Appendix 4.1-D

Description of Roadways and Intersections

New Bedford

Inventory of Roadways and Intersections

The study area for the whale's Tooth station traffic analysis is bounded by Coggeshall Street to the north, Union Street and the State Pier to the south, the Acushnet River to the east and Purchase Street to the west. The traffic study area for the King's Highway station in bounded by Tarkiln Hill Road, King's Highway and Route 140 interchange 4 to the north; Nash Street to the south; Ashley Boulevard to the east and Mt. Pleasant Street to the west. A comprehensive field inventory of traffic conditions on the study area roadways was conducted in October 2008. The field reconnaissance consisted of an inventory of existing roadway geometry, traffic volumes, and traffic operations. The transportation infrastructure in the vicinity of each site is described below.

Roadways

The following key roadways within the vicinity of the station sites provide access to the proposed stations.

Downtown Connector (Route 18) is a high speed, multi-lane, limited access highway that connects the northern sections of New Bedford and I-195 with downtown New Bedford and Route 6. The road begins at Coggeshall Street, Ashley Boulevard and Acushnet Avenue and terminates at the New Bedford/Fairhaven Bridge (Route 6) where the roadway continues as the J.F.K. Memorial Highway. The Downtown Connector is a state-owned and maintained roadway.

Ashley Boulevard (Route 18) is a major north-south roadway in New Bedford extending from Route 140 near the Freetown town line to Coggeshall Street where the Downtown Connector begins. Ashley Boulevard is a two-lane, urban arterial roadway with a mixture of commercial and multi-unit residential buildings. For the majority of its length, Ashley Boulevard is a two-lane two-way roadway; however, in the vicinity of Coggeshall Street, it is one-way southbound. Ashley Boulevard is a city owned and maintained roadway, which provides access to the surrounding community.

Acushnet Avenue extends in a north-south direction from the Freetown town line to Coggeshall Street where the Downtown Connector begins. For the majority of its length, Acushnet Avenue is a two-lane two-way roadway; however, in the vicinity of Coggeshall Street it is one-way northbound. The land use on this portion of Acushnet Avenue is primarily residential and commercial. South of I-195, Acushnet Avenue begins again at Washburn Street. It continues as a two-lane two-way roadway along the west side of the project site until Hillman Street where MacArthur Drive begins. The land use along this portion of Acushnet Avenue is primarily industrial. Acushnet Avenue is a city owned and maintained roadway. The proposed site driveway would be located on Acushnet Avenue south of Wamsutta Street.

J.F.K. Memorial Highway traverses the study area in a north-south direction from the New Bedford-Fairhaven Bridge (Route 6) to Cove Road. J.F.K. Memorial Highway is a multi-lane, divided, limited access highway that provides access from the southern portions of New Bedford and Dartmouth to the downtown area. The land use along J.F.K. Memorial Highway includes residential, commercial, industrial, port and marine uses. J.F.K. Memorial Highway is a city owned and maintained roadway.

Purchase Street is a minor arterial roadway that parallels the Downtown Connector through the study area from north of Coggeshall Street to Route 6 (Kempton Street). Purchase Street provides access to the site via Logan Street, North Front Street and Hillman Street. Purchase Street is a city owned and maintained roadway of variable width. In the vicinity of Logan Street, Purchase Street is a narrow two-lane roadway with parking on both sides of the street. In the vicinity of Hillman Street and Kempton Street, Purchase Street generally provides two travel lanes in each direction. The land uses along Purchase Street are a combination of commercial and residential.

North Front Street is a north-south roadway extending from Acushnet Avenue, north of Coggeshall Street to Wamsutta Street, south of I-195, where it becomes Herman Melville Boulevard. North of Coggeshall Street, North Front Street is a two-lane, one-way northbound urban roadway. Land uses in this section are mixed residential and commercial. South of Coggeshall Street and I-195, North Front Street is a two-lane, two-way roadway. Land use in this section is primarily industrial. North Front Street is a city owned and maintained roadway.

Logan Street is a two-lane, two-way, roadway that connects Purchase Street with Herman Melville Boulevard, North Front Street and the waterfront area. Land use along Logan Street is primarily industrial.

Hillman Street provides one of the only connections between the downtown area, the waterfront and Route 18. Hillman Street begins at Purchase Street and continues over Route 18 to Acushnet Avenue and MacArthur Drive. Hillman Street is a two-lane, two-way roadway of varying widths.

Herman Melville Boulevard is a north-south roadway extending from Wamsutta Street to the north to MacArthur Drive to the south. Herman Melville Boulevard is a two-lane, city owned and maintained roadway providing access to industrial and port facilities.

Coggeshall Street is a major east-west arterial roadway connecting New Bedford and Fairhaven. In the study area, Coggeshall Street is a two-lane, two-way roadway of varying width with parking on the north side of the street. Land use along Coggeshall Street is primarily commercial. Coggeshall Street is a city owned and maintained roadway.

MacArthur Drive is a north-south roadway that primarily serves as a frontage road to J.F.K. Memorial Highway. MacArthur Drive provides access to the waterfront land uses located along the east side of the roadway. This roadway provides one travel lane in each direction and is city owned and maintained.

Route 140 is a four-lane limited access highway. It runs north-south extending from Route 6 (Kempton Street) in the south to Taunton in the north. In New Bedford, Route 140 connects with I-195 and Route 6 (Kempton Street), providing easy access to along the South Coast. Its intersections with Mount Pleasant Street and King's Highway provide direct access to the proposed King's Highway station, which is located south of the Route 140 southbound ramps at King's Highway Street. South, by the piers, Route 140 intersects with Route 6 (Kempton Street) providing easy access to the proposed State Pier station, which its proposed location would be at the pier east of the intersections of Union Street at MacArthur Drive. Land uses in the vicinity of Route 140 are mainly commercial.

Mount Pleasant Street is a two-lane local roadway running north-south from Tarkiln Hill Road, to Durfee Street in downtown New Bedford. Its intersection with Route 140 in New Bedford provides connection to the New Bedford Regional Airport, (located west of Mt. Pleasant Street) as well as, easy access to the proposed King's Highway station. Land uses along Mt. Pleasant Street consist of a mix of residential and commercial uses.

King's Highway Street is a short four-lane local roadway located north of the proposed King's Highway station in New Bedford. It runs east-west from Jones Street to Tarkiln Road. In between, it intersects with the Route 140 northbound ramps, providing easy access to the shopping centers at both sides of the road and the proposed King's Highway Rail station. Land uses in the vicinity of the King's Highway station are commercial.

Church Street is a two-lane local roadway which runs north-south through the center of New Bedford. It connects with Route 140 in New Bedford and extends south to downtown, passing to the east of the proposed King's Highway station. Land uses along Church Street are characterized by a mix of commercial and residential areas.

Intersections

The following key intersections within the vicinity of the sites provide access to the proposed stations.

Hillman Street and Purchase Street intersect to form a three-legged, signalized intersection. The Purchase Street northbound approach consists of a through lane and a through/right-turn lane. The Purchase Street southbound approach consists of a shared left-turn/through lane and a through lane. The Hillman Street westbound approach accommodates one general purpose lane. This intersection is controlled by a two-phase signal. The first phase permits northbound and southbound movements. The second phase permits Hillman Street westbound movements. Sidewalks are present on all approaches and crosswalks are present across Hillman Street and northbound Purchase Street. Land uses in the vicinity of the intersection are primarily commercial and residential.

Purchase Street and the Route 18 Southbound Off-Ramp intersect to form a three-legged, unsignalized intersection. Purchase Street consists of a shared left-turn/through lane on the northbound approach and a shared through/right-turn lane on the southbound approach. The Route 18 southbound off-ramp is the westbound approach, with one general purpose lane, which is STOP-controlled. Traffic control includes signal heads with flashing yellow lights for the northbound and southbound approaches and a flashing red light for the westbound approaches. A crosswalk is provided on the northbound approach only and sidewalks are provided along both sides of Purchase Street. Land uses in the vicinity of this intersection are entirely commercial.

McArthur Drive and Herman Melville Boulevard intersect at a three-legged, unsignalized intersection. The northbound and southbound approaches on MacArthur Drive consist of one general purpose lane. The westbound Herman Melville Boulevard approach, which is under STOP-control, has sufficient width to accommodate two lanes. There are no sidewalks present along any approach. A crosswalk is located across Herman Melville Boulevard. Land uses in the vicinity of this intersection are primarily industrial.

Route 6 and Pleasant Street intersect to form a complex signalized intersection with four approaches. The eastbound Route 6 (Kempton Street) approach consists of a left-turn lane and a shared through/right-turn lane. The westbound Route 6 approach consists of an exclusive left-turn lane, a through lane and an exclusive right-turn lane. The northbound Pleasant Street approach consists of an exclusive left-turn lane, two through lanes and a channelized right-turn lane. The southbound Pleasant Street approach consists of two general purpose lanes. Mill Street is one-way in the westbound direction leaving the intersection and forms a one-way pair with Kempton Street. North 6th Street is one-way in the southbound direction leaving the intersection and forms a one-way pair with the northbound Pleasant Street approach.

The intersection is controlled by a five-phase traffic signal. The first phase is for eastbound traffic from Kempton Street. The second phase permits westbound Route 6 movements. The third phase is an exclusive pedestrian phase upon push button activation. The fourth phase permits southbound Pleasant Street movements. Finally, the fifth phase accommodates northbound Pleasant Street traffic. Right turns on red are not permitted for the westbound approach on Route 6. Sidewalks and crosswalks are present along all approaches of the intersection. Land uses in the vicinity include residential and commercial.

Route 18/MacArthur Drive and Union Street/State Pier intersect to form a six-legged, signalized intersection. Route 18 and MacArthur Drive run in the north-south direction and are parallel to each other separated by a median. The northbound MacArthur Drive approach consists of one general purpose lane but left turns are not permitted from this approach. The southbound approach consists of a shared left-turn/through lane and an exclusive right-turn lane. The northbound and southbound Route 18 approaches consist of an exclusive left-turn lane, two through lanes and a right-turn lane. The eastbound Union Street approach accommodates an exclusive left-turn lane and a shared through/right-turn lane. The westbound State Pier Driveway approach accommodates one general purpose lane.

This intersection is controlled by a five-phase signal. The first phase permits southbound MacArthur Street and northbound Route 18 right turns. The second phase is a protected phase for the northbound and southbound Route 18 left turns. The third phase permits the northbound and southbound through movements from MacArthur Street and Route 18. The fourth phase is an exclusive pedestrian phase upon push button activation. Finally, the fifth phase permits all movements from Union Street and State Pier Driveway. Right turns on red are not permitted for the southbound MacArthur Drive and eastbound Union Street approaches. Sidewalks are present along all approaches of the intersection. Crosswalks are provided across all approaches. Land uses at this intersection consist of residential and commercial to the west and a ferry terminal to the east.

Coggeshall Street intersects Purchase Street to form a four-legged, unsignalized intersection. All approaches consist of one general purpose lane and are STOP-controlled. Sidewalks are present on all sides of the intersection. Crosswalks are present across all approaches. Land uses at this intersection consist primarily of residential and commercial to the west and a school at the southwest corner of the intersection.

Route 18 Northbound and Coggeshall Street intersect to form a four-legged, signalized intersection. The northbound approach consists of an exclusive left-turn lane, one through lane and a right-turn lane. There is no southbound approach because Route 18 is one-way

northbound. The eastbound Coggeshall Street approach consists of one shared left-turn/through lane. The westbound Coggeshall Street approach accommodates one shared through/right-turn lane. The traffic signal operates on two phases: Route 18 northbound traffic proceeds; then Coggeshall Street eastbound and westbound traffic is released. Sidewalks are present on all approaches of the intersection except on the southern leg of the intersection. Crosswalks are present across all approaches. Metered parking is present on Route 18 north of the intersection. Land uses in the vicinity of this intersection are primarily commercial and residential to the north and undeveloped land with a parking lot to the south.

Route 18 Southbound and Coggeshall Street intersect to form a four-legged, signalized intersection. The southbound approach consists of a shared left-turn/through lane, one through lane and a right-turn lane. There is no northbound approach because Route 18 is one-way southbound. The eastbound Coggeshall Street approach consists of one shared through/right-turn lane. The westbound Coggeshall Street approach accommodates one shared left-turn/through lane. This intersection is controlled by a two-phase signal. The first phase permits southbound Route 18 movements. The second phase permits eastbound and westbound Coggeshall Street movements. Sidewalks and crosswalks are present on all approaches of the intersection except on the southern leg of the intersection. Land uses in the vicinity of this intersection consist of a church and residential buildings to the north and a community center to the south.

Coggeshall Street intersects North Front Street to form a four-legged unsignalized intersection. All approaches of the intersection consist of one general purpose lane. North Front Street is two-way south of the intersection and one-way north of the intersection. The northbound North Front Street approach is under STOP-control. Sidewalks are present along all approaches of the intersection. Crosswalks are located across all approaches. Land uses in the vicinity of this intersection are primarily commercial uses and a parking lot.

Coggeshall Street and Belleville Avenue intersect to form a four-legged, signalized intersection. The northbound Belleville Avenue approach includes a shared left-turn/through lane and an exclusive right-turn lane. The southbound Belleville Avenue approach consists of one shared left-turn/through and a shared through/right-turn lane. The eastbound Coggeshall Street approach accommodates one shared left-turn/through lane and a shared through/right-turn lane. The westbound Coggeshall Street approach consists of a shared left-turn/through lane and a right-turn lane. This intersection is controlled by a four-phase signal. The first phase is a lead phase for southbound Belleville Avenue movements. The second phase permits northbound and southbound Belleville Avenue movements. The third phase is an exclusive pedestrian phase upon push button activation. The fourth phase permits eastbound and westbound Coggeshall Street movements. Sidewalks and crosswalks are present on all approaches of the intersection. Land uses in the vicinity of this intersection are primarily retail and commercial.

Purchase Street and Weld Street/Route 18 Off-Ramp intersect to form a four-legged unsignalized intersection. All approaches to the intersection consist of one general purpose lane except for the Route 18 off-ramp which operates as two lanes. All the approaches are under STOP-control. Sidewalks and crosswalks are present on all approaches. Land uses in the vicinity of this intersection are primarily residential, commercial and retail uses.

Logan Street intersects Purchase Street to form a three-legged, unsignalized intersection. All approaches consist of one general purpose lane. There is no traffic control. Sidewalks are

present along all of the approaches of the intersection. Land uses in the vicinity of this intersection are primarily commercial and retail.

Logan Street and Acushnet Avenue intersect to form a four-legged unsignalized intersection. Acushnet Avenue is a north-south roadway and Logan Street runs east-west. All approaches consist of one general purpose lane and there are no pavement-markings present on any of the approaches. The Logan Street approaches are under STOP-control. Sidewalks are present on all approaches. There are no crosswalks. A 12-foot 11-inch bridge vertical clearance sign is located on the southwest corner of the intersection. Land uses at this intersection consist primarily of commercial and residential to the east and undeveloped land to the west.

Logan Street and North Front Street/Herman Melville Boulevard intersect to form a three-legged unsignalized intersection. All the approaches consist of one general purpose lane. There is no signage, pavement markings or traffic control present at this intersection. Sidewalks are present on all approaches of the intersection. The pavement and sidewalks are in poor condition. Land uses at this intersection consist primarily of an auto body shop to the east and the Department of Social Services is located a few hundred feet to the east.

Wamsutta Street intersects North Front Street/Herman Melville Boulevard to form a three-legged unsignalized intersection. All the approaches consist of one general purpose lane. There is no signage, pavement markings or traffic control present at this intersection. Land uses at this intersection consist primarily of a parking lot and railroad dockyard to the west and the Mar-Lees Seafood production and distribution center is located to the east.

Wamsutta Street and Acushnet Avenue intersect to form a three-legged unsignalized intersection. The northbound Acushnet Avenue approach consists of a shared through/right-turn lane. The southbound Acushnet Avenue approach consists of a shared left-turn/through lane. The westbound Acushnet Avenue approach operates as a shared left-turn/right-turn lane. The Wamsutta Street approach is under STOP control. Sidewalks are present along Acushnet Avenue and the westbound side of Wamsutta Street. Land uses at this intersection consist primarily of a new residential development to the north and undeveloped land to the south.

Mount Pleasant intersects the Route 140 southbound ramps to form an unsignalized T-intersection. The northbound Mount Pleasant Street approach consists of a through lane and a channelized right-turn lane that provides access to Route 140 southbound. The southbound Mount Pleasant Street approach operates as a shared left-turn/through lane. The Route 140 southbound off-ramp approach consists of a left-turn lane and a channelized right-turn lane. The left-turns from southbound Route 140 off-ramp are under STOP control and the right turns yield to northbound Mount Pleasant traffic. Sidewalks are present along the northbound approach of Mount Pleasant Street. Land uses in the vicinity of this intersection are primarily residential and undeveloped land.

King's Highway and Route 140 northbound ramps intersect to form signalized T-intersection. The northbound King's Highway approach consists of a shared left-turn/through lane and a through lane. The southbound King's Highway approach operates as two through lanes and a channelized right-turn lane that provides access to Route 140 northbound. The Route 140 northbound off-ramp approach consists of a left-turn lane and a channelized right-turn lane. The right-turns yield to southbound King's Highway traffic.

This intersection is controlled by a three-phase signal. The first phase is a lead phase for northbound traffic. The second phase permits northbound and southbound King's Highway movements. The third phase permits left-turns from the Route 140 off-ramp. Sidewalks are present along the northbound approach of King's Highway. Land uses in the vicinity of this intersection are primarily commercial and retail.

Mount Pleasant Street intersects Jones Road/King's Highway to form a four-legged signalized intersection. This intersection is under construction and the traffic signals were turned off during the field visit. Due to construction activity and milled condition of the roadway pavement, lane configuration and crosswalk locations could not be determined. However, the roadway width is sufficient to accommodate two lanes on every approach. Land uses in the vicinity of this intersection are primarily residential.

Park Avenue and Church Street intersect to form a four-legged, unsignalized intersection. All approaches consist of one general purpose lane. Park Avenue is one-way from the west and two-way to the east. The eastbound and westbound Park Avenue approaches are under STOP control. There are no sidewalks or crosswalks present on any of the approaches. Land uses at this intersection are primarily commercial and residential.

Route 18 and Wood Street intersect to form a four-legged, signalized intersection. The northbound and southbound Route 18 approaches accommodate an exclusive left-turn lane and a shared through/right-turn lane. The eastbound and westbound Wood Street approaches consist of one general purpose lane. This intersection is controlled by a three-phase signal. The first phase permits northbound and southbound Route 18 movements. The second phase is an exclusive pedestrian phase upon push button activation. The third phase permits eastbound and westbound Wood Street movements. Sidewalks and crosswalks are present on all approaches of the intersection. Land uses in the vicinity of this intersection are primarily retail and commercial.

Church Street and Irvington Street intersect to form a four-legged, unsignalized intersection. All approaches at this intersection consist of one general purpose lane and the westbound Irvington Street approach is one-way into the intersection. A driveway exists opposite Irvington Street which provides access to a tool supply store. There are no STOP signs present at any of the approaches. Sidewalks are present along Church Street approaches. Land uses at this intersection are commercial and residential.

Church Street and Nash Road intersect to form a four-legged, signalized intersection. All approaches of the intersection consist of one general purpose lane. This intersection is controlled by a two-phase signal. The first phase permits northbound and southbound Church Street movements. The second phase is for eastbound and westbound Nash Road traffic. During the field visit, there was a malfunction of the pedestrian push buttons as the pedestrian calls did not activate any pedestrian phase. Sidewalks and crosswalks are present on all approaches of the intersection. Land uses in the vicinity of this intersection are primarily residential uses.

Church Street and Tarkiln Hill Road intersect to form a four-legged signalized intersection. The northbound Church Street approach accommodates an exclusive left-turn lane and a shared through/right-turn lane. The southbound Church Street approach consists of a shared left-turn/through lane and an exclusive right-turn lane. The eastbound and westbound approaches on Tarkiln Hill Road consist of an exclusive left-turn lane and a shared through/right-turn lane. This intersection is controlled by a two-phase signal. The first phase permits northbound and

southbound Church Street movements. The second phase permits eastbound and westbound Tarkiln Hill Road movements. There are no sidewalks or crosswalks present on any of the approaches. Land uses at this intersection are primarily commercial and retail.

King's Highway intersects Shaw's driveway to form a three-legged signalized intersection. The northbound Shaw's driveway approach accommodates an exclusive left-turn lane and an exclusive right-turn lane. The eastbound approach consists of a through lane and a shared through/right-turn lane. The westbound approach provides a through lane and a shared through/left-turn lane.

This intersection is controlled by a three-phase signal. The first phase allows the eastbound and westbound movements. The second phase is a lag phase for the westbound traffic. The third phase allows the northbound movements. Sidewalks are present along the westbound approach of King's Highway. Land uses in the vicinity of this intersection are primarily commercial and retail.

King's Highway intersects Stop & Shop driveway to form a four-legged signalized intersection. All the approaches in this intersection provide one shared through/left-turn lane and one shared through/right-turn lane. This intersection is controlled by a four-phase signal. The first phase is a lead phase for the westbound traffic. The second phase permits the eastbound and westbound movements. The third phase is a lag phase for the eastbound traffic. The fourth phase permits the northbound and southbound movements. Sidewalks are present along the eastbound approach of King's Highway. Land uses in the vicinity of this intersection are primarily commercial and retail.

King's Highway intersects Tarkiln Hill Road to form a three-legged unsignalized intersection. The King's Highway westbound approach provides one shared through/right-turn lane. The eastbound approach provides a shared through/left-turn lane, however, it operates as an exclusive through lane with a shared through-left-turn lane. The Tarkiln Hill Road southbound approach provides a wide shared left/right-turn lane, however it operates as an exclusive left-turn lane with an exclusive right-turn lane. Land uses in the vicinity of this intersection are primarily commercial and retail land uses.

Freetown

Inventory of Roadways and Intersections

The study area for this analysis focused on the segment of South Main Street (Route 79) between Copicut Road to the south and High Street to the north. The study area includes the Route 24/Route 79 interchange. A comprehensive field inventory of traffic conditions on the study area roadways and at study area intersections was conducted in October 2008. The field inventory consisted of data collected on existing roadway geometry, traffic volumes, and operating characteristics.

Roadways

The following key roadways within the vicinity of the site provide access to the proposed station.

Ridge Hill Road is a two-lane local street located east of the interchange of Route 24 and Route 79. It extends from the Mobile Gas station located off of South Main Street to the west to south of the interchange of Routes 24 and 79. Land uses along the vicinity of this street are entirely commercial uses.

South Main Street is a two-lane arterial roadway connecting Fall River to Freetown. It runs north-south extending from Fall River Country Club Road in the south to Water Street in the north, providing easy access to the proposed Freetown station. In between, it intersects with the Route 24 interchange providing direct access to Fall River to the south and to Taunton to the north. Land uses surrounding the vicinity of this roadway consist of a mix of commercial and residential uses.

Narrows Road is a two-lane local street in Freetown. It runs east-west extending from the densely populated Pine Island eastward to South Main Street. Its intersection with South Main Street is located north of the proposed Freetown station. Land uses along this local street are mainly residential.

Intersections

The following key intersections provide access to the proposed station.

South Main Street intersects Ridge Hill Road to form a four-legged, unsignalized intersection. All approaches consist of one general purpose lane. There are no pavement markings on Ridge Hill Road. The westbound Ridge Hill Road approach is under STOP control. Sidewalks are present along the northbound South Main Street approach. Land uses in the vicinity of this intersection include commercial uses to the north and undeveloped land to the south.

South Main Street and High Street intersect to form a three-legged, unsignalized intersection. All approaches to the intersection consist of one general purpose lane. The westbound High Street approach is under STOP control. Sidewalks are present along the northbound and southbound South Main Street approaches. A yellow painted crosswalk is present across the southbound South Main Street approach. Land uses in the vicinity of this intersection consist of residential uses to the south and a church to the north.

South Main Street and Narrows Road intersect to form a three-legged, unsignalized intersection. All approaches of the intersection consist of one general purpose lane. The Narrows Road approach is under STOP control. There are no sidewalks or crosswalks present at any of the approaches of the intersection. Land uses in the vicinity of this intersection are primarily residential uses to the north and vegetation to the south.

South Main Street and the Route 24 southbound ramps intersect to form an unsignalized T-intersection. The northbound South Main Street approach consists of a shared left-turn/through lane. The southbound South Main Street approach operates as through lane and a channelized right-turn lane that provides access to Route 24 southbound. The Route 24 southbound off-ramp approach consists of a left-turn lane and a channelized right-turn lane. The left-turns from southbound Route 24 off-ramp are under STOP control and the right turns yield to the southbound South Main Street traffic. A 14 feet 2 inches bridge vertical clearance sign is present along the northbound direction alerting truck traffic approaching the Route 24 overpass. Land in the vicinity of this intersection is primarily undeveloped.

South Main Street and the Route 24 southbound ramps intersect to form an unsignalized T-intersection. The northbound South Main Street approach consists of a through lane and a channelized right-turn lane that provides access to Route 24 northbound. The southbound South Main Street approach accommodates a shared left-turn/through lane. The Route 24 northbound off-ramp approach consists of a left-turn lane and a channelized right-turn lane. The left-turns from northbound Route 24 off-ramp is under STOP control and the right turns yield to the northbound South Main Street traffic. A 14 feet 2 inches bridge vertical clearance sign is present along the southbound direction alerting truck traffic approaching the Route 24 overpass. Land uses in the vicinity of this intersection are primarily undeveloped land.

South Main Street and Copicut Road intersect to form a three-legged, unsignalized intersection. All approaches of the intersection consist of one general purpose lane. The westbound Copicut Road approach is under STOP control. Sidewalks are present along the northbound South Main Street approach. Land uses in the vicinity of this intersection are primarily residential uses to the east and undeveloped land to the west.

Fall River

Inventory of Roadways and Intersections

A comprehensive field inventory of traffic conditions on the study area roadways and at study area intersections was conducted as part of the study. The field inventory consisted of data collected on existing roadway geometry, traffic volumes, and operating characteristics.

Roadways

The following key roadways provide access to the proposed station site.

President Avenue (Route 6) is a four-lane arterial roadway extending from South Davol Street and continuing east through Fall River providing direct access to Route 24 at Exit 5. President Avenue runs east-west just north of the proposed Fall River Depot station. Its intersection with South Davol Street provides access to the proposed the Fall River Depot station via a U-turn under Route 79. Land uses along President Avenue consist of commercial uses.

Davol Street traverses the study area in a north-south direction from Brightman Street to Broadway. Davol Street serves as a frontage route to Routes 138 and 79, which connects Route 24 with I-195. North Davol Street provides easy access to the proposed Fall River Depot station, south of President Avenue, while South Davol provides direct access to the proposed Battleship Cove station through its intersection with Anawan Street/Pocasset Street.

North Main Street is a minor arterial roadway traversing downtown Fall River. It runs north-south extending from the Fall River Country Club in the north to Central Street in the south. Its intersection with President Avenue is located just to the north of the proposed Fall River Depot station. On its southern end, North Main Street intersects with Central Street providing easy access to the proposed Battleship Cove station. Land uses along this road are a mix of commercial and residential.

Turner Street is a short two-lane local street. It runs east-west connecting North Davol Street to North Main Street. Its intersection with North Davol Street lies just to the south of the proposed Fall River Depot station, providing easy access to Routes 138 and 79 to the west and direct access to the center of town to the east. Land uses along this street are a mix of residential and commercial.

Intersections

The following key intersections provide access to the proposed stations:

Water Street and Anawan Street intersect to form a four-legged, unsignalized intersection. All approaches consist of one general purpose lane and the westbound Anawan Street approach is under STOP control. Sidewalks are present along all sides of the intersection. Crosswalks are present across all approaches. Land uses at this intersection are primarily commercial and industrial.

Ferry Street and Water Street (Ponta Delgada Street) intersect to form a slightly skewed three-legged, unsignalized intersection. All approaches consist of one general purpose lane and the eastbound Ferry Street approach is under STOP control. Sidewalks are present on both sides of Water Street and the eastbound side of Ferry Street. The southbound Water Street pavement is striped for parking. Land uses in the vicinity of this intersection are primarily commercial.

Anawan Street/Pocasset Street intersects Davol Street to form a five-legged, unsignalized intersection. All approaches consist of one general purpose lane and a concrete median separates Davol Street northbound and southbound movements. All approaches are under STOP control. Sidewalks are present on all approaches of the intersection except on the northeast corner of the intersection. A crosswalk runs diagonally across from the northwest corner of the intersection to the southeast corner. Land uses in the vicinity of this intersection include commercial, residential and an undeveloped area with a parking lot.

Davol Street and Central Street intersect to form a four-legged unsignalized intersection. The northbound and southbound Davol Street approaches consist of one general purpose lane. The Central Street westbound approach, which is under STOP control, is striped as two general purpose lanes and is one-way. Sidewalks are present on all approaches to the intersection. Crosswalks are located across Davol Street. A 14 feet 5 inches bridge height restriction sign is located on the southwest corner of the intersection. Land uses at this intersection are primarily commercial and residential.

North Main Street and President Avenue intersect to form a four-legged signalized intersection. The eastbound and westbound approaches on President Avenue accommodate an exclusive left lane and a shared through/right-turn lane. Right turns on red are not permitted for the westbound approach on President Avenue. The northbound and southbound approaches on North Main Street consist of one general purpose lane. The traffic signal operates on three phases. The first phase permits the northbound and southbound traffic concurrently, then the second phase is an exclusive pedestrian phase, and the third phase permits the eastbound and westbound traffic concurrently. Bus stops are located on both sides of North Main Street south of the intersection. Sidewalks and crosswalks are present on all approaches of the intersection. Land uses at this intersection consist of residential and commercial uses.

North Davol Street and President Avenue intersects to form a four-legged signalized intersection. The northbound Davol Street approach is one-way and consists of a shared left-turn/through lane, a through lane and an exclusive right turn lane. The eastbound approach on President Avenue consists of two general-purpose lanes. The westbound President Avenue approach consists of a shared left-turn/through lane, a through lane, and a channelized right turn lane. This intersection is controlled by a four-phase signal, including an exclusive pedestrian phase. The first phase permits the northbound approach movements. The second phase is a lead phase for the eastbound left-turn traffic. The third phase accommodates the eastbound and westbound traffic concurrently, and finally, the fourth phase is the exclusive pedestrian phase. Crosswalks are present across all approaches of the intersection. Land uses at this intersection are retail and commercial.

South Davol Street and President Avenue intersect to form a four-legged signalized intersection. The southbound Davol Street approach is one-way and accommodates two general purpose lanes with a wide shoulder. The eastbound approach on President Avenue consists of a general purpose lane. The westbound President Avenue approach consists of two general purpose lanes. This intersection is controlled by a three-phase signal. The first phase permits all southbound movements. The second phase is a concurrent phase that permits the eastbound and westbound traffic with a permitted westbound left-turn. The third phase is an exclusive pedestrian phase. Sidewalks and crosswalks are present on all approaches of the intersection. Land uses at this intersection consist of a public park area to the north and a power sub-station to the south.

Pearce Street and Davol Street intersect to form a three-legged, unsignalized intersection. Davol Street is one-way northbound and consists of two general purpose lanes. Pearce Street is one-way westbound and consists of one general purpose lane and is under STOP-control. Parking is permitted on both sides of Pearce Street. A crosswalk is present across Pearce Street. Land uses in the vicinity of this intersection consist primarily of commercial and retail uses.

Davol Street and Turner Street intersect to form a three-legged, unsignalized intersection. Davol Street is one-way and consists of two general purpose lanes. The Turner Street westbound approach consists of one general purpose lane and is under STOP-control. A crosswalk is present across Turner Street. Land in the vicinity of this intersection consist primarily of commercial uses and undeveloped areas.

South Davol Street U-turn at Route 138/79 Overpass. Davol Street southbound intersects with the U-turn ramp to provide access to the north on Davol Street. Davol Street consists of two general purpose lanes and the U-turn ramp consists of one lane. There is no STOP sign present controlling the U-turn merge. The U-turn ramp traffic yields to northbound Davol Street traffic. Land use is primarily undeveloped area near the intersection and water front to the west.

North Davol Street U-turn at Route 138/79 Overpass. Davol Street northbound intersects the U-turn ramp to provide access to the south on Davol Street. Davol Street consists of two general purpose lanes and the U-turn ramp accommodates one lane. The land uses in the vicinity of this intersection are primarily undeveloped land and a gas station.

Easton

Inventory of Roadways and Intersections

This section provides a description of major roadways and key intersections within the vicinity of the proposed Easton Village and North Easton stations.

Roadways

A comprehensive field inventory of traffic conditions on study area roadways was conducted as part of the study. The field inventory consisted of data collected on existing roadway geometry, traffic volumes, crash history, and operating characteristics. The following key roadways within the vicinity of the site provide access to the proposed station.

Route 138 (Washington Street) is a four-lane north-south arterial roadway, extending from Stoughton (to the north) to Taunton Center (to the south). Route 138 connects with I-93, I-495, Routes 106 and 140. Its intersection with Route 123 (Depot Street) provides key access to the Easton Village station. Land uses along this roadway include both residential and commercial.

Union Street is a two-lane local roadway extending east–west from Route 138 in Easton to Route 27, providing easy access to Route 24. Land uses along Union Street are mainly residential.

Elm Street is a two-lane local roadway which extends in a east–west direction from Pearl Street (Brockton) in the east to Main Street (Easton) in the west, just south of Canton Street. Along its entire length, land uses consist only of residential.

Main Street is a two-lane local roadway running east-west parallel to Elm Street. It extends from Lincoln Street, to the west, to Stonehill Street to the east. Its intersection with Route 138 provides easy access to Routes 123 and Route 24, as well as both of the proposed rail station locations in Easton. Land uses along this road are mainly commercial.

Route 123 (Belmont Street) is a two-lane east-west arterial roadway extending from Route 138 in Easton to Main Street in Brockton. In between, Belmont Street connects with Route 24, obtaining easy access to Routes 27 and 28. Its intersection with Route 138 (Washington Street) provides a key access point to both proposed rail stations in Easton.

Intersections

The following key intersections provide access to the proposed station sites.

Route 138 at Elm Street is a four-legged, slightly offset, unsignalized intersection. The northbound and southbound approaches consist of one general purpose lane and each have seven-foot shoulders on both sides of the roadway. The eastbound and westbound approaches consist of one general purpose lane and are under STOP control. No sidewalks or crosswalks are present at this intersection. Land uses in the vicinity are commercial and residential.

Route 138 intersects Belmont Street (Route 123) to form a four-legged signalized intersection. The northbound approach consists of a channelized right-turn, a through lane and a shared

through/left-turn lane. The southbound approach consists of a shared through/left-turn lane and a shared through/right-turn lane. The westbound approach consists of a shared through/right-turn lane and a left-turn only storage lane. The eastbound approach consists of a CVS driveway with one general purpose lane. The intersection operates with a two-phase signal. The first phase allows the eastbound and westbound movements followed by the northbound and southbound movements. Sidewalks are present an all approaches, except for the eastbound approach. Crosswalks are present only across the northbound and westbound approach. Land uses in the vicinity of this intersection are mainly commercial.

Route 138 intersects with Main Street to form a four-legged signalized intersection. The northbound and southbound approaches consist of an exclusive left-turn lane, an exclusive through lane and a shared through/right-turn lane. The posted speed limit on both these approaches is 40 mph. The westbound approach consists of an exclusive left-turn lane, an exclusive through lane and a shared through/right-turn lane and has a posted speed limit of 45 mph for the eastbound direction. The eastbound approach consists of an exclusive left-turn lane, an exclusive through lane and an exclusive right–turn lane, and has a posted speed limit of 35 mph for the westbound direction.

This intersection operates as a full-quadrant operation having concurrent pedestrian phases. The first phase allows the left turns from Route 138, followed by the through and right movements from Route 138. Phase three allows the left turns from Main Street, followed by the through and right movements from Main Street. Sidewalks are present on the right side of both approaches of Route 138 and on the north side of both approaches on Main Street. Crosswalks are present on the westbound and southbound approaches only. Land uses in the vicinity of this intersection are mainly commercial.

Elm Street intersects North Main Street to form an unsignalized T-type intersection. All approaches in this intersection consist of one general-purpose lane. The westbound approach is under STOP control. The posted speed limit for the westbound approach is 30 mph. A crosswalk is present on the northbound approach only. Sidewalks are present on all approaches. Land uses in the vicinity of this intersection are residential.

Barrows Street intersects Lincoln Street to form an unsignalized T-type intersection. The Barrows Street southbound approach has one general purpose lane under STOP control. Lincoln Street consists of the eastbound and westbound approaches, each having one general purpose lane. Crosswalks and are present across all approaches and sidewalks are present along each approach, except on the north side of the westbound approach. Land uses in the vicinity of the intersection are primarily residential.

Lincoln Street intersects with Main Street and Center Street to form a four-legged unsignalized intersection. The eastbound Lincoln Street approach has one general purpose lane under STOP control. A speed limit of 30 mph is posted on this approach for the westbound traffic. The Main Street westbound approach has one general purpose lane and a speed limit of 20 mph is posted on this approach for the eastbound traffic. The northbound Center Street approach consists of one general purpose lane under STOP control. A speed limit of 20 mph is posted on this approach for southbound traffic. The southbound North Main Street approach consists of one general purpose lane under STOP control. There are no posted speed limits. A median is located at the center of the intersection to separate the through movements from the right turns coming from Main Street (westbound approach). Crosswalks and sidewalks are present on the

northbound and westbound approaches only. Land uses in the vicinity of this intersection consist of commercial and residential

Union Street intersects Route 138 to form an unsignalized T-type intersection. Route 138 southbound approach has a shared through/right-turn lane and the northbound approach has a shared through/left-turn lane. Six-foot shoulders are present at both sides of both Route 138 approaches. The Union Street westbound approach consists of one shared left-turn/right-turn lane under STOP control. A 30-mph speed limit is posted on this approach. Crosswalks are present across the northbound approach only. No sidewalks are present on any approach. Land uses in the vicinity of this intersection are commercial and residential.

Roche Brothers Way intersects Route 138 to form a four-legged signalized intersection. The Route 138 northbound and southbound approaches both have a shared through/right-turn lane and a shared through/left-turn lane. A 45-mph speed limit is posted on the northbound approach. The Roche Brothers Way eastbound approach has an exclusive right-turn lane and a shared through/left-turn lane. A raised median separates eastbound and westbound traffic. The Stonehedge Village driveway is the westbound approach and has one general purpose lane.

This intersection currently operates with a four-phase signal. The first phase is a lead phase for the northbound movements with the southbound right-turns, followed by the southbound and northbound movements, simultaneously. The third phase is an exclusive pedestrian phase, followed by the eastbound and westbound movement, simultaneously. Crosswalks are not present on any approach and sidewalks are present along the south side of the eastbound approach. Land uses in the vicinity of this intersection are commercial and residential.

Roosevelt Circle intersects Route 138 to form a three-legged unsignalized intersection. The Route 138 northbound approach has a shared through/left-turn lane and the southbound approach has a shared through/right-turn lane. Roosevelt Circle is the eastbound approach with a shared left-turn/right-turn lane. Land uses near this intersection consist of a mix of residential, university-related uses and undeveloped areas.

Raynham

Inventory of Roadways and Intersections

This section provides a description of major roadways and key intersections within the vicinity of the proposed Raynham station.

Roadways

The following key roadways provide access to the proposed station site.

Route 138 (Broadway) is a state-owned, two-lane roadway which provides direct access to the proposed station site. Within the project study area, Route 138 extends in a north-south direction from Stoughton to Taunton. The roadway generally provides one 15-foot travel lane in each direction with 4- to 6-foot wide shoulders on each side of the roadway. Land uses along Route 138 include the Raynham-Taunton Greyhound Park as well as some other small commercial and industrial uses and residential property.

Route 106 (Foundry Street) is a state-owned, two-lane roadway located in Easton. Within the project study area, Route 106 extends in an east-west direction linking Mansfield to Bridgewater. The roadway generally provides one travel lane in each direction.

Interstate 495 (I-495) is part of the federal interstate highway system that is maintained by the Commonwealth of Massachusetts. I-495 is a six lane, divided circumferential highway traversing eastern Massachusetts from Salisbury to Wareham. Access to the proposed site from I-495 is provided via an interchange with Route 138, approximately two miles south of the proposed site.

Intersections

The following key intersections provide access to the proposed station site:

Route 138 and Route 106 intersect to form a four-legged signalized intersection. All approaches to the intersection consist of two general purpose lanes. The intersection is located in Easton but provides access to northern Raynham to the south and a Route 24 interchange to the east. The intersection is controlled by a two-phase signal. The first phase permits Route 106 eastbound and westbound movements. The second phase permits Route 138 northbound and southbound movements. Sidewalks are present along all approaches. There are no crosswalks across any of the approaches. Land uses in the vicinity of the intersection are primarily residential.

Route 138, Robinson Street and the Dog Track driveway intersect to form an unsignalized, slightly offset four-way intersection. The Route 138 northbound and southbound approaches, Robinson Street eastbound approach and the Dog Track driveway westbound approach provide one general purpose lane. The eastbound and westbound approaches are controlled by a STOP sign. No crosswalks or sidewalks are provided on any approach. Land uses in the vicinity of this intersection are predominantly undeveloped areas.

Route 138 at Wilbur Street is a three-legged unsignalized intersection located north of I-495 in Raynham. Route 138 runs north-south providing one-general purpose lane in each direction. The Wilbur Street runs westbound approach provides one general-purpose lane. There are no sidewalks present in this intersection, no crosswalks located across any of the three approaches, and no STOP sign installed on the Wilbur Street westbound approach although there is a STOP bar. Land uses in the vicinity of this intersection consisted primarily of residential with some commercial mixed in the area.

Route 138 at I-495 Northbound On and Off Ramps. Route 138 and I-495 intersect at a diamond interchange. The I-495 northbound off ramp intersects Route 138 from the east and the northbound on-ramp exits the intersection to the west. The intersection is unsignalized. The southbound Route 138 approach consists of two through lanes and a channelized right-turn lane. The northbound Route 138 approach accommodates two through lanes and an exclusive left-turn lane that provides access to northbound I-495. A concrete median divides Route 138. The I-495 northbound off-ramp provides a STOP-controlled left-turn lane and a channelized right-turn lane which yields to northbound Route 138 traffic. U-turns are not permitted on northbound Route 138. A sidewalk is present along northbound Route 138 and there are crosswalks across the I-495 northbound off-ramp. Land uses in the vicinity of this intersection are predominantly undeveloped areas.

Route 138 at I-495 Southbound On and Off Ramps. Route 138 and I-495 intersect at a diamond interchange. The I-495 southbound off ramp intersects Route 138 from the west and the southbound on-ramp exits the intersection to the east. The intersection is unsignalized. The northbound Route 138 approach consists of two through lanes and a channelized right-turn lane. The southbound Route 138 approach accommodates two through lanes and an exclusive left-turn lane that provides access to southbound I-495. A concrete median divides Route 138. The I-495 southbound off-ramp provides a STOP-controlled left-turn lane and a channelized right-turn lane which yields to southbound Route 138 traffic. U-turns are not permitted on southbound Route 138. A sidewalk is present along northbound Route 138 and there are crosswalks across the I-495 southbound on-ramp. Land uses in the vicinity of this intersection are predominantly undeveloped areas.

Route 138 and Carver Street intersect to form a four-legged signalized intersection. The northbound and southbound Route 138 approaches consist of two general purpose lanes. The eastbound Carver Street approach accommodates an exclusive left-turn lane and a shared through/right-turn lane. The westbound Carver Street approach consists of one general purpose lane. This intersection is controlled by a three-phase signal. The first phase is a lead for northbound Route 138 movements. The second phase permits all movements from northbound and southbound Route 138. The third phase is for eastbound and westbound Carver Street traffic. The only sidewalk is on the west side of Route 138 and the only crosswalk crosses the Carver Street eastbound approach. The land use in the vicinity of this intersection is predominantly commercial.

Route 138 and Center Street intersect to form a unsignalized T-type intersection. All approaches to the intersection consist of one general purpose lane. The Center Street approach is under STOP control. A wide driveway across from Center Street provides access to a retail establishment. Sidewalks are present along northbound and southbound Route 138 south of the intersection. There are no crosswalks located across any approaches. Land uses in the vicinity of this intersection include a gas station, an auto loan company, and the Granite & Marble Company.

Route 138 intersects Britton Street to form two T-type offset unsignalized intersections. All approaches consist of one general purpose lane except the eastbound Britton Street approach which accommodates a shared left-turn/through lane and a channelized right-turn lane. The Britton Street approaches are under STOP control. Sidewalks are present along the west side of Route 138 and on westbound Britton Street. There are no crosswalks located across any approaches. Land uses in the vicinity of this intersection include residential buildings and a gas station at the southeast corner of the intersection.

Taunton

Inventory of Roadways and Intersections

This section provides a description of major roadways and key intersections within the vicinity of the proposed Taunton commuter rail and Rapid Bus stations.

Roadways

The following key roadways provide access to the proposed stations.

Route 140 (County Street) extends in a northwest-southeast direction through Taunton Center. It goes to Norton in the northwest and to Freetown and New Bedford in the southeast. South of Route 24, the roadway is a limited access, four-lane divided highway. Route 140 connects with Route 24 approximately one-half mile south of the proposed station.

Hart Street extends in an east-west direction from Middleborough Avenue to Plain Street.

Route 138 (Broadway) extends in a north-south direction from Stoughton to Taunton. Route 138 would provide access to the Taunton Station site (via Arlington Street) for residents of the northern sections of Taunton. Within Taunton, Route 138 varies between a two-lane and a four-lane cross-section.

Route 44 extends in an east–west direction from Plymouth to Seekonk where it continues into Rhode Island. Route 44 would serve as the primary access route for commuters originating from the eastern and western sections of Taunton. Between Route 24 and Route 104, Route 44 is a four-lane roadway. West of Route 104, Route 44 narrows to a two-lane cross-section.

Washington Street extends in a north–south direction from west Raynham to Taunton Center. The two-lane roadway serves as a secondary collector roadway for those travelers accessing either the Downtown Taunton Station sites.

Arlington Street extends in a north–south direction from Route 44, passes by the Taunton Station site and Route 138, and terminates near Taunton Center. Arlington Street is named Purchase Street north of School Street. The Taunton Station will be accessed off of Arlington Street near its intersection with Route 44 (Dean Street).

Winter Street is a two-lane local road northwest-southeast roadway located northeast of the proposed Taunton station, in Taunton. It extends from Washington Street to the northwest to Bristol Avenue on the southeast, where it becomes Longmeadow Road, which provides direct access to Route 44.

Tremont Street is a two-lane arterial roadway serving as a segment of Route 140, and farther west as Route 118 in Taunton. It extends from western Taunton to Washington Street/Oak Street at the center of town. Its intersection with Washington Street/Oak Street lies just west of the proposed location for the Downtown Taunton station, providing easy access between the suburbs and the proposed rail station. Land uses in the vicinity of this roadway consist of a mix of residential uses as well as commercial uses.

Frederick Martin Parkway is a short two-lane east-west local roadway connecting Washington Street (Route 140) on its west end to Cohannet Street on its east end. This roadway would provide direct access to the proposed Downtown Taunton station, since its intersection with Washington Street is located just north of the proposed rail station. Land uses in the vicinity of this road are primarily commercial uses.

Intersections

The following key intersections provide access to the proposed station sites.

Route 140 and Hart Street intersect to form a four-legged signalized intersection. The northbound and southbound Route 140 approaches accommodate two general purpose lanes. The eastbound and westbound Hart Street approaches consist of a shared left-turn/through lane and an exclusive right-turn lane. This intersection is controlled by a three-phase signal. The first phase permits northbound and southbound Route 140 movements. The second phase is an exclusive pedestrian phase upon push button activation. The third phase permits eastbound and westbound Hart Street movements. Sidewalks and crosswalks are present on all approaches of the intersection. Land uses at this intersection are primarily residential.

Route 140 and Route 24 northbound ramps intersect to form a three-legged, signalized intersection. The Route 140 northbound approach consists of two through lanes and a channelized right-turn lane. The southbound Route 140 approach consists of an exclusive left-turn lane and two through lanes. The northbound and southbound Route 140 traffic is separated by a concrete median. The Route 24 northbound off ramp to Route 140 northbound accommodates a channelized right-turn lane and is under a YIELD control. This intersection is controlled by a two-phase signal. The first phase is a lead phase for southbound traffic. The second phase permits northbound and southbound Route 140 movements. There are no sidewalks or crosswalks present at this intersection. Land use at this intersection consists primarily of undeveloped areas.

Route 140 and Route 24 southbound ramps intersect to form a three-legged, signalized intersection. The Route 140 southbound approach consists of two through lanes and a channelized right-turn lane. The northbound Route 140 approach consists of an exclusive left-turn lane and two through lanes. The northbound and southbound Route 140 traffic is separated by a concrete median. The Route 24 northbound off ramp accommodates an exclusive left-turn lane and a channelized right-turn lane. This intersection is controlled by a three-phase signal. The first phase permits Route 140 northbound and southbound movements. The second phase is a lagging phase for the northbound Route 140 movements. The third phase permits Route 24 southbound off-ramp left and right turns. Right turns on red are not permitted for the Route 24 off-ramp traffic. There are no sidewalks or crosswalks present at this intersection. Land use at this intersection consists primarily of thickly wooded areas.

Route 140 and Taunton Depot Drive intersect to form a four-legged, signalized intersection. The northbound Route 140 approach accommodates an exclusive left-turn lane, one through lane and a shared through/right-turn lane. The southbound Route 140 approach consists of a shared left-turn/through lane, a through lane and an exclusive right-turn lane. The eastbound Taunton Depot Drive consists of an exclusive left-turn lane, a shared left-turn/through lane and a single right-turn lane. The westbound driveway opposite Taunton Depot Drive serves a storage facility and consists of one general purpose lane.

This intersection is controlled by a four-phase signal. The first phase is a lead phase for the northbound Route 140 movements along with the right turns from Taunton Depot Drive. The second phase permits northbound and southbound Route 140 movements. The third phase is an exclusive pedestrian phase upon push button activation. The fourth phase permits movements from Taunton Depot Drive and the storage facility driveway. Sidewalks are present on all approaches of the intersection. Crosswalks are provided across driveway and the Route 140

southbound approach. Land uses in the vicinity of this intersection consist of residential uses to the east and a shopping complex to the west.

Route 140 northbound ramps intersect Stevens Street and Galleria Mall Drive to form a four-legged, signalized intersection. This intersection serves as a major connection from Route 140 northbound to the Galleria Mall. The northbound Stevens Street approach consists of a shared left-turn/through lane, one through lane and a channelized right-turn lane. The southbound Stevens Street approach consists of a shared through/left-turn lane and a shared through/right-turn lane. The eastbound Galleria Mall Drive approach accommodates shared through/left-turn lane and a through lane with a channelized right-turn lane. The Route 140 northbound off- ramp approach accommodates an exclusive left-turn lane, one through lane and a channelized right-turn lane. A concrete median provides directional separation for the traffic on the Route 140 on- and off-ramps and on Galleria Mall Drive.

This intersection is controlled by a four-phase signal. The first phase is a lead phase for the southbound Stevens Street movements. The second phase permits northbound and southbound Stevens Street movements. The third phase is an exclusive pedestrian phase upon push button activation. The fourth phase permits Galleria Mall Drive and Route 140 northbound off-ramp traffic. Sidewalks are present along Galleria Mall Drive. A crosswalk is provided across the southbound Stevens Street approach. Land uses in the vicinity of this intersection are primarily the Galleria Mall to the west and undeveloped areas.

Route 140 southbound ramps and Galleria Mall Driveway intersect County Street to form a four-legged, signalized intersection. The northbound and southbound County Street approaches accommodate a shared left-turn/through lane, one through lane and a channelized right-turn lane. The eastbound Galleria Mall Drive approach consists of two general purpose lanes. The Route 140 southbound off-ramp consists of a single right-turn only lane and is under YIELD control. Through movements and left turns are not permitted from this approach. This intersection is controlled by a two-phase signal. The first phase permits northbound and southbound County Street movements. The second phase is for Galleria Mall Drive traffic. There are no sidewalks or crosswalks present at this intersection. Land uses in the vicinity of this intersection are primarily the Galleria Mall to the west with undeveloped areas to the east.

Weir Street intersects Route 44/140 at the southeast corner of Taunton Green to form a four-legged signalized intersection. Circulation around Taunton Green is one-way in the counter clockwise direction. The eastbound Cohannet Street approach is one-way toward the intersection and consists of an exclusive left-turn lane, dual through lanes and one exclusive right-turn lane. The northbound Weir Street (Route 138) approach consists of one through lane and a right-turn lane. The westbound Route 44/140 (Main Street) approach consists of two channelized right-turn lanes. There is no southbound approach as Weir Street on the north side of the intersection is one-way northbound. Traffic at this intersection is controlled by a three-phase, pre-timed signal. The first phase permits northbound Weir Street and westbound Route 44/140 right-turns. The second phase is for eastbound Cohannet Street and the third is an exclusive pedestrian phase. Metered parking is provided along the south side of Cohannet Street, both sides of Route 44/140, and both sides of northbound Route 138. All four streets provide sidewalks and the three approaches to the intersection have crosswalks. Land uses in the vicinity of the intersection are primarily commercial and office.

Route 140/44 at Court Street/Route 138. A weave segment occurs at the northeast corner of the Taunton Green where traffic from Route 138 and Route 140/44 merge. The northbound Route 138/140/44 approach consists of two free-flow, exclusive left-turns onto Court Street and one free-flow through lane. The southbound Route 138 approach consists of one free-flow, exclusive right-turn lane onto Court Street. Court Street is one-way westbound away from the intersection. There are no controls at the intersection except a flashing yellow signal indicating that vehicles should yield to pedestrians. Metered parking is provided along both sides of Route 138/140/44 and the north side of Court Street. Sidewalks are located along both sides of Route 138/140/44 and Court Street. Crosswalks are present on all approaches but are in poor condition and only some are accessible. Land uses in the vicinity of the intersection are primarily commercial and office.

Taunton Green/Court Street at Post Office Square. This four-legged unsignalized intersection is at the northwest corner of Taunton Green. The westbound Court Street approach consists of one exclusive left-turn lane, a shared left-turn/through land and a channelized right-turn lane. There are no controls for this approach. The southbound Court Street approach has a single through/right-turn lane and is controlled by a YIELD sign. The eastbound Post Office Square approach has one right-turn lane and is under STOP control. Taunton Green is one-way southbound away from the intersection and accommodates three lanes. Metered parking is provided along both sides of Post Office Square and on the west side of Court Street. A bus stop is located in the vicinity of the intersection, at Downtown Court House. Sidewalks are present along both sides of Court Street and Post Office Square. Crosswalks are provided across all approaches. Land uses in the vicinity of the intersection are primarily commercial and office.

Taunton Green Street at Cohannet Street/Route 44. This four-legged unsignalized intersection is at the southwest corner of Taunton Green. The eastbound Cohannet Street approach has one through lane and one exclusive right-turn lane and is STOP controlled. Cohannet Street is one-way eastbound away from the intersection. The northbound Winthrop Street (Route 44) approach consists of one right-turn lane controlled by a YIELD sign. Left turns from Winthrop Street onto Cohannet Street are not allowed. The southbound Taunton Green approach has two exclusive left-turn lanes and a shared through/right-turn lane. There are no controls for this approach. Metered parking is provided along both sides of Cohannet Street and on the west side of Winthrop Street. Sidewalks are present along Winthrop Street and Cohannet Street approaches. Crosswalks are located across all approaches to the intersection. Land uses in the vicinity of the intersection are primarily commercial and offices.

Court Street intersects Washington Street from the east to form a signalized three- legged intersection. The Court Street westbound approach consists of an exclusive left-turn lane and one right-turn lane. The Washington Street northbound approach accommodates one through lane and an exclusive right-turn lane. The Washington Street southbound approach consists of an exclusive left-turn lane and a through lane. Traffic at the intersection is controlled by a two-phase pre-timed signal. A Washington Street northbound/southbound phase is followed by a Court Street eastbound phase. Pedestrians move concurrently with vehicular movements upon push button activation. Parking is not permitted along any of the approaches. A bus stop is located on the eastbound travel lane on Court Street. Sidewalks are located along both sides of Washington Street and Court Street. Crosswalks are present across all approaches of the intersection. Land uses in the vicinity of the intersection is primarily commercial and office uses.

Tremont Street intersects Washington Street (which becomes Oak Street south of the intersection) from the west to form a signalized T-type intersection. The Tremont Street approach consists of two-exclusive left-turn lanes and one channelized right-turn lane. The Washington Street southbound approach consists of a through lane and a shared through/right-turn lane while the Oak Street northbound approach consists of a shared left-turn/through lane and one through lane. Traffic at the intersection is controlled by a three-phase, pre-timed signal. The signal currently operates with a leading protected northbound left-turn/through phase, followed by a northbound/southbound phase. The third phase permits the eastbound movements. The pedestrians move concurrently with vehicular movements upon push button activation. Parking is not permitted along any of the approaches. Sidewalks and crosswalks are present on all approaches of the intersection. Land uses in the vicinity of the intersection are primarily commercial and undeveloped land with parking.

Oak Street intersects Lowell Street and Kilmer Street to form a four-legged, unsignalized intersection. All approaches at this intersection consist of one general purpose lane. A driveway exists adjacent to the Kilmer Street northbound approach which provides access to the Fire Department building. There are no STOP signs or stop bars present at any of the approaches. A non-operational beacon is present on Oak Street. The Kilmer Street and Lowell Street approaches are configured in a way that creates sight problems for vehicles turning onto Oak Street from these two approaches. Sidewalks are present along all approaches except on the Lowell Street approach. There are crosswalks located across Lowell Street and the southbound Oak Street approach. Land uses at this intersection include residential and an inactive fire station.

Frederick R. Martin Sr. Parkway (FRM Parkway) intersects Washington Street from the east while a private road that provides access to Mill Pond Apartments intersects Washington Street from the west to form an unsignalized four-way intersection. The FRM Parkway westbound approach consists of an exclusive left-turn lane and a shared through/right-turn lane and is under STOP control. The Washington Street southbound approach consists of an exclusive left-turn lane and a shared through/right-turn lane. The northbound Washington Street approach consists of a shared left-turn/through lane and a shared through/right-turn lane. The Mill Pond Apartments road is STOP sign controlled and has one general purpose lane. Parking is not permitted along any of the approaches. Sidewalks are located along both sides of Washington Street and FRM Parkway. No sidewalks are provided on Mill Pond Apartments driveway. Crosswalks are provided across all approaches but are in poor condition. Land uses in the vicinity of the intersection are primarily commercial and residential.

School Street intersects Purchase Street and Arlington Street to form a four-legged unsignalized intersection. All approaches to the intersection consist of one general purpose lane. The School Street Approaches are under STOP control. Sidewalks are present along all approaches of the intersection. There are1 no crosswalks present across any of the approaches. Land uses in the vicinity of this intersection are primarily residential.

Route 138 (Broadway) intersects Washington Street at a sharp angle to form a four-legged signalized intersection (St. Mary's Square). The Route 138 northbound approach consists of an exclusive left-turn lane and a shared through/right lane. The Route 138 southbound approach consists of one shared left-turn/through lane and a right-turn lane. Both the Washington Street northeast and southwest approaches consist of one general purpose lane. Randall Street intersects Route 138 just south of Washington Street and is STOP sign controlled.

This intersection is controlled by a two-phase signal. The first phase permits northbound and southbound Route 138 movements. The second phase permits northeast and southwest traffic on Washington Street. Pedestrians move concurrently with vehicular movements upon push button activation. Parking is permitted for thirty minutes on Broadway south of the intersection and along the eastbound lane on Randall Street. Sidewalks are located along both sides of Route 138 and Washington Street. Crosswalks are provided across all approaches. Land uses at this intersection are primarily commercial and residential.

Washington Street and Purchase Street intersect to form a four-legged signalized intersection. All approaches to the intersection consist of one general purpose lane. The Purchase Street approaches are under STOP control while the Washington Street approaches operate freely. Sidewalks and crosswalks are present along all approaches of the intersection. Land uses in the vicinity of this intersection are primarily residential.

Route 44 (Cape Highway) at Route 104 (Dean Street). Route 44 and Route 104 intersect to form a four-legged, signalized intersection. The eastbound Route 44 approach accommodates two general purpose lanes. The westbound Route 44 approach consists of a shared left-turn/through lane, a through lane and a channelized right-turn lane. The southbound Route 104 consists of a shared left-turn/through and an exclusive right-turn lane. The northbound driveway opposite the Route 104 approach consists of one general purpose lane.

This intersection is controlled by a three-phase signal. The first phase is a lead phase for the eastbound Route 44 movements with the right turns from Route 104 southbound overlapping. The second phase permits eastbound and westbound Route 44 movements. The third phase permits movements from Route 104 and the driveway. Pedestrian indications are present at the intersection but were not in operation. Sidewalks are present along the westbound Route 44 approach and a crosswalk is provided across Route 104. Land uses in the vicinity of this intersection are primarily commercial.

Longmeadow Road intersects Route 44 (Dean Street) from the north and Honorable Gordon Owen Parkway intersects Route 44 from the south to form a four-legged, signalized intersection. The eastbound Route 44 approach consists of an exclusive left-turn lane, two through lanes and a short, channelized right-turn lane. The westbound Route 44 approach consists of an exclusive left-turn lane, a through lane and a shared through/right lane. A concrete median provides directional separation for the traffic on Route 44. The northbound Honorable Gordon Owen Parkway accommodates one general purpose lane and a channelized right-turn lane. The southbound Longmeadow Road approach accommodates one general purpose lane. The right-turns on the eastbound and northbound approaches are under YIELD control.

This intersection is controlled by a four-phase signal. The first phase is a protected phase for the eastbound and westbound Route 44 left turns. The second phase permits eastbound and westbound Route 44 through and right turns. The third phase permits the Honorable Gordon Owen Parkway and Longmeadow Road traffic. The fourth phase is an exclusive pedestrian phase upon push button activation. Sidewalks and crosswalks are present on all approaches. Land uses in the vicinity of this intersection are primarily commercial and residential.

Arlington Street intersects Route 44 from the north to form a three-legged, Y-type signalized intersection. The westbound Route 44 approach consists of a shared through/right lane. The

eastbound Route 44 approach accommodates an exclusive left-turn lane and one through lane. The southbound Arlington Street approach consists of a shared left-turn/right-turn lane. This intersection is controlled by a two-phase signal. The first phase permits eastbound and westbound Route 44 movements. The second phase permits southbound Arlington Street left and right turns. Pedestrians move concurrently with vehicular movements upon push button activation. Sidewalks are present along the north side of the eastbound Route 44 approach and the Arlington Street corner of the intersection. The land use in the vicinity of this intersection is predominantly residential to the north and undeveloped area to the south.

Summer Street intersects Route 44 (Main Street and Church Green Street) from the southeast to form a five-legged intersection. Summer Street becomes Union Street north of the intersection and is one-way in the northbound direction, away from the intersection. The northbound Summer Street approach has a shared left-turn/through lane and a right-turn lane. The westbound Church Green approach has one through/right-turn lane while the eastbound Main Street approach has a single left-turn/through lane. Left turns are not permitted from the westbound Church Green approach. In addition, there is a free-flow channelized right-turn lane from the eastbound Main Street approach onto Summer Street.

Traffic at this signal is controlled by a two-phase pre-timed signal. The signal currently operates with a northbound Summer Street phase followed by the eastbound and westbound Main Street/Church Green movements. Pedestrians move concurrently with vehicles upon push button activation. Metered parking is provided along both sides of Church Green, the west side of Summer Street, the east side of Union Street and both sides of Main Street. Sidewalks and crosswalks are located on all approaches. Land uses near the intersection are predominantly commercial.

Spring Street, Church Green and Summer Street intersect to form a four-legged, signalized intersection. All four approaches have a single general purpose lane. Because the westbound Church Green approach is slightly skewed, it is wide enough to accommodate right turning vehicles separately from through and left-turning vehicles. The intersection is controlled by a two-phase signal that lets the Church Green and Spring Street approaches move in one phase and the Summer Street northbound and southbound approaches to move in another phase.

Route 140 (County Street) and Honorable Gordon Owen Parkway intersect to form a T-type signalized intersection. The westbound Route 140 approach consists of a through lane and a right-turn lane. The eastbound Route 44 approach accommodates a shared left-turn/through lane. The southbound Honorable Gordon Owen Parkway approach consists of a shared left-turn and right-turn lane. There is a driveway located across from the southbound approach serving a residential building. This intersection is controlled by a three-phase signal with video detection for all approaches. The first phase permits eastbound and westbound Route 140 movements. The second phase is an exclusive pedestrian phase upon push button activation. The third phase permits movement from the Honorable Gordon Owen Parkway and the residential driveway. Sidewalks are present along both sides of Route 140. There is a crosswalk across the westbound Route 140 and Owen Parkway approaches. The land use in the vicinity of this intersection is predominantly residential.

School Street and Winter Street intersect to form a four-legged unsignalized intersection. All approaches to the intersection consist of one general purpose lane. The School Street approaches are under STOP control. Sidewalks are present on all approaches of the intersection.

There are crosswalks located across all approaches except on Winter Street west of the intersection. Land uses in the vicinity of this intersection are primarily residential.

Norton

Inventory of Roadways and Intersections

This section provides a description of major roadways and key intersections within the vicinity of the proposed Barrowsville station.

Roadways

The following key roadways provide access to the proposed station.

South Worcester Street is a two-lane local road that connects Route 123 with Route 140. It runs north-south, intersecting with Route 123, John B. Scott Boulevard, and Barrows Street, among others. Its intersection with Barrows Street is just west of the proposed Barrowsville station. Land uses along this road are entirely residential.

Route 123/Old Colony Road is a two-to-four lane east-west arterial, extending from Route 106 in Raynham to I-95 in South Attleboro. It provides access to and from I-495 and intersects with South Worcester Street near the proposed rail station. Land uses along this road are a combination of residential and commercial.

Dean Street is a two-lane local roadway extending from South Worcester Street to Tremont Street. It runs north-south and intersects with John B. Scott Boulevard south of the proposed Barrowsville station. Land uses along this road are entirely residential.

Barrows Street is a two-lane local roadway, running east-west and extending from South Worcester Street on the west to Route 140 on the east. Barrows Street intersects with South Worcester Street, which lies just east of the proposed Barrowsville station. Land uses along this roadway are mainly residential.

Intersections

The following key intersections provide access to the proposed station.

South Worcester Street and North Worcester Street intersect Route 123 at a skewed angle to form a four-legged unsignalized intersection. The North and South Worcester Street approaches are slightly offset making it difficult for vehicles turning left into or out of these approaches. All approaches to the intersection consist of one general purpose lane. The intersection operates with red and yellow flashing indications. Flashing yellow indications are present for the eastbound and westbound Route 123 approaches. The northbound and southbound approaches have the flashing red indications. STOP signs are located on the South and North Worcester Street approaches. There are no sidewalks or crosswalks present at any of the approaches. The land use in the vicinity of this intersection is predominantly residential to the east and undeveloped areas to the west.

John B. Scott Boulevard at Harvey Street is a four-legged unsignalized intersection located south of the proposed Barrowsville station location. John B. Scott Boulevard, which is the major roadway, travels northwest and southeast, while Harvey Street runs in the northeast and southwest direction. All four approaches consist of one general purpose lane and are STOP sign controlled with a red-flashing beacon overhead facing each approach. No crosswalks and sidewalks are present on any of the approaches. Land uses around this intersection are entirely residential.

South Worcester Street intersects John B. Scott Boulevard and Sturdy Street to form a four-legged unsignalized intersection. All approaches to the intersection consist of one general purpose lane. STOP signs are located on all approaches except for the southbound South Worcester Street approach. An at-grade railroad crossing is located south of the intersection across John B. Scott Boulevard. There are no sidewalks or crosswalks present at any of the approaches. The land use in the vicinity of this intersection is predominantly residential and undeveloped.

John B. Scott Boulevard and Dean Street intersect to form a four-legged unsignalized intersection. All approaches to the intersection consist of one general purpose lane and are under STOP control. A flashing all red beacon is located at the intersection to reinforce the all-way STOP control. There are no sidewalks or crosswalks present at any of the approaches. The land use in the vicinity of this intersection is predominantly residential and undeveloped areas.

Barrows Street intersects South Worcester Street from the east to form an unsignalized T-type intersection. All approaches to the intersection consist of one general purpose lane. The westbound Barrows Street approach is under STOP-control. The Norton Fire Department is located at the northeast corner of the intersection. Sidewalks are present along the northbound South Worcester Street and westbound Barrows Street approaches. There are no crosswalks present at any of the approaches. The land uses in the vicinity of this intersection are mainly residential.