National Park Service
U.S. Department of the Interior

Pullman Factory Site Conceptual Design

Environmental Assessment

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Pullman National Monument
11111 S. Forrestville Avenue
Chicago, IL 62628

Executive Summary

The National Park Service (NPS) has developed a range of alternative conceptual designs for improvements, rehabilitation, and use of the Pullman Factory site (Pullman or site), a component of the Pullman State Historic Park within Pullman National Monument. These proposed actions focus on preserving the historic Pullman Factory site by creating a common vision and understanding of the options available, and of the contributing roles of state, federal and private partners in moving these options forward.

The town of Pullman was created for the Pullman Palace Car Company in the 1880s by George Pullman and became a model factory town on the south side of Chicago. Pullman developed this town with the assistance of architect Solon Spencer Beman and landscape architect Nathan F. Barrett to create a community that served as a positive incentive for his workforce. Over the years, elements of this unique community have deteriorated but residents and partner groups have organized to rehabilitate the area. The district became a national historic landmark district in 1970. The State of Illinois purchased the Hotel Florence, the iconic Administration Clock Tower Building, and over twelve acres of the surrounding factory site in 1991, establishing the Pullman State Historic Site. The southern portion of the Pullman neighborhood was designated a Chicago city landmark district in 1972, and north district of Pullman was designated a Chicago city landmark district in 1993. The two districts were administratively joined and renamed the Pullman District by the city in 1999. In February 2015, President Obama designated Pullman National Monument using the Antiquities Act of 1906 to ensure that its unique history is preserved in perpetuity.

The conceptual designs communicate basic information on the improvements necessary to the Administration Clock Tower Building; placement of access points and parking; identification of period of significance; preserving and rehabilitating historic structures to improve visitor access and use; repairing or improving a variety of structural features such as windows, roofs, and ventilation in historic structures; and removing or stabilizing hazardous materials.

This Environmental Assessment (EA) evaluates three alternatives; one of which is the preferred action alternative (preferred alternative). Under Alternative 1, the Minimal Amenities Conceptual Design - Administration Clock Tower Building Conversion to Visitor Center (no action alternative), the park would continue its current planned level of operations and maintenance at the Pullman Factory site, but there would be no integrated approach to cultural landscape and historic structure treatments. Alternative 1 would convert the Administration Clock Tower Building into Pullman National Monument's principal Visitor Center suitable for other administrative uses. This development would include the provision of utilities into the building, routine maintenance, and limited development of visitor and employee parking on the site, basically using the same disturbed areas presently used for parking. The proposed action alternatives evaluate the features that contribute to two distinct periods of historic significance of the cultural landscapes and structures, and incorporate those features into the site design. Alternative 2, the George Pullman Period (ca. 1880-1897) alternative, includes all aspects described within Alternative 1 (No Action) and adds a series of other elements that assist in interpreting the 1880 Factory site and provides additional landscape design features reminiscent of that initial period in the history of Pullman. Alternative 3, Pullman Factory Modernization

Era (ca. 1898-1941) Conceptual Design alternative, includes all aspects described within Alternative 1 (No Action) and adds a series of other elements, including landscape features that assist in interpreting the Factory site after 1907. By 1907, the company had sold most of its residential properties to comply with the 1898 Illinois Supreme Court's order to do so, and began a series of efforts that resulted in significant alterations to the factory site.

The proposed action alternatives also address existing limitations on visitor access to, and use of, the structures. Selection of a conceptual design preferred alternative would provide the NPS and its partners with a common understanding of site rehabilitation goals and objectives for future actions to protect cultural resources, improve visitor experience and access, improve public health and safety, and provide more consistent and effective management and use of the Pullman Factory site.

This EA has been prepared in compliance with the National Environmental Policy Act (NEPA) to provide the decision-making framework that 1) analyzes a reasonable range of alternatives to meet objectives of the proposal, 2) evaluates potential issues and adverse impacts to the park's resources and values, and 3) identifies mitigation measures to lessen the degree or extent of these impacts. Impact topics evaluated in detail in this EA are cultural resources (archeology, historic structures and cultural landscapes), and health and safety. Some impact topics were dismissed because the project would result in no more than minor effects. No major effects were identified as a result of this project in an initial analysis of effects. The public, regulatory agencies, and other stakeholders will have an opportunity to comment on this EA. Comments received will be considered in the final evaluation of effects.

This document is part of Pullman National Monument's planning portfolio. It addresses some elements of the park's required management plans; other elements will be addressed in future planning documents. Together, all of the documents in a park's planning portfolio describe a vision for the park's future and meet NPS policy requirements.

The approval of the plan does not guarantee that funding will be available to implement it. Ultimately, implementation is dependent on partner assistance, fundraising efforts, remediation, federal budgets, and staffing levels. Full implementation may be years in the future.

Public Comment

If you wish to comment on this EA, you may post comments online using the National Park Service Planning, Environment and Public Comment (PEPC) website at: http://parkplanning.nps.gov/PullmanConcept or mail comments to: Superintendent; Pullman National Monument, 11111 S. Forrestville Ave., Chicago, IL 60628.

This EA will be on public review for 30 days. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made available to the public at any time. Although you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

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1.0 Introduction

Pullman National Monument (Monument) in Chicago, Illinois was established by a proclamation by President Barack Obama on February 19, 2015. The boundaries of the national monument include much of the historic Pullman neighborhood. Pullman was designed as a model community of the late 19th century and is a thriving community today. The town design, street layout, architecture, and landscaping of the community are largely intact and provides for a community identity. The monument boundary includes historic and active residential communities.

There are several overlapping designations and authorities (Figure 1) in the Pullman neighborhood. The National Park Service (NPS) owns only the historic Administration Building of the former Pullman factory (also known as the Administration Clock Tower Building.). All NPS management policies and federal regulations apply where the National Park Service has an ownership interest in the property. The Illinois Historic Preservation Agency (IHPA) owns and operates Pullman State Historic Site within the boundaries of the national monument. IHPA ownership includes the grounds around the Clock Tower Building, the north factory wing, the rear erecting shop, and the four-story Hotel Florence. The majority of the neighborhood is a City of Chicago Landmark. Within the City of Chicago Landmark, the city has zoning authority and the ability to enforce landmark and building code violations through administrative hearings or circuit court. There is also a National Historic Landmark (NHL) District boundary overlaying the monument. Designation as a national historic landmark helps recognize, preserve, and protect important locations in American history.

The Illinois Historic Preservation Agency (IHPA) transferred ownership of the Administration Clock Tower Building itself to the United States (total of 0.2397 acres), and retained the remainder of the Factory site surrounding the Administration Clock Tower Building (12.65 acres). For the purpose of collaborating on mutually agreed upon projects, programs and activities at the Monument, the NPS and the IHPA entered into a separate general agreement on February 20, 2015.

As a new unit of the National Park System, Pullman National Monument is at the beginning stages of developing partnerships with existing organizations, defining and developing visitor services, and creating interpretive programs. This Environmental Assessment (EA) examines proposed conceptual designs for improvements, rehabilitation, and use of the Pullman Factory site, which includes both the Administration Clock Tower Building in NPS ownership and the surrounding site and buildings that are a component of the Pullman State Historic Site within the boundary of Pullman National Monument. These proposed actions focus on preserving the historic Pullman Factory site by creating a common vision and understanding of the options available, and of the contributing roles of state, federal, and private partners in moving these options forward.

The conceptual alternatives provide specific recommendations on treatments for structures and landscapes at the site. This EA has been prepared to evaluate potential effects of the proposed draft conceptual designs on environmental health and cultural resources. All of the alternatives include adaptive reuse of the Administration Clock Tower Building as the initial Visitor Center for Pullman National Monument. The alternatives differ in conceptual designs for how the larger Pullman Factory site might be developed to accommodate and enhance visitor use. This EA was prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 and implementing regulations, 40 CFR Parts 1500-1508 and NPS Director's Order (DO) – 12 and Handbook, Conservation Planning, the National Environmental Policy Act (NEPA) of

Figure 1: Pullman National Monument and Several Overlapping Designations and Authorities in the Pullman Neighborhood, Chicago, Illinois (Graphic courtesy of Positioning Pullman)

1969 and implementing regulations, 40 CFR Parts 1500-1508 and NPS Director's Order (DO) – 12 and Handbook, Conservation Planning, Environmental Impact Analysis, and Decision-making and the National Historic Preservation Act (NHPA) of 1966, as amended (16 USC 470, et seq.). This EA determines whether significant impacts would occur as a result of the preferred alternative and if an environmental impact statement (EIS) or finding of no significant impact (FONSI) would be required.

1.1 Purpose and Significance of Pullman National Monument

The purpose and significance of Pullman National Monument have been identified in in the national monument's draft Foundation Document.

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Pullman National Monument was drafted through an analysis of the Presidential Proclamation that established the unit. The park was established on February 19, 2015. The purpose statement lays the foundation for understanding what is most important about the park.

> Pullman National Monument fulfills the following purposes for the benefit of present and future generations: to preserve the historic resources; to interpret the industrial history and labor struggles and achievements associated with the Pullman Company, including the rise of and the role of the Brotherhood of Sleeping Car Porters; and to interpret the history of urban planning and design of which the planned company town of Pullman is a nationally significant example.

Significance statements express why Pullman National Monument resources and values are important enough to merit national park unit designation. Statements of significance describe why an area is important within a global, national, regional, and system-wide context. These statements are linked to the purpose of the park unit, and are supported by data, research, and consensus. Significance statements describe the distinctive nature of the park and inform management decisions, focusing efforts on preserving and protecting the most important resources and values of the park unit.

The following significance statements have been identified for Pullman National Monument in the draft Foundation Document. (Please note that the sequence of the statements does not reflect the level of significance.)

- The Pullman Company transformed passenger rail travel in America. The comfortable facilities and consistently exceptional level of service of the Pullman Company was unprecedented; it became an international model for luxury. Pullman was a brand name equated with opulence and consistency, and is still recognized worldwide.

- What is today the Pullman neighborhood was the first completely planned major industrial model community in America. The community was recognized by some as "the perfect town," and influenced later planned communities. The architecture (by Solon Spencer Beman), landscape architecture (by Nathan Franklin Barrett), and sanitation (by

Benzette Williams) of the development were thoughtfully designed to provide good living conditions for workers, a significant departure from previous worker housing models and an improvement on what was generally available to workers in the free market in American cities at the time.

- George Pullman's factory town is a powerful example of the concept of corporate paternalism. Amenities provided to employees to encourage loyalty and workforce retention were meant to be both good for workers and profitable for the company. The Pullman workers' experiences were a mix of benefits and limitations. Employees in the community, comprised of European immigrants and migrants from the South and other parts of America, had to conform to the company's expectations. The Pullman Company town influenced later similar efforts by other industrialists.

- The Pullman Company and its employees played a pivotal role in the American labor movement. The 1894 strike was national in scope and highlighted the emerging strength of unions in America. Clarence Darrow and Eugene V. Debs, major figures in U.S. labor history, played roles in the Pullman strike. President Cleveland used the Sherman Anti-Trust Act to end the strike, the first time it was ever used against a union. Though already adopted by nearly half of the states, the enactment of the national Labor Day holiday was spurred by the Pullman Strike.

- The Pullman porter job was pivotal for the growth of the black middle class in America, and porters played a large role in the civil rights movement. By 1937 the Pullman Company had been the nation's largest employer of African Americans for more than 20 years, and Pullman porters composed 44% of the Pullman Company workforce. The jobs at Pullman contributed to the Great Migration of African Americans to the industrial Midwest.

- Formed by A. Philip Randolph, the Brotherhood of Sleeping Car Porters (BSCP) was the first black union to be recognized by the American Federation of Labor and to achieve a bargaining agreement with a major corporation. The (BSCP) union had a major influence on the American civil rights movement. The Pullman neighborhood is home to the National A. Phillip Randolph Pullman Porter Museum.

- The business economy of Pullman's industries allowed the company to be successful for a long period, despite legal and labor challenges. The Pullman Company was vertically integrated for maximum profit. It controlled the manufacturing process and staffing for its products and services. It leased its products and tightly controlled the consistency of the experience it provided.

1.1.1 Historic Overview and Project Background

The town of Pullman was created for the Pullman Palace Car Company in the 1880sby George Pullman and became a model factory town on the south side of Chicago. Pullman developed this town with the assistance of architect Solon Spencer Beman and landscape architect Nathan F.

Barrett to create a community that served as a positive incentive for his workforce. Town buildings, housing, and public spaces were all owned by the Pullman Company. During an economic downturn, Pullman reduced wages but kept rents high, which lead to the Pullman Strike of 1894. These strikes resulted in major disruptions to rail traffic. On June 27, 1894, Labor Day was designated a Federal holiday. Thirty-one States had already adopted the holiday, but it was the Pullman strike of 1894 that spurred final Federal action in an attempt to placate workers across the Nation.

In 1937, Pullman workers under the leadership of A. Philip Randolph, established the Brotherhood of Sleeping Car Porters. This labor group secured collective bargaining unit rights for the African American union membership. Randolph later worked on other early Civil Rights movements including the March on Washington in 1941.

The residents of Pullman are dedicated to ensuring the neighborhood is strong and well cared for. The Pullman Civic Organization was created in 1960 to further the preservation of this community's rich history. Two non-profit groups, the Historic Pullman Foundation and the National A. Philip Randolph Pullman Porter Museum also are active in promoting the significance of Pullman. The City of Chicago and the Pullman community have been strong advocates for the preservation of Pullman, which resulted in Pullman becoming a National Historic Landmark District in 1970. Since that time, the State of Illinois purchased the Hotel Florence, the iconic Administration Clock Tower Building, and over twelve acres of the surrounding Factory site in 1991, establishing the Pullman State Historic Site. The southern portion of the Pullman neighborhood was designated a Chicago city landmark district in 1972, and north district of Pullman was designated a Chicago city landmark district in 1993. The two districts were administratively joined and renamed the Pullman District by the city in 1999.

In February 2015, the President Obama designated Pullman National Monument using the Antiquities Act so as to ensure that its unique history is preserved in perpetuity. Despite the designation of Pullman National Monument, the National Park Service (NPS) only has fee title to the Administration Clock Tower Building, or about 0.2397 acres (about 10,000 ft^2 –Figure 1). The rest of the property in the National Monument boundary is held by the State of Illinois, non-profit organizations, and private landowners.

The Positioning Pullman workshop was convened late in 2015 through the collaborative efforts of the American Institute of Architects (AIA) Chicago, the National Parks Conservation Association, the National Park Service and other organizations and community groups. The Positioning Pullman project gave design professionals organized under AIA Chicago's Regional Urban Design Knowledge Community the task of developing important framework recommendations in areas related to topics such as community development, access and mobility, and historic preservation.

Following on Positioning Pullman, the NPS, the partners involved in the Positioning Pullman efforts, and the community itself recognized the need to develop and implement a plan that will set forth an organized effort to fully realize the National Monument's potential. As a result, the partners and the NPS have worked towards developing a conceptual design. This conceptual design and EA presents a general outline of how the NPS proposes to manage land we have

acquired to date, as well as how we will work in partnership with the various state, federal and non-profit groups within the Pullman District Factory site to achieve a series of common goals and objectives. These goals and objectives include:

- Preservation of Pullman's cohesive architectural style, scale, and identity
- Promotion of adaptive reuse of historic buildings
- Interpretation of features and architectural relicts for visitors and education
- Contribute to a "Sense of Place" for Pullman
- Protection of historic spatial qualities and significant landscape characteristics.

This EA explores alternatives and lays out a conceptual framework for park managers and their partners to follow in the future development of the Pullman Factory site. Additionally, this EA lays out the alternative concepts so that the potential impacts of each can be evaluated. These conceptual designs should be considered complementary to, and consistent with, other existing planning efforts. The National Environmental Policy Act (NEPA) specifically discusses and encourages the use of compliance within the planning process to communicate and evaluate conceptual designs

1.2 Purpose and Need for Action

A conceptual design is needed to propose a series of actions that will enhance and stabilize structures and features so as not to allow further deterioration of the historical integrity of the Factory site. There is a need to prepare the NPS-owned Clock Tower Building for park uses. There is also a vital need to communicate a common understanding of the goals and objectives for the site and to establish a larger vision among interested parties. There are many efforts ongoing to support the Pullman Factory site and the adjacent district; thus there is a need to communicate and coordinate these efforts to promote the efficient and effective treatment of the site.

The purpose of the conceptual design is to identify strategies that will provide redevelopment, rehabilitation and restoration, preservation, and interpretation of the Pullman Factory site within the larger Pullman National Monument. This document's purpose is to propose viable conceptual design options and to evaluate the relative impacts associated with those designs.

1.3 Legal Context

The United States owns in fee simple the Administration Clock Tower Building situated on 0.2397 acres located within the Pullman Factory site. The remainder of the property is owned by the Illinois Historic Preservation Agency. The NPS is directed to use applicable authorities to seek to enter into agreements with others to address common interests and promote management efficiencies, including provision of visitor services, interpretation and education, establishment and care of museum collections, and preservation of historic objects. Thus, partnerships will form much of the overall functional working context for Pullman but the overarching legal NPS authorities are presented below.

National Park Service Policy, Law and Regulation

The 1916 Organic Act directed the Secretary of the Interior and the NPS to manage national parks and monuments to:

> "…conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." (16 U.S.C. 1)

The Organic Act also granted the Secretary the authority to implement "rules and regulations as he may deem necessary or proper for the use and management of the parks, monuments and reservations under the jurisdiction of the National Park Service." (16 U.S.C. 3)

The 1966 National Historic Preservation Act, as amended, provides direction to federal agencies for protection of historic resources. Section 106 of the act requires consideration of adverse impacts to historic resources during the course of any federal undertaking. Section 110 provides for an affirmative role of federal agencies in identifying, preserving, and utilizing the historic properties that are in agency ownership.

The NPS Organic Act and the General Authorities Act prohibit impairment of park resources and values. The 2001 *NPS Management Policies* use the terms "resources and values" to mean the full spectrum of tangible and intangible attributes for which the park is established and managed, including the Organic Act's fundamental purpose and any additional purposes as stated in the park's establishing legislation. The impairment of park resources and values may not be allowed unless directly and specifically provided by statute. The primary responsibility of the NPS is to ensure that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

The 1970 National Park Service General Authorities Act (as amended in 1978, i.e., the Redwood Amendment) prohibits the NPS from allowing any activities that would cause derogation of the values and purposes for which the parks have been established (except as directly and specifically provided by Congress in the enabling legislation for the parks). Therefore, all units are to be managed as national parks, based on their enabling legislation and without regard for their individual titles. Parks also adhere to other applicable federal laws and regulations, such as the Endangered Species Act, the National Historic Preservation Act, the Wilderness Act, and the Wild and Scenic Rivers Act. To articulate its responsibilities under these laws and regulations, the NPS has established management policies for all units under its stewardship (NPS *Management Policies* NPS 2006).

National Environmental Policy Act (NEPA) (42 USC 4341 ET SEQ.)

NEPA requires the identification and documentation of the environmental consequences of federal actions. Regulations implementing NEPA are set forth by the President's Council on Environmental Quality (CEQ) (40 CFR, Parts 1500–1508). CEQ regulations establish the

requirements and process for agencies to fulfill their obligations under NEPA. The purposes of this Act are:

> *"*To declare a national policy which will encourage productive and enjoyable harmony between man and his environment and biosphere and stimulate the health and welfare of man, to enrich the understanding of the ecological systems and natural resources important to the Nation, and to establish a Council on Environmental Quality."

NEPA established requirements that federal agencies analyze the environmental impacts of federal actions and engage the public in the decision-making process. NEPA defines a process that federal agencies must follow when proposing to take actions that have environmental impacts. NEPA does not; however, dictate what decision an agency must make with regard to actions affecting the environment.

Pullman Proclamation

On February 19, 2015, President Obama signed Proclamation 9233 for the Establishment of the Pullman National Monument. Section 320301 of Title 54, United States Code (the ''Antiquities Act''), authorizes the President, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Federal Government to be national monuments, and to reserve as a part thereof parcels of land, the limits of which shall be confined to the smallest area compatible with the proper care and management of the objects to be protected. This proclamation set forth that the Secretary of Interior shall manage the monument through the NPS, pursuant to applicable legal authorities, consistent with the purposes and provisions of this proclamation. The proclamation specifically states that for benefit of present and future generations, the Monument is:

> "(1) to preserve the historic resources; (2) to interpret the industrial history and labor struggles and achievements associated with the Pullman Company, including the rise and role of the Brotherhood of Sleeping Car Porters; and (3) to interpret the history of urban planning and design of which the planned company town of Pullman is a nationally significant example."

The Proclamation further indicates that any planning process shall provide for full public involvement, including coordination with the State of Illinois and the City of Chicago and consultation with interested parties including museums and preservation and neighborhood organizations. Plans are to identify steps to be taken to provide interpretive opportunities and coordinate visitor services for the entirety of the Pullman Historic District to the extent practicable and appropriate for a broader understanding of the monument and the themes that contribute to its national significance. The NPS is directed to use applicable authorities to seek to enter into agreements with others to address common interests and promote management efficiencies, including provision of visitor services, interpretation and education, establishment and care of museum collections, and preservation of historic objects. This EA and conceptual design is an early effort to further these objectives.

1.4 Issues

In the context of the EA, "issues" can be problems, concerns, conflicts, obstacles, or benefits that could result if the proposed action or alternatives, including the no-action alternative, are implemented. To focus the environmental assessment, the NPS selected specific issues for further analysis and eliminated others from evaluation. A listing of environmental concerns identified through during internal scoping and discussions with partners and other local, state and federal agencies is presented below. These issues/concerns are fully evaluated in Section 3, Affected Environment and Environmental Consequences.

Period of Significance

The significance of the Pullman NHL district is definitively known, as it has already been designated a National Historic Landmark District. The NHL was designated on the basis of it being the first major planned industrial town in which an array of concerns – industrial, residential, recreational, cultural, and religious – were addressed by design; on the basis of the importance of the Pullman Strike of 1894 and its influence on the American labor movement; and for representing the architecture of Solon Spencer Beman.

At the time of its designation in 1970, the significance of the district was recognized for architecture, landscape architecture, urban planning, and the "social/humanitarian" area of significance, which encompassed the 1894 strike. No specific period of significance was identified. The boundaries of the NHL District were based on the original town, bounded by Cottage Grove Avenue on the west side of the district, the Illinois Central Railroad tracks on the east, 103rd Street on the north, and 115th Street on the south (NPS 1999).

Since 1970, the Pullman NHL District has come to be understood in a broader context. The field of labor history has evolved and come to greater prominence, and the "new labor history" approach goes outside the union narrative of marches and legal reforms to tell a wider story of working-class experiences, including women and workers of color who were neglected by or may never have belonged to unions. The new labor history pushes beyond the trade unions themselves to integrate labor history and social history, focusing on familial, communal, and cultural resources.

As a result, a greater segment of Pullman's history – the social history of living and working in the model town as reflected in the buildings and landscapes – would likely contribute to the significance of the Pullman NHL District.

The American Labor History Theme Study, undertaken by NPS in phases in the late 1990s and early 2000s, recommended an update to the Pullman NHL District documentation. A revision was begun in 1997, but the revised draft NHL documentation was not completed or submitted for consideration by the Landmarks Committee or the National Park System Advisory Board.

In addition to a broader understanding of Pullman in labor history, the district is potentially also significant for its role in the history of industry, commerce, and transportation. The model town of Pullman took the company town concept to new extremes and epitomized social engineering and corporate paternalism.

The Pullman palace car concept, in which cars were not bought but leased to railroads with attendants employed directly by the Pullman Company, was a way of selling a comfortable, luxury long-distance travel experience. Additional research into these aspects of the Pullman Company and its impact may yield new facets of the NHL District's significance.

Another area of understanding in the history of the Pullman Company is the importance of the Brotherhood of Sleeping Car Porters (BSCP), and their charismatic leader A. Philip Randolph, in labor history and the civil rights movement. The hard won BSCP agreement with the Pullman Company became the first black labor union chartered by the American Federation of Labor in 1937. Unlike the Pullman Company's factory workers, who worked at specific locations, the Pullman porters worked around the country across miles and miles of rail lines. Many Pullman porters were employed in the major rail hub of Chicago. Organizing and the quest for union recognition took place in a variety of cities; sites of organizing in Chicago include office and meeting space at the Metropolitan Community Church in Chicago, associated with the BSCP's large and influential Chicago division. Pullman Company headquarters were at the Pullman Building on Michigan Avenue in downtown Chicago from 1884 until 1948. Though there is not a direct physical connection between the BSCP and the Pullman NHL District, the Presidential Proclamation establishing Pullman National Monument directs the NPS to interpret the story of the BSCP.

Thematically, the story of the Pullman porters and the labor struggle and triumph of the BSCP is related to Pullman National Monument because the thematic connection to the Pullman Company and the system of sleeping cars that George Pullman built is strong at the site. In addition to other venues where the Pullman porter story is being told, such as the National A. Philip Randolph Pullman Porter Museum, Pullman National Monument is an appropriate place to interpret the BCSP story as a part of the Pullman Company's relationship with labor in the 19th and 20th centuries, especially including the historic 1937 labor agreement between the Pullman Company and the BSCP. Both the 1894 Pullman Strike and the quest for recognition by the BSCP can be seen as part of a larger trajectory of struggle between companies and a workforce often wracked by social, gender, and racial divisions.

Given this unique and varied history, the NPS defines a specific period of significance for each alternative as described in Section 2. This approach will allow the reader to best understand the rationale for each alternative and the need to undertake certain activities to honor the period of significance selected.

Integrity – The historic integrity of a particular site or district is determined on the basis of the degree to which the key characteristics of location, design, setting, materials, workmanship, feeling, and association have persisted through time. Since its designation, the overall level of integrity of the Pullman NHL District has been largely maintained. By the time of designation in 1970, some signature industrial buildings including the Water Tower, the Allen Paper

Wheelworks, and the Corliss Engine House were lost, and other industrial operations took their place on the eastern portion of the industrial heart of the district. This pattern of land use persists today. The overwhelming majority of residential structures remain intact. The Pullman Factory Site has lost some of its integrity due to changes over time. The issue addressed in this document is what elements of the site still have integrity, and how they can be highlighted for visitors. Changes to the site to allow visitor access and interpretive opportunities must strive to maintain the overall integrity of the site.

Environmental Health and Safety – The Pullman Factory site was an industrial complex and its industrial practices resulted in the release of contaminants to the environment, which still remain on site. The alternatives proposed in this plan must account for those hazards; therefore, this is an issue that must be addressed.

While recognizing that there are limitations on its capability to totally eliminate all hazards, the NPS and its concessioners, contractors, and cooperators will seek to provide a safe and healthful environment for visitors and employees at Pullman. The NPS will work cooperatively with other federal, state, and local agencies, organizations; and individuals to carry out this responsibility. The NPS will strive to identify and prevent injuries from recognizable threats to the safety and health of persons and to the protection of property by applying nationally accepted codes, standards, engineering principles, and the guidance contained in Director's Orders #50B, #50C, #58, and #83 and their associated reference manuals (NPS 2006). *NPS Management Policies* also state when practicable and consistent with congressionally designated purposes and mandates, the Service will reduce or remove known hazards and apply other appropriate measures, including closures, guarding, signing, or other forms of education. In doing so, the NPS's preferred actions will be those that have the least impact on park resources and values. NPS must ensure that parties responsible for contamination or threatened contamination of NPS property bear the responsibility for addressing such contamination (NPS 2006). NPS will comply with federal, state, and local laws and regulations including, but not limited to, (1) the Solid Waste Disposal Act, including the Resource Conservation and Recovery Act of 1976 and the Hazardous and Solid Waste Amendments of 1984, as amended; (2) the Comprehensive Environmental Response, Compensation and Liability Act of 1980; (3) the Oil Pollution Act of 1990; (4) the Clean Water Act; (4) the Hazardous Materials Transportation Act; and (5) the Toxic Substances Control Act. Such activities will also comply with the NPS integrated pest management program when addressing contaminant issues in parks (NPS 2006).

The ability of the NPS to implement the alternatives is dependent in part on the ability of partners to remediate the contaminants at the Pullman Factory site. The NPS will take affirmative and aggressive action to ensure that all NPS costs and damages associated with the release of contaminants are borne by those responsible for the contamination of NPS property. In addition, when lands are proposed for acquisition by the Park Service, the agency will take steps to avoid or minimize its liability for the contamination of NPS property caused by other parties (NPS 2006).

1.5 Impact Topics Retained for Analysis

Impact topics are resources of concern that could be adversely affected by implementing any of the proposed alternatives. NEPA requires that agencies take into account the impact on the human environment from the actions they propose and evaluate those impact topics that are most significant (meaning pivotal issues or issues of critical importance).

Each of the following topics would be impacted by the proposed alternatives and have been retained for analysis in this document.

Cultural Resources - Section 106 of the National Historic Preservation Act of 1966, as amended, provides the framework for federal review and protection of cultural resources, and ensures that they are considered during federal project planning and execution. As a result of potential impacts, the following categories of this topic will be retained for further analysis:

- **Archeological Resources** – The full extent of archeological resources in the project area is unknown as the site has not undergone formal inventory; however, it is acknowledged that a traditional formal survey methodology would not be particularly useful for this industrial site. In essence the entire area of the Factory site comprises an archeological site given the distribution of remnant architectural features - but the more important question is which of these are significant in terms of their contribution to our knowledge of the operation of the factory and/or the events that took place here. Site development, restoration, and upgrading Park infrastructure will require ground disturbing activities and could affect archeological resources.
- **Historic Structures and Cultural Landscapes** – The proposed conceptual designs have the potential to adversely impact historical structures and the cultural landscape. As a result, historic structures and cultural landscape will be retained for full analysis.

Environmental Health and Safety -Past uses at and surrounding the Factory site included heavy industrial activities. Subsurface throughout the area include environmental contaminates. The proposed action has the potential for ground disturbance. As a result, environmental health and safety will be retained for full analysis.

1.6 Impact Topics Eliminated from Further Consideration

The following impacts were determined to be insignificant and/or not considered central to the issue or of critical importance. Therefore, these impact topics have been dismissed from further analysis in this document.

Threatened and Endangered Species - The Endangered Species Act requires an analysis of impacts on all federally listed threatened and endangered species, as well as species of special concern. In compliance with Section 7 of the Act, the U.S. Fish and Wildlife Service (USFWS) has been consulted. No federally-designated threatened or endangered species are known to occur within the Park and none are anticipated to be affected by this plan.

Floodplains and Wetlands – Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Wetlands) requires an examination of impacts to floodplains and potential risks involved in placing facilities within floodplains and wetlands. NPS *Management Policies 2006* and DO 77-2: Floodplain Management provides guidelines for proposed actions in floodplains. The action alternative proposes reuse of the altered landscape but largely returns the area to a more natural setting. A portion of the site was the former Lake Vista. Like many urban areas during the age of industrialization, wetlands and floodplains were filled to facilitate construction and other land use needs. According to soil surveys conducted by IEPA (IEPA 2016), several soil borings around the former Lake Vista location, sand was located between depths of 3-6 feet bgs. Little to no moisture was observed in the majority of the soil borings. Thus remnant wetlands do not exist on site and hydrology has been highly altered. No extant floodplains or wetlands persist in the project area. Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Wetlands) are therefore not addressed in this Environmental Assessment.

Viewshed – *NPS Management Policies 2006* states that scenery and scenic features are included among the resources and values that are to be protected and conserved. The proposed action calls for site development and improvement to infrastructure. The actions proposed could potentially result in short-term adverse impacts associated with construction but the overall goal is to improve the visual experience and create a holistic vision for the Pullman Factory site. Therefore this topic, while important, is largely incorporated within the larger cultural landscape analysis and thus will not be retained for further analysis independently.

Climate Change – Some greenhouse gases, such as carbon dioxide, would be emitted from the use of construction equipment. These emissions would have a negligible short-term adverse effect on climate change. Changes in visitor use following implementation of the action alternatives would not result in a substantial increase in traffic or associated vehicle emissions. Because the proposed alternatives would result in no more than negligible park-wide and regional short-term adverse effects on climate change, this impact topic was dismissed from further analysis in this EA.

Soils – According to soil surveys conducted by IEPA (IEPA 2016), the Park's soil types are generally characterized as several feet of silty fill material, consisting of rock/gravel/brick, and in some instances, portions of slag (an industrial byproduct), underlain by a thick brownish-gray silty clay unit (with trace gravel) to the maximum depth explored - approximately 40 feet below ground surface (bgs). In several soil borings around the former Lake Vista location, sand was located between depths of 3-6 feet bgs. Little to no moisture was observed in the majority of the soil borings. These soil types are indicative of an area that is highly disturbed from historic uses and thus the total area disturbed by the proposed project would likely not impact native soils types to any degree; therefore, soils are dismissed from further analysis.

Air Quality – The federal 1970 Clean Air Act stipulates that federal agencies have an affirmative responsibility to protect a park's air quality from adverse air pollution impacts. The Monument is located within a Class II air quality area. The air quality requirements for this area are less stringent and pristine as compared to a Class I area. The effects of construction and site development on air quality would be limited to short-term consequences resulting from the

temporary introduction of particulates into the environment. As a result, air quality will be dismissed from further analysis.

Visitor Experience – The Pullman State Historic Site hosted 8,825 visitors to the shared visitor contact station (Historic Pullman Visitor Center) in 2015. It is expected that Pullman National Monument will see a fairly significant increase in visitation once its Visitor Center in the Administration Clock Tower Building is complete. All alternatives address components of improvements to the Pullman Factory site, which would enhance visitation and the public/community experience. A description of specific improvements are presented within the alternatives discussion and can infer an improvement to visitor experience by providing more green space and improved facilities and interpretative opportunities; therefore, visitor experience is dismissed from further analysis but will be addressed as appropriate within the alternative descriptions in Section 2.

Socioeconomics – The local economy and most businesses within the communities adjacent to the site are based on professional services, construction, tourism, and light industry. The proposed plan would improve the overall quality of the visitor experience, which is beneficial to the local economy. Construction-related spending also would provide a short-term benefit to the economy through employment and purchase of construction materials and services. There would be less beneficial socioeconomic effects under the no action alternative as the construction/ rehabilitation elements of the project are shorter. No adverse socioeconomic effects were identified as the project itself will improve the facilities, the appearance and the aesthetics within the community; therefore, socioeconomics was dismissed as an impact topic in this EA.

Indian Trust Resources – Indian Trust Resources are those resources held in trust for American Indians by the United States. These can be lands or specific resources granted by treaty. There are no known properties that can be classified as trust resources, no resources at the Monument have been protected through treaty or by other government agreements. As a result, Indian Trust Resources have been dismissed from further analysis.

Environmental Justice – Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations,* requires all federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. This plan would not result in significant changes in the socioeconomic environment of the area, and therefore is expected to have no direct or indirect impacts to minority or low-income populations or communities.

1.7 Permits and Approvals Needed to Complete the Project

The alternatives described within this document are conceptual and intended to serve as an early step in planning; therefore, the NPS does not need to secure any permits or approvals at this time. The NPS, the Illinois Historic Preservation Agency (IHPA), Illinois Environmental Protection Agency (IEPA), and other state and local government and program partners will continue to work together to advance these concepts. This document's purpose is to propose viable conceptual design options and to evaluate the relative adverse impacts associated with those designs. The document

provides an opportunity to communicate and consult with key partners, agencies and groups on these conceptual designs. Once a conceptual design is selected, additional compliance, permits and approvals may be needed and will be addressed at a later date.

Local, city, and state regulations apply throughout the Pullman National Monument, to all properties except those owned by the federal government or the state. The federal government has limited ability to influence privately owned property inside the Monument, aside from provisions related to the NHL district.

2.0 Alternatives

This section describes a no-action alternative and two action alternatives for addressing the needs in the headquarters area of Pullman National Monument. The original town design and factory operations and subsequent factory modifications, long-standing community needs, and the forthcoming conversion of the Administration Clock Tower Building into the Monument's Visitor Center were considered to develop a set of three site improvement concepts. Alternatives and actions that have been considered but dismissed from further analysis are also briefly discussed. For each of the alternatives considered, the land area that would be affected by implementation of that conceptual development plan would not exceed the 12.65 acres of the Pullman State Historic Site, exclusive of Hotel Florence.

No Action Alternative

The term 'no action" under NEPA has two interpretations. First "no action" may mean "no change" from a current management direction or level of management intensity (*e.g.*, if no ground-disturbance is currently underway, no action means no ground-disturbance). Second "no action" may mean "no project" in cases where a new project is proposed for implementation (43 CFR 46.30). The no-action alternative can describe what would happen if current management were to continue into the future and an analysis of the no-action alternative should discuss how the current condition of affected resources would change if current management were to continue. In this Conceptual Design Environmental Assessment, no action is described in terms of carrying the current management direction forward; that is, NPS will continue to move forward with the development of the improvements to the Administration Clock Tower Building as this was and is the current management direction of NPS. This perspective will serve as the baseline to consider the other alternatives.

Proposed Action

The proposed action is "the bureau activity under consideration" (36 CFR 46.30). Put another way, a proposed action is the initial NPS proposal to address a purpose and need. In preparing the EA, the NPS develops alternatives that constitute different ways to address purpose and need.

The NPS proposed action is to rehabilitate the Administration Clock Tower Building into the Monument's visitor center and to select a conceptual design for improvements, rehabilitation, and use of the Pullman Factory site in order to prevent further deterioration of the historical integrity of the Factory Site and provide for a safe visitor experience.

Definitions

The descriptions of the alternatives include a number of words that have specific meaning when used in the context of historic structures and cultural landscapes.

National Register of Historic Places

NPS administers the National Register of Historic Places (NRHP). The NRHP is the official federal list of districts, sites, buildings, structures, and objects that have been determined to be significant in American history, architecture, archeology, engineering, and culture. As such, properties eligible for listing in the NRHP have demonstrable significance to the history of their community, state or the nation.

Contributing Feature

A contributing feature is a building, site, structure, or object adding to the historic significance of a property, structure, or cultural landscape as applicable.

Treatment Approaches

The Secretary of the Interior has developed four nationally accepted treatment approaches for addressing historic resources. Each treatment approach has associated guidelines and standards for how it is applied to historic resources. The four treatment approaches are:

- **Preservation** standards require retention of the greatest amount of historic fabric, including the landscape's historic form, features, and details as they have evolved over time. Limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work is permitted.
- **Rehabilitation** standards acknowledge the need to alter or add to a building or cultural landscape to meet continuing or new uses while retaining the site's historic character. Rehabilitation allows for repairs, alterations, restoration of missing features, and additions necessary to enable a compatible use for a property as long as the portions or features which convey the historical, cultural, or architectural values are preserved.
- **Restoration** standards allow for the depiction of a building or landscape at a particular time in its history by preserving materials from the period of significance and removing materials from other periods.
- **Reconstruction** standards allow for depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

Treatment Terminology

The following terms are used in the descriptions of alternatives:

- **Alter** – is to change in some fashion from the existing condition.
- **Maintain** – are those standard maintenance practices (mowing, pruning, thinning vegetation or painting, cleaning small scale features) that are necessary to retain the features or area as a contributing resource. Maintenance activities are usually not classified as repair, however, minor repair such as replacing posts or railings or segments of paving are included. Limited and sensitive upgrading of systems (mechanical, electrical, plumbing) and other code related work is appropriate.
- **Plant** – removing and replanting landscape plantings and vegetation as part of maintenance activities.
- **Protect** – short term and minimal measures used to stabilize and protect features, such as fencing around landscape features.
- **Reestablish** – measures necessary to depict a landscape feature as it occurred historically. Reestablish may include replacing a missing feature, such as replacing a pattern of planting, or replacing a missing quality, such as the reestablishment of a view.
- **Relocate** – removing and resetting non-contributing features.
- **Remove** – removing non-historic features.
- **Repair** – are those measures necessary to maintain a building or portion of a building in place using the same materials that exist, or with very minimal addition of new materials. Repairs are more extensive than regular maintenance. Features that are repaired will match the old in design, color, texture, and if possible, material. Replacement work will only occur when historic fabric is deteriorated beyond repair. Evaluation of restoration and low-impact options must be exhausted before replacement is considered feasible.
- **Restore** – are those measures necessary to depict a feature or area as it occurred historically. Restoration may include repairing a feature so that it appears as it did historically or it may include replacing missing features (such as replacing a section of a historic fence) or quality (restoring a view). Restoration is undertaken when a "period of significance" is determined and that period of significance (original construction or a succeeding period representing a continuum of change for the property) becomes a project goal. Restoration is only recommended when restorative details can be substantiated by documentary and physical evidence. Without indisputable evidence, restorative work risks conjectural decision making, leading to inaccurate and inappropriate historical appearance. Restoration must avoid the creation of a false sense of historical development.
- **Retain** – are those actions that are necessary to allow for a feature (contributing or non-contributing) to remain in place in its contributing current configuration and condition. Retention of historic fabric is the primary tenet for preservation treatment of historic properties. The extent of historic fabric represents historic integrity which is fundamental to the recognition and status of historic properties.
- **Stabilize** – immediate measures (more than standard maintenance practices) are needed to prevent deterioration, failure, or loss of features.

Activities Common to All Alternatives Including the No-Action Alternative

Development of Administration Clock Tower Building as Visitor Center

Within the Monument's approximately 200-acre boundary, the NPS currently owns only the iconic Administration Clock Tower Building. This building was transferred to the NPS by Quitclaim Deed, dated December 23, 2014 from the Illinois Historic Preservation Agency, together with an easement for ingress and egress to and from the property. The Administration Clock Tower Building is identified in the Park's Draft Foundation Document as a fundamental resource for Pullman National Monument:

"This structure is the cornerstone of the National Park Service presence at the monument. The Clock Tower Building was the heart of the factory and town. An arson fire in 1998 heavily damaged the building, and it was partially reconstructed and restored. The NPS currently owns only the Clock Tower Building, and the Illinois Historic Preservation Agency owns the grounds and the rest of the factory site."

The Administration Clock Tower Building is expected to accommodate a visitor center and also serve as the administrative center of NPS operations at the Monument. As the first phase in developing the approximately 30,000 square-foot building, the NPS is working with partners to prepare the first floor (10,000 square feet) for visitors, exhibits, and administrative offices.

The conversion of the Administration Clock Tower Building into the Monument's principal Visitor Center and administrative hub is described in some detail under Alternative 1 below, but would also be undertaken under all of the action alternatives. A discussion of that activity will not be included in the descriptions of the action alternatives but should nonetheless be considered an integral part of each concept.

Erecting Shops

The erecting shops including the north and south annex areas will be stabilized to the extent necessary for staff and visitor safety.

Remediation and Factory Site Ownership/Management

The United States owns in fee simple the Administration Clock Tower Building situated on 0.2397 acres located within the Pullman Factory site. The remainder of the property is owned by the Illinois Historic Preservation Agency. As a result of historical industrial activities, the Pullman Factory site contains certain environmental contaminants, including heavy metals and petroleum derivatives that necessitate remediation in order to facilitate future use. Pursuant to Title XVII of the Illinois Environmental Protection Act, 415 ILCS 5, Illinois EPA has jurisdiction over the Site Remediation Program, under which the Factory site will be remediated.

The NPS and the IHPA share the objective of restoring the Pullman Factory site so that it can be made fully and safely available for public use and enjoyment, including historical and cultural interpretation. In so doing, both agencies will work to ensure that the investigation, evaluation, and cleanup conducted at the Factory Site are thorough; satisfy applicable state and federal laws and requirements. The NPS and the IEPA jointly signed an agreement on July 20, 2015, to address environmental contaminant issues on the site. All parties will work together to address risks to public health, safety and the environment and to minimize risks of environmental liability exposure under state, federal, and common law. This conceptual design will outline design needs that can then be included in remediation goals for the site, ensuring continuity between design and remediation needs.

The NPS does not intend to assume operator responsibilities related to the Pullman Factory site until cleanup conforms to NPS standards. The NPS will continue to work in partnership with the State of Illinois to develop a remediation plan and if appropriate develop a multi-party agreement to assign roles and responsibilities for operation and management of any contaminated lands. Development of easements or securing federal ownership of the Pullman Factory site (the remainder of the 12.65 acres of the site) would be subject to securing a remedial outcome that satisfies applicable state and federal laws and requirements and conforms to NPS standards.

Costs

This Conceptual Design and EA is intended to provide a vision for future use of the Pullman Factory Site and specific costs would be dependent on the extent to which the site is built out and subsequent detailed design specifications. A detailed cost estimate will be developed though the design process, once the appropriate design alternative has been identified (discussed herein). The costs for the development of the Administration Clock Tower Building, including exhibits and site development, is estimated between $10 to $13.3 million and is dependent on the extent of development of Pullman Factory site. At this time, we anticipate an additional $2 million for remediation and State funds have been set aside to address much of these costs. NPS and the State will continue to work to secure funds to address additional costs through appropriate funding opportunities and through partnership agreements.

2.1 Alternative 1 – No Action - The Minimal Amenities Conceptual Design - Administration Clock Tower Building Conversion to Visitor Center

The “no action” alternative is presented for comparative purposes so that the impact of maintaining current conditions can be compared to the impact of the other alternatives (Figure 3). The “no action” represents “no change” from a current management direction or level of management intensity. Under this alternative the only action that would take place at the site would be the conversion of the Administration Clock Tower Building into Pullman National

Monument's principal Visitor Center suitable for other administrative uses. This development would include the provision of utilities into the building, as well as very limited development of visitor and employee parking on the site, basically using the same disturbed areas presently used for parking.

2.1.2 Visitor Center Development

Central Carriageway – West Entry / East Vestibule / Welcome / Orientation

Visitors would be able to enter or exit the building at either the west or the east central entrances of the building; NPS staff would also be able to enter through the other two service doors on the east and south elevations (Figure 2 and 3). This entry sequence into the Visitor Center would give a striking visual and unique physical experience as visitors walk into the building through one of the monumental entranceways into frameless glass entry vestibules. The restored central carriageway, with exposed decorative brick masonry and limestone walls and a reproduction decorative wood ceiling and dry laid granite cobble stone floors, would provide a striking welcome and orientation space for the Pullman National Monument.

In order to prevent the release of any potential contaminants present in the existing dirt floor of the Administration Clock Tower Building, the entire surface of that floor would be capped in a concrete slab sealed against the exterior walls. All new floor surfaces would be installed upon that concrete cap.

The four original arched transom masonry door openings would be re-established, and new frameless glass doors with transoms would be provided at all original archway openings except for one, which provides access to the elevator and public toilet rooms to the south. The two double doors on the north wall would provide access to the exhibit and retail spaces located in the north wing; the double door at the east end of the south wall would enter into the administration spaces of the Visitor Center.

Non-original door penetrations and later modifications to the carriageway would be reversed. This would include the removal at the first floor of the brick masonry bearing walls that form vault spaces within the center of the building, as well as the existing metal stair that provides access to the first, second, and third floors. New glass doors would be installed in the original doorways in the west entry; the north door will also lead into the exhibit space, and the south door would lead into a small vestibule that provides access to the Multi-Purpose Room and one of two egress stairs.

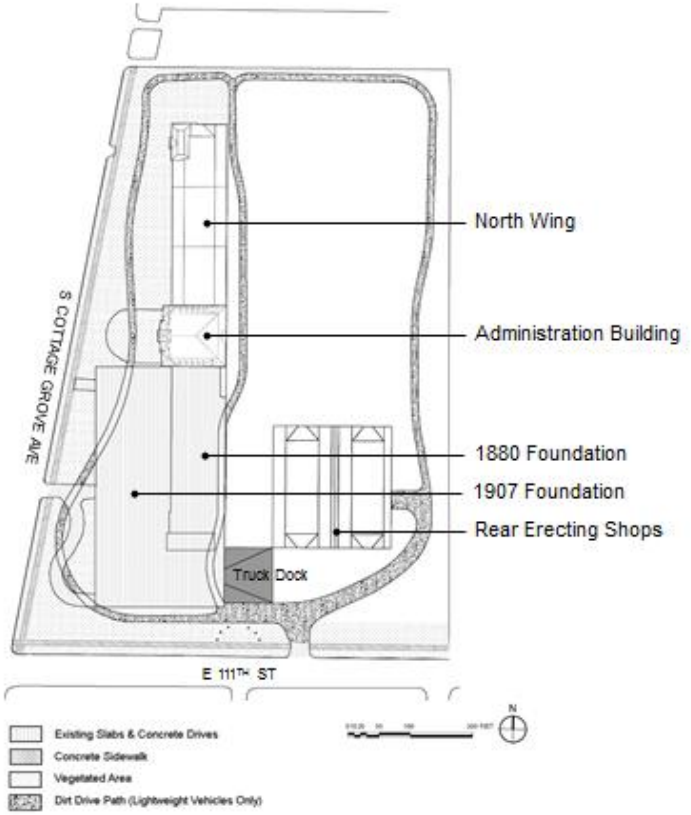

Figure 2 – Alternative 1 (No Action) Concept Plan

At the center of the carriageway space, which is more than 12' wide and runs the full east-west length of the building, a portion of the Welcome/Information/Visitor Contact desk would be located (Figure 4). The design intent is for the wood casework of the Welcome desk to integrate with the original internal masonry window opening at this location, and to do so in a way that provides for good functionality, visibility, and supervisory sightlines as well as smart ergonomics and Architectural Barriers Act Accessibility Standard (ABAAS) compliant work surfaces and features for staff and public alike. This desk would be the central point of reference within the restored carriageway as well as within the exhibit spaces to the north, and would be scaled and detailed in a manner compatible with the remaining historic character of the Administration Clock Tower Building.

Primary heating and cooling to this space would be transferred from the north and south portions of the first floor; radiant heating would be provided in the entry vestibules, and ceiling fans may also be provided throughout the carriageway to assist with de-stratification. Surface-mounted ceiling light fixtures that are compatible with the historic character of the building would be provided, and would be supplemented with exhibit lighting for wall-mounted interpretive panels and graphics; there are no exterior windows in this space. Fire protection devices, including detectors and sprinklers, would be coordinated above the ceiling, and power/data conduits will

be fed from above. In both the west entry and east vestibule, interconnected fire command station devices and building security panels would be provided.

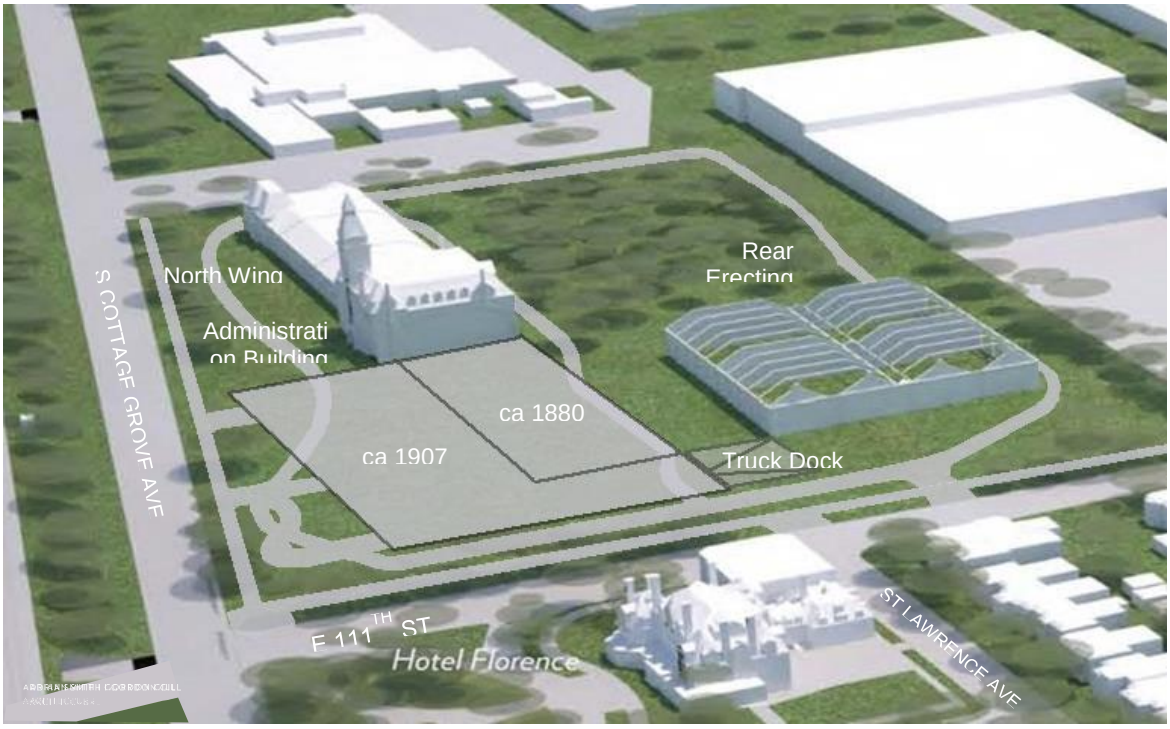

Figure 3: Alternative 1 Aerial View (No Action)

North Rooms – Exhibits / Retail / Information Desk

The north side of the building would be programmed for the primary visitor experience spaces, due to the adjacent relationship with the North Shops and the potential for programmatic collaboration with the State of Illinois as the Visitor Center and Pullman National Monument expands and evolves. This space would be left open, with the exception of the existing columns and the mechanical equipment room and egress stair at the northeast corner, to allow for as much flexibility with exhibit and interpretive planning and programming as possible.

Three doors would enter into the space from the central carriageway: one at the west end and two near the middle of the space. The Welcome/Information/Visitor Contact desk would also be centrally located in the space, and would serve as the primary point of visitor contact at the carriageway and in the exhibit spaces (Figure 4). At the north wall, the large existing opening would be infilled with a fire-rated glass window system, to allow for visual and possibly physical connection between the Visitor Center and the North Shops.

Figure 4: Conceptual Schematic of Interior of Pullman Visitor Center

At the west end of this space, existing historic reproduction windows provide ample daylighting and opportunities for interpretive connections to the exterior industrial landscape; light control devices are recommended at these windows, and would be coordinated with the exhibit design and the exterior appearance of the building. Window openings at the east are currently infilled with plywood panels. The current project budget does not include reproduction windows at this elevation of the Administration building; a separate project may be developed concurrently to provide these windows in coordination with the interior construction.

The east end of the north side of the first floor would be programmed for the retail functions; the boundary between exhibits and retail would be somewhat porous, allowing the retail design of casework and display tables to develop independent of the base building but in connection with the exhibits. To achieve visual continuity within this space but provide after-hours security, a motorized overhead security screen is proposed to segregate the retail from the exhibit space if needed. Secure storage for immediate stock, supply, and cash storage needs would be provided directly adjacent to the retail space and located underneath the egress stair.

National Institute of Standards and Technology (NIST 800-53) requirements mandate that server equipment in government facilities be secured. The equipment would be stored in a dedicated closet or minimally locking full height equipment rack. The equipment would have appropriate grounding, surge suppression, temperature controls (humidity/temperature), physical protection, access to demarcation point (or telephone/Internet), etc.

Finishes throughout the north half of the Visitor Center would be consistent throughout the public spaces, and are meant to visually unify the large volume. Much of the exterior exposed walls would have new metal stud furring with insulation and a painted gypsum wallboard finish; large wall areas would have a layer of plywood behind, to facilitate exhibit installation. Interior wood window trim (head, jamb, and sill) would be provided and painted at all windows. Interior original masonry walls would be cleaned and repointed and left exposed to reveal the few remaining areas of original building fabric, and to observe and monitor these walls for the deteriorating effects of rising dampness.

The floor surface throughout the north space would be wood strip flooring with a wood base, and would be installed to match the species, width, and direction of the original flooring which survives in several remnant areas; a remnant area would be incorporated into the interpretive exhibits in some fashion. The original drive shaft at the eastern end of the first floor runs continuous across the building and would be stabilized, infilled, and new flooring will be installed over this trench.

The ceiling would be a continuous floating plane of suspended decorative panels, similar to an egg-crate panel construction, that would obscure the building systems installed above yet provide for easy access and reconfiguration as needed. This system would be held back from the exterior wall at window locations, as the existing steel framing of the building drops below the window head height. The underside of the second floor structure would be insulated prior to building system installation, which would consist of ductwork, sprinkler piping, and power/data conduits that will feed the spaces primarily from above. All systems would be painted out following installation to minimize their visual appearance above the ceiling plane. Lighting controls for this space would be located in the mechanical equipment room.

The mechanical equipment room would be a double height space with stacked mechanical equipment. Floor finishes would be Vinyl Composition Tile (VCT) with vinyl base, and wall finishes would be painted gypsum wallboard; no ceiling is provided due to the amount of equipment proposed for this room.

The egress stair at the northeast corner would be a metal pan concrete filled steel stair supported off a concrete masonry unit shaft wall construction with a 2’ wide concrete strip foundation; no underpinning is assumed.

South Rooms – Multi-Purpose Room / Administration Spaces

The south spaces in the Visitor Center would also be accessed from the central carriageway; the eastern entrance would lead into the Administration spaces, the central entrance would lead into the elevator and public comfort station areas, and the western entrance would lead into the Multi-Purpose Room. A second egress stair, similar to the stair located at the northeast corner, would also be off this west vestibule.

The Multi-Purpose Room, which is envisioned to be used for group orientation as well as after-hours programming in conjunction with community groups, would be adjacent to the western entrance and will have a separate egress directly to the exterior on the south elevation. Two large

storage spaces would be provided within this room to facilitate chair/table storage as well as other general building and limited site equipment storage. Floor finishes in these closets would be VCT with vinyl base, and wall finishes would be painted gypsum wallboard; no ceiling is provided to maximize storage capacity. This space can generously accommodate 35 seats, and the room and its entrance vestibule would have similar wall, floor, and ceiling finishes as the north exhibit spaces. Lighting control at the south and west windows within this room, as well as interior painted wood trim surrounds at these windows, would be provided. Audio/visual (A/V) equipment would be stored within a dedicated A/V closet, and the room would be supplied with appropriate power, conduit, grounding, in support of A/V needs.

The administration spaces at the eastern end of the building would provide for the essential staff proposed for the first phase of operation of the Visitor Center; there is not room for expansion or staff growth in this office suite. Entry into the space would be from the central carriageway, with a secondary door off the hallway near the elevator and public comfort station rooms; this space would be secured separately from the rest of the building. The central portion of this space provides room for four open workstations and circulation space around; the private office spaces and conference room would be located against the east wall, and provide borrowed light into the central workspace. Doors and sidelights within this space would be solid wood construction. The central workspace as well as the offices, conference room, and interim curatorial workshop would have linoleum flooring with wood base trim; all spaces would be finished with painted gypsum wallboard construction for floors and ceilings. Built in casework would provide a small server and mail/file/copy space along the west wall of the central workspace.

The elevator core would be located at the center of the building, directly off the central carriageway, and away from both the original building foundations and the new footings for the reconstructed columns that support the second and third floor framing.

2.1.3 Building Envelope

Roof

There are two types of roof materials on this building. One is a rolled asphalt flat roof and the other is asphalt shingles on a very steep roof on the building. The roofing is in generally poor condition. Neither the flashings nor the asphalt shingles appear to have been designed or installed to perform adequately as long-term weatherproofing. The numerous problems associated with the roofs will only be exacerbated by subjecting the roofing to thermal differentials and ice damming as a result of heating the building's interior. The asphalt flat roof would be replaced with white Polyvinyl Chloride **(**PVC) roofing. The shingles would be replaced in kind. Flashing would be replaced as needed. Approximately 14,200 square feet of asphalt shingles and 5,250 square feet of flat roof would be replaced in total.

Tuck-pointing

In general, the new areas of substantially rebuilt masonry remain in good condition, while several areas of original brick and stone exhibit significant spalling and numerous open mortar

joints. The exterior of the building is 14,900 square feet of brick and approximately 50% of that needs to be tuck-pointed. Tuck pointing would be completed using in-kind mortar materials.

Windows

The replacement wood window frames and sash remain in sound condition; however, there is paint failure, exposed wood, and rusting nail heads on the sash and frames of most of the windows. Additional paint failure, resulting from condensation, can be seen on the interior of most windows. In total, 117 windows on the first, second and dormer/tower floors would have new interior storms, 34 windows on the first and second floors would be completely replaced in-kind, and 117 windows on the second and dormer/tower floors would be repaired and repainted. These replacements would likely be completed in phases over time as funding allows.

The original fire-resistive vault construction on the south side of the building is a unique fragment of the original design and construction of the building, and would be preserved in its current state. Limited curatorial storage that must be present on site may be accommodated in this room, which would be cleaned and repointed. A new wood floor construction with a finished wood strip flooring to match the original in species, width, and direction would be installed.

Throughout these administration spaces, building systems would be installed above the suspended gypsum wallboard ceilings, which would be held back at the east windows (see above for description of east façade windows). The mechanical equipment room on this side of the building would provide piping and ductwork distribution for these spaces, and access panels will be located where needed. In particular, power/data conduit would be installed from above within the wall construction to facilitate flexible office use.

The elevator core would be located at the center of the building, directly off the central carriageway, and away from both the original building foundations and the new footings for the reconstructed columns that support the second and third floor framing. The currently planned shaft size and location provide for a standard machine room-less passenger elevator rated at 2,500 lb.; the elevator equipment and the elevator pit are not included in the project at this time.

2.1.4 Exterior Modifications and Ground Disturbance

The proposed installation of the Visitor Center within the Administration Clock Tower Building will entail several changes to the existing grounds as well as ground disturbance associated with installation of underground utilities (Figure 3). Employee and visitor parking will utilize existing hardened surface areas. A 20' wide drive will run from the existing gate on 111th Street to a new parking lot constructed on top of the current footprint of the previous South Wing. This drive will traverse the remains of the transfer pit corridor and also provide access to a new employees' parking and refuse area located on top of the previous Wood Shop building foundation. An above ground surface mounted heat exchange system will be constructed immediately south of the Visitor Center between the building and the parking lot area. Utilities will be installed using an existing electrical corridor that extends from 108th Street to the North Wing and within a new

right of way that extends from Cottage Grove Ave. to the North Wing. Utility installation will be accomplished via directional boring, where practicable.

NPS does not envision immediate and significant changes to the other extant historic structures on the site – the North Factory wing and the ruins of the Rear Erecting Sheds. Because NPS property ownership is limited, NPS will work with the State to develop opportunities to improve external appearance and safety of the grounds. Any improvements to the grounds would be contingent on the remedial needs for the site.

2.2 Alternative 2 – The George Pullman Period (ca. 1880-1897) Conceptual Design (The National Park Service Preferred Alternative)

This alternative includes the visitor center construction aspects described within Alternative 1 (No Action) and adds a series of other elements that assist in interpreting the 1880 Factory site and provides additional landscape design features reminiscent of that initial period in the history of Pullman (Figure 5 and 6). This alternative also acknowledges the exceptional impact of the 1894 strike at the Pullman Palace Car Factory on American labor history, while noting that most

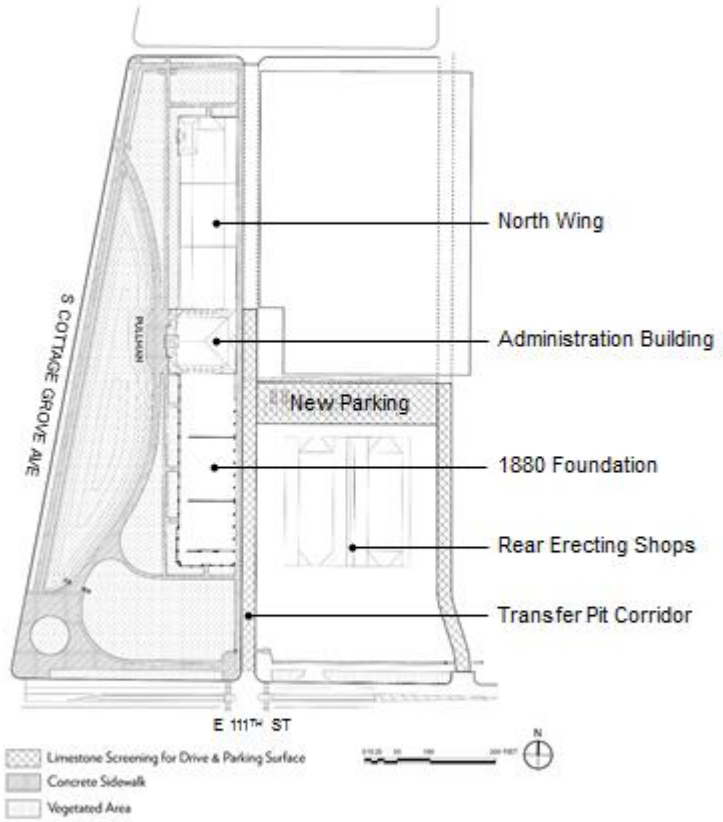

Figure 5: Alternative 2 Concept Plan (George Pullman Period ca 1880)

of the actions associated with the strike took place a short distance to the south in the Arcade Building. The areas of the site that were involved during the strike would be refined.

This concept seeks to recall architectural aspects of the factory site as originally built in 1880 and the landscape design as approved by George Pullman himself (Figures 5 and 6). Mimicking the original plan for the factory site, this conceptual design features an interpretive reconstruction of the roundabout for pedestrian use at East 111th Street and South Cottage Grove Avenue with a semicircular footpath leading to the front door of the Administration Clock Tower Building. A portion of the former site of Lake Vista would be a lawn to provide outdoor programming capacity for the Visitor Center while establishing a sense of the factory site's original appearance. This feature is not intended to store water.

Front lawn landscape enhancements are envisioned to include historically compatible stone seat wall and gateway details, period lighting, canopy trees, low-scale decorative plantings (similar to those depicted in Figure 7) and reconstruction of the historic Pullman sign. In order to accomplish this vision, as well as accommodate the access improvements described below, removal of a 1907 concrete slab and 1950 truck dock will be required.

At East 111th Street and South St. Lawrence Avenue, reconstruction of the 1889 Workers Gate on the original footings is envisioned to restore the historic axial connection between the factory and the South Pullman neighborhood. Adequate documentation exists for an accurate reconstruction. This gateway would accommodate vehicular access as needed for emergency services or other limited operational uses although it would serve primarily as a pedestrian connection for visitors who are interested in reenacting a day-in-the-life scenario of a typical Pullman factory employee walking between home and work.

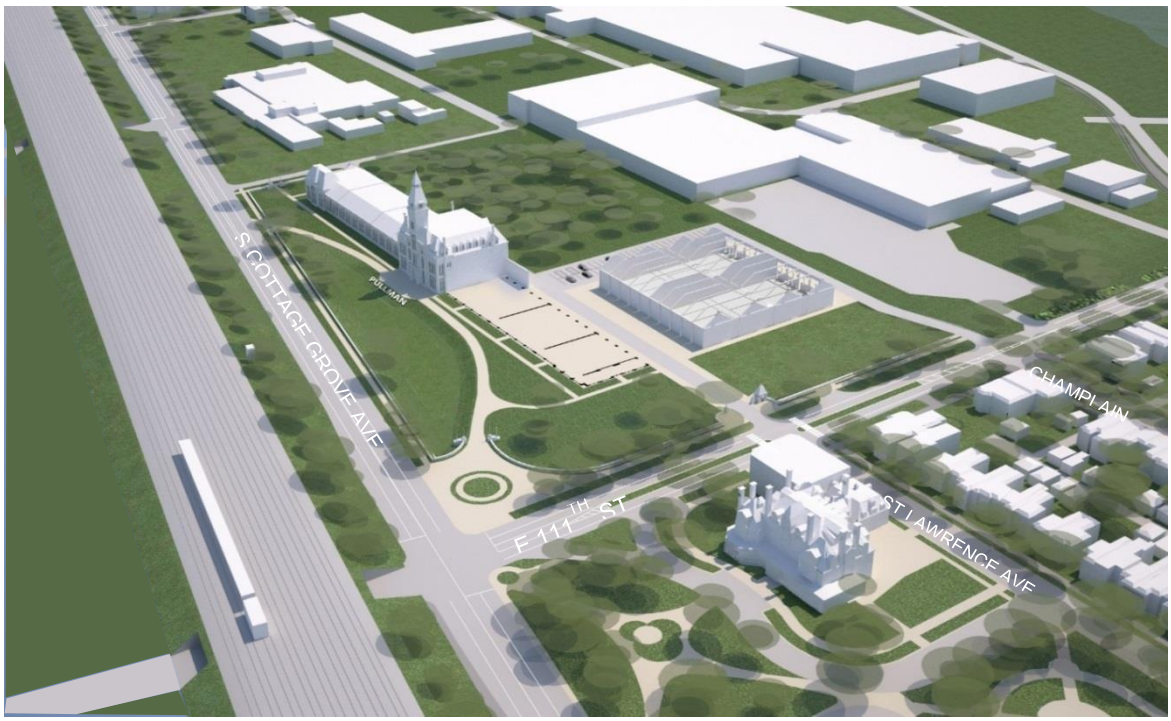

Figure 6: Alternative 2 Aerial View (George Pullman Period ca 1880)

Concurrent with the Workers Gate reconstruction, reestablishment of the geometry of the transfer pit corridor behind the Visitor Center is envisioned to include interpretive displays that explain the factory layout and operations. Due to storm water management considerations and monetary constraints, excavation and reconstruction of the entire transfer pit corridor is not envisioned. However, a portion of the corridor could be excavated and/or reconstructed. To the extent possible, the outline of the erecting shops that have been previously destroyed could be marked with hardscape and/or landscape elements to convey spatial understanding of the original building configurations.

Vehicular access and parking for visitors and staff is envisioned to be provided from East 111th Street. In addition to the reconstruction of the South St. Lawrence Avenue axis, a portion of the South Champlain Avenue corridor would be constructed to enable vehicular access to the site at both intersections. Access and site circulation utilizing these two street segments will provide operational flexibility for the NPS. Future extension of these corridors is envisioned to link to the adjacent property to the north with options for shared site access at Cottage Grove Avenue and connection to the North Pullman neighborhood.

Figure 7: View of Lake Vista, with the Administration Clock Tower Building, Hotel Florence and the Arcade Building, C 1885. Photo courtesy of the Pullman State Historic Site.

A parking lot with capacity for approximately 30 cars is envisioned due north of the remaining Rear Erecting Shops given that this area is relatively flat and does not contain existing slabs or structures. With signage and lighting, this location is relatively visible from Cottage Grove and 111th Street. Accessible sidewalks will link the parking lot to the Visitor Center entrance. This strategy provides convenient parking for visitors with special needs and staff, as well as a reasonable number of spaces for off-peak daily visitation. Larger-scale parking capacity is available throughout Pullman and adjacent areas.

Bus drop-off is envisioned along the Factory site frontage on South Cottage Grove Avenue so that the arrival experience is at the Visitor Center front door or from the visitor parking area behind the building. Street striping improvements for bus operations on South Cottage Grove Avenue are envisioned as part of a City of Chicago street improvement initiative. Off-site staging areas for bus parking are available. Direct wheel chair access into the Visitor Center will also be possible from the parking area to the east.

Utilization of an existing utility trench along the front of the Administration Clock Tower Building and North Factory Wing is envisioned with tap connection just north of the Lake Vista footprint on South Cottage Grove Avenue.

2.3 Alternative 3 – Pullman Factory Modernization Era (ca. 1898-1941) Conceptual Design

This alternative includes all aspects of the visitor center construction described within Alternative 1 (No Action) and adds a series of other elements, including landscape features that assist in interpreting the Factory site after 1907. By this time the company had sold most of its residential properties to comply with the 1898 Illinois Supreme Court's order to do so and began a series of efforts that resulted in significant alterations to the Factory site. This concept attempts to convey the character of the significant alterations to the original Factory Site to accommodate changes in factory operations and its relationship with the Pullman community subsequent to the death of George Pullman (Figure 8 and 9).

In the early 20th century, factory operations were modernized to go from wood to steel fabrication. Lake Vista was filled in and in 1903; an additional shop building was added in the front lawn of the Factory Site west of the South Factory Wing. During this time (1898 -1941), the company's manufacturing operations and requisite infrastructure were changed several times. Ultimately, this conversion proved inefficient and steel car manufacturing was moved out of Chicago. This building was destroyed by fire, and thus, the 1907 slab is all that remains of the South Erecting Shops.

Based upon historic photographs and site plan drawings, this concept envisions sidewalks that would extend in a straight line configuration between South Cottage Grove Avenue and the front door of the future Visitor Center. Landscape improvements would include turf enhancement, lighting and sidewalk construction. Visitors would approach the Visitor Center by walking down South Cottage Grove Avenue to a walkway located on axis with the Visitor Center front door.

At East 111th Street and South St. Lawrence Avenue, reconstruction of the 1889 Workers Gate on the original footings is envisioned to restore the historic axial connection between the factory and the South Pullman neighborhood. This gateway would accommodate vehicular access as needed for emergency services or other limited operational uses although it would serve primarily as a pedestrian connection for visitors who are interested in reenacting a day-in-the-life scenario of a typical Pullman factory employee walking between home and work.

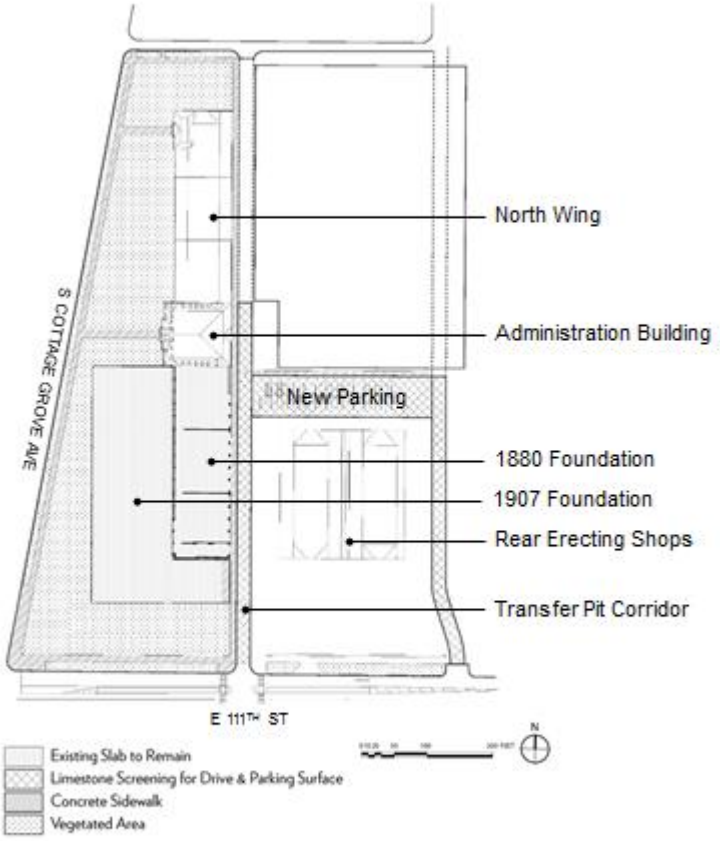

Figure 8: Alternative 3 (Pullman Factory Modernization Era (ca. 1898-1941) Conceptual Design

Concurrent with the Worker's Gate reconstruction, reestablishment of the geometry of the transfer pit corridor behind the Visitor Center would include interpretive displays that explain the factory layout and operations during this later time period. Due to storm water management considerations and monetary constraints, excavation and reconstruction of the entire transfer pit corridor is not envisioned. However, a portion of the corridor could be excavated and/or reconstructed, although that portion of the transfer pit covered by the 1907 expansion of operations would be reconstructed and interpreted differently than that representing the earlier

time period. To the extent possible, the outline of the erecting shops that have been previously destroyed could be marked with hardscape and/or landscape elements to convey spatial understanding of the building configurations after 1907.

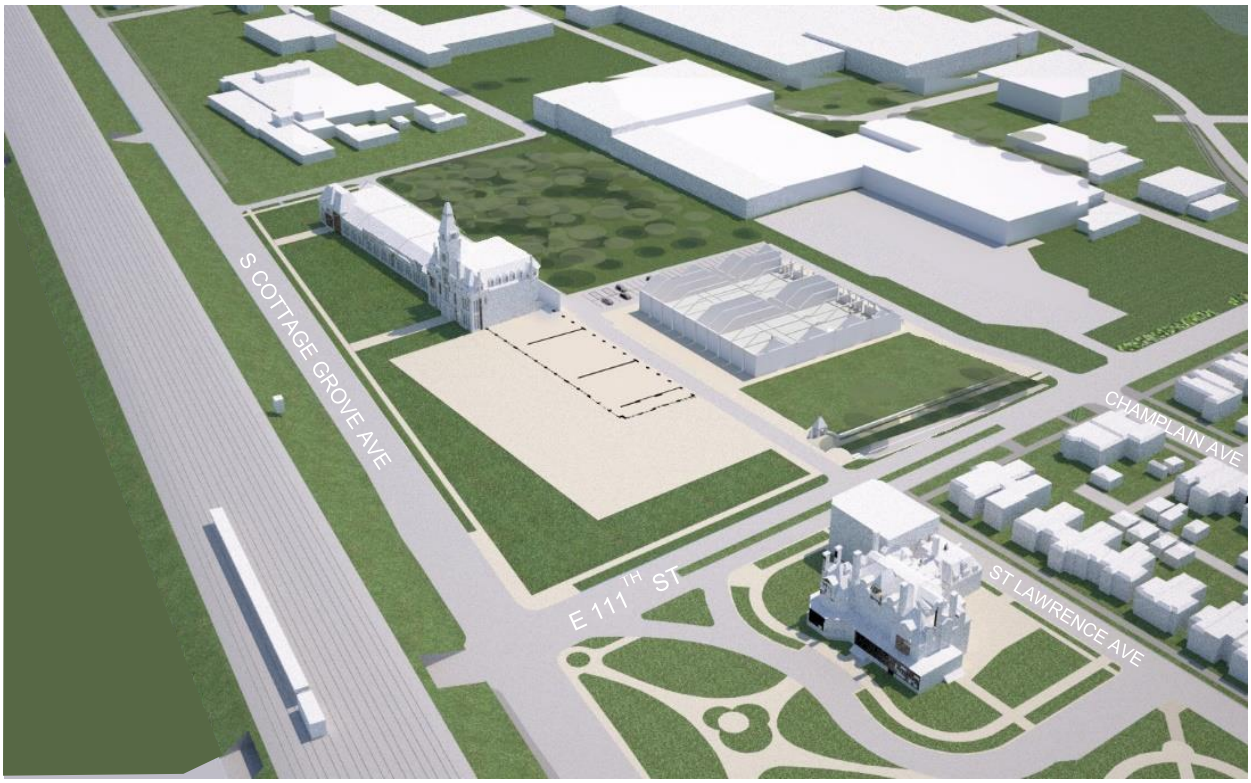

Figure 9: Alternative 3 - Pullman Factory Modernization Era (ca. 1898-1941) Aerial View

Vehicular access and parking for visitors and staff would be provided from East 111th Street. In addition to the reconstruction of the South St. Lawrence Avenue axis, a portion of the South Champlain Avenue corridor would be constructed to enable vehicular access to the site at both intersections. Access and site circulation utilizing these two street segments would provide operational flexibility for the National Park Service. Future extension of these corridors would link to the adjacent property to the north with options for shared site access at Cottage Grove and connection to the North Pullman neighborhood.

A parking lot with capacity for approximately 30 cars is envisioned due north of the remaining Rear Erecting Shops given that this area is relatively flat and does not contain existing slabs or structures. With signage and lighting, this location is relatively visible from Cottage Grove and 111th Street and not hidden behind buildings. Accessible sidewalks will link the parking lot to the Visitor Center entrance. This strategy provides convenient parking for visitors with special needs and staff, as well as a reasonable number of spaces for off-peak daily visitation. Larger-scale parking capacity is available throughout Pullman and adjacent areas.

Bus drop-off is envisioned along the Factory site frontage on South Cottage Grove Avenue so that the arrival experience is at the Visitor Center front door. Street striping improvements for bus operations on South Cottage Grove Avenue are envisioned as part of a City of Chicago street improvement initiative. Off-site staging areas for bus parking are available. Direct wheel chair access into the Visitor Center will also be possible from the parking area to the east.

Utilization of an existing utility trench along the front of the Administration Clock Tower Building and the North Wing is envisioned with tap connection just north of the Lake Vista footprint on South Cottage Grove Avenue.

2.4 Description of Alternatives and Actions Considered but Eliminated

No Intervention Alternative – Under this alternative, there would be no intervention by the NPS or the IHPA in the preservation, restoration or rehabilitation of the extant buildings of the Factory site located within the Pullman State Historic Site, such that they would be allowed to deteriorate. The 12.27 acre site consisting of the extant North Factory Wing, Administration Clock Tower Building, and Rear Erecting Shops, as well as archeological remains of other factory infrastructure would be left as unmaintained ruins. The complex would continue to be surrounded by a chain link fence and the buildings would not provide for any permanent occupants or visitor use. Although the Administration Clock Tower Building and North Wing of the factory were stabilized and restored and the associated Clock Tower was reconstructed following a 1998 arson fire between 1999 and 2007, none of these structures would be maintained. The buildings, which are now unheated masonry shells with steel skeletons and concrete floors with over 53,000 square feet of space, would remain in this condition. The Rear Erecting Shops, also severely damaged in that fire, would remain unroofed, encompassing a total 36,600 square feet. In 2001, the roof covering these shops was deconstructed to save the walls from collapse and limited measures were taken to cap the walls and stabilize the existing structure. These efforts are nearing the end of their lifespan and without further intervention they could collapse or deteriorate to the point that they would no longer be salvageable.

Thus, while this situation may represent a true "no action" alternative, NEPA requires federal agencies to evaluate the impact of maintaining current conditions so they can be compared to the impact of the action alternatives. Allowing these historic structures to continue to deteriorate is not compatible with the preservation efforts that have been expended to date and this alternative is not compliant with NPS policy. This approach would constitute an adverse effect on contributing elements of this nationally significant historic property because simple neglect leading to collapse can be defined as anticipatory demolition. Accordingly, this potential alternative will not be carried forward through these analyses.

All Structures Retained and Restored –Under this alternative, all structures within the Factory Site would be retained and restored. The remaining standing structures within the 12.5 acre Pullman State Historic Site - the extant North Factory Wing, Administration Clock Tower Building, and Rear Erecting Shops - as well as archeological remains of other factory infrastructure would be restored to a condition representative of a defined period of significance

and maintained so as to allow for public access and use of all areas. While this alternative would potentially preserve the site as whole, it is not feasible due to the condition of the existing structures (i.e., often no longer present) and uncertainties associated with identifying the appropriate attributes of the site at any particular point in time. This alternative may be explored step-wise as the NPS and the State of Illinois develop additional opportunities for fundraising and partnering and conduct additional research. The concept of retaining and restoring additional structures could still be accomplished within the scope of the alternatives discussed above for each conceptual schematic explored within its period of significance. Thus, this alternative does not bring any new concept to light other than the restoration/construction of additional structures, which may be accommodated within the proposed site plans at any time in the future but which is not financially feasible at present.

Agency Preferred Alternative

The preferred alternative is defined in Department of the Interior NEPA regulations as the alternative that the National Park Service determines "would best accomplish the purpose and need of the proposed action while fulfilling its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors" (43 CFR 46.420(d)). Identification of a preferred alternative is within the discretion of the National Park Service. The recommended preferred alternative is Alternative 2 because it would best address the purpose and need for the proposed action.

It is important to note that, when identifying a preferred alternative, no final agency action is being taken. The purpose of identifying a preferred alternative is to let the public know which alternative the agency believes would best meet the purpose and need for the plan at the time an environmental assessment is released.

3.0 Affected Environment and Environmental Consequences

3.1 Introduction

This chapter summarizes relevant resource components of the existing environment of the Factory site. It focuses on the monument resources and uses that have the potential to be affected if any of the alternatives were implemented (including the no-action alternative) and provides a baseline against which environmental consequences of the action alternatives can be compared. Additional material related to the impacts and effects of the alternatives is included in the Environmental Consequences sections. Impacts are evaluated based on context, duration, intensity, and whether they are direct, indirect, or cumulative.

3.1.1 General Methods

This section contains the environmental impacts, including direct and indirect effects, and their significance for each alternative. The analysis is based on the assumption that the mitigation

measures identified in the "Mitigation" section of this EA will be implemented for the action alternatives. The NPS based these impact analyses and conclusions on the review of existing literature and park studies, information provided by experts within the park, other agencies, professional judgment and park staff insights, and public input.

In accordance with Council of Environmental Quality (CEQ) regulations, direct, indirect, and cumulative impacts are described (40 CFR 1502.16), and the impacts are assessed in terms of context and intensity (40 CFR 1508.27). Where appropriate, mitigating measures for adverse impacts are described and incorporated into the evaluation of impacts. The specific methods used to assess impacts for each resource may vary and, therefore, are described as part of each impact topic.

The following terms are used in the discussion of environmental consequences to assess the nature of impacts associated with each alternative.

Type. Impacts can be beneficial or adverse. A beneficial impact is an impact that would result in a favorable change in the condition or appearance of the resource. An adverse impact is an impact that causes an unfavorable result to the resource as compared with the existing conditions.

Context. The significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance usually would depend on the effects in the locale rather than in the world as a whole.

Duration. Duration of impact is analyzed independently for each resource because impact duration is dependent on the resource being analyzed. Impact duration is described as short term, long term, or permanent for each resource. For the purposes of this analysis, short-term and long-term impacts are defined for each resource.

Direct and Indirect Impacts. Effects can be direct, indirect, or cumulative. Direct effects are caused by an action and occur at the same time and place as the action. Indirect effects are caused by the action and occur later or further away but are still reasonably foreseeable. Direct and indirect impacts are considered in this analysis. Cumulative effects are discussed in the next section.

The Severity of Impact. The following should be considered in evaluating impact severity:

- Impacts that may be both beneficial and adverse. A significant effect may exist even if the federal agency believes that on balance the effect will be beneficial.
- The degree to which the proposed action affects public health or safety.
- Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- The degree to which the effects on the quality of the human environment are likely to be highly controversial.

- The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- The degree to which the action may establish a precedent for future actions having significant effects or represents a decision in principle about a future consideration.
- Whether the action is related to other actions that have individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- 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 or may cause loss or destruction of significant scientific, cultural, or historical resources.
- The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
- Whether the action threatens a violation of federal, state, or local law or requirements imposed for protection of the environment.

For each impact topic analyzed, an assessment of the potential significance of the impacts according to context and intensity is provided in the "Conclusion" section that follows the discussion of the impacts under each alternative. The intensity of the impacts is presented using the relevant factors from the preceding list. Intensity factors that do not apply to a given resource topic and/or alternative are not discussed.

Cumulative effects are defined as "the impact on the environment that 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 nonfederal) or person undertakes such other actions" (40 CFR 1508.7). Cumulative effects can result from individually minor, but collectively significant, actions taking place over a period of time. The CEQ regulations that implement NEPA require assessment of cumulative impacts in the decision-making process for federal projects.

3.1.2 National Historic Preservation Act Section 106 Assumptions

The following impact analysis is intended to comply with the requirements of the National Environmental Policy Act, not section 106 of the National Historic Preservation Act. In accordance with the advisory council's regulations implementing section 106 (36 CFR 800), impacts on historic properties are identified and evaluated by (1) determining the area of potential effects; (2) identifying historic properties present in the area of potential effect that are listed in or eligible for listing in the national register; (3) applying the criteria of adverse effect to these historic properties; and (4) identifying methods to avoid, minimize, or mitigate any adverse effects, if they exist.

Under the advisory council's regulations, a determination of either adverse effect or no adverse effect must be made for affected historic properties eligible for or listed in the national register. An adverse effect occurs whenever an undertaking alters, either directly or indirectly; any

characteristic of a historic property that qualifies it for inclusion in the national register (e.g., diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association). Adverse effects also include reasonably foreseeable effects that could occur later in time, be farther removed in distance, or be cumulative (36 CFR 800.5). A determination of no adverse effect means the undertaking would not diminish the historic property's integrity in a manner that alters any characteristics of the property that qualify it for the national register.

CEQ regulations and Director's Order 12 also call for a discussion of the appropriateness of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact. However, any resultant reduction in intensity of impact resulting from mitigation is an estimate of the effectiveness of mitigation only under the National Environmental Policy Act. It does not suggest that the level of effect as defined by section 106 is similarly reduced—although an adverse effect under section 106 may be mitigated, the effect remains adverse.

The NPS will coordinate the development of a memorandum of agreement with the Illinois State Historic Preservation Office (SHPO) to address mitigation measures for the preferred alternative when the specifics of the site design, which is not only conceptual in nature, have been determined and considered in detail in terms of their potential impacts. The memorandum of agreement will satisfy Section 106 responsibilities for the purposes of the actions associated in the preferred alternative.

3.2 Historic Structures/Cultural Landscapes

3.2.1 Affected Environment

The following is a summary of the extant historic structures, and cultural landscape features associated with the Pullman Factory site (Figure 10). Other historic properties that are associated with the Pullman National Historic Landmark District exist adjacent to the park, but they would not be affected by any of the alternatives and therefore are not addressed further in this EA.

The factory site currently consists of three brick buildings and associated manufacturing infrastructure in various states of repair or ruin. The North Factory wing is the most intact structure representative of the initial construction of the Pullman Palace Car Factory. The Administration Clock Tower Building, the South Factory Wing and 1907 Addition, and most of the Rear Erecting Shops burned in an arson fire in 1998. The Administration Clock Tower Building and what is left of the Rear Erecting Shops currently exist as building shells. A portion of the Rear Erecting Shops was stabilized to a minimal extent after the fire; however, they are presently considered unsafe for entry. The Administration Clock Tower Building envelope is intact but is not in a good state of repair. The 1907 Addition considerably expanded upon the earlier South Factory wing that mirrored the North Factory wing in the 1880 design. No standing architecture associated with the South Factory Wing or 1907 Addition currently exists, and indeed the only remaining physical manifestation of that structure is a concrete slab on grade, referred to as "the 1907 slab" below based on its construction in that year.

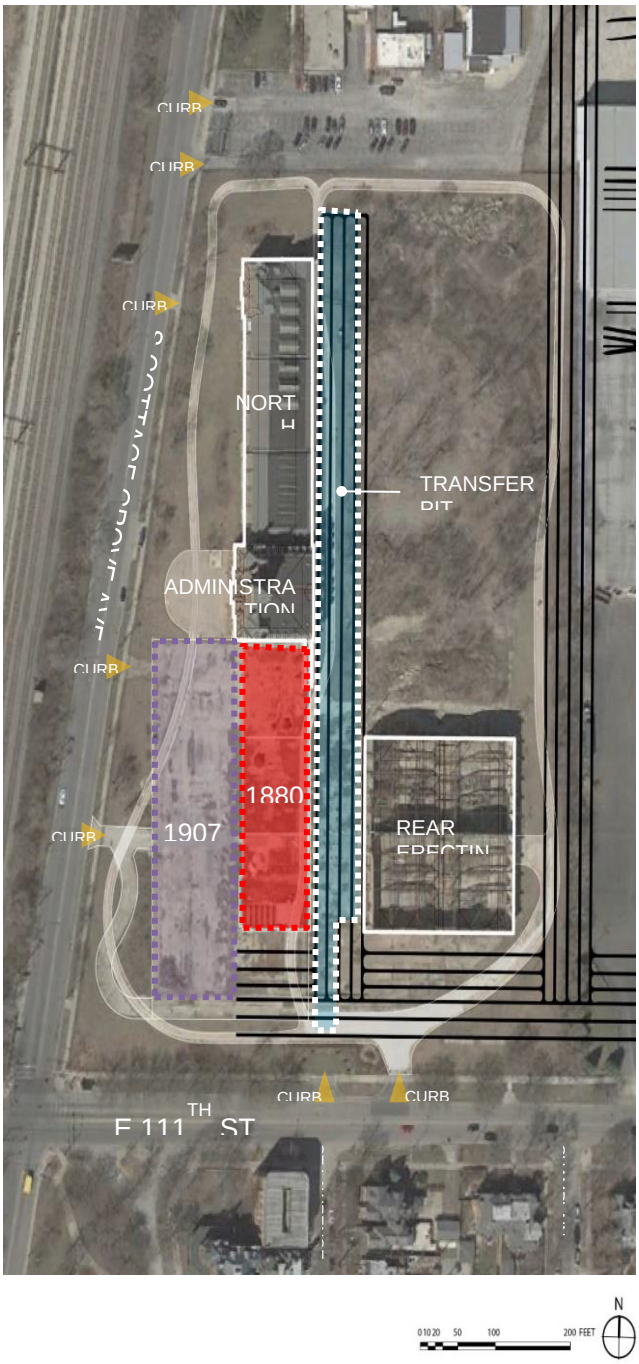

Figure 10: Extant Structures

The Administration Clock Tower Building, the contiguous North Factory wing, and the detached and largely skeletal remnants of the Rear Erecting Sheds comprise the inventory of extant

standing structures on the site (Figure 11). All of these structures are historically significant and will be preserved to the greatest extent possible under all of the alternatives presented previously.

Figure 11: Extant Administration Clock Tower Building and Rear Erecting Shops. NPS photo

The transfer pits that moved railcars from work station to work station have largely been filled in with a variety of materials and are currently overgrown and unidentifiable as are various other rail lines used to move railcars and equipment throughout the Factory site. Despite its current condition and the numerous alterations to it over time, the transfer pit corridor aligned north-south directly to the east of the Administration Clock Tower Building that serviced the north and south factory wings and the full array of the former Rear Erecting Sheds is considered to be significant in terms of its potential interpretive value.

The landscaping, plantings, lighting, and pathways that were designed as a part of the original 1880 plans for the site have been substantially altered, such that a cultural landscape true to that period no longer exists. Originally, Lake Vista was developed immediately west of the Administration Clock Tower Building. Lake Vista and associate plantings were built to both beautify the principal entry way into the company offices and to store water for the Corliss Engine which powered the factory's machinery. Lake Vista was completely filled-in as part of modernization efforts in 1903 and then served as a parking lot for much of the rest of the time

the factory was in operation. The carriageway that originally brought visitors to the entrance was removed at the time Lake Vista was filled and Cottage Grove Avenue was subsequently constructed in its current location on the western edge of the factory site. At present, the Lake Vista area is overgrown with thick weedy vegetation. Workers initially entered the factory site through gates on its northern and southern edges. No standing remains associated with the Workers Gates presently exist, although their locations and forms are known through photographic evidence.

The mechanical necessities of cleaning up the site after the 1998 fire combined with minimal subsequent site management have done little to preserve even a vestige of what might have been the post-1907 cultural landscape of the Factory site. Further, several large pieces of machinery not attributable to this area of the Pullman Factory site have been stored on top of what remains of the slab floor of the former South Factory wing and also on the 1907 slab (Figure 10).

3.2.2 Environmental Consequences

Alternative 1 - The Minimal Amenities Conceptual Design - Administration Clock Tower Building Conversion to Visitor Center (No Action Alternative)

Direct and Indirect Impacts of the Alternative. The No Action Alternative would renovate the Administration Clock Tower Building and install an NPS Visitor Center but leave only limited opportunities for access or visitor enjoyment of the greater site, as work would be primarily limited to that structure only. The Administration Clock Tower Building will receive treatments that will stabilize and secure the outer envelope and significantly reduce additional deterioration. Therefore, the exterior work has a major beneficial impact in both the short and long-term for the preservation of the structure. Non-original door penetrations and later modifications to the carriageway will be reversed. This will include the removal at the first floor of the brick masonry bearing walls that form vault spaces within the center of the building, as well as the existing metal stair that provides access to the first, second, and third floors. These alterations are necessary to provide access and ensure safety to the visiting public. These alternations are would be considered minor adverse impacts in the short-term and can be mitigated through interpretative programs, displays and exhibits that communicate the original features.

The interior of the structure will be converted into a visitor center but every effort will be made to retain to the extent possible, original elements of the interior finishes so as to provide the visitor with an understanding of the unique architectural features of the building as originally built. Interior original masonry walls will be cleaned and repointed and left exposed to reveal the few remaining areas of original building fabric, and to observe and monitor these walls for the deteriorating effects of rising dampness. It should be noted that in order to prevent the release of any potential contaminants present in the existing dirt floor of the Administration Clock Tower Building, the entire surface of that floor will be capped in a concrete slab sealed against the exterior walls. All new floor surfaces will be installed upon that concrete cap. Potential dampness arising through that cap will be monitored.

The floor surface throughout the north space will be wood strip flooring with a wood base, and will be installed to match the species, width, and direction of the original flooring which survives in several remnant areas; a remnant area will be incorporated into the interpretive exhibits in some fashion. The original drive shaft at the eastern end of the first floor runs continuously along the east side of the building interior; this trench will be stabilized, infilled, and new flooring will be installed over it. At the west end of this space, existing historic reproduction windows provide ample daylighting and great opportunities for interpretive connections to the exterior industrial landscape; light control devices are recommended at these windows, and will be coordinated with the exhibit design and designed to not adversely affect the exterior appearance of the building. The ceiling will be a continuous floating plane of suspended decorative panels, similar to an egg-crate panel construction, that can obscure the building systems installed above yet provide for easy access and reconfiguration as needed for security and fire prevention systems. While the interior of the structure will be very different than the original administrative building interior, visitors will be provided with an opportunity to see the interior and it will be coupled with interpretive exhibits that will demonstrate the original detail and function of the space. In general, it is assumed that by providing access and interpretation to a site that is currently inaccessible, there would be a major beneficial effect relative to access and communication of the original interior features of the building in what now stands as an empty shell. It should be noted, the finishes would not impact the interior space should efforts in the future focus on restoring additional components of the interior and thus the adverse impacts relative to future renovation are considered short term.

The Visitor Center would provide interpretative programs, displays and communicate basic information about the Pullman site but there would be limited access to observe historic features outside of the Visitor Center or to experience the original or subsequent cultural landscapes. This alternative does not provide for improvements to the Pullman Factory site property as a whole, as the NPS would only exert its administrative and management controls on the Administration Clock Tower Building itself through its conversion into a Visitor Center. Opportunities to interpret the transfer pit or other manufacturing locations would be limited pending future site redesign and development pursuant to guidance from the IHPA, the owner of the site outside of the Administrative Clock Tower Building. Under this alternative, parking onsite would be limited to several spaces for NPS staff and public parking would take place off-site within the local community. This alternative does not consider site design to accommodate bus access but would by definition need to address wheel chair access in the parking area and into the Visitor Center from the parking area. Only the immediate landscape adjacent to the Administration Clock Tower Building would be maintained under the No Action Alternative and no attempt would be made to restore the original or subsequently designed landscapes at the site. Under this scenario, however, it is likely that the extant landscape would receive necessary operational maintenance under the overall management of the Illinois Historic Preservation Agency in cooperation with the NPS. Access to areas beyond the Administration Clock Tower Building would be limited to

that deemed appropriate by the IHPA and NPS on the basis of safety and accessibility issues.

Cumulative Impacts. Completion of site amenities per the final site plan will have little or no direct cumulative impacts on the structures and cultural landscape of the site after construction. There is little question; however, that the development of the Pullman Factory site could have cumulative impacts on the structures and cultural landscape in the immediate vicinity of the new visitor center due to what is anticipated to be greater visitation to the site after completion of the final site plan. By the same token, the development of the site will also likely lead to greater visitation within the entire Pullman NHL District. Those impacts are not necessarily negative as new interest in preservation of the area may offset the increased maintenance costs that greater visitor use may bring.

Conclusion. The actions proposed under this alternative would have only a minor effect on the remaining historic structures and extant cultural landscape of the Pullman Factory site. The impacts could become long term if no additional work is done at the site; however, the general site impacts in terms of ingress/egress and parking would be largely reversible.

Alternative 2 – The George Pullman Era (ca. 1880-1897) Conceptual Design

Direct and Indirect Impacts of the Alternative. This alternative would renovate the Administration Clock Tower Building and install an NPS Visitor Center in the same way as Alternative 1 and similarly does not envision immediate and significant changes to the other extant historic structures on the site – the North Factory wing and the ruins of the Rear Erecting Sheds. Because this alternative will accommodate full visitor access to the site, at a minimum some yet to be designed stabilization of those two structures may be necessary to assure visitor and staff safety. The environmental consequences of those efforts would be likely be positive as they will greatly enhance preservation of the structures both in the short and long term and the impacts to those structures would be minimized through design.

Alternative 2 would have moderate (but mitigatable) impacts on the remains of several historic structures and the extant cultural landscape in that it seeks to return the nature and feel of large portions of the Pullman Factory site to something approaching what they were during the 1880 -1897 time period. At that time the expansion of 1907 and subsequent changes to the manufacturing plant had not yet occurred and the landscape was essentially what was designed and built around 1880. The largest changes to the current landscape would occur to the west and south of the Administration Clock Tower Building, as one goal of this alternative would be to restore as much of those designed 1880 landscape features as possible. As described above, the existing landscape holds little resemblance to that time period, yet this alternative would require fairly significant alterations to what is there now. These changes would provide for abundant opportunities to interpret Pullman's original aesthetics and would largely be a positive consequence allowing for mitigation of a moderate to a minor impact to the current cultural landscape.

The implementation of this alternative would necessitate the removal of the 1907 slab and the loading dock to the south of what remains of the Rear Erecting Sheds, likely dating to the 1950s, would also be removed. This would represent a long-term impact to those resources. On the other hand, remnants of the floor of the South Factory wing would be left intact, the remaining shell of the Rear Erecting Sheds would be stabilized, and both would likely be treated over time to enhance their preservation, a positive impact. Because this alternative provides access to the entire Pullman Factory site, structural changes to the North Factory wing and its immediate environs would likely be needed to facilitate accessibility and the safety of visitors and staff.

The sense of what took place at the Pullman Palace Car Company during this early time period would also be enhanced by the renovation and restoration of at least some portion of the transfer pit corridor along the east side of the Administration Clock Tower Building. In addition to being used for its designed purpose of moving rail cars in various stages of completion between specific work sites along what was originally a whole line of Rear Erecting Sheds, this corridor was used extensively by workers as the principal north-south pedestrian throughway within the factory and out into the surrounding community. The reconstruction of the south Workers Gate would enhance the feel of that use, help to reconnect the factory site to South Pullman, and, once again, help to mitigate any impacts to later structural developments in this area. Changes to the structure of this transfer pit corridor were required in order to accommodate how it was used after the renovation of the Pullman Factory site in the move from wood to steel car construction in 1907 and thereafter. Accordingly, interpretation of its use during the 1880-1897 time period will require some reconstruction of its earlier configuration guided by archival review and perhaps some archeological testing.

The development of visitor parking to the north of the Rear Erecting Sheds on what was once the location of the Wood Shop would minimize the visual effects of that infrastructure, particularly when viewed from the west and south, thus enhancing the feel of the restored 1880 landscape design. Directing the majority of vehicular traffic to an entrance on the east side of the Pullman Factory site and minimizing the size of the parking area by accommodating bus parking off site would provide greater flexibility in the interpretation of the transfer pit corridor and other parts of the site. Construction of the parking area - in addition to the removal of the 1907 slab and any other ground disturbing activity - would be monitored by individuals meeting or exceeding the Secretary of Interior's Standards for historic preservation professionals to insure that if any significant architectural remains or artifacts are discovered that construction would be halted until those finds could be adequately investigated. The development of this parking will be determined by its specific design as there may be options for avoiding effects on foundation remnants of the former Wood Shop. It is likely that this activity would have only a moderate impact intensity that would be long-term in nature.

Cumulative Impacts. Completion of site amenities per the final site plan will have little or no direct cumulative impacts on the structures and cultural landscape of the site after construction. There is little question, however, that the development of the Pullman

Factory site could have cumulative impacts on the structures and cultural landscape in the immediate vicinity of the new visitor center due to what is anticipated to be greater visitation to the site after completion of the final site plan. By the same token, the development of the site will also likely lead to greater visitation within the entire Pullman NHL District. Those impacts are not necessarily negative as new interest in preservation of the area may offset the increased maintenance costs that greater visitor use may bring.

Conclusion. The actions proposed under this alternative would have only a minor effect on the remaining historic structures. Construction of the parking area and removal of the 1907 slab would be monitored by individuals meeting or exceeding the Secretary of Interior's Standards for historic preservation professionals to insure that if any significant architectural remains or artifacts are discovered that construction would be halted until those finds could be adequately investigated.

Alternative 3 – Pullman Factory Modernization Era (ca. 1898-1941) Conceptual Design

Direct and Indirect Impacts of the Alternative. This alternative would renovate the Administration Clock Tower Building and install an NPS Visitor Center in the same way as Alternatives 1 and 2 and similarly does not envision immediate and significant changes to the other extant historic structures on the site – the North Factory wing and the ruins of the Rear Erecting Sheds. Because this alternative will also accommodate full visitor access to the site, at a minimum some yet to be designed stabilization of those two structures will be necessary. The environmental consequences of those efforts would be positive as they will improve the structural integrity of the buildings and will be designed so as to enhance preservation of the structures both in the short and long term.

Alternative 3 would have minor impacts on the remains of historic structures and the extant cultural landscape in that it seeks to maintain the nature and feel of large portions of the Pullman Factory site in keeping with what they were during the 1897-1941 time period. Nearly all of the physical changes to the Pullman Factory site that accommodated the transition from wooden to steel chassis construction were completed during this period. As noted above, the original 1880 designed landscape also underwent considerable change beginning with the infill of Lake Vista in 1903. Once again, that which remains of the cultural landscape of this later period has been significantly impacted by cleanup activities associated with the 1998 fire and subsequent minimal maintenance of the site.

If implemented, this alternative would not require removal of the extant foundations of historical structures. The exception would be removal of the 1950's access ramp immediately to the south of the remains of the Rear Erecting Sheds and associated concrete that dates post-1941. Pending funding, preservation treatments would likely be applied to aid the conservation of remnant slabs and other architectural remains. In general, the impacts of this alternative on historic structures and the extant cultural landscape would be negligible but would become long-term through continued maintenance of the site post-rehabilitation.

Reconstruction and interpretation of the transfer pit corridor would by nature revolve around the new uses of this portion of the site that developed as factory functions evolved. Accordingly, interpretation of its use during the 1897-1941 time period will require some reconstruction of its configuration guided by archival review and perhaps some archeological testing. Because there were a series of changes in the use of this area during this time period it may be necessary to reach a conclusion as to what period and configuration is most appropriate for interpretation.

The development of visitor parking to the north of the Rear Erecting Sheds on what was once the location of the Wood Shop would minimize the visual effects of that infrastructure, particularly when viewed from the west and south, thus enhancing the feel of the restored 1880 landscape design. Directing the majority of vehicular traffic to an entrance on the east side of the Pullman Factory site and minimizing the size of the parking area by accommodating bus parking off site would provide greater flexibility in the interpretation of the transfer pit corridor and other parts of the site. Construction of the parking area - in addition to the removal of the 1907 slab and any other ground disturbing activity - would be monitored by individuals meeting or exceeding the Secretary of Interior's Standards for historic preservation professionals to insure that if any significant architectural remains or artifacts are discovered that construction would be halted until those finds could be adequately investigated. The development of this parking will be determined by its specific design as there may be options for avoiding effects on foundation remnants of the former Wood Shop. It is likely that this activity would have only a moderate impact intensity that would be long-term in nature.

Under this alternative, the site west and south of the Administration Clock Tower Building would be landscaped to produce an area suitable for visitor use and appreciation but which would have the feel of the post-1908 industrial transformation of the larger site. For instance, the sweeping walkways and decorative landscaping to the west and south of the Administration Clock Tower Building in the 1880 design gave way to a far more utilitarian layout. Based upon historic photographs and site plan drawings, this concept envisions sidewalks that extend in a straight line configuration between South Cottage Grove Avenue and the front door of the future Visitor Center. Landscape improvements include turf enhancement, lighting and sidewalk construction. Visitors would approach the Visitor Center by walking down South Cottage Grove Avenue to a walkway located on axis with the Visitor Center front door. Taken together, these changes would allow for multiple opportunities to interpret the site from the vantage point of its post-Pullman Factory modernization era development, and would be a beneficial impact to the cultural landscape.

Cumulative Impacts. Completion of site amenities per the final site plan will have little or no direct cumulative impacts on the structures and cultural landscape of the site after construction. There is little question, however, that the development of the Pullman Factory site could have cumulative impacts on the structures and cultural landscape in the immediate vicinity of the new visitor center due to what is anticipated to be greater visitation to the site after completion of the final site plan. By the same token, the development of the site will also likely lead to greater visitation within the entire Pullman

NHL District. Those impacts are not necessarily negative as new interest in preservation of the area may offset the increased maintenance costs that greater visitor use may bring.

Conclusion. The actions proposed under this alternative would have only a minor effect on the remaining historic structures. Construction of the parking area would be monitored by individuals meeting or exceeding the Secretary of Interior's Standards for historic preservation professionals to insure that if any significant architectural remains or artifacts are discovered that construction would be halted until those finds could be adequately investigated.

3.3 Archeological Remains

3.3.1 Affected Environment

The entire 12.27 acre Factory site at Pullman was developed and utilized as the Pullman Palace Car Company and should be considered as having the potential to yield archeological resources related to the post-1880 industrial complex. However, given the intermittent wetland nature of the pre-construction natural environment, the degree of grading and disturbance associated with the construction of the Pullman Factory, the use of the site, and subsequent post-Pullman landscape modification, significant prehistoric archeological sites are not believed to exist on the Factory Site. No archeological surveys or baseline archeological documentation exist for the Pullman State Historic Site but, in general, traditional archeological survey techniques would be at best ineffective in this industrial setting.

The vast majority of archeological materials that occur in the monument are extant historic buildings, associated architectural debris, and the remnants of industrial production. It is unlikely that any great numbers of artifacts, exclusive of architectural materials, will be found at the site in contexts that will be particularly useful to explain production practices or social conditions at the factory due to numerous and pervasive site disturbances. An extensive number of historic maps, drawings, and photographs exist that can be used to interpret what architectural remains may be encountered during the implementation of any of the alternatives presented here. Current research by the Industrial Heritage and Archeology Group at Michigan Technological University funded by the NPS will be useful for determining the integrity and significance of such resources.

3.3.3 Environmental Consequences

Alternative 1 - The Minimal Amenities Conceptual Design - Administration Clock Tower Building Conversion to Visitor Center (No Action Alternative)

Direct and Indirect Impacts of the Alternative. Under the no action alternative, there would be no new ground-disturbing activities that would potentially affect archeological resources, other than those associated with remediation of hazardous materials across the site (see below). Under current Federal law and NPS management policies, impacts to

archeological resources are avoided or minimized by performing surveys prior to ground disturbance and/or by having specialists meeting the Secretary of Interior's Standards for historical archeology monitor the work. As noted above, industrial sites are generally not conducive to traditional archeological survey techniques due to the presence of numerous remnant foundations, utility lines, and other features that make interpretation of the larger area difficult based on the results of a series of relatively small exploratory test units. Further, the ground surface itself has been repeatedly altered due to changes in use and then due to cleanup activities following the 1998 fire. Hence, monitoring of any ground disturbing activities will be employed as a mitigation measure. The installation of utilities to service the new Visitor Center would be accomplished by lateral boring from Cottage Grove Avenue to the west through a part of the former Lake Vista which was filled in in 1903. An existing utility corridor will be utilized along the west side of the North Factory wing and the Administration Clock Tower Building and thus this installation has very little chance of affecting archeological materials during construction but will nonetheless be monitored. Installation of the concrete cap on the floor of the Visitor Center is also not likely to disturb archeological resources but that construction will also be monitored. Parking would be accommodated on top of the extant 1907 slab and would thus not affect any archeological materials lying under it.

Cumulative Impacts. There are no known reasonably foreseeable actions that would have a new effect on archeological remains or materials that is not already subject to state regulatory controls, so there would be no cumulative effects.

Conclusion. Because current management practices would continue, there would be no new impacts to unknown archeological sites and artifacts in the rest of the factory site. The impact of Alternative 1 on archeological materials would be negligible and of short duration.

Alternative 2 – The George Pullman Era (ca. 1880-1897) Conceptual Design

Direct and Indirect Impacts of the Alternative. Under Alternative 2, the same ground disturbing work would be done in the vicinity of the Administration Clock Tower Building as would occur under Alternative 1. Namely, the installation of utilities and the concrete floor cap have only a very slight potential to affect archeological materials but that construction would be monitored nonetheless.

It is unlikely that any great numbers of artifacts, exclusive of architectural materials, will be found at the site in contexts that will be particularly useful to explain production practices or social conditions at the factory due to numerous and pervasive site disturbances. Nonetheless, removal of the 1907 slab and the 1950s era ramp to the south of the remains of the Rear Erecting Sheds could possibly expose archeological materials and thus that construction would be monitored, as it is impossible to anticipate what might be under a slab until it is removed. Construction of the parking area will be monitored due to the slight chance that tools or other artifacts used in the former Wood Shop are still present. Reestablishment of the geometry of the transfer pit corridor behind

the Visitor Center for interpretive use likewise has the remote potential of encountering artifacts and that effort will also be monitored.

Under this alternative, landform reconstruction of a portion of Lake Vista is envisioned as a lawn area to provide outdoor programming capacity for the Visitor Center, while also reestablishing a sense of the factory's original iconic identity. This would require excavation of some quantity of the material that was used to backfill Lake Vista in 1903. Any artifacts discovered in that fill would have no meaningful context and the glacial clay surface of the lakebed precludes the discovery of any prehistoric materials should excavation reach that deep. Other landscaping completed under this alternative would have some limited potential for the discovery of isolated artifacts.

Cumulative Impacts. There are no known reasonably foreseeable actions that would have a new effect on archeological remains or materials that is not already subject to state regulatory controls, so there would be no cumulative effects.

Conclusion. The impact of implementation of Alternative 2 on archeological materials would likely be negligible if monitored properly. Any effects on those resources would be short-term in nature.

Alternative 3 – Pullman Factory Modernization Era (ca. 1898-1941) Conceptual Design

Direct and Indirect Impacts of the Alternative. Under Alternative 3, the same ground disturbing work would be done in the vicinity of the Administration Clock Tower Building as would occur under Alternatives 1 and 2. Namely, the installation of utilities and the concrete floor cap have only a very slight potential to affect archeological materials but that construction would be monitored nonetheless.

It is unlikely that any great numbers of artifacts, exclusive of architectural materials, will be found at the site in contexts that will be particularly useful to explain production practices or social conditions at the factory due to numerous and pervasive site disturbances. Nonetheless, removal of the 1950s era ramp to the south of the remains of the Rear Erecting Sheds could possibly expose archeological materials and thus that construction would be monitored. Construction of the parking area will be monitored due to the slight chance that tools or other artifacts used in the former Wood Shop are still present. Reestablishment of some version of the geometry of the transfer pit corridor behind the Visitor Center for interpretive use likewise has the remote potential of encountering artifacts and that effort will also be monitored.

Impacts of the landscaping planned as a part of this alternative on archeological materials would be negligible due to the small likelihood that isolated artifacts might be discovered. Nonetheless, all ground disturbing activities will be monitored during construction.

Cumulative Impacts. There are no known reasonably foreseeable actions that would have a new effect on archeological remains or materials that is not already subject to state regulatory controls, so there would be no cumulative effects.

Conclusion. The impact of implementation of Alternative 3 on archeological materials would likely be negligible, if monitored properly. Any effects on those resources would be short-term in nature.

3.4 Environmental Health and Safety

3.4.1 Affected Environment

While the Pullman Factory site was diligently planned and as such was an architectural accomplishment, it was an industrial factory building. The site likely conducted a series of activities that would have resulted in releases of hazardous waste materials to the environment when conducting industrial practices of that time.

The site could present many potential hazards and risks to visitors and employees; therefore, health and safety is an important concern. Virtually all of the structures at Pullman include materials that are hazardous to public health. Some materials, such as asbestos and lead-based paint, were used throughout the structures for construction and repairs prior to regulatory restrictions on their use and handling. Any work on the structures requires consideration of the potential for these materials to affect the health of workers and visitors.

The Illinois Environmental Protection Agency (IEPA) prepared a *Comprehensive Site Investigation Report* (CSIR) (IEPA, 2016), which presents the results of a Comprehensive Site Investigation (CSI) performed at the Pullman Factory site. The CSI was performed in multiple phases to evaluate Site conditions associated with long-term industrial Site use. The CSIR was developed in accordance with the Illinois EPA Site Remediation Program (SRP) requirements of 35 Illinois Administrative Code (IAC) Section 740.425. The 12.74-acre Site was enrolled in the SRP on September 18, 2015 with an assigned LPC #0316505070.

Based on the analysis of over 100 soil samples and three groundwater samples collected during the CSI, Contaminants of Concern (COCs) consist mainly of various inorganics (e.g. arsenic, lead, mercury) and polynuclear aromatic hydrocarbons (PNAs). The investigation also identified a series of Recognized Environmental Conditions (REC) (Figure 12), which are potential environmental hazards associated with historic site use and these include:

- Former Lake Vista: slag/debris-filled area;
- Transformer pit: potential use of polychlorinated biphenyls (PCBs);
- Potential underground storage tank (UST): petroleum or other hazardous substances;
- Corliss Steam Engine: solid waste by-products (e.g. heavy metals);
- Automotive/truck repair shop: multiple potential COCs (e.g., VOCs, solvents); and
- Historic industrial land use: petroleum or other hazardous substances.

RECs represent the presence or likely presence of any hazardous substance or petroleum product on a property under conditions that indicate an existing release, a past release, or a material threat

of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water on the property.

A potential subsurface anomaly was identified at the Site east of the Administration Building (potential UST area).

There are no known, active potable water wells or public water systems located at the site (based on visual inspections) or surrounding properties within approximately 2,500 feet based on the Illinois EPA Source Water Assessment Program (SWAP) database.

Current analysis of contaminant samples from the site indicate total petroleum hydrocarbon levels that exceed the requirements for 35 IAC 742.305 (a) with a concentration of 29,900 mg/kg in a boring at a depth of 3-5 ft. IEPA is recommending excavation and removal of these soils around soil boring 149.

A potential UST was identified during the site investigation and a geophysical survey confirmed the likelihood of a UST on-site. IEPA is currently recommending removal of the UST, its contents and the surrounding soils.

The remaining contaminants of concern (assessed as inhalation exposure risk) consist of arsenic and chromium. Initial site samples indicate arsenic levels of 781 mg/kg and chromium levels of 629 mg/kg, both of which exceed their respective Tier 1 residential soil outdoor inhalation remediation objectives. Excavation and off-site disposal of impacted soils is proposed for these areas.

Further delineation of contaminants and evaluation is needed to address nature and extent of contamination at the site. Samples collected to date only represent a portion of the area potentially impacted (Figure 13). IEPA is recommending installation of engineered barriers to address some areas of the Pullman Factory Site. Types of engineered barriers for excluding soil exposure routes include caps (e.g., asphalt parking lots and concrete building foundations). In addition, geologic material such as clean fill can also be an acceptable engineered barrier in some circumstances. Institutional controls would also need to be put in place during any potential for inhalation exposure during construction or excavation activities. These controls would be discussed within a site safety plan to ensure workers perform activities in a manner that will prevent accidents or exposure to contaminants.

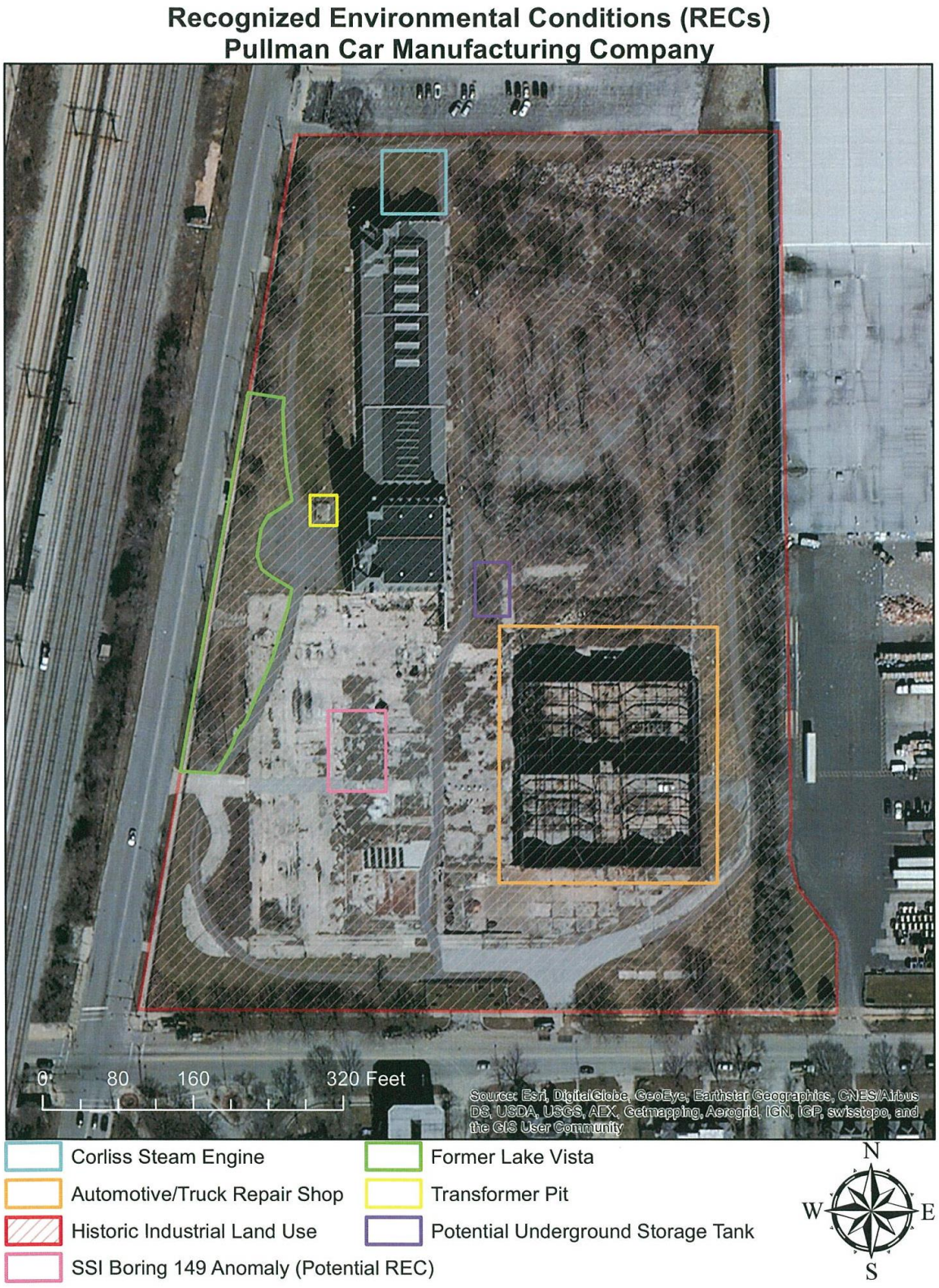

Figure 12: Recognized Environmental Conditions (REC) for Pullman (IEPA, 2016)

Figure 13: Contaminant Sampling Locations (IEPA 2016)

3.4.3 Environmental Consequences

Alternative 1 - The Minimal Amenities Conceptual Design - Administration Clock Tower Building Conversion to Visitor Center (No Action Alternative)

Direct and Indirect Impacts of the Alternative. Under the no action alternative, the presence of hazardous materials in the structures would be contained or eliminated through a series of remedial actions. The floors which are exposed surfaces/soils/dirt would be tested for contaminants. In many cases, placing a barrier to reduce exposure would be appropriate, while in other situations removal may be needed. These improvements within the Administration Clock Tower Building would be considered moderately beneficial. IEPA and NPS share the objective of restoring the Factory Site at the Monument in a single remediation plan so that it can be made fully and safely available for public use and enjoyment, including historical and cultural interpretation, as a unit of the National Park Service. Therefore, under the no action alternative, the Administration Clock Tower Building will subject to an appropriate level the investigation, evaluation, and cleanup to satisfy applicable state and federal laws and requirements and conform to NPS standards. During renovation activities, there may be some remobilization of contaminants but workers will be informed of the potential and be required to adhere to appropriate health and safety standards and use personal protective equipment as appropriate while conducting all work.

The continued presence of unaddressed contaminants on the remaining 12.65 acres currently owned and managed by IHPA would be addressed through added remedial actions managed through IEPA. NPS and IEPA will continue to work together to develop remediation plans for those lands. In the short-term, there is a potential that un-remediated areas just outside the Administration Clock Tower Building could result in soil contaminants being tracked into the building. Without action, the Pullman Factory site contaminants would have local long-term moderate adverse effects on public health, safety, and park operations by providing a continued exposure pathway to the visiting public, volunteers and the park employees.

In addition to the contaminant issue on the site, the no action alternative calls for substantial rehabilitation and restoration of the historic Administration Clock Tower Building. Public health and safety would be secured as the site would continue to be closed to the public during the construction activities. NPS strives to maintain a healthy and safe environment for workers during construction and will have safeguards in place. Upon completion of the renovations, the building will provide major beneficial effects to public safety by providing a secure and stable building. The public would be subject to minor safety concerns on the remaining Factory Site grounds, as there are still numerous hazards (e.g., exposed metal/industrial materials, inconsistencies in ground surface level) that remain associated with the past industrial practices. Should the Factory Site be remediated coincident with the opening of the Administration Clock Tower Building, the majority of these hazards would be eliminated.

Cumulative Impacts. There are a series of industrial operations in the Pullman community that likely have historically or currently contribute to some level of contaminant loading to the area. However, there are no known reasonably foreseeable actions that would have a new effect on public health and safety that is not already subject to state regulatory controls, so there would be no cumulative effects.

Conclusion. The no action alternative would have a beneficial long-term improvement to contaminant issues in the Administration Clock Tower Building. Without immediate remediation of the surrounding environment on the adjacent 12.65 acres, there would be a short-term impacts on the Administration Clock Tower Building, while a lack of action over a protracted period across the Pullman Factory site would potentially have local long-term adverse effects on public health, safety, and park operations by providing a continued exposure pathway to the visiting public, volunteers and the park employees. If the Pullman Factory site is fully remediated during the timeframe the Administration Clock Tower Building is completed, no further effects would be expected. There would be no cumulative effects.

Alternative 2 - The George Pullman Era (ca. 1880-1897) Conceptual Design

Direct and Indirect Impacts of the Alternative. Hazardous materials would be addressed as discussed under the no action alternative 1 and have similar impacts in association with the Administrative Clock Tower Building. Some of the improvements developed within this alternative will also result in reduction of exposure to residual contaminants in association with the property adjacent to the Administrative Clock Tower Building. As stated earlier, NPS owns only a small portion of the Pullman Factory site, the remainder of the property is owned by the Illinois Historic Preservation Agency. As a result of historical industrial activities, the Pullman Factory site contains certain environmental contaminants, including heavy metals and petroleum derivatives that necessitate remediation in order to facilitate future use. The IEPA has jurisdiction over the Site Remediation Program, under which the Factory site will be remediated. The NPS and the IEPA share the objective of ensuring that the investigation, evaluation, and cleanup conducted at the Factory site are thorough, satisfy applicable state and federal laws and requirements, and meet the highest professional standards, ensuring that the public is appropriately informed of environmental conditions on the Factory site, allowing the Parties to address risks to public health, safety and the environment and to minimize risks of environmental liability exposure under stale, federal, and common law. Remedial options for contaminated soils on the site include removal with disposal off site, and cap/cover to reduce exposure and contain migration. There are still some unknowns associated with fully characterizing the contaminants on-site and NPS will continue to work with the IEPA to convey our interests in seeing forward the appropriate cleanup.

The presence of hazardous materials on the 12.65 acres of the site would be covered, contained or eliminated through a series of remedial actions. Many of the actions described with the conceptual design for Alternative 2 call for placement of hard surfaces and regrading with cover that would reduce risk of exposure to site contaminants. Thus,

these actions will be beneficial in removing exposure to hazardous chemicals but must be integrated within a larger remedial action plan to be effective.

Alternative 2 focuses on architectural aspects of the original 1880 factory site and the George Pullman landscape design. This involves a reconstruction of the roundabout at East 111th Street and South Cottage Grove Avenue with a semicircular footpath leading to the front door of the future Pullman Visitor Center. These actions would reduce or remove contaminant exposure through application of an impermeable asphalt or concrete surface. In addition, landform reconstruction of a portion of Lake Vista would be envisioned as a lawn area to provide outdoor programming. This feature would not store water. Front lawn landscape enhancements are envisioned to include historically-sensitive stone seat wall and gateway details, period lighting, canopy trees, low-scale decorative plantings and reconstruction of the historic Pullman sign. These design features may be affected by remediation/construction but with appropriate soil cover, the area should not be not be impacted architecturally and would address some contaminant issues. Actions would result in a beneficial impact (both short and long term), as soil cover would remove/reduce exposure to site contaminants. Improvements also include the removal of a 1907 concrete slab and 1950 truck dock. This slab has likely served as a barrier to some conveyance of contaminants, but cracks and seepage under the slab should be evaluated.

The reconstruction of the 1889 Workers Gate would also result in placement of an asphalt or concrete barrier across much of the area. Areas not subject to a hardened surface would be regraded and covered with clean fill to provide a secondary barrier to exposure to any residual contamination. This gateway would accommodate vehicular access as needed for emergency services. Concurrent with the Workers Gate reconstruction, reestablishment of the geometry of the transfer pit corridor behind the Visitor Center is envisioned. Storm water management for the property constrains the amount of the transfer pit corridor slated for reconstruction; thus, much of the original transfer pit will be capped with soil or pavement to allow for appropriate drainage from the site. This action would contain the bulk of materials in the former transfer pit and allow for natural contouring of the property to address storm water flow.

A parking lot with capacity for approximately 30 cars is envisioned due north of the remaining Rear Erecting Shops. The area is relatively flat and does not contain existing slabs or structures but will be hardened with pavement to accommodate the dual role of reducing exposure to any soils that might contain residual contamination, while still providing for parking. This pavement cover would reduce exposure to residual contaminants and prevent further migration of those compounds. Therefore, these actions would have a moderate beneficial impact in the long-term.

Vehicular access and parking for visitors and staff is envisioned to be provided from East 111th Street. In addition to the reconstruction of the South St. Lawrence Avenue axis, a portion of the South Champlain Avenue corridor would be constructed to enable vehicular access to the site at both intersections. Access and site circulation utilizing these two street segments will provide operational flexibility for the National Park

Service and provide signage and crossing to facilitate access to the site. Future extension of these corridors is envisioned to link to the adjacent property to the north with options for shared site access at Cottage Grove and connection to the North Pullman neighborhood. Bus drop-off is envisioned along the Factory site frontage on South Cottage Grove Avenue so that the arrival experience is at the Visitor Center front door. These improvements should not create any substantive changes to traffic flow or congestion and would provide an added level of safety to the visiting public. Thus, during construction there may be a minor short term adverse impact but improvements would ultimately lead to long term minor beneficial impacts through the improvement access and traffic flow.

Cumulative Impacts. There are a series of industrial operations in the Pullman community that likely have historically or currently contribute to some level of contaminant loading to the area. However, there are no known reasonably foreseeable actions that would have a new effect on public health and safety that is not already subject to state regulatory controls, so there would be no cumulative effects.

Conclusion. Alternative 2 would have a beneficial long-term improvement to contaminant issues in the Administration Clock Tower Building and to the adjacent lands (some portion of the 12.65 acres). A full remediation plan is needed to address the site conceptual design needs in concert with contaminant cleanup. Improvements to site access would have commensurate beneficial impacts to public safety and traffic flow with improved signage and designated crossings. There would be no cumulative effects.

Alternative 3 – Pullman Factory Modernization Era (ca. 1898-1941) Conceptual Design

Direct and Indirect Impacts of the Alternative. Hazardous materials would be addressed as discussed under the no action alternative 1 and have similar impacts in association with the Administrative Clock Tower Building. Some of the improvements developed within this alternative will also result in a similar reduction of exposure to residual contaminants in association with the property adjacent to the Administrative Clock Tower Building as discussed under alternative 2. Pavement and soil cover will provide a similar level of protection from exposure to environmental contaminants through the implementation of an integrated remediation plan for the site.

Under this alternative the 1907 concrete slab would remain. Discussions with IEPA as to how to assess potential contaminants below the slab would be necessary but the slab as described above may have served as a barrier to contaminant transport in that area. Cracks in the slab over time may have provided some movement of materials and assessment of the appropriate remediation methods for that section of the site would be needed.

Under this design period, the Lake Vista area had been filled and thus would remain so. It is likely that contaminated fill material was used in this effort. Additional characterization of that fill material would be appropriate and there is some likelihood that additional cover material would be needed to reduce potential exposure to those contaminants should they exist at levels of concern for the protection of human health.

Pedestrian use and traffic impacts would be similar to those described within alternative 2 and have a minor beneficial impact.

Cumulative Impacts. There are a series of industrial operations in the Pullman community that likely have historically or currently contribute to some level of contaminant loading to the area. However, there are no known reasonably foreseeable actions that would have a new effect on public health and safety that is not already subject to state regulatory controls, so there would be no cumulative effects.

Conclusion. Alternative 3 would have a beneficial long-term improvement to contaminant issues in the Administration Clock Tower Building and to the adjacent lands (some portion of the 12.65 acres). A full remediation plan is needed to address the site conceptual design needs in concert with cleanup of environmental hazards. Improvements to site access would have commensurate beneficial impacts to public safety and traffic flow with improved signage and designated crossings. There would be no cumulative effects.

4.0 Consultation and Coordination

The historic resources of the Pullman neighborhood have been studied by government agencies and groups for decades. These studies include:

- Pullman National Historic Landmark Nomination, 1970
- The Illinois Museum of Transport and Travel in Pullman, 1988
- Pullman State Historic Site Prospectus, 1991
- The Pullman State Historic Site: Opportunities for the Future, 1993
- National Park Service American Labor History Theme Study, 1997 and 2003
- Calumet Ecological Park Feasibility Study, 1998
- Pullman Factory Task Force Report, 2000
- Urban Land Institute Technical Assistance Panel Report: The Pullman State Historic Site, 2011
- Pullman Historic District Reconnaissance Survey, 2013
- Positioning Pullman, 2015

Each of these efforts benefited from significant contributions from the agencies, partners, groups and the community. The concepts presented within this plan/EA have incorporated a great deal of information and supporting facts from these documents and the public's input to date. Primary government and community organizations associated with historic preservation, reconstruction, and interpretation include the:

- **Illinois Historic Preservation Agency (Pullman State Historic Site) -** As the owners of the Administration Clock Tower Building and Factory site and the Hotel Florence, the State of Illinois has had a presence in the Pullman neighborhood through the Illinois Historic Preservation Agency (IHPA) since 1991.

- **City of Chicago -** The City of Chicago has been the municipality of the Pullman neighborhood since annexation in 1889. Though the Pullman Historic District is a recognized landmark at the state and national level, it is the city Pullman District that provides legal protection for the privately owned buildings within it.
- **Historic Pullman Foundation** - The Historic Pullman Foundation (HPF) was formed in 1973 with the mission of expanding on existing preservation efforts and involving greater resources from outside the community.
- **Bielenberg Historic Pullman House Foundation** - The Bielenberg Historic Pullman House Foundation (BHPHF) was founded to support the interpretation of Pullman by providing houses that would be available for tours, working closely with HPF.
- **National A. Philip Randolph Pullman Porter Museum** - Founded in 1995, the mission of this museum named for the Brotherhood of Sleeping Car Porters (BSCP) union president is to "promote, honor and celebrate the legacy of A. Philip Randolph and contributions made by African-Americans to America's labor movement; with a significant focus on the African American Railroad Employee."
- **Chicago Neighborhood Initiatives -** Chicago Neighborhood Initiatives (CNI), a non-profit community development organization, was formed in 2010, but its roots stretch back a decade in the Pullman neighborhood, having grown out of the former Pullman Bank Initiatives.
- **Pullman Civic Organization -** The Pullman Civic Organization (PCO) was formed as a civil defense organization during World War II and reactivated in 1960 in response to plans to turn the district into an industrial park. It has remained a strong and active presence in the southern part of the Pullman neighborhood. Today, PCO works with residents "toward building a better neighborhood through community outreach, community events, and community partnerships."
- **Millennium Reserve -** The Pullman Historic District is within the core area of the Millennium Reserve, an initiative of the Illinois Department of Natural Resources (IDNR) backed by the federal America's Great Outdoors (AGO) initiative to align federal programs with local conservation efforts.

There are a number of other groups with a thematic (though not physical) presence in Pullman, such as the Illinois Labor History Society, the Bronzeville Historical Society, Preservation Chicago, and the National Parks Conservation Association. Each of these groups, as well as the community itself, are devoted advocates and has contributed to the body of work that will further Pullman as a whole.

Consultation

Section 106 Consultation

Agencies that have direct or indirect jurisdiction over historic properties are required by Section 106 of the National Historic Preservation Act of 1966, as amended (16 USC 470, et seq.), to take into account the effect of any undertaking on properties listed in or eligible for listing in the National Register of Historic Places. To meet the requirements of 36 CFR 800, on November 17, 2016, NPS met with the Illinois SHPO to discuss the proposed project and solicit comment on the alternatives. These officials also received a copy of the EA for review and comment. The

NPS will coordinate with the SHPO in the development of mitigation measures for historic and archeological resources through the use of a memorandum of agreement.

Consultation with American Indians
None of the proposed actions being considered in this EA would impede, prevent, or in any way negate treaty rights. The options being proposed here would not affect the harvesting of plants or plant materials, hunting, fishing (including commercial fishing in Lake Michigan), trapping rights or alterations to known tribal cultural resources. There are no American Indian tribes currently considered to be affiliated with Pullman National Monument.

U.S. Fish and Wildlife Service, Section 7 Consultation
In accordance with section 7 of the Endangered Species Act, the park informally consulted with the U.S. Fish and Wildlife Service to evaluate any potential for impacts to listed species in a letter dated January 11, 2017. The Fish and Wildlife Service replied on January 12, 2017 via email indicating "This project, in which construction may include repairs to historic structures, remediation of environmental contamination, and redevelopment of already developed property is a good example of reasonable rationale for a no effect determination."

5.0 References

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