ALTERNATIVES ANALYSIS - RECOMMENDED ALTERNATIVE

Alternative Analysis Summary

The development of alternatives for the Plaistow Commuter Rail Extension Study began with the identification of facility and operational needs for a layover facility and station. The 17 preliminary site options were evaluated and screened down to three paired alternatives (layover facility and station) for further consideration and evaluation as part of the Alternatives Analysis process. An Alternatives Analysis report is almost complete that documents the complete alternative development process and analysis completed on a range of topics.

Over the past several months, the alternatives were developed and results from the analysis were completed and reviewed with the Project Advisory Committee (PAC), Town of Plaistow Board of Selectmen, and public. The purpose of the analysis and review process was to solicit input on the impacts, benefits, and constraints of each alternative. Each alternative was measured against the set of evaluation criteria. Each alternative is summarized and the key issues or benefits of each are outlined below. A summary of the alternatives analysis and evaluation of each alternative is provided in Table 1. This evaluation matrix allows for the comparison of each alternative against the evaluation criteria.

Finally, using the results of the alternative evaluation and input from the public, local officials, and PAC, a recommended alternative was selected. The rationale for the selection of the Recommended Alternative, Alternative II, is outlined below. Over the next few months, a National Environmental Policy Act (NEPA) Environmental Assessment (EA) will be prepared that concisely summarizes the analysis completed already. The EA will compare the impacts of the Recommended Alternative with a No Build option.

Alternative Screening Process

The alternative screening process included input from the PAC, local officials, and the public. Four PAC meetings and two public meetings were held between September 2014 and February 2015 and based on the results of the preliminary analysis of the alternatives and input from the PAC and public in fall 2014, the study team undertook additional screening and analysis of the alternatives in winter 2014-2015.

The study team also reviewed the status of the project and presented the preliminary screening to the Town of Plaistow Board of Selectmen in December 2014. As an outcome of this meeting, the study team continued to conduct additional analysis and results from the additional analysis and the evaluation of the alternatives were reviewed in detail at three PAC meetings in December 2014 and January 2015. After detailed review and discussions of the analysis, the PAC agreed that Alternative II should be the Recommended Alternative to move forward into the EA process.

Table 1. Alternatives Evaluation Matrix

Evaluation Criteria		Alternative I (Haverhill Layover/Westville Rd Station)	Alternative II (Joanne Drive)	Alternative III (Testa/144 Main Street)
1. Land Use/Neighborhood Character/Zoning				
Compatibility with Planning Policies	What is the zoning district for the site and is a layover facility/station consistent with the zoning regulations?	Located with the City of Haverhill's Business Park zoning district, the layover facility site is compatible with existing zoning, local, and regional planning policies. The station site is located within the Town of Plaistow's Commercial 1 zoning district and would require a zoning variance.	The site is located with the Town of Plaistow's Commercial 1 zoning district and would require a zoning variance.	The site is located within the Town of Plaistow's Industrial 1 and Village Center District zoning districts. Development of a station or layover facility is consistent with the Industrial 1 zoning district regulations, but it would require a zoning variance for the Village Center District portion of the site.
	What is the Future Land Use category for the site and is the layover facility/station consistent with this land use?	The station site is located within the Town of Plaistow's Light Industrial Future Land Use Area. A station use is consistent with this Future Land Use designation. The layover facility site is located within a state designated Concentrated Development Center (CDC) and Priority Development Site (PDS).	The site is located with the Town of Plaistow's Light Industrial, Commercial Corridor, and Resource Protection and Conservation Area Future Land Use areas. Development on the site is limited to the Light Industrial and Commercial Corridor areas. Development of a station and layover facility is consistent with these Future Land Use designations.	The site is located within the Town of Plaistow's Light Industrial, Public Land and Open Space, Main Street Corridor, and Resource Protection and Conservation Area Future Land Use areas. Development on the site is limited to the Light Industrial and Public Land and Open Space areas. A station and layover facility is consistent with the Light Industrial designation, but not the Public Land and Open Space designation.
	Is the site concept consistent with the town's vision or Master Plan?	The Town of Plaistow' Master Plan supports the extension of MBTA commuter rail service, including the development of a station and layover facility. Development of a station on this site is compatible with the Master Plan. The use of public land is not required.	The Town of Plaistow' Master Plan supports the extension of MBTA commuter rail service, including the development of a station and layover facility. Development of a station on this site is compatible with the Master Plan. The use of public land is not required.	While the Town of Plaistow's Master Plan supports the extension of MBTA commuter rail service into Plaistow, this site is not consistent with the Town's Master Plan due to the use of the town-owned 144 Main Street property. The site is partially located within the Town's Village Center District, which is envisioned to be the cultural center of the community with a focus on pedestrian-oriented development. The site is envisioned as a park or other public use.
Land Use Compatibility	Does the site concept fit with adjacent land uses?	The station and layover sites are compatible with adjacent land uses. The layover has industrial uses to the west and open space to the east. The station utilizes an existing park-and-ride lot and is located next to commercial and residential uses.	The site is compatible with adjacent land uses. Adjacent uses include commercial uses to the west on Route 125, industrial uses to the north, and residential and commercial uses across the tracks to the east.	The site is a reuse of an existing developed industrial site (brownfield site) and a publically owned, former industrial property. Adjacent uses include undeveloped industrial land to the south and open space to the west and north. Across the tracks to the east are residential, commercial, and institutional uses.
	What is the site's proximity to residential uses?	The layover and station sites create minimal to no impact on existing residential development. 289 residential units are located within one-half mile from layover facility. 234 residential units located within one-half mile from station.	The site would require acquisition of four residential units. The site creates minimal to no impact on other surrounding existing residential development. 341 residential units are located within one-half mile from layover and station.	The site creates minimal to no impact on existing residential development. 475 residential units are located within one-half mile from layover and station.
	Does the site concept impact protected and recreational open space?	No impact to protected or recreational open space.	No impact to protected or recreational open space.	No impact to protected or recreational open space.
	Does the station site concept provide any potential for adjacent compatible development?	Limited opportunities for adjacent station related development. 144 Main Street/Testa Realty property remains available for redevelopment.	Development of a station on this site could support station related development on the adjacent Testa Realty, Inc. parcel /144 Main property to the north.	Because the majority of the site is utilized for the station and layover facility, there is limited development potential on remaining portion of the site (Testa Realty, Inc. parcel).
2. Land Acquisitions and Displacements				
Acquisitions Required	What is the number and total acreage of the parcels that will be acquired?	The layover facility is located on two parcels (38.65 acres). The station is located on three parcels (3.51 acres). The existing park-and-ride lot extends on another parcel.	The station/layover facility site is located on five parcels (27.22 acres).	The station/layover facility site is located on three parcels (44 acres).
	Is the site accessible from existing road right-of-way?	The station utilizes an existing park-and-ride lot on Westville Road, which is one-third of a mile north of a signalized intersection with Route 125. The intersection with Westville Road is signalized. The layover is accessed from a new access road from Route 121.	Located at the end of Joanne Drive, the station is located about one-quarter of a mile east of the signalized intersection with Route 125.	The site is accessed from an existing driveway from Route 121A (Main Street). The site does not have direct access to Route 125, which is almost one mile to the northwest.
	Does the site concept require a new access road and/or additional right-of-way/easement acquisition?	Layover facility requires new access road to Route 121 (Atkinson Depot Road) through an existing business site. The station requires a realignment of Westville Road to the east and right-of-way acquisition from several properties.	The site is accessed from Joanne Drive and no additional right-of-way or easement is required.	The site is accessed from an existing driveway from Route 121A (Main Street) and no additional right-of-way or easement is required.

Evaluation Criteria		Alternative I (Haverhill Layover/Westville Rd Station)	Alternative II (Joanne Drive)	Alternative III (Testa/144 Main Street)
	Will any property owners or tenants be required to relocate for the proposed site alternative?	Layover facility requires acquisition of two parcels. Station creates moderate impact to residential areas from Westville Road realignment. Station requires acquisition of two businesses and frontage of residential condominiums on Westville Road.	The layover facility and station requires acquisition of four residences and five parcels.	The site creates a moderate impact on existing residential areas. Requires acquisition of two businesses and two parcels.
3. Socio-economic/Environmental Justice				
Socio-economic Conditions	What is population density for the surrounding area?	The layover and station sites have similar population density to the surrounding area. The site and surrounding area has low population density (less than 1,280 persons/square mile).	The site has similar population density to the surrounding area. The site and adjacent area has low population density (less than 1,280 persons/square mile).	The site has similar population density to the surrounding area. The site and adjacent area has low population density (less than 1,280 persons/square mile).
	What is the housing density for the surrounding area?	The layover and station sites have similar housing density to the surrounding area. The site and adjacent area has low housing density (less than 1,280 dwellings units per square mile).	The site has similar housing density to the surrounding area. The site and adjacent area has low housing density (less than 1,280 dwellings units per square mile).	The site has similar housing density to the surrounding area. The site and adjacent area has low housing density (less than 1,280 dwellings units per square mile).
	What is the median household income within the adjacent area?	The site and surrounding area's median household income is $70,357, higher than the national median household income.	The site and surrounding area's median household income is $70,357, higher than the national median household income.	The site and surrounding area's median household income is $70,357, higher than the national median household income.
	What is the area's transit dependent population?	Very few area households near the site and within the overall surrounding area have no vehicle available (less than 1%).	Very few area households near the site and within the overall surrounding area have no vehicle available (less than 1%).	Very few area households near the site and within the overall surrounding area have no vehicle available (less than 1%).
Environmental Justice	Is the site located within an Environmental Justice (EJ) community?	The layover and station sites are not located within an Environmental Justice (EJ) community. The site creates no impact to EJ populations.	The layover and station sites are not located within an Environmental Justice (EJ) community. The site creates no impact to EJ populations.	The layover and station sites are not located within an Environmental Justice (EJ) community. The site creates no impact to EJ populations.
4. Transportation				
Traffic Impacts	Will passenger trips to and from the site create significant impacts on nearby roadways?	Creates no impact on nearby roadways.	Creates no impact on nearby roadways.	Creates minimal impact on nearby roadways due to access on Main Street.
	Will the site concept facilitate traffic patterns that improve traffic circulation?	Creates no additional traffic impacts.	Creates no additional traffic impacts.	Creates moderate traffic impacts on Main Street (existing traffic calming efforts).
Non-Vehicular Accessibility	Is the site accessible via public transportation (bus transit service)?	Plaistow area has no bus transit service. Parking area would provide room for future bus drop-off.	Plaistow area has no bus transit service. Parking area would provide room for future bus drop-off.	Plaistow area has no bus transit service. Parking area would provide room for future bus drop-off.
	Is the site accessible for pedestrians or bicycles?	Bicycle/pedestrian improvements needed to access station site.	Bicycle/pedestrian improvements needed to access station site.	Station has good pedestrian connectivity to Main Street/residential access.
Parking Supply	Can the site accommodate sufficient parking for the anticipated ridership?	Station can accommodate sufficient parking for anticipated ridership. Utilizes an existing underutilized park-and-ride-lot.	Station can accommodate sufficient parking for anticipated ridership.	Station can accommodate sufficient parking for anticipated ridership.
	Is there sufficient parking supply at the station to prevent overflow parking in the surrounding area?	An existing parking lot is utilized for the majority of parking at the station, some additional parking is added directly adjacent to the station platform along with a kiss-and-ride area. The station site has limited potential for surface parking expansion.	Station has potential to connect to park-and-ride lot on Westville Road (pedestrian bridge over the railroad track) or Testa property for future parking expansion. The site has limited potential to expand surface parking due to natural resource constraints. The parking for the station is not very close to the station to avoid the wetland areas and to accommodate grade changes in the site. A kiss-and-ride area is close to the station.	The site provides sufficient parking on the site and a kiss-and-ride area is provided. The site offers opportunity to expand future surface parking for station in close proximity to the station.
Commuter Rail Operations	Will the site concept interfere with existing commuter rail service?	Creates impact to passenger rail service (operations between layover and station), which increases interference with freight trains and increases costs of passenger service operations. MBTA has identified this separation as not operationally acceptable and considers Alternative I as NOT FEASIBLE.	Minimal impact to passenger rail service.	Minimal impact to passenger rail service.
	Is the station conveniently located to attract commuter rail passengers?	The station is located to attract local and regional passengers.	The station is located to attract local and regional passengers.	The station's location has greater potential to attract local passengers, but its location offers less ability to attract regional passengers.
	Does the site concept allow for additional phasing/growth?	Station site has limited potential for on-site expansion of surface parking. The layover site has limited potential for on-site expansion.	Site has limited potential for on-site expansion of surface parking or expansion of layover facility. Site could connect over tracks to existing Westville Road park-and-ride parking lot.	Site offers opportunity to expand future surface parking for station.
Freight Rail Operations	Would operations at this site impact existing freight rail service?	Creates impact to freight rail service (operations between layover and station).	Minimal impact to freight rail service.	Minimal impact to freight rail service.
5. Air Quality				

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Regional and Local Impacts	What is the level of regional air quality impact?	Will not have any significant affect on regional air quality	Will not have any significant affect on regional air quality	Will not have any significant affect on regional air quality
	Does the site result in localized air quality impacts?	The layover facility site is within 800 feet of a sensitive air quality receptor (residential uses), but the station is immediately adjacent to a sensitive air quality receptor.	The combined layover facility site and station is the farthest from a sensitive air quality receptor (residential uses) within 600-620 feet. This site has a low potential for residential/school air quality impacts.	The layover facility site is the closest to a sensitive air quality receptor (Pollard Elementary School) within 262 feet.
6. Noise and Vibration				
Noise	What is the number of moderate noise impacts?	This alternative results in 38 moderate noise impacts. All three alternatives have equal impacts for residences in MA, but this one results in four additional moderate impacts in Plaistow. All moderate impacts can be mitigated.	This alternative results in 34 moderate noise impacts, the lowest number for all three alternatives. All alternatives have equal impacts for residences in MA. This alternative results in no additional moderate impacts in Plaistow. All moderate impacts can be mitigated.	This alternative results in 36 moderate noise impacts. Although it is not included as moderate impact, this alternative has the highest potential noise impact on schools. All alternatives have equal impacts for residences in MA. This alternative results in two additional moderate impacts in Plaistow. All moderate impacts can be mitigated.
	What is the number of severe noise impacts?	This alternative results in 20 severe noise impacts. All alternatives have equal impacts for residences in MA, but this one results in one additional severe impact in Plaistow. All severe impacts can be mitigated.	This alternative results in 22 severe noise impacts. All alternatives have equal impacts for residences in MA. While this one results in three additional impacts in Plaistow, the three residences impacted are proposed for acquisition and demolition as part of the alternative concept. Overall, this alternative has the fewest number of total noise impacts. All severe impacts can be mitigated.	This alternative results in 21 severe impacts. All alternatives have equal impacts for residences in MA, but this one results in one additional severe impact in Plaistow. All severe impacts can be mitigated.
Vibration	What is the number of moderate vibration impacts?	Moderate potential for moderate vibration impacts of all three alternatives (proximity to schools).	Lowest potential for moderate vibration impacts of all three alternatives.	Highest potential for moderate vibration impacts of all three alternatives (proximity to schools).
	What is the number of severe vibration impacts?	Moderate potential for severe vibration impacts of all three alternatives (proximity to schools).	Lowest potential for severe vibration impacts of all three alternatives.	Highest potential for severe vibration impacts of all three alternatives (proximity to schools).
7. Hazardous Materials				
Environmental Concerns	Are there any recognized environmental concerns (REC)?	Layover facility site has the second highest potential for hazardous material impacts.	Lowest potential for hazardous materials impacts.	Highest potential for hazardous material impacts.
8. Visual Resources/Aesthetics				
Visual/Scenic Resources	Does the site impact any existing viewsheds or scenic resources?	Change in visual character would result in minor impacts, primarily related to loss of commercial building and some vegetated screening between Westville Road and the railroad tracks and addition of station platform, sidewalks, and enhanced streetscape on west side of roadway.	Change in visual character would result in moderate impacts, primarily related to removal of the residential structures, electrical substation, and wooded areas to accommodate surface parking lots, the kiss-and-ride area, and the station platform. Joanne Drive will be improved, sidewalks will be added, and an enhanced streetscape will be added. The layover facility will be screened from Joanne Drive and Route 125 by existing vegetation and a fence or other screening as necessary.	Change in visual character would result in minor impacts, primarily related to removal of the industrial buildings to accommodate a surface parking lot, the kiss-and-ride area, the station platform, and the new layover and station tracks. Viewers from Main Street will see an improved access road with sidewalks and landscaping and the layover facility tracks will be screened from Main Street by vegetated cover or a fence. The existing water tower will remain.
9. Natural and Cultural Resources				
Natural Resources	What is the impact to wetland resources (acres)?	The station site has minimal wetland impacts (0.02 acres). The layover facility impacts 0.08 acres sf of wetlands. Total impact is 0.1 acres and no mitigation is required.	This alternative has the highest impact on wetland resources. Approximately 0.94 acres of wetlands are impacted. Wetland mitigation will be required.	This alternative impacts 0.21 acres of wetlands and no wetland mitigation is required.
	What is the impact to stream buffers (acres within 100 feet of stream)?	Station site has no stream buffer impacts. Layover facility impacts approximately 0.49 acres of the stream buffer.	This alternative impacts approximately 1.97 acres of the stream buffer.	This alternative impacts approximately 1.42 acres of the stream buffer.
	How many stream crossings are required for site concept?	Station site does not require any stream crossings. Layover facility requires one stream crossing.	This alternative requires a stream crossing for a layover lead track and station track.	This alternative requires a stream crossing for a layover lead track and station track.
	Is the site located within the floodplain?	Station site is not located within the floodplain. Approximately 0.49 acres of the layover facility site are within the floodplain.	A small area of the site (0.53 acres) near the stream crossing is located within the floodplain.	A small area of the site (0.33 acres) is located within the floodplain.
	Does the site concept impact environmentally sensitive areas, such as wildlife habitats or threatened and endangered species areas?	Station site creates no significant environmental impacts. Layover facility site has moderate environmental impacts (stream crossing, stream buffer, and potential vernal pool buffers).	This site has the highest impact on natural resources (wetlands, stream buffers, stream crossings, and potential vernal pool buffers). The site is designed to minimize impacts.	Moderate impact on natural resources (stream buffer, stream crossing, and potential vernal pool buffers).
Historic/Cultural Resources	Will there be any impact to historic/cultural resources?	Minimal impacts to historic/cultural resources.	No impact to historical/cultural resources.	This site has the greatest likelihood of impacts to historical/cultural resources due to the proximity to Plaistow Village.

Evaluation Criteria		Alternative I (Haverhill Layover/Westville Rd Station)	Alternative II (Joanne Drive)	Alternative III (Testa/144 Main Street)
Archeological Resources	Will there be any impact to archeological resources?	Station site has low sensitivity for archeological resources. Layover facility has moderate to high sensitivity for archaeological resources due to proximity to Little River.	Site has moderate sensitivity to archaeological resources due to proximity to Little River.	The site has low sensitivity for archeological resources.
10. Operational Feasibility				
Layover Facility	What is the distance to the terminal station?	The layover and station sites are in two states (MA and NH) and are separated by approximately 1.1 miles. MBTA has identified the configuration of the sites as NOT FEASIBLE.	Layover and station are located on the same site in NH.	Layover and station are located on the same site in NH.
	Does the site allow for efficient service operations with station?	Separated layover and station causes increases in MBTA operations time with associated increase in cost to operate negating some savings from reduced train deadheading.	Site layout allows for efficient MBTA operations between station and layover.	Site layout allows for efficient MBTA operations between station and layover.
Station	What is the distance to the layover facility?	The layover and station sites are in two states (MA and NH) and are separated by approximately 1.1 miles.	Layover and station are located on the same site in NH.	Layover and station are located on the same site in NH.
	Can a train be stored here overnight?	Station track can store train overnight.	Station track can store train overnight.	Station track can store train overnight.
	Does the site allow for a double-ended track?	Station site layout allows for double-ended track for future operational considerations.	Site allows for double-ended track for future operational considerations.	Station has no possibility for a double-ended track for future operational considerations.
	Does the train have to change directions on the main line?	Station layout supports direct pull in and departure of trains.	Station layout supports direct pull in and departure of trains.	Station layout supports direct pull in and departure of trains.
Costs	What are the capital investment costs?	At $40.5 million, this alternative has the lowest estimated capital investment cost.	Due to the site's grade differential and efforts to avoid wetlands areas, this site has the highest capital investment costs. The total estimated cost is $50.5 million.	This alternative has the second highest estimated capital investment cost, at $49.4 million. The higher costs associated with this alternative are based on the higher land values and building demolition costs associated with the site.
	What are the operations and maintenance costs?	Although assumed to be zero for NHDOT or local entities based on plan to have station and layover facility built in Plaistow area for use by MBTA, MBTA has identified the configuration of the sites as NOT FEASIBLE.	Assumed to be zero for NHDOT or local entities based on plan to have station and layover facility built in Plaistow area for use by MBTA. In exchange for construction of the station and layover facility by others, MBTA would fund and operate the commuter service from the Plaistow area.	Assumed to be zero for NHDOT or local entities based on plan to have station and layover facility built in Plaistow area for use by MBTA. In exchange for construction of the station and layover facility by others, MBTA would fund and operate the commuter service from the Plaistow area.

ALTERNATIVE I (HAVERHILL LAYOVER/WESTVILLE ROAD STATION)

Located in both Haverhill and Plaistow, the Alternative I layover facility and station would be separated by over one mile. This separation creates operational issues and from the MBTA's perspective, it increases costs and is operationally less desirable than the other two alternatives. Additionally, the layover facility site is less than ideal given the significant potential for impacts to environmental or archeological resources on the site. The layover site is primarily located in Massachusetts, which is expected to create issues for New Hampshire as the project proponent. While the capital investment costs for this alternative are much lower than the other two alternatives, the operations and maintenance costs are anticipated to be higher to account for the increased movement between the station and layover facility.

The Alternative I station site would use an existing, underutilized park-and-ride parking lot on Westville Road in Plaistow for the majority of the station parking. The development potential of the area surrounding the station site is low. This alternative has the lowest potential to accommodate future adjacent transit-oriented development around the station given the character of the adjacent land uses. Westville Road would need to be realigned to accommodate the station facility.

While this alternative has the fewest potential impacts on wetlands, the potential impacts on floodplains and stream corridors are higher than the other two alternatives. In particular, the layover facility is situated near the Little River in an area that has moderate to high sensitivity for environmental and archaeological resources associated with the river and floodplain.

Table 2. Alternative I Summary of Key Benefits and Constraints

Benefits/Advantages	Constraints/Issues
▪ Lowest capital investment cost ($40.5 million). ▪ Station site creates no significant environmental impacts, including wetlands or other water resources. ▪ Station uses existing NHDOT park-and-ride lot. ▪ Station and layover facility uses are compatible with adjacent land uses. ▪ Layover facility is furthest from schools/Plaistow Center.	▪ Operational issues tied to 1.1-mile separation of layover and station (existing freight & passenger service). ▪ Largest number of residences within 1/2 mile of sites ▪ Operational subsidies may be required because facilities are separated; Town of Plaistow cannot support costs. ▪ Layover site has moderate to high sensitivity for archaeological resources and moderate environmental impacts (stream and floodplain). ▪ Westville Road must be slightly realigned to the east

ALTERNATIVE II (JOANNE DRIVE LAYOVER/STATION)

Alternative II has the service utility needed with the least amount of impacts to the local community. From a traffic perspective, the site location on Joanne Drive offers the best regional access for the station. The station would be located just one-quarter mile from an existing signalized intersection at Route 125 (Plaistow Road). Future improvements on Route 125 are planned for completion in the near-

term that would further support placement of a station at this location. Based on initial analysis, traffic impacts at this location are anticipated to be the least of all alternatives considered.
Due to the environmental conditions and grade differentials of the site, it will require a site design that includes grading and fill or a new bridge to construct a track from the layover facility tracks to the mainline. To mitigate impacts on the wetlands and avoid other water resources, a bridge and retaining walls will be required. This additional site work to avoid wetland areas comes at a premium cost; this alternative has the highest capital costs at $50.5 million.

The Alternative II site would be located adjacent to existing commercial development on Route 125 (Plaistow Road). Compared to the other alternatives, it is more isolated from existing schools and residential areas. Because of its separation, it offers the lowest potential for noise impacts. Additionally, compared to Alternative III, which is a current industrial site and brownfield site, this site has the fewest hazardous materials considerations.

Development of a station and layover facility on the Alternative II site could increase the redevelopment potential of the adjacent Testa Realty property. In contrast to Alternative III that utilizes the majority of developable area of the Testa Realty site, Alternative II leaves the full area of that site available for future, potentially compatible development. Further, the proximity of Alternative II to the Testa Realty parcel would allow good access from a station to any redevelopment on the Testa Realty property and the proximity would support the potential for future mixed-use or transit-oriented development (TOD) on the Testa Realty site.

Table 3. Alternative II Summary of Key Benefits and Constraints

Benefits/Advantages	Constraints/Issues
▪ Best regional access to Route 125; Joanne Drive has an existing signalized intersection. ▪ Fewest number of noise impacts. ▪ Fewest number of residential properties within ½ mile. ▪ Operationally ideal; co-location allows movement between station and layover without access to main line track; reduces impact to Amtrak and freight services. ▪ Low potential for hazardous materials, historical, cultural, and archaeological resources impact. ▪ Allows for potential to connection with future development in Plaistow Center.	▪ Highest capital investment cost ($50.5 million) ▪ Site has the highest potential impact on natural resources, including wetlands. ▪ Requires acquisition of three residential buildings. ▪ To avoid wetlands areas and minimize need for ramping due to site grading, parking for the station is not very close to the platform.

ALTERNATIVE III (144 MAIN ST LAYOVER/STATION)

The Alternative III site would be located near the Plaistow Village center on the Testa Realty and Town of Plaistow-owned 144 Main Street property. The station and layover facility would be co-located on an industrial site. In this alternative, the station is located west of the layover tracks away from the main line track. Due to this configuration, the station cannot be served from a double-ended track, which is not ideal from an MBTA operational perspective.

While the Alternative III location offers the greatest potential to attract pedestrian and bicycle access given its proximity to Route 121A (Main Street) and residential areas, regional vehicular access to the site would not be ideal given the distance from Route 125 (Plaistow Road). There is also concern that the station would increase traffic within Plaistow Village on Main Street. The location also creates the highest potential noise and vibration impacts as it is the closest of the three sites to the existing Pollard School on Main Street and the high number of residences that are located within one-half mile.

While not the most expensive of all three alternatives, the capital investment cost for Alternative III is estimated at $49.4 million. The high cost is associated with the acquisition of the Testa Realty, Inc. site and the uncertain extent of building demolition and site preparation costs. Additionally, the development of a station and layover facility on this site reduces the development potential of the site and decreases the property tax revenue potential for this parcel.

Table 4. Alternative III Summary of Key Benefits and Constraints

Benefits/Advantages	Constraints/Issues
▪ Operationally ideal; co-location allows movement between station and layover without access to main line track; reduces impact to Amtrak and freight services. ▪ Station is located closest to Plaistow Village, which would allow the best access for local passengers and bicycle and pedestrian access. ▪ Results in minor environmental impacts and no impacts to potential vernal pools.	▪ Concern with traffic impacts on Main Street. ▪ Reduces opportunities for other (TOD) development. ▪ Highest potential impact on schools/surrounding area. ▪ Site has the most difficult regional access. ▪ Requires acquisition of largest amount of land, including Town of Plaistow parcel. ▪ High capital investment cost ($49.4 million). ▪ The existing industrial site has the highest potential for hazardous materials issues and impacts.

Recommendation

Based on the input received at the PAC meetings, public meetings, and the evaluation of each alternative, Alternative II is the Recommended Alternative. The recommendation of the Alternatives Analysis report is that the Recommended Alternative moves forward as part of the NEPA EA process. An EA is a concise public document that will be prepared to compare the Recommended Alternative with a No Build condition and identify regulatory issues. When the significance of impacts of a transportation project proposal is uncertain, an EA is prepared to assist in making this determination. The purpose of an EA is to briefly provide sufficient evidence and analysis for determining whether a Federal agency needs to prepare an environmental impact statement or a finding of no significant impact.

The EA will be reviewed by the Federal Transit Administration (FTA) and will be available for public comment. After a 30-day public review period including a public hearing, FTA will make a determination of the significance of the impacts. If at any point in the EA process it is discovered that the project would result in significant impacts, an environmental impact statement (EIS) must be prepared. Upon completion of the EA, if there is no evidence of any significant impacts associated with the project, a finding of no significant impact (FONSI) may be prepared. The FONSI document is essentially a modified

EA that is updated to reflect all applicable comments and responses received during the EA public review period.