

Southern Service Area: Watertown Car Barn

Overview

The Watertown Site is located north and east of Water Street, east of Galen Street, and south of Nonantum Road. Exhibit 12 provides an aerial photograph of the Watertown site. The MBTA currently has a bus stop shelter, an old car barn, and an MBTA transportation office on this site. The Charles River is located east of the site, and a GMC car dealership and the Exergen building is located along Water Street to the east. The MDC owns a small triangular parcel south of the site. There are overhead trolley wires surrounding the Transportation office located at the western corner of the site. The site has commuter parking which can accommodate approximately 200 cars, and commuters use a farebox honor pay system.

Summary of Proposed Actions

- Open a new garage at Watertown with capacity to store 70 to 90 vehicles.
- Reassignment of Albany Express service and Route 57, Watertown-Kenmore to Watertown providing more capacity at Albany Garage for Urban Ring southside service.

Site Configuration

The facility as planned is to maintain the western portion of the site and maintain the bus stop, bus shelter, Transportation office, and trolley wire system. Exhibit 13 illustrates the proposed layout of the Watertown facility. The existing car barn will be gutted, and will be renovated to store and maintain 66 buses. All areas of this proposed maintenance facility will be enclosed. The bus fuel type is clean diesel, and all facilities will incorporate provisions for future conversion to alternative fuels. The Maintenance Building will be in the old car barn, will have four (4) repair/inspection bays, set at an angle. All buses must back out of each repair bay. The Repair and Maintenance area will total 13,600 square feet. The transportation area totals 3,500 square feet.

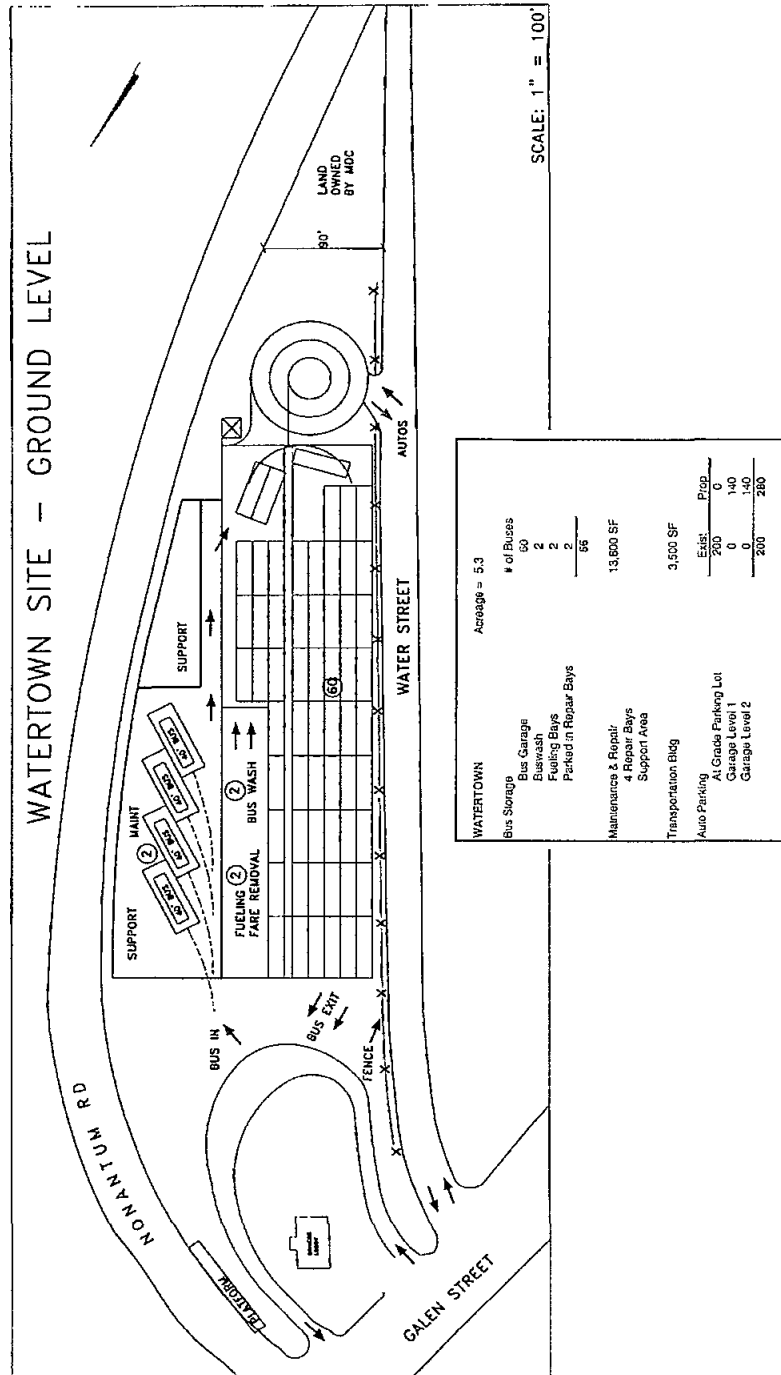
The Servicing Area will provide one (1) lane for bus fueling, fare retrieval, and washing and will total 15,000 square feet. The Servicing Area is located to the south of the Maintenance Area. Bus storage will be covered by a parking structure and is located south of the Servicing Area and will accommodate 60 buses. The remaining buses will be stored in the bus wash (2), fueling (2), and repair (2) bays.

Parking for employees and commuters will be constructed above the bus storage area. The parking garage will have two (2) decks, at 20-feet and 30-feet above grade. A two-way helical drum will be located at the south end of the parking structure for entry and egress. The parking structure will hold 280 cars on two levels. The structural foundation could also be designed to accommodate future expansion. The transportation area will be located on the north-end of the new parking garage.

Exhibit 12: Aerial Photograph of the Watertown Site



Exhibit 13: Proposed Layout of the Watertown Facility



Operational Feasibility

- Slight improvement in pullout/pullback mileage from reassignment of Albany buses to Watertown (Table 15).
- Decrease in the number of buses stored at Albany, allowing an expansion of its maintenance area (Table 16).
- Proposed southside Urban Ring routes (54 buses) can be housed at Albany Garage (Table 17).

The following tables detail changes in the systemwide pullout/pullback mileage, reassignment of buses and estimated fleet requirement.

Table 15: Proposed Watertown Garage – Pullout/Pullback Mileage

System Changes at Watertown	Total
Existing Systemwide Weekly	60,183
Albany Routes to Watertown 57, 59, 500, 501, 502, 504, 505, 553, 544, 556, 658	(8,489)
Mileage to Watertown	7,941
New Systemwide Mileage	59,636
Percent Change	(1%)

Table 16: Proposed Bus Reassignment to Watertown Garage

	Vehicles Relocated AM Peak	Peak Vehicles +15% Spares	Current Garage Excess Capacity	Excess Capacity After Watertown Opens
Albany Routes 57, 59, 500, 501, 502, 504, 505, 553, 544, 556, 558	75	86	12	98
Fleet Size at Watertown		86		

Table 17: Proposed Urban Ring Routes and Estimated Fleet Requirements

Route Number	Route Destination		# of Vehicles
CT1	Central Sq.	Andrew Sq.	2
CT3	Logan	Longwood	7
CT4	Ruggles	UMass Campus	7
CT7	Franklin Park	Kendall Sq.	10
CT10	Kenmore	JFK/UMass	7
CT11	Fields Corner	Longwood	8
EC3	Route 9, Natick	Kenmore	13
Total			54

Affected Community

Based on income and minority population data prepared by the Central Transportation Planning Staff, the TAZs in which the Watertown site is located and adjacent to are characterized as non-minority¹², and above the MPO median income range¹³.

Environmental Impacts

Soil and groundwater samples must be taken to assess any environmental problems at the site. The parcel is very small and potential for expansion is limited.

The creek adjacent to the Watertown site may necessitate an Orders of Condition from the local Conservation Commission (Pursuant to 310 CMR 10.00) and an evaluation for Chapter 91 License Waterways Permits jurisdiction. Additional the site should be evaluated to ensure that dredging and filling and/or disposal of dredge material is not required for construction at this site.

Watertown is a confirmed disposed site under the Massachusetts Contingency Plan and has achieved Response Action Outcome (RAO) status that indicates no further action on the property is necessary. However the RAO includes a deed restriction since residual

¹² Where a Minority population is defined as all persons identified as either non-white or multi-racial, as well as all persons of any race who were identified as Hispanic, and where the minority area is one whose minority population percentage in 2000 exceeded the minority population percentage of the MPO region. The population of the MPO region in 2000 was 3,066,394, of which 657,102 or 21.4% were members of a minority group.

¹³ Where, based on 1999 median household incomes, a low income area is defined as one whose median household income is no more than 75% of the median household income of the MPO region, and where the median income of the MPO region in 1999 was estimated to be approximately \$55,800.

contamination is present at the site and special techniques or construction implementation plans will be required for construction.

Costs

The capital cost estimates are detailed in Appendix B – VAL-BUS Computer Analysis. Table 18 summarizes the capital cost estimates for the Watertown bus garage. These estimates do not include environmental site remediation or specialized foundations. These estimates assume the site to be reasonably level, with utilities adjacent to the site.

Table 18: Watertown Capital Costs

	Minimum	Recommended
Facility	\$10,035,124	\$10,813,322
Site Work <i>(includes outside bus storage)</i>	\$1,904,927	\$1,956,813
Equipment	\$1,320,000	\$1,320,000
A/E Services (10%)	\$1,326,005	\$1,409,013
Contingency (20%)	\$2,917,211	\$3,099,830
Total Facility Cost	\$17,503,267	\$18,598,978

Southern Service Area: Riverside Station

Overview

Riverside is located north of Grove Street, east of Route 128, and south and west of the MBTA rail maintenance facility. Exhibit 14 provides an aerial photograph of the Riverside site. This Green Line station has a side platform. There is a Kiss-N-Ride parking area, and several bus loading/unloading bays. There are approximately 675 parking spaces available to commuters. The MBTA parcel, south of the rail maintenance facility is approximately seven (7) acres. Exhibit 15 provides pictures of the southwest corner of the site, including the adjacent hotel. The adjacent parcels are the Holiday Inn Hotel (south) and the Golf Course (southeast).

Summary of Proposed Actions

- Establish a new garage at Riverside with capacity for 70-90 vehicles.
- Reassignment of Albany Express service and route 70, Cedarwood-Central Sq. to Riverside providing more capacity at Albany Garage for Urban Ring southside service and expanding capacity at Charlestown.

Exhibit 14: Aerial Photograph of the Riverside Site

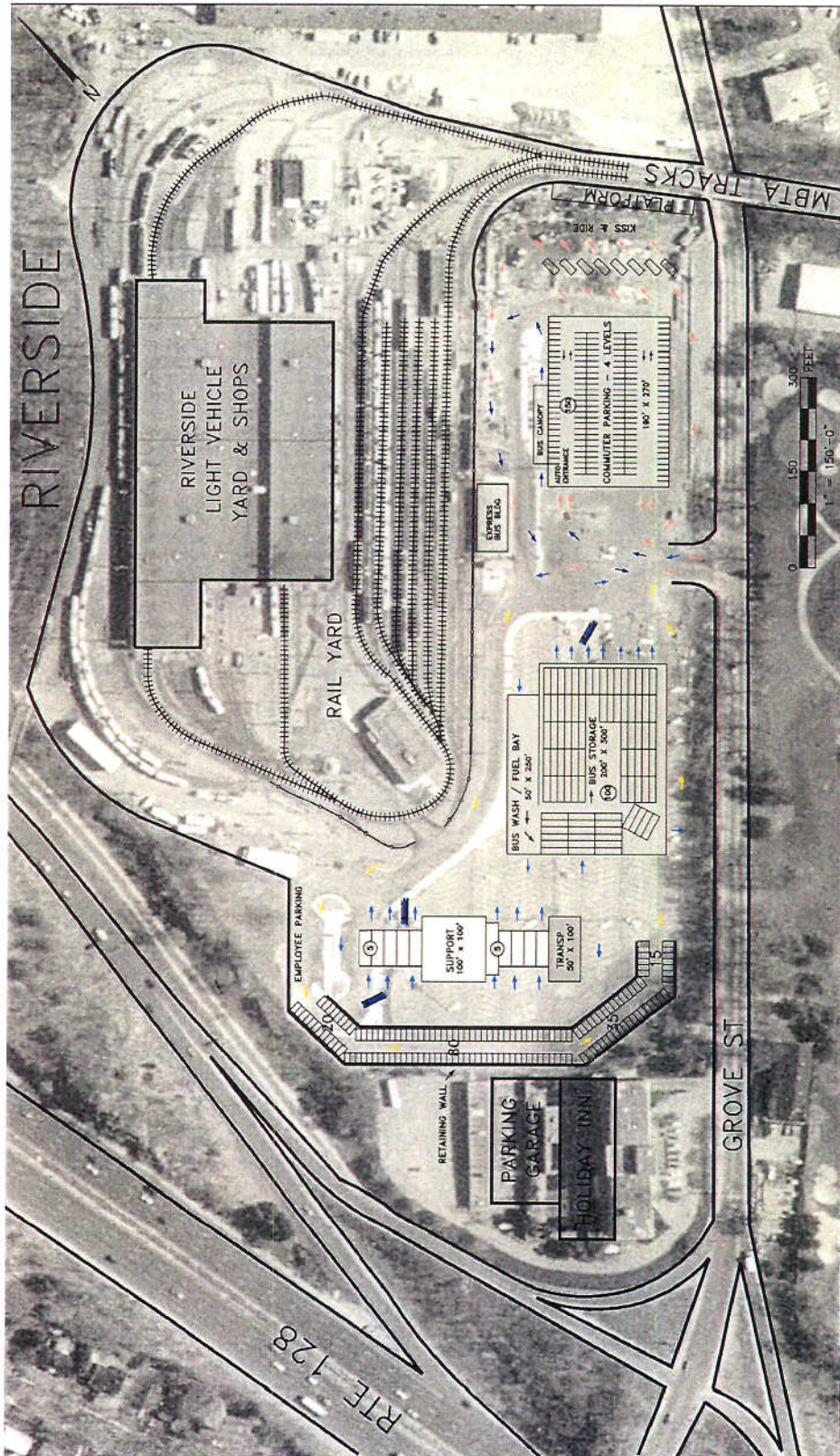


Exhibit 15: Southwest Corner of the Riverside Site



Southwest corner of site looking at Holiday Inn/retaining wall



Southwest corner of site looking at Holiday Inn

Site Configuration

The Riverside facility as planned is to maintain and store 100 buses. Exhibit 16 illustrates the proposed layout of the Riverside facility. The bus fuel type is environmentally clean diesel, and all facilities will incorporate provisions for future conversion to alternative fuels. The adjacent maintenance building will have ten (10) repair bays with pull through capability. The adjacent Maintenance Building support area totals 21,500 square feet. The transportation area totals 5,000 square feet.

The Servicing Area will provide two (2) lanes for bus fueling, fare retrieval, and washing and will total 12,500 square feet. All bus movements exiting the bus wash area will be internal, minimizing the visual and noise impact to the hotel adjacent to the site. Bus circulation and storage will be indoors. Approximately 100 buses can be stored at this facility. Employee parking for approximately 150 automobiles will be provided at-grade. The bus storage area will be an open deck construction, and the upper parking deck will be outdoors.

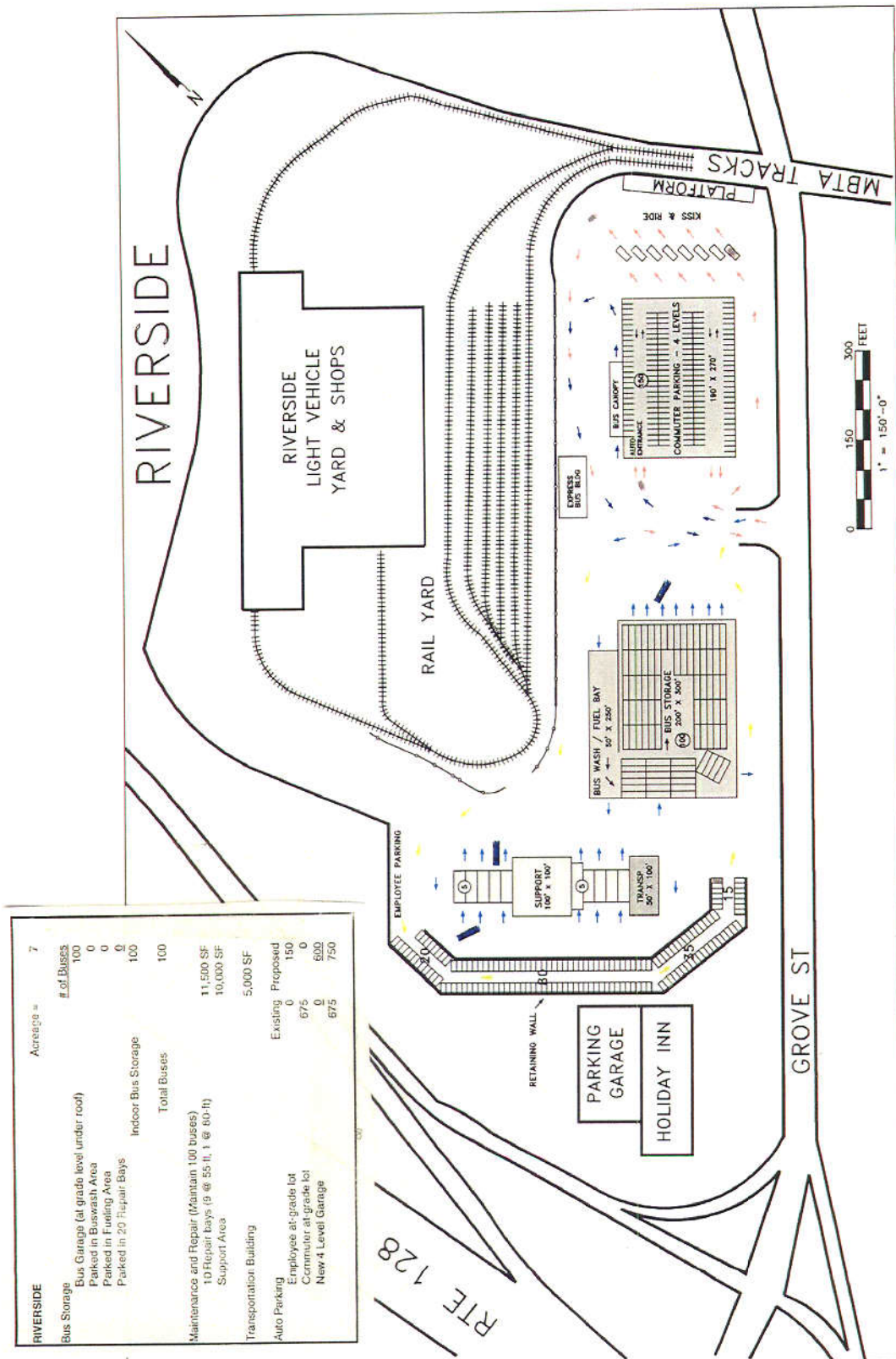
A new four-level parking garage will be constructed for commuter parking. At grade, there will be two to three ticket dispenser lanes, and three fare booths. The ground level will provide capacity for 150 parking spaces, and the three upper levels will accommodate 150 spaces each. The center aisle will have a sloping floor. In total, the parking garage should hold at least 600 automobiles, with capability to expand to a fourth level for an additional 150 parking spaces, or total capacity of 750 automobiles. An express bus canopy will be attached to the side of the parking garage for passenger drop-off/pick-up.

Operational Feasibility

- Large increase in pullout/pullback mileage from reassignment of Albany buses to Riverside; however schedule adjustments could minimize or eliminate the difference (Table 19).
- Large increase in pullout/pullback mileage from reassignment of Somerville route 70 to Riverside; however schedule adjustment could minimize the difference (Table 20).
- Proposed southside Urban Ring routes (54 buses) can be housed at Albany Garage (Table 21)
- Decrease in the number of buses stored at Albany, allowing an expansion of its maintenance area (Table 22).

The following tables detail systemwide changes in pullout/pullback mileage and the reassignment of routes to garages.

Exhibit 16: Proposed Layout of the Riverside Facility



RIVERSIDE	Acreage =	# of Buses
Bus Storage	7	100
Bus Garage (at grade level under roof)		0
Parked in Buswash Area		0
Parked in Fueling Area		0
Parked in 20 Repair Bays		100
Indoor Bus Storage		100
Total Buses		100
Maintenance and Repair (Maintain 100 buses)		11,500 SF
10 Repair bays (9 @ 55-ft, 1 @ 80-ft)		10,000 SF
Support Area		5,000 SF
Transportation Building		
Auto Parking		
Employee at-grade lot	Existing	Proposed
Commuter at-grade lot	0	150
New 4 Level Garage	675	0
	0	600
	675	675

Table 19: Proposed Riverside Garage – Pullout/Pullback Mileage

System Changes at Riverside	Total Mileage
Existing Systemwide Weekly	60.183
Albany Routes to Riverside 59, 500, 501, 502, 504, 505, 544, 553, 556, 558	(5,354)
Somerville Route to Riverside 70	(803)
Mileage to Riverside	13,925
New Systemwide	67,952
Percent Change	13%

Table 20: Proposed Bus Reassignment to Riverside Garage

	Vehicles Relocated AM Peak	Peak Vehicles +15% Spares	Current Garage Excess Capacity	Excess Capacity After Riverside Opens
Albany Routes 59, 500, 501, 502, 504, 505, 544, 553, 556, 558	62	71	12	83
Somerville Route 70	11	13	27	40
Fleet Size at Riverside		84		

Affected Community

Based on income and minority population data prepared by the Central Transportation Planning Staff, the TAZs in which the Watertown site is located and adjacent to are characterized as non-minority¹⁴, and above the MPO median income range¹⁵.

¹⁴ Where a Minority population is defined as all persons identified as either non-white or multi-racial, as well as all persons of any race who were identified as Hispanic, and where the minority area is one whose minority population percentage in 2000 exceeded the minority population percentage of the MPO region. The population of the MPO region in 2000 was 3,066,394, of which 657,102 or 21.4% were members of a minority group.

Costs

The capital cost estimates are detailed in Appendix B – VAL-BUS Computer Analysis. Table 21 summarizes the capital cost estimates for the Riverside bus garage. These estimates do not include environmental site remediation or specialized foundations. These estimates assume the site to be reasonably level, with utilities adjacent to the site.

Table 21: Riverside Capital Costs

Riverside Capital Costs	Minimum	Recommended
Facility	\$22,386,190	\$23,541,668
Site Work <i>(includes outside bus storage)</i>	\$2,169,000	\$2,222,533
Equipment	\$2,165,000	\$2,165,000
A/E Services (10%)	\$2,672,019	\$2,792,920
Contingency (20%)	\$5,878,442	\$6,144,424
Total Facility Cost	\$35,270,651	\$36,866,545

¹⁵ Where, based on 1999 median household incomes, a low income area is defined as one whose median household income is no more than 75% of the median household income of the MPO region, and where the median income of the MPO region in 1999 was estimated to be approximately \$55,800.