015, which is an estimate of when the replacement, permanent hospital will be constructed.

4.1 Proposed Action

Mercy Hospital Joplin is a Mercy Health (f/k/a/ Sisters of Mercy Health System) hospital. Prior to the tornado Mercy Hospital Joplin was an acute care hospital with level II trauma designation. It had 367 licensed beds that provided state of the art comprehensive health care services for 19 counties in Missouri, Oklahoma, Kansas and Arkansas. Mercy Hospital Joplin and its related clinics employed 2200 employees and were capable of providing quality, efficient care for its communities of more than 140,000 residents in its service area. The hospital and nearby related structures on the on the hospital campus, including medical office and other buildings, sustained a direct hit by the EF-5 tornado on May 22, 2011, and sustained extensive damage. In efforts to continue providing medical services, the Sisters of Mercy Health System opened a 60-bed field hospital near the site of the original hospital for emergencies, x-rays, lab, and some in-patient care, until such time as more secure temporary facilities could be constructed. The field hospital was subsequently replaced by trailers; and other interim temporary modular facilities are being constructed to open in April or May, 2012 to provide for an acceptable longer term interim solution until the time the permanent replacement hospital and related facilities can be constructed and opened. The longer term temporary hospital is much smaller in capacity than the hospital destroyed by the tornado and much smaller than the planned permanent replacement hospital. For example, the temporary hospital will have four operating rooms while the prior hospital had 16. Obviously this will greatly impact the number of cases that can be performed. The temporary hospital will have 94 acute care beds and 8 nursery bays.

The new hospital will have the capacity for 308 beds. Initially the hospital will operate with 260 beds including behavioral health beds and will expand into the additional 48 beds as needed. There are a number of reasons that the bed count is initially lower than the original hospital.

- The new hospital will allow for better utilization of beds since the majority of the (all) rooms will be private as opposed to semi-private rooms in the original hospital.
- Effective January 1, 2012, Mercy Health Southwest Missouri/Kansas Communities entered a long term lease (with purchase options) to operate the McCune Brooks Hospital in Carthage, Missouri, n/k/a Mercy Hospital Carthage. As part of the response to the tornado Mercy Hospital Carthage currently has 52 beds, but the regulatory limit of 25 beds (applicable to Medicare certified critical access hospitals) is anticipated to be in effect again when the current CMS waiver expires on February 14, 2012. Part of Mercy's overall strategy to provide accessible care in the Joplin region includes having a north campus in Carthage. While this resulted in fewer beds in Joplin it provides improved access to services for the population on the north side of Joplin.
- Mercy Hospital Joplin is currently planning a separate 40 bed Rehabilitation Hospital for inpatient care which will open in the same time frame as the new hospital. This facility will be a joint venture and may not be located on the main hospital campus. The plan for a separate 40 bed Rehabilitation Hospital eliminated the need for rehabilitation beds at the main hospital.

Mercy Hospital Joplin is also providing inpatient behavioral health services at an off campus location. The facility does not meet code to be permanently licensed, but it currently provides inpatient behavioral health services with 32 beds. The permanent replacement hospital will have 45 beds for inpatient behavioral health services. Mercy Hospital Joplin is donating a portion of its campus for a variety of community uses. At this time Mercy is donating a total of 55 acres for the following uses: a public elementary school, the Stained Glass Theatre, a Memorial Garden, a Museum for the City of Joplin, a playground and an area of naturalized forest. The elementary school is planning to break ground in June of 2012. The donation agreements will require the projects to be completed within five years.

4.2 No-Action Alternative

Under the No-Action Alternative the permanent medical facilities would not be constructed. Mercy Hospital Joplin was a 367-bed facility that staffed (with its related clinics) approximately 2,200 full and part-time employees from Joplin and the regional area.

Direct effects would include the loss of the majority of beds and services that Mercy Hospital Joplin provided. Other medical facilities in the area include the 193-bed Freeman Hospital in Joplin and Mercy Hospital Carthage f/k/a McCune-Brooks Regional Hospital in Carthage, MO, currently a 52-bed facility serving patients primarily from the counties of Jasper, Newton, Barton, Greene, and Lawrence, MO. Effective February 15th, it will return to a 25 bed facility. Please note that McCune Brooks is not a level II trauma center and is not licensed to handle cases as severe as was Mercy Hospital Joplin. The loss of 367 hospital beds at Mercy Hospital

Joplin is a 67% loss of beds for the regional area. Indirect cumulative impacts include the burden that the loss has placed on the remaining medical facilities and health care systems in the area, as well as medical professionals and staff, both in Joplin and in surrounding communities such as Carthage, Springfield, and other municipalities in Missouri.

The no-action alternative would result in a higher level of stress on local and regional health care systems as well as medical professionals and other staff. Citizens from the Joplin and regional area would not receive the same level of routine, specialized, or emergency health care services and in many cases would have to travel greater distances to receive health care. In fiscal year 2011 (year end June 30, 2011), Mercy Hospital Joplin provided services to 1,500 charity patients and provided over 5 million dollars in unpaid costs to indigent persons without insurance, unpaid costs of Medicaid and other community benefits. Much of the charity care would simply not be available to indigent persons, who would likely go without health care. Inpatient behavioral health care services would have significant adverse impact. Before the tornado Mercy Hospital Joplin provided two thirds of the inpatient behavioral health beds in the region. Mercy Hospital Joplin's temporary facility operates with nine less beds and is not able to be permanently licensed. Freeman has not added additional inpatient behavioral health beds to its hospital, therefore two thirds of the inpatient behavioral health beds for the region would not exist.

In addition there would be an economic stress on the area from the loss of employment opportunities at the facility. Mercy Hospital Joplin and related clinics employed approximately 2,200 full and part-time people from Joplin and surrounding communities, including office/managerial, professional, technical, clerical, and service employees. The loss of their jobs would impact not only the 2,200 employees, but would impact 5,700 community members when the dependents of employees are included. Indirect employment includes those additional jobs that are generated through the expenditure patterns of direct employment associated with an industry (i.e. spending by the employees of the hospital and expenditures by the hospital in the purchase of goods and services supporting its operation). The loss of employment at Mercy Hospital Joplin would result in reduced expenditures in the local economy, indirectly resulting in cumulative impacts to jobs in the area.

Induced employment follows the economic effect of employment beyond the expenditures of an industry's employees to include jobs created by the stream of goods and services that support businesses in the area (i.e., spending from business activity and employees that exist as a result of the indirect effects of the hospital). When a manufacturer that receives orders from the hospital buys or sells products, the employment associated with those inputs or outputs is considered induced employment. Likewise, when a patient is released from hospital care, that patient may require products (e.g., medicine) and services (e.g., physical therapy) provided by a pharmacy or private medical practice. The pharmacist and physical therapist hold jobs that were indirectly created by the hospital. When they spend their income in the local economy, the jobs created by this third-tier effect are considered induced employment.

According to, "The Economic Impact of Mercy on the Joplin Area," a report written by Edward C. Lawrence, Ph.D., Jane Qing-Jiang Qu, MBA, MA and Ellen N. Briskin, Ph.D., the institutional impact of the local operation on the Joplin area in fiscal year 2011 were:

- $356.3 million in spending by Mercy's facilities and its suppliers
- 1,600 direct hospital jobs (exclusive of clinic jobs) and $124 million in payroll
- $1.7 million in annual local and state taxes

Much of this positive economic impact would be eliminated in the event the permanent replacement hospital is not constructed.

Additional cumulative impacts related to the No Action alternative would be the loss of jobs that would have been created through direct and indirect employment, during the construction and related activities associated with the proposed temporary hospital facility.

5.0 Mitigation

5.1 Geology and Soils

The existing geology, topography, and soils do not preclude the use of the site for a permanent medical facility. Site preparation for construction of the proposed project would require stripping and grading of existing soils. Because the soils at the site are considered prone to moderate to severe erosion, measures must be implemented during construction until final site stabilization after construction. Measures to mitigate soils during construction include the development and implementation of a sound erosion and sediment control plan as required by State and Local regulations. Appropriate mitigation measures include construction sequencing to disturb as little soil as possible, establishment of vegetative cover where soils will be exposed for more than two weeks, use of turf reinforced mats on erodible soils, or use of runoff diversion channels and/or terraces, silt fencing or hay bales on slopes to reduce erosion and sediment loss, and rock check dams in drainage channels to slow runoff velocity and sediment losses from the site.

5.2 Hydrology and Floodplains

There are no hydrology or floodplain impacts to the proposed project site; however, changes to site conditions could result in increased hydrology impacts to nearby, off-site drainage channels and streams. Impacts to nearby drainages and streams will be mitigated with implementation of stormwater best management practices (BMPs) that detain stormwater and filter pollutants. Several stormwater BMPs are possible for consideration, including stormwater detention basins, treatment wetlands, bio retention gardens and swales, and native landscapes that will promote infiltration of stormwater into the soil. Stormwater control measures in accordance with State of Missouri and local requirements will be required that result in no adverse impact to the surrounding drainages and streams.

5.3 Wetlands

No wetlands exist on the site; therefore mitigation measures are not required.

5.4 Water Quality

The contractor would be required to identify and implement specific BMPs (e.g., silt fences, hay bales, etc.) to reduce or eliminate runoff impacts during proposed construction activities. Design of the proposed project should include landscape features that will capture and filter pollutants from stormwater. Water quality impacts will be mitigated with implementation of stormwater best management practices (BMPs) that detain stormwater and filter pollutants. Several stormwater BMPs are possible for consideration, including stormwater detention basins, treatment wetlands, bio retention gardens and swales, and native landscapes that will promote infiltration of stormwater into the soil. Stormwater control measures in accordance with State of Missouri and local requirements will be required that result in no adverse impact to water quality.

5.5 Air Quality

Periodic wetting during construction would reduce fugitive dust. These measures would help reduce air quality impacts on asthmatics, seniors, and other sensitive residents.

5.6 Vegetation and Wildlife

The project would be required to minimize, to the maximum extent practicable, the extent of forest clearing by using only those areas necessary to construct the facilities. All disturbed areas should be stabilized during and immediately after construction and should be seeded and/or replanted with shrubs and trees.

Prior to mass grading and clearing of the site, individual trees were selected to be harvested and replanted upon completion of construction activities. On December 21, 2011, SWT Design, the sub-contractor (Wickman's Gardens/Kin-Kam Tree Farm), and Missouri Department of Conservation representatives met on site to identify and flag viable, native trees for harvesting from the future hospital site. A total of 440 trees with a maximum ¾ inch caliper were selected for harvest. A majority of these trees tagged were varieties of Oak and Hickory They ranged in size from ½" in diameter to ¾" in diameter in size. Hickories, sassafras, and other species of flowering trees were tagged.

Harvesting of the trees began on December 22nd and continued through December 30th, 2011. Trees were dug by hand and collected bare root. The sub-contractor heeled the bare root saplings into a large container and mulched the trees liberally to ensure proper moister and temperature levels were maintained. Once all of the trees were dug they were transported to Kin-Kam Tree Farm fields, in nearby Aurora, to be held until replanting.

5.7 Threatened and Endangered Species

There are negligible impacts to threatened and endangered species; therefore mitigation measures are not required.

5.8 Cultural Resources

There are no historic or archaeological issues associated with the Proposed Action, therefore mitigation measures are not required. In accordance with the NHPA, if unanticipated historic or cultural materials are discovered during construction, all construction activities shall immediately cease within 100 feet of the materials until their cultural affiliation and ultimate disposition are determined in consultation with the Missouri SHPO, SEMA, FEMA PA, FEMA Environmental and Historic Preservation Advisor.

5.9 Socio-economic

There are negligible socio-economic impacts; therefore mitigation measures are not required. The proposed action would result in enhanced socioeconomic conditions.

5.10 Environmental Justice

There are no impacts to minority or low-income populations due to the Proposed Action, therefore mitigation measures are not required.

5.11 Noise

If necessary, noise reduction measures would be instituted. These measures include: 1) restricting the 24-hour construction schedule 2) using a 7 a.m. to 7 p.m. construction schedule 3) completing construction closest to potential sensitive receptor first; and/or 4) completing noisier activities during the day if using a 24-hour schedule.

5.12 Safety and Security

Safety and security mitigation measures would include the use of BMPs for construction and the installation/implementation of approved safety and management plans, phased construction, UFAS considerations, and appropriate signage and fencing. The contractor will post appropriate signage and fencing to minimize potential adverse public safety concerns. Appropriate signage and barriers should be in place prior to construction activities in order to alert pedestrians and motorists of project activities and traffic pattern changes. The contractor will also place fencing around the site perimeter to protect residents from vehicular traffic on surrounding roads and will provide 24-hour security services at the site during construction, if needed. To minimize worker and public health and safety risks from project construction and closure, all construction and closure work will be done using qualified personnel trained in the proper use of construction equipment, including all appropriate safety precautions. Additionally, all activities will be conducted in a safe manner in accordance with the standards specified in Occupation Safety and Health Administration (OSHA) regulations.

Areas where grading or construction would occur in the vicinity of mine features should be investigated prior to performing work to ensure that no underground hazards exist. These areas should be located, marked, and evaluated prior to construction by a person qualified to perform such work and to make recommendations to mitigate unforeseen conditions.

5.13 Hazardous Materials and Toxic Wastes

The process of clearing and grading for site preparation to construct a medical center will unlikely reveal the presence of any hazardous or toxic compounds. If hazardous or toxic compounds are discovered on the site, such areas should be immediately investigated for the nature and extent of potential contaminants, and removal or remediation of the compounds be conducted in accordance and compliance with Federal, State, and local regulations. Alternatively, the site could be abandoned in view of an alternate site without hazardous or toxic wastes.

5.14 Traffic and Transportation

Currently a traffic impact study (TIS) is being completed for the proposed roadway improvements along 50th Street and Indiana Avenue, as well as at the Interstate 44 Exit 6 interchange. The interchange and Route 86 improvements are a separate project which requires compliance with the National Environmental Policy Act (NEPA). The NEPA work for this project is being completed by MoDOT staff. MoDOT's review is complete and will be finalized following approval of the Access Justification Report (AJR). MoDOT expects to receive a CE-2 determination. A full description of the traffic impacts and traffic mitigation is provided in an AJR produced for the Federal Highway Administration.

The 50 Street and Indiana Avenue TIS will analyze the existing roadway conditions, future roadway conditions, and future roadway conditions with development traffic and roadway improvements. The purpose of the TIS is to recommend the necessary roadway improvements to ensure that roadway capacity, intersection level of service (LOS), horizontal and vertical geometrics, and other safety considerations throughout the project site are addressed. Safety and traffic concerns related to potential increases in traffic volume will be attenuated through the construction of the following projects (once verified through the TIS analysis):

- Construction of an at grade intersection at the Main Site Drive entrance. The drive will either be a dual lane roundabout or a signalized intersection.
- Expansion of 50th Street to a 4-lane, divided section between Route 86 and the Main Site Drive.
- Expansion of 50th Street to a 3-lane, undivided and 2-lane, divided section between Route 86 and east of Indiana Avenue.
- Expansion of Indiana Avenue to a 3-lane, undivided section between 50th Street and 44th Street.
- Vertical profile adjustments along 50th Street and Indiana Avenue to improve site distance.
- Removal of drives along 50th Street and Indiana Avenue from the project site.
- The addition of sidewalks along 50th Street and Indiana Avenue to address pedestrian access.

6.0 Public Involvement

An extensive public involvement process was undertaken for this project, including communications and active involvement from community leaders, the public and representatives from Mercy Hospital Joplin. A detailed summary of public involvement for this project is listed below.

6.1 Website

Mercy Hospital Joplin developed a website at www.mercy.net/Joplin-rebuild.com. The purpose of the website is to share information about the project and provide a medium for receiving questions and comments from the public. Interested persons may submit comments or obtain more detailed information about the action from Mercy Hospital Joplin's website at www.mercy.net/Joplin-rebuild.com. Requests can also be made at Chelsea.Klein@fema.dhs.gov.

6.2 Public Meetings

A great number of public meetings and hearings were held to discuss the proposed site. A total of three open-house-type informal gatherings (described as Open Houses below) were held at which time the public was able to learn more about the proposed site and provide comments. The proposed site appeared on the agenda of various panels of the Joplin City Government a total of ten times (described as Public Hearings below) since its initial announcement. Each time, the proposal received the unanimous affirmative vote of the panel. Summaries of each of the Open Houses and Public Hearings follow:

6.2.1 August 16, 2011 Open House

Subsequent to the determination being made that the current proposed site (50th and Main) was the site selection committee's first choice, a community meeting was held on August 16, 2011 to announce the decision. The press was invited along with over 350 community members. Conceptual renderings of the proposed site plan and elevations of the buildings were shown at that time and appeared on the front page of the Joplin Globe. During the period of time between July 1 and August 1 meetings were held between Mercy Hospital Joplin representatives and individual property owners to determine the availability of land at the proposed site. Other environmental determinations were also being made during this period of time relating to past mining activity on the site.

6.2.3 September 20, 2011 Open House

Mercy Hospital Joplin held a public open house meeting on September 20, 2011, with the Board of Trustees of the Village of Leawood (the proposed site's neighbor to the East), wherein the design of the medical complex was discussed with the Board and a number of citizens. Notice of the meeting to Leawood residents was given by mailed newsletter from Village of Leawood staff. A number of citizens discussed and made comment regarding the medical complex design.

6.2.4 October 4, 2011 Open House

On October 4, 2011, an open house was held in an auditorium at the proposed site. All residents within the Village of Leawood along with other surrounding neighborhoods within

approximately 500 feet of the site were invited. Approximately one hundred people attended this forum hosted by Mercy Hospital Joplin, consulting groups, architects, City of Joplin, the Missouri Department of Transportation, Empire District Electric utility, and the Joplin Special Road District. Written comments and suggestions, along with many oral suggestions, were taken that evening, and were incorporated into the medical complex design where reasonably possible.

6.2.5 October 10, 2011 Public Hearing

On this date, a Public Hearing on the rezoning of the proposed site was convened before the City of Joplin's Planning and Zoning Commission, and members of the public were invited to comment. Missouri statutes require notice of zoning changes to be mailed to residents within 185 feet of the area to be rezoned, for notice of the rezoning to be placed in a local newspaper of record, and for the property to be posted with notice of the proposed rezoning, all of which was handled by the Joplin Planning and Zoning Department. During the Public Hearing, two residents of Leawood voiced concern over the changes that the medical complex would bring to their residential community. The Planning and Zoning Commission considered these comments, and voted unanimously to recommend approval of the zoning change to the Joplin City Council. Following the meeting, the Mercy representatives gathered further comments from the Leawood residents, primarily relating to locations of entrances to the medical complex and storm water runoff issues, and incorporated many of those comments into the medical complex design.

6.2.6 October 17, 2011 Public Meeting

On October 17, 2011, a Mercy Hospital Joplin representative was in attendance at the City Council's first reading of the proposed rezoning of the land acquired by Mercy for the proposed medical complex. No comment was made by any citizen.

6.2.7 October 21, 2011 Public Hearing

On October 21, 2011, a Public Hearing was held before the Board of Adjustment to obtain approval for a height variance from the current zoning limitations. The Board unanimously approved the variance, and no opposition was voiced at the Hearing.

6.2.8 November 7, 2011 Public Hearing

On November 7, 2011, a Public Hearing on the proposed rezoning of the proposed site was held in the City of Joplin Council chambers during a regularly scheduled council meeting. During the Public Hearing, a citizen again spoke in opposition to the rezoning, primarily based upon objections to the change in the residential character of the surrounding property. Following the Public Hearing, the City Council considered the comments, and then unanimously approved the rezoning request.

6.2.9 December 12, 2011 Public Hearing

On December 12, 2011, a Public Hearing was held before the Joplin Planning and Zoning Commission on the rezoning of an approximately 2 acre tract (the "Gentry Parcel") within the proposed site, which tract had not been under contract at the time the previous

Rezoning Application was filed. No one spoke in opposition to the rezoning and the Planning and Zoning Commission unanimously recommended approval of the rezoning to the Joplin City Council.

6.2.10 December 12, 2011 Public Hearing

On December 12, 2011, a Public Hearing was also held before the Joplin Planning and Zoning Commission on a Special Use Permit to operate a Heliport at the proposed site (the "Heliport Permit"). There was no opposition to the Heliport Permit, and the Planning and Zoning Commission unanimously recommended approval of it to the Joplin City Council.

6.2.11 January 3, 2012 Public Hearing

On January 3, 2012, a Public Hearing was held before the Joplin City Council upon the issue of the rezoning of the Gentry Parcel. No one spoke in opposition to the rezoning, and the City Council unanimously voted in support of the first reading of the Rezoning Petition.

6.2.12 January 3, 2012 Public Hearing

On January 3, 2012, a Public Hearing was held before the Joplin City Council upon the issue of approval of the Heliport Permit. No one spoke in opposition to the Heliport Permit, and the City Council unanimously approved the Heliport Permit.

6.2.13 January 17, 2012 Public Meeting

On January 17, 2012, the rezoning of the Gentry Parcel was placed on the Consent Agenda for approval by the Joplin City Council. No one appeared in opposition to the rezoning of the Gentry Parcel, nor did anyone request the items removal from the Consent Agenda, and the rezoning of the Gentry Parcel was unanimously approved by the Joplin City Council.

6.2.14 January 20, 2012 Public Hearing

On January 20, 2012, a Public Hearing was held before the Joplin Board of Adjustment to obtain approval for a height variance on the Gentry Parcel. No one appeared in opposition to the height variance, and it was unanimously approved by the Joplin Board of Adjustment.

6.2.15 Other Communications in the Local Community

In addition to the above meetings, the administrative team of Mercy Hospital Joplin was available to reporters from the local newspaper reports (Joplin Globe) and local television (KOAM, a CBS affiliate). Local coverage of Mercy Hospital Joplin rebuilding plans, as well as a number of the formal city and local meetings, was heavily publicized. Communications were also received from the Wildcat Glades Conservation and Audubon Center stating their appreciation for the work Mercy was doing to mitigate impact on the chert glades and Silver and Shoal Creeks.

7.0 Agencies Consulted

Preparation of this EA has been coordinated with appropriate Federal, State, and local agencies, and other interested parties including the Environmental Protection Agency (EPA), Natural Resources Conservation Service (NRCS), U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), Missouri Department of Conservation (MDC), Missouri Department of Natural Resources (MDNR) and Missouri State Historic Preservation Office (SHPO).

8.0 List of Preparers

The matrix below identifies persons and affiliations responsible for the preparation of this Environmental Assessment.

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9.0 References

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16 USC 1531 et seq. Endangered Species Act of 1973. Public Law 100-478, as amended.

25 USC 3001 et seq. Native American Graves Protection and Repatriation Act. Public Law 101-601.

33 USC 1251 et seq. Clean Water Act. Public Law 100-4, as amended.

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U.S. Geological Survey Topographic Maps. “Joplin West” Quadrangle.

Appendix A

Correspondence