

4.4 CONSTRUCTION IMPACTS

Legal and Regulatory Requirements

The discharge of storm water from construction activities disturbing five or more acres requires the receipt of a National Pollutant Discharge Elimination System (NPDES) Construction Permit. A Stormwater Pollution Prevention Plan (SWPPP) for construction activities will need to be created in order to receive this permit. Permit applications in this area are submitted to the Minnesota Pollution Control Agency (MPCA). This issue is further discussed in Section 4.3.7 Storm Water Drainage.

Temporary closure of streets will require approval of the agency responsible for the roadway facilities. In the project area, the City of Saint Paul maintains the roadway facilities. It should be noted that Warner Road / Shepard Road on the south side of the project are Ramsey County highways that are maintained by the City of Saint Paul, so additional permits may need to be received from Ramsey County. This issue is further discussed in Section 4.2 Transportation Impacts.

Construction noise will be regulated by the City of Saint Paul noise ordinance, and is allowed between the hours of 7:00 a.m. and 10:00 p.m.. A variance must be requested from the City for any work outside of these hours. This issue is further discussed in Section 4.3.3 Noise.

Existing Conditions

The existing conditions at the site are mainly parking and loading dock facilities. The site east of Broadway Street is mainly a pay parking lot, with an 'upper' level to the south and 'lower' level to the north. Broadway Street serves as a ramp up from 'street' level on Kellogg to the 'upper' level with access to the U.S. Postal Service operations. This upper level to the west of Broadway consists of 2 to 5 feet of fill and bituminous pavement over the top of the concrete deck. The lower level in this area has approximately 675 concrete columns which support the original concrete train deck. The concrete deck and columns are deteriorating and in need of repair with spalled concrete and exposed reinforcement in many locations. Moisture is also infiltrating from above in many areas of the concrete deck which can be seen at this time only from below.

Impacts

No-Build Alternative

There are no construction impacts in the no-build option.

Build Alternative

During the construction of the Build Alternative several parts of the project site will need to be modified this includes:

- Demolishing the 1978 USPS Annex
- Removing approximately 44,000 cubic yards of fill from the train deck
- Cutting into train deck to construct a new ramp
- Constructing a new ramp



- Filling in or building a structure over the southern portion of the existing ramp
- Constructing concrete platforms for boarding and alighting
- Installing stairs and an ADA-compliant ramp from the intersection of Sibley Street and Kellogg Boulevard to the train deck
- Building vertical circulation (e.g. stairs, escalators, elevators) between the platforms, waiting room, and under track level
- Refurbishing the concourse and waiting room
- Removing approximately 20 feet of train deck along Kellogg Boulevard from Sibley Street to approximately Wacouta Street
- Adding a pedestrian and bicycle way along Kellogg Boulevard from Sibley Street to Broadway Street
- Creating a bicycle station with bicycle parking and locker room facilities
- Implementing storm water runoff BMP possibly including the use of pervious pavement, underground storage, and/or bioretention area
- Laying track for Amtrak

With the historical nature of the building and surrounding area, reviewing and monitoring plans will need to be put in place to ensure the integrity of the historical buildings. Temporary impacts from construction noise, vibration and dust are anticipated, but would be evaluated to determine how to minimize their effects.

Temporary visual impacts would result during operation of equipment, transportation of materials to and from the construction site, staging of equipment, and stockpiling of materials.

Temporary impacts to the transportation system could include short-term roadway lane restrictions, and short-term roadway closures. Temporary closure of sidewalks adjacent to the project site may be necessary during construction.

Property access surrounding the construction area could be temporarily impacted, and temporary construction easements may be required during construction.

Current 'surface' parking within the project site would be either eliminated by the construction, or temporarily closed during construction. Parking in the lower level area would need to be temporarily closed during construction operations.

Vibration due to construction operations will need to be continuously monitored, especially in regards to the historical structures and the structural integrity of the various elements. Structural stability of the concrete deck and lower level columns will need to be monitored during removal of the soil on top. Noise should also be monitored continuously during the project to ensure compliance with city ordinances, and minimize impacts to adjacent activities.

Fugitive dust (i.e. soil material that becomes airborne) and emissions from construction equipment are potential air quality impacts. Air quality will need to be monitored during construction due to the various contaminants in the soil.

Contaminated materials have been identified as part of the Phase II Environmental Site Assessment. Further testing of materials would be needed to determine what type of monitoring and disposal are required to meet state regulations. This is discussed in more detail in Section 4.3.10, Hazardous Materials.

Mitigation Measures

The Mn/DOT CRU on behalf of FHWA, and in consultation with SHPO and the HPC, determined that the project potentially could have adverse effects on historic properties. FHWA, Mn/DOT, and RCRRRA developed a Programmatic Agreement, dated XXXXX, with SHPO, HPC, and NPS to guide the design and construction of the multi-modal transit hub and satisfy Section 106 requirements (Appendix C). Provided that the process in the agreement is followed, there would be no adverse impacts on historic properties as a result of the proposed project.

Direct emissions from construction equipment would not be expected to produce adverse effects on local air quality, provided that all equipment is properly operated and maintained. Appropriate mitigation requirements could consist of assurance of proper operation and maintenance, specification of low-emissions equipment (EPA Tier 2 compliant, alternative-fueled, or retrofit with emissions controls), and prohibition of excessive idling of engines.

Increased emissions from traffic congestion due to lane closures, detours, and construction vehicles accessing the site can be mitigated by implementing appropriate traffic management techniques during the construction period. Examples of these techniques include development of site-specific traffic management plans; temporary signage and other traffic controls; designated staging areas, worker parking lots (with shuttle bus service if necessary), truck routes, and the prohibition of construction vehicle travel during peak traffic periods.

Fugitive dust impacts can be mitigated through good “housekeeping” practices such as water sprays during demolition; wetting, paving, landscaping, or chemically treating exposed earth areas; covering dust-producing materials during transport; limiting dust-producing construction activities during high wind conditions; and providing street sweeping and tire washes for trucks leaving the site. MPCA regulations require mitigation of fugitive dust emissions.

Property access adjacent to the project site should be maintained during construction. The majority of work will be contained within the project limits.

Construction will result in temporary visible surface disturbances, including material stockpiles, parked construction vehicles, disturbed earth and occasional dust plumes. Water can be used during excavation operations to keep dust down, as well as frequent street sweeping when hauling off-site.

Noise and vibration should be monitored during construction and efforts made to reduce noise and vibration in accordance with the state and local ordinances. Noise should be monitored and



how it may be affecting the historical structures. Vibration can be continually monitored during construction, and certain equipment not allowed, i.e. impact hammers versus vibratory hammers cause less vibration during pile driving operations.

Fencing and concrete barrier of the project site during construction should be used to maintain public safety and security during construction.

4.5 INDIRECT IMPACTS

Legal and Regulatory Requirements

Indirect impacts are defined by the Council on Environmental Quality regulations (40 CFR 1500-1508) as:

Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems(40 CFR 1508.8).

Indirect effects are changes to, and resulting from, changes in land use, new/redevelopment changes in population/ employment density and any effects to natural features that could occur as a result of reuse of Minnesota's Union Depot as a multi-modal transit hub. When an action, such as the proposed project, enables indirect effects, it does not directly cause the change, but along with other factors, it helps to provide more opportunities for change.

Impacts

No-Build Alternative

The No-Build Alternative would not result increased accessibility provided by a multi-modal transit hub. As a result, existing development patterns would continue, including suburban sprawl development.

Build Alternative

A primary purpose of the reuse of Minnesota's Union Depot as a multi-modal transit hub is to increase the accessibility for residents and visitors of the Twin Cities and the Upper Midwest. The increased accessibility will, in turn, make the area around the Union Depot a more desirable place to live and work. This will create added development pressure and higher density development in the area around the Union Depot and along the primary transit routes that provide access to the Union Depot. The increased densities will result in indirect impacts from the Union Depot. These indirect impacts are identified in Table 4.5-1.

The vacation of the Midway Amtrak and Greyhound Bus Stations may enable these properties to be reused. The location of both properties makes them good locations for continued use. The Midway Amtrak Station is located in an industrial park with accesses to freight rail lines. The Greyhound Bus Station is located in close proximity to the state capital and is on the proposed Central Corridor LRT.



TABLE 4.5-1 INDIRECT IMPACTS OF THE PROPOSED ACTION

Impact		Indirect Impacts of Action
Social Impacts	Land Use	Implementation of the project is expected to encourage development and redevelopment in downtown Saint Paul and, in particular, the Lowertown neighborhood, including an identification of development
	Acquisition and Displacements	N/A
	Neighborhoods	Neighborhoods will experience increases in population and employment densities.
	Environmental Justice	Due to the increase demand to live and work in the area, some gentrification may occur.
	Community Facilities	More people will have easy access to and utilize community facilities like the Farmer's Market and Mears Park.
	Infrastructure and Public Services	The Twin Cities are projected to add nearly 1 million people by 2030. Through increased density targeted at Greyfield and Brownfield sites the existing infrastructure and public services can be used more efficiently, decreasing the need to further invest in these expanding them.
	Coastal Zone Management Program	N/A
	Wild and Scenic Rivers	Increased densities within view of the river will increase the number of people who see the river, as well as modify the views from the river.
	Mississippi National River and Recreation Area	Increased densities within view of the river will increase the number of people who see the river, as well as modify the views from the river.
	Mississippi River Critical Area	Increased densities within view of the river will increase the number of people who see the river, as well as modify the views from the river.
	Visual and Aesthetics	Increased development in the area will heighten residents' and businesses' interest in visual appeal of the area, resulting in a greater desire for artistic detail in buildings and other aspects of public life.
	Historical, Architectural, and Archaeological Properties	Increased development pressure will result in historic properties. Some property will likely be restored and preserved through use. However, other properties will experience pressure to be redeveloped.
	Public Parklands	Increases in densities will result in increased demand or parks.
Safety and Security	Increases in densities will increase the number of "eyes on the street", improving safety.	
Farmland	Increased development densities in existing urban areas may reduce pressure to convert farmland to urban land, thus preserving farmland.	

TABLE 4.5-1 INDIRECT IMPACTS OF THE PROPOSED ACTION (CONT.)

Impact		Indirect Impacts of Action
Transportation Impacts	Traffic	Increases in density will lead to increased traffic congestion.
	Parking and Access	Increases in density will lead to increased demand for parking.
	Transit	Increases in density will lead to increased demand for transit.
	Pedestrians	Increases in density will encourage more walking.
	Bicycles	The increase in bicycle commuters to downtown Saint Paul will translate to increased bicycle use for other purposes in other parts of the Twin Cities.
	Aeronautics	No Impact
	Freight Rail	Because freight rail is grade-separated throughout downtown Saint Paul, it is unlikely that it will be impacted by increases in density or development in downtown.
Environmental Impacts	Air Quality	No Impact
	Energy	Increases in density will encourage energy conservation.
	Noise	Increases in density will contribute to increases in noise. This will be mitigated by existing high noise levels present in the urban environment.
	Vibration	N/A
	Wetlands and Ecologically Sensitive Areas	Careful planning will be required to minimize impacts on wetlands and ecologically sensitive areas as a result of increases in density. This can be accomplished, in part, through targeting development on Brownfield and Greyfield sites, opposed to Greenfield.
	Floodplains	Careful planning will be required to minimize impacts on floodplains as a result of increases in density. This can be accomplished, in part, through targeting development on Brownfield and Greyfield sites, opposed to Greenfield.
	Stormwater Drainage	Careful planning will be required to minimize impacts on stormwater drainage as a result of increases in density. This can be accomplished, in part, through targeting development on Brownfield and Greyfield sites, opposed to Greenfield.
	Water Quality	Careful planning will be required to minimize impacts on water quality as a result of increases in density. This can be accomplished, in part, through targeting development on Brownfield and Greyfield sites, opposed to Greenfield.
	Endangered Species	Careful planning will be required to minimize impacts on endangered species as a result of increases in density. This can be accomplished, in part, through targeting development on Brownfield and Greyfield sites, opposed to Greenfield.
	Hazardous materials	Hazardous materials are known to be present in the area around the Union Depot. Careful planning will be required to minimize impacts of these hazardous materials on urban life as these areas are redeveloped. This can be accomplished, in part, through targeting Brownfield sites for clean up of hazardous materials and redevelopment.
	Geotechnical	N/A



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4.6 CUMULATIVE IMPACTS

Legal and Regulatory Requirements

A cumulative impact is the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR § 1508.7)

The following are past projects considered taken into account as part of the cumulative impacts:

- Creation of the Lowertown Historical District
- Conversion of warehouse buildings to residential use in the Lowertown Historical District of Downtown
- Improvements to the Bruce Vento Nature Sanctuary
- Bruce Vento Regional Trail
- Sam Morgan Regional Trail
- Fourth Street connect of the Bruce Vento Regional Trail

The following are potential future project considered for the cumulative impacts:

- Central Corridor Light Rail Transit
- Lafayette Bridge Reconstruction
- Bruce Vento Nature Sanctuary Interpretive Center
- Extension of the Gateway Trail
- Kittson Boulevard Extension
- Red Rock
- Rush Line

Hazardous Materials

Over the last decade, there have been successful efforts to remove hazardous materials from the area, including the establishment of the Bruce Vento Nature Sanctuary, Figure 4.1.5-1, which had previously been used as a rail yard and an illegal dump. Cleaning and restoring the site included the removal of 50 tons of debris. Contaminants, including asbestos and mercury, were removed from the site and marginal soil was covered with clean soil where necessary. Other efforts to beautify and clean the Nature Sanctuary include the removal of invasive species and replanting of oak savannah, as well as the creation of three stormwater retention ponds to allow for natural absorption of stormwater into plants and the ground. The mitigation of the hazardous materials on the Union Depot site will build on the clean up efforts at the Bruce Vento Nature Sanctuary, dramatically improving the environment for the residents of Lowertown and Dayton's Bluffs neighborhoods.

Historical Preservation

The Lowertown neighborhood in Saint Paul played a key role in the history of Saint Paul and Minnesota. Many people and goods came into Saint Paul and Minnesota via the railroad and Mississippi River. In many ways, the Lowertown neighborhood functioned as the lobby for the city and the state. However, in the last half of the 20th century the role of railroads began to



diminish and, as a result, so did Lowertown neighborhood. To preserve the rich history of the neighborhood, the Lowertown National Register Historic District was created in 1983. The following year the City of Saint Paul designated the area as the Saint Paul Lowertown Heritage Preservation District. These designations have fostered the preservation of many of the historical buildings. A survey of the properties in National Register District was conducted in 2007 to, among other things, document the changes in the district since the original survey in the early 1980s. Of the 40 properties surveyed, 27 had minimal alterations, four had minimal alterations but were no longer vacant, one was restored in a historically sensitive manner, and only one has been torn down. The remaining buildings have experienced some level of alterations, ranging from new windows to gutting the interior to create a parking deck. The restoration of the Union Depot, a passenger transportation facility, would restore it to original use. By restoring the Union Depot it will preserve a pivotal structure in the district. In doing so, it will reinforce the historical theme in the district, motivating others to continue to preserve their structures.

Economic Development

The reuse and rehabilitation of the Union Depot will build on efforts to revitalize the Lowertown neighborhood of Saint Paul. This has been an almost constant ongoing effort since the early 1980s, when Lowertown was listed as a historical district on the NRHP and as a locally designated historical preservation district. This was continued with the construction of Galtier Plaza (1986), a multi-use complex across the street from Mears Park, which, when it was built, was the tallest building in Saint Paul. In 1993, Mears Park was redesigned to include a creek and amphitheater where music can often be heard on summer afternoons. The Union Depot's head house has been under renovation since 2005 and will include condominiums and restaurants when it is completed. The rehabilitation and reuse of the remainder of the Union Depot as a multi-modal transit hub will continue this pattern of investment into the Lowertown neighborhood. It is likely the trend of investment in the Lowertown neighborhood will continue with the redevelopment of the Diamond Products site. The Metropolitan Council is proposing that the Diamond Products be reused as the Operations and Maintenance Facility for the Central Corridor LRT.

Transportation

Although not part of the current project, there are potential future projects that could involve Minnesota's Union Depot as the primary multi-modal transit hub in Saint Paul. Central Corridor LRT connecting downtown Minneapolis, the University of Minnesota, State Capital, and downtown Saint Paul is currently proposed to have a stop in front of the Union Depot head house. The Red Rock line from the southeast and the Rush Line from the north would provide rapid transit service into downtown Saint Paul. The Midwest High Speed Rail Initiative would provide a high-speed rail connection to Chicago. Rapid transit options are also being considered in the Robert Street Corridor south of downtown Saint Paul and the I-94 Corridor east of Saint Paul. These projects are in various stages of the planning process and it is unknown when or if these projects will ultimately be constructed. The Minnesota Valley Transit Authority (MVTA) may wish to use the Union Depot for bus layovers in downtown Saint Paul. In anticipation of these potential future transit expansion projects the Union Depot has been designed so that two additional platforms with vertical circulation can be added in the future, between the Amtrak tracks and the vehicular ramp.

The cumulative impacts of the proposed action along with these potential future transit projects are as follows:

- The additional transportation uses would strengthen the role of the Union Depot as a regional transportation hub. The additional transportation uses will contribute to the economic viability of the Depot which would, in turn, help to preserve the historic building and context of the Depot as a transportation center.
- The additional transit connectivity provided by adding transportation uses to the Union Depot would improve mobility for area residents and intercity travelers.
- Improved transit mobility and connectivity could result in reduced dependence on private motor vehicles and potentially fewer vehicle miles of travel.
- At the time that additional transportation uses are added to the Depot, an additional platform and vertical circulation between the platform and the waiting room would need to be constructed. This new vertical circulation component will be consistent with the design of the vertical circulation elements included in the proposed action and the historic designation of the Depot.
- The additional transit uses have the potential to generate additional vehicular traffic to and from the Depot site. As described in the Section 4.2.1, Traffic, the number of vehicular trips associated with an individual transit use is relatively small. However, the potential impact of additional vehicular traffic would need to be assessed at the time the use is defined for implementation.
- Success of the Union Depot as a multi-modal transit hub could enhance the marketability of the Lowertown District of Saint Paul. This would be considered to be a positive impact consistent with land use plans for the area.

Connecting two regional bicycle facilities will increase the destinations that can be access via bicycles.



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