

5.0 CONSTRUCTION IMPACTS

This section describes potential construction-related impacts of selecting a Build Alternative. For purposes of the Tier 1 DEIS, a discussion of probable construction impacts and potential mitigation strategies is provided. During the Tier 2 analysis more site specific construction impacts would be identified and appropriate mitigation would be developed.

All construction would conform to the applicable federal, state, and local requirements. Construction of a Build Alternative would include, but would not be limited to: laying tracks; modifying roadways and sidewalks; paving and repaving of surfaces; clearing vegetation; grading; excavating; removing debris; stabilizing soil; and constructing, demolishing and/or modifying structures, utilities, and drainage infrastructure. For all activities, the project sponsors anticipate using standard construction practices.

5.1 Probable Impacts and Potential Mitigation Strategies

5.1.1 Disruption to Existing Businesses

5.1.1.1 Probable Impacts

Construction of a Build Alternative may temporarily disrupt existing businesses along the Atlanta BeltLine Corridor. During construction, access to and from businesses may be impacted, however, some level of access would be maintained to all businesses during construction. The potential for disruption may result in patrons opting to take their business elsewhere, which could result in a temporary economic impact on existing businesses along the corridor.

5.1.1.2 Potential Mitigation Strategies

Potential disruption to existing businesses would be temporary, only lasting during construction activities for that area. Construction would be phased in order to minimize possible disruptions. In addition, MARTA in partnership with ABI would make a reasonable effort to maintain access, both pedestrian and vehicular, to existing businesses during construction. Existing access points would be used to the extent possible; however, if alternative access to these businesses is required, appropriate signage and detours would be provided. MARTA in partnership with ABI would establish good communication protocols with potentially affected business in order to minimize temporary effects.

5.1.2 Neighborhoods and Community Cohesion

5.1.2.1 Probable Impacts

Any major construction project, public or private, could temporarily inconvenience or disturb neighboring communities and services. Potential temporary impacts may include:

- Traffic congestion and detours
- Interrupted access to residences and businesses
- Loss of roadside parking
- Light intrusion (night construction)

- Disruption of utility services
- Presence of construction workers and materials
- Noise and vibrations from construction equipment and vehicles

5.1.2.2 Potential Mitigation Strategies

MARTA would make a reasonable effort to minimize temporary construction impacts to neighboring communities and services. Construction activities are not expected to impede community cohesion. Reasonable efforts to maintain access to community services would be made. Appropriate signage and detours would be provided to maintain access to neighborhoods and amenities for both pedestrians and vehicles. Construction activities affecting roadways and transit operations would likely occur during off-peak hours to minimize disruption. Best management practices would be employed to minimize the potential effects of construction-related fugitive dust emissions, light intrusion, noise, and vibration. Potential disruptions in utilities would be timed not to occur during peak usage hours. Appropriate notifications and ongoing communications with the affected communities would be made prior to construction activities taking place.

5.1.3 Visual and Aesthetic Quality

5.1.3.1 Probable Impacts

The visual and aesthetic quality of the corridor would be temporarily affected by construction equipment and construction staging areas. For residents living along the corridor, some materials stored for the project could be visually displeasing. This would be a temporary condition.

5.1.3.2 Potential Mitigation Strategies

In general, to reduce the potential for visual impacts, construction activities would be contained as much as practical. Construction easements on parcels outside the corridor, where required, would be managed to minimize potential visual impact. Following construction, the use of ground cover, landscaping, or related materials would restore areas to pre-construction conditions or better.

Further, during Tier 2 analysis, areas that may be considered visually sensitive, such as recreational, natural, or historic resources, would require site specific mitigation to minimize the temporary and permanent impacts related to construction.

5.1.4 Freight Rail Operations

5.1.4.1 Probable Impacts

As stated in Section 3.1.9.3, both CSX and Norfolk Southern business decisions regarding potential use of its ROW by activities other than their own freight operations are predicated on safety, maintenance of current operations, accommodation for future needs, and liability protection. In this context, construction activities within or near freight railroad ROW, when agreed to by the railroads, must not compromise these essential criteria.

As the Atlanta BeltLine project advances, construction planning and staging will be developed in consultation with the railroads. Although the goals of such planning are to avoid or minimize impacts to the railroads and their operations, some impacts such as

construction of structures to cross over railroad tracks may have unavoidable temporary impacts. An example is temporary interruption of operations while constructing nearby facilities to assure the safety of construction workers and railroad operators. These interruptions could result in operational delays.

5.1.4.2 Potential Mitigation Strategies

To address unavoidable effects of construction activities on the railroads, the project sponsors will consult with the railroads to develop mutually agreeable mitigation strategies. These could include, but would not be limited to, design adjustments to minimize effects and scheduling of activities to cause the least potential disruption.

5.1.5 Air Quality

5.1.5.1 Probable Impacts

Temporary effects to the local ambient air quality would occur during construction activities. These potential impacts include direct emissions from construction equipment and trucks, increased emissions from motor vehicles on the streets due to disruption of traffic flow, rerouted trains, and fugitive dust emissions. These impacts would be temporary and would affect only the immediate vicinity of the construction sites and access routes.

5.1.5.2 Potential Mitigation strategies

Measures potentially used to mitigate fugitive dust impacts could include:

- Spraying exposed areas with water or other dust suppressants;
- Covering trucks carrying dusty materials to and from the site;
- Washing construction vehicles, particularly their wheels and underbodies before they leave construction sites;
- Minimizing the use of vehicles in unpaved or uncovered areas; and
- Regularly cleaning adjacent paved areas to remove dust before it has the potential for re-suspension into the air.

5.1.6 Noise and Vibration

5.1.6.1 Probable Impacts

Project construction activities could have short-term noise and vibration effects on potentially sensitive receptors in the immediate vicinity of the construction site. Potential sources of noise and vibration during construction could include noise and vibration from construction equipment and noise from construction vehicles and delivery vehicles traveling to and from the site.

Similar effects also could result from rerouted train movements required during construction in certain corridors. The level of effect of these noise and vibration sources depends upon the noise characteristics of the equipment and activities involved (e.g., pile driving), the construction schedule (time of day and duration of activity), and the distance from sensitive receptors.

During Tier 2 analysis, the identification of potentially highly sensitive receptors, such as historic sites or receptors that deal with highly sensitive equipment, would occur to minimize any potential construction effects to those resources.

5.1.6.2 Potential Mitigation Strategies

During the construction phase, noise and vibration control measures may be required to ensure compliance with all federal and local guidelines and noise limits. For example, specifications could require contractors to use properly maintained and operated equipment, including the use of exhaust mufflers according to the equipment manufacturer's specifications. As determined to be necessary during final design, there could be an incorporation of additional noise control measures into the construction specification documents.

Methods of potential noise and vibration control during construction include, for example, the following measures:

- Erecting temporary noise barriers between noisy activities and noise-sensitive receptors;
- Utilizing alternative construction methods that avoid impact pile driving near vibration-sensitive receptors, such as residences, schools, and hospitals. Whenever possible, use of drilled piles or sonic/vibratory pile drivers to reduce excessive vibration;
- Re-routing construction traffic along roadways that minimize noise and vibration impacts at nearby sensitive receptors; or,
- Requiring contractors to use Best Available Control Technologies (BACT) to limit excessive noise and vibration.

5.1.7 Water Resources

5.1.7.1 Probable Impacts

The Build Alternatives have the potential to directly affect streams in the study area during construction with one or a combination of new crossing structures, extensions of existing culvert crossings, and stream buffer encroachments. During construction, possible temporary impacts on water quality may also occur. Water quality may be impacted by turbidity caused by in-stream work. The potential exists for water quality to also be impacted by disturbance of existing contaminated facilities and spills or potential or accidental discharges during construction. Additionally, increased runoff from construction sites may affect water resources within the study area.

5.1.7.2 Potential Mitigation Strategies

Potential effects on water resources would be minimized through the use of best management practices such as silt fencing, restricting certain in-stream activities at certain times, and proper planning. All appropriate federal, state, and local regulations would be followed during construction. As appropriate, an erosion and sediment control plan and all applicable permits would be approved and acquired prior to commencing construction activities.

5.1.8 Infrastructure and Utilities

5.1.8.1 Probable Impacts

Short-term utility service disruptions could occur due to construction activities. This would occur where utility relocations are necessary or in the event a utility line is impacted during construction.

5.1.8.2 Potential Mitigation Strategies

All utilities within the study area that have the potential to be affected would be identified during the Tier 2 analysis. Prior to construction activities, these utility owners would be coordinated with in order to identify ways to minimize utility disruptions to their customers. Most utility companies have technologies to alter facilities without inconveniences to the customers. To the extent feasible, mitigation strategies would include:

- Maintaining utility connections in temporary locations;
- Minimizing the time without service;
- Installing alternative service before disconnecting the existing service; and
- Allowing service disruption only during periods of non-usage or minimum usage.

5.1.9 Contamination

5.1.9.1 Probable Impacts

To varying degrees, the Build Alternatives could disturb contaminated soils. In some areas, depending on the severity of contamination, the soils on site would be considered hazardous wastes, subject to state and federal remediation regulations. Some of these wastes could undergo removal prior to the commencement of construction activities to avoid the following potential impacts:

- Groundwater contamination;
- Exposure of construction workers to health risks; and,
- The wider distribution of pollutants by contaminated dust.

All corridors could potentially involve the removal or disturbance of contaminated soils. Further testing and evaluation would occur prior to the completion of preliminary engineering and documentation of appropriate mitigation strategies would take place in a subsequent Tier 2 analysis.

5.1.9.2 Potential Mitigation Strategies

Encountering any contaminated materials would require mitigation, remediation, and/or removal, as well as protection from those contaminants during the construction of the project. Additional remedial investigations or actions could depend on the types, frequencies, and amounts of contamination encountered, if any. Impacted media or materials that could possibly be encountered include the site soils, groundwater, underground or above ground storage tank systems, and asbestos containing materials (should any buildings or structures require demolition).

Best management practices, industry standards, and regulatory-approved methods will be used during any investigation and upon handling any materials. Coordination with all required regulatory agencies will be completed to ensure the continued compliance of the Atlanta BeltLine Corridor. Any work with regard to contaminated or hazardous materials undertaken as part of the Atlanta BeltLine Corridor project should be completed in accordance with all local, state, and federal regulatory requirements.

Additionally, the nature and extent of a contaminated site or hazardous materials would require developing site-specific environmental health and safety planning with regards to the workers, the surrounding area, and the environment. Material handling plans, personal protection, workplace monitoring, construction environmental control plans, alternative designs, and methods of construction would need to be evaluated and adjusted to limit impacts from those materials.