Metropolitan Transportation Authority

2004 BUS DIVISION STRATEGIC ASSESSMENT REPORT

TABLE OF CONTENTS

Executive Summary

Long-Range Facility Plan

Introduction and Summary of Assessment

Map of Metro Bus Facilities

Division 1 .....1.0
Division 2 .....2.0
Division 3 .....3.0
Division 4 .....4.0
Division 5 .....5.0
Division 6 .....6.0
Division 7 .....7.0
Division 8 ..... 8.0
Division 9 .....9.0
Division 10 .....10.0
Division 12 .....12.0
Division 15 .....15.0
Division 18 .....18.0

South Park (Location 14).....14.0
Vernon Yard (Location 34)..... 34.0

Appendices

Appendix A: Bus Operating Divisions – Service Data
Appendix B: Bus Operating Divisions – Bus Parking Capacity
Appendix C: Modifications Required to Accommodate Articulated Buses
Appendix D: Bus Operating Divisions – Equipment Summary - Hoists
Appendix E: MTA Operating Facilities - Roofing Summary

Executive Summary

This Report presents a full assessment of existing Metro Bus Operating Facilities, and identifies facility improvements and expansions that are required to support the Metro Fleet Management Plan, recent orders of the Consent Decree, and Metro Executive Management's mandate to provide world class, efficient, and state-of-the-art bus operating and maintenance facilities.

Currently, there are two primary system-wide concerns related to Metro's bus operating and maintenance facilities: (1) Metro Bus facilities are generally above capacity, affecting their ability to efficiently service and maintain Metro's current bus fleet and forecasted bus fleet increases, and (2) the general condition of Metro's bus facilities as it relates to age of improvements, condition of equipment, security, administrative space, and layout of the facilities.

As of February 2004, Divisions 1, 5, 6, 7, 10 and 18 store and service numbers of buses which exceed the design capacities of the Divisions. Due to future service changes and fleet increases both planned and mandated, there is an urgent and immediate need to provide increased bus maintenance capacity system-wide.

Proper geographic deployment of the increased fleet is also a critical focus of the assessment. Although capacity exists to service an expanded fleet at divisions within the San Fernando Valley and San Gabriel Valley Sectors, the greatest ridership growth is occurring elsewhere, in the South Bay, Gateway, and Westside/Central Sectors. These sectors are also heavily impacted by the Consent Decree. As some bus lines servicing these sectors have been assigned to more remote locations, non-revenue, or "deadhead" hours have increased as a percentage of total vehicle hours, translating into an annual cost of about $3.5 million (Bus Fleet Management Plan 2003).

The key to controlling this cost is to develop additional facility capacity in the central portion of the service area. Future facility planning efforts are being directed at providing additional capacity in the South Bay, Gateway and Westside/Central Sectors and increasing the number of divisions that can support high-capacity vehicles. Several facility expansions and construction projects, such as expansion of Divisions 1 and 10 and the new Division 6, are in early phases of design but will only satisfy fleet growth and capacity issues into FY07. Additional facility capacity must be developed to efficiently accommodate and operate Metro's fleet of high capacity and standard buses beyond FY07. This required capacity can only be developed through expansion or reconstruction of Metro's existing facilities, or by construction of one or more new bus operating divisions in the Central Business District

Facilities-Operations has therefore prepared a Long Range Facility Plan to address the primary concerns of facility capacity and facility condition. The Long Range Facility Plan shows that Metro has approximately $158 million in Capital Project funding currently reserved for improvement to Metro bus facilities. These dollars are not adequate for Metro to provide the required capacity and condition improvements to our bus facilities beyond FY07.

The Long Range Plan shows that up to $312 million of additional funding would be required through FY10 in order to provide the facility capacity in the desired geographical area beyond FY07. A prioritized list of the proposed projects, cost estimates, and the years funding would be required are provided in the Long Range Facility Plan. Priority 1 projects are required to be funded immediately in order to accommodate Consent Decree fleet increases and articulated buses that are currently on order. Priority 2 projects are required to support forecasted fleet increases beyond FY07, and Priority 3 projects are required for fleet increases beyond FY09.

All of Metro's bus facilities were constructed greater than 20 years ago, and were not designed to maintain and operate the current size of Metro's bus fleet. If Metro is to continue providing efficient and cost-effective transit service, Metro must reevaluate funding priorities and invest in improvement and expansion of Metro's bus operating and maintenance facility network. These improvements and increases in system-wide capacity are required to operate the number of buses currently at the divisions as well as forecasted increases, and will provide for efficiency in operation and reductions in deadhead costs. Executive Management, Facilities-Operations, and the Board of Directors must work diligently to locate additional funding to ensure that Metro continues to provide world-class transit services to our customers within the County of Los Angeles.

Long-Range Facility Plan

The primary objective of this Strategic Assessment is to define the scope of a long-range plan for expansion and refurbishment of Metro Bus Operating Facilities. The long-range plan focuses primarily on 1) expansion and reconfiguration of facilities to increase division bus capacity, 2) accommodation of 60-foot articulated buses beginning in FY05 and, 3) improvement of general conditions at Metro's operating facilities, such as employee parking, security, bus maintenance equipment, bus cleaning equipment, yard and coach parking configuration, renovation of interior spaces, and general modernization.

The Long Range Facility Plan outlines those projects currently planned and funded for each division through FY09, as well as projects presently un-funded in the Capital Program that will be required to support forecasted fleet growth and improve efficiency and conditions of Metro's bus divisions.

The Long Range Facility Plan follows below. The plan is separated into two charts, one showing currently funded and scheduled projects (Constrained Plan), and one showing unfunded projects (Unconstrained Plan) which will be required to meet Executive Management's mandate to provide world class and state-of-the-art maintenance facilities. The Unconstrained Plan shows the priority of all currently unfunded projects based on current need, as well as the Fiscal Year where funding would be desired. Priority 1 projects are required to be funded immediately in order to accommodate Consent Decree fleet increases and articulated buses that are currently on order. Priority 2 projects are required to support forecasted fleet increases beyond FY07, and Priority 3 projects are required for fleet increases beyond FY09.

Long Range Facility Plan - Funded Capital Projects from FY04-FY09 (Constrained)

Currently Funded Projects			Locations														Year Budgeted ($000s)						
CP #	Sub #	CP Description	Div. 1	Div. 2	Div. 3	Div. 4	Div. 5	Div. 6	Div. 7	Div. 8	Div. 9	Div. 10	Div. 12	Div. 15	Div. 18	RRC	FY04	FY05	FY06	FY07	FY08	FY09	CP Subtotal (FY04-09)
2303006	**0**	**Bus Division Maint. Equip.**															2,005	1,143	1,000	1,408	1,913	1,000	**8,469**
2303006	1	Bus Division Maintenance Equipment - Paint Booth Filter														X	500	0	0	208	0	0	--
2303006	2	Bus Division Maintenance Equipment - Reverse Osmosis	X	X			X	X	X	X	X	X		X	X		805	0	0	0	413	0	--
2303006	3	Bus Division Maintenance Equipment - Steamers	X	X	X		X		X		X	X					150	200	0	200	200	100	--
2303006	4	Bus Division Maintenance Equipment - Chassis Washers			X				X	X				X	X		450	400	0	0	500	200	--
2303006	5	Bus Division Maintenance Equipment - Bus Washer and	X								X	X			X		100	443	500	500	300	200	--
2303006	6	Bus Division Maintenance Equipment - Various	X	X	X		X		X	X	X	X		X	X		0	100	500	500	500	500	--
2303008		**Bus Division - Replace Emergency Generators**	X	X	X		X	X		X	X	X		X	X		346	0	0	500	1,500	1,500	**3,846**
2303043		**RRC: General Building Modifications**														X	0	679	0	0	0	0	**679**
2303083		**Bus Fume Exhaust System (Phase - III)**														X	487	0	0	0	0	0	**487**
2304004		**In-Ground Bus Hoist Replacement (Replace Leaking**	X		X		X		X	X	X	X		X	X	X	3,506	3,575	0	1,668	1,800	0	**10,549**
2304022		**Upgrade Underground Storage Tanks and Site Remediation**	X	X	X		X	X	X	X	X	X		X	X		7,391	3,825	4,436	3,022	1,363	1,384	**21,421**
2305007		**Division Lighting Program**	X	X	X		X		X	X	X	X		X	X	X	850	694	1,000	1,000	1,000	1,000	**5,544**
2305013		**Bus Division Amenity Improvement Project**	X	X	X		X		X	X	X	X		X	X		1,500	1,038	1,000	1,000	1,000	1,000	**6,538**
2305017	**0**	**Bus Facilities Projects (Bucket Funds)**															10,079	8,579	5,000	5,000	5,000	5,000	**38,658**
2305017	1	Division 18 Air Conditioning													X		433	0	0	0	0	0	---
2305017	2	Division Safety Program (Safety Nets at all divisions & Safety Cables at Divs. 8, 15 & 18)	X	X	X	X	X	X	X	X	X	X		X	X		200	0	0	0	0	0	---

Currently Funded Projects			Locations														Year Budgeted ($000s)						
CP #	Sub #	CP Description	Div. 1	Div. 2	Div. 3	Div. 4	Div. 5	Div. 6	Div. 7	Div. 8	Div. 9	Div. 10	Div. 12	Div. 15	Div. 18	RRC	FY04	FY05	FY06	FY07	FY08	FY09	CP Subtotal (FY04-09)
2305017	3	Facility Modifications for Articulated Buses (Div. 1 Pit Extension) (D/B)	X														200	0	0	0	0	0	---
2305017	4	Facility Modifications for Articulated Buses - Yard Reconfig. (4 Divisions)	X				X			X		X		X	X		200	0	0	0	0	0	---
2305017	5	Facility Modifications for Articulated Buses - Hoists, Vacuum Modif.					X			X		X		X	X		1,600	0	0	0	0	0	---
2305017	6	Solar Generation Project								X				X			3,500	0	0	0	0	0	---
2305017	7	Paint Booth Construction Program					X		X	X				X			599	500	0	0	0	0	---
2305017	8	Elevator Modernization Project								X				X			250	0	0	0	0	0	---
2305017	9	Division 4 Expansion and Paving Project (Design)				X											200	0	0	0	0	0	---
2305017	10	Engineering Service Requests	X	X	X	X	X		X	X	X	X		X	X	X	500	500	500	500	500	500	---
2305017	11	Contingency Funds for Small or Unplanned Facilities projects under 1,000,000	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1,000	7,579	4,500	4,500	4,500	4,500	---
2305018	**0**	**Div. 9 Shop Renovation & Expansion**									X						1,000	5,715	0	0	0	0	**6,715**
2305018	1	New Transportation Building									X						200	5,715	0	0	0	0	---
2305018	2	Renovation & Exp. (Tire Shop, Storage Canopy, Brake Shop & Battery Room)									X						400	0	0	0	0	0	---
2305018	3	Shop Renovation & Exp. (Air Conditioning)									X						40	0	0	0	0	0	---
2305021	**0**	**Div. 7 Facility Improvements**							X								300	3,126	0	0	0	0	**3,426**
2305021	1	Facility Improvements - Concrete Apron Repair (BOS Funded)							X								150	0	0	0	0	0	---
2305021	2	Facility Improvements - A/C (BOS Funded)							X								100	0	0	0	0	0	---

Currently Funded Projects			Locations														Year Budgeted ($000s)						
CP #	Sub #	CP Description	Div. 1	Div. 2	Div. 3	Div. 4	Div. 5	Div. 6	Div. 7	Div. 8	Div. 9	Div. 10	Div. 12	Div. 15	Div. 18	RRC	FY04	FY05	FY06	FY07	FY08	FY09	CP Subtotal (FY04-09)
2305021	3	Facility Improvements - Pavement Replacement & other design activities (BOS Funded)							X								50	3,126	0	0	0	0	---
2305022	**0**	**Div. 2 Maintenance Bldg. Modernization**		X													200	1,314	0	0	0	0	**1,514**
2305022	1	Maintenance Bldg Modernization - Tail Pipe Exhaust System		X													175	0	0	0	0	0	---
2305022	2	Maintenance Bldg Modernization - 5 Inspection Pits		X													0	550	0	0	0	0	---
2305022	3	Maintenance Bldg Modernization - Hoists		X													0	764	0	0	0	0	---
2305022	4	Maintenance Bldg Modernization (Annex Building)		X													25	0	0	0	0	0	---
2305023		**Division 6 Sound Wall (applied to D6 Land Exchange)**						X									0	722	0	0	0	0	**722**
2305068		**Articulated Bus Facility Modifications**	X	X	X		X		X	X	X	X		X	X	X	0	2,110	2,484	1,000	1,000	0	**6,594**
2305072		**Division 1 Expansion (D/B)**	X														100	6,125	0	0	0	0	**6,225**
2305142		**Division 4 Expansion and Paving Project (Construction)**				X											0	1,559	0	0	0	0	**1,559**
2305125		**Division 6 Relocation**						X									0	79	12,360	0	0	0	**12,439**
2303010		**Vacuum System Upgrade and Replacement**	X	X	X		X		X	X	X	X		X	X		0	0	0	570	501	500	**1,571**
2305043		**HVAC Replacement Program**	X	X	X		X			X		X		X			0	0	0	0	962	1,000	**1,962**
2305109		**D8 Maintenance Bldg: Refurbish Steam rack**								X							0	0	50	0	0	0	**50**
2305093		**D15 Maintenance Bldg: Refurbish Steam rack**												X			0	0	50	0	0	0	**50**
2305091		**D8 Maintenance Bldg: Install closed circuit TV**								X							0	0	0	50	0	0	**50**
2305106		**D15 Maintenance Bldg: Install closed circuit TV**												X			0	0	50	0	0	0	**50**
2305013		**D8 Maintenance Bldg: Install new flooring**								X							0	0	0	50	0	0	**50**
2305108		**D15 Maintenance Bldg: Install new flooring**												X			0	0	0	50	0	0	**50**

Currently Funded Projects			Locations														Year Budgeted ($000s)						
CP #	Sub #	CP Description	Div. 1	Div. 2	Div. 3	Div. 4	Div. 5	Div. 6	Div. 7	Div. 8	Div. 9	Div. 10	Div. 12	Div. 15	Div. 18	RRC	FY04	FY05	FY06	FY07	FY08	FY09	CP Subtotal (FY04-09)
2305080		CNG Fueling Facilities										X					0	0	0	0	1,083	1,080	**2,163**
2305081		CNG Fueling Facilities													X		0	0	0	0	1,083	1,080	**2,163**
2305036		Div. 18: Employee Parking Reconfiguration													X		0	0	0	0	0	10,000	**10,000**
2305129		Div. 3: Shop Renovation and Expansion			X												0	0	0	0	0	1,272	**1,272**
2305082		Div. 15 Maintenance: Install awnings over shop area												X			0	0	0	0	100	0	**100**
2305042		Division 8 and 15 Paving Program								X				X			0	0	0	2,000	0	0	**2,000**
2305141		Division 6 - Purchase and Install New Maintenance						X									0	0	515	0	0	0	**515**
2305135		Division 2 - New Roof on Tool Room		X													0	0	15	0	0	0	**15**
2305134		Division 2 Maintenance - Improve Storage systems		X													0	0	10	0	0	0	**10**
2305137		Division 2 Maintenance - Replace Ladder System		X													0	0	26	0	0	0	**26**
2305130		Division 9 - Portable Canopies for Outside Maintenance									X						0	0	0	0	0	113	**113**
2305131		Division 9 - Siding on Bulk Storgage Area									X						0	0	0	0	0	56	**56**
2305136		Division 2 Maintenance - Install Cameras		X													0	0	0	0	0	56	**56**
2305136		Division 2 Maintenance - Install Cameras		X													0	0	0	0	0	56	**56**

TOTAL PROGRAMMED CP FUNDS (FY04-FY09)		27,764	40,283	27,996	17,318	18,305	26,097	**157,763**

Note: Forecasted budgets for outlying Fiscal Years 05-09 are accurate as of February 3, 2004 based on the proposed Capital Program for Fiscal Year 05. Historically, these amounts have been reduced or depleted from year to year due to budget constraints, and their availability at the time required in this Plan must be a priority for Executive Management and the Board.

Long Range Facility Plan - Proposed Projects with No Reserved Capital Funding (Unconstrained)

Proposed Projects			Year $'s Requested Based on Priority and Need ($000s)							
Project Title	Priority	Project Description	FY04	FY05	FY06	FY07	FY08	FY09	>FY10	Project Subtotal
Division 10 Expansion	1	Expansion of Division 10 via acquisition of several adjacent properties to accomodate up to 100 articulated buses, including possible 100% operation of 60-foot articulated coaches. Preliminary engineering and environmental clearance will be completed by June 2004, after which properties can be acquired. Project is part of Wilshire Rapidway, which is currently funded by TCRP but future funding is unclear. This project **must be funded in order to accomodate the Rapidway buses**, as well as future fleet increases with both standard and articulated coaches.	0	10,000	45,000	0	0	0	0	55,000
New Bus Division	1	Construction of a new bus division in or near the LA Central Business District. Construction of a new facility is required to ease facility overcrowding, allow for increase in fleet due to forecasted ridership increases and the Consent Decree, and increase efficiency of the system by having an additional operating base in the central business area. Project would require environmental clearance, property acquisition, and facility construction. Studies of available properties have been conducted; however, no property has been located to date.	0	10,000	50,000	0	0	0	0	60,000
Division 1 Expansion	1	Expansion of Division 1 via acquisition of adjacent property and vacation of Industrial Street. Also includes improvements to maintenance functions to accommodate increased fleet. This project is already funded by BOS; however the funds only accomodate property acquisition and limited construction work. Plan to request **additional BOS dollars** to complete project with increased maintenance and transportation capacity, as well as the construction of a second level parking deck on the acquired property.	0	3,000	9,000	0	0	0	0	12,000

Proposed Projects			Year $'s Requested Based on Priority and Need ($000s)							
Project Title	Priority	Project Description	FY04	FY05	FY06	FY07	FY08	FY09	>FY10	Project Subtotal
Division 6 Relocation	1	Construction of new bus division in West Los Angeles by Developer in return fo MTA Venice Division and one-time cash payment. Plan to request **additional dollars from BOS** to supplement CNG system installation at facility, and to construct facility to LEED guidelines.	0	0	5,000	0	0	0	0	5,000
Division 9 New Transportation Building	1	Construction of new transportation building at Division 9. Phase I of El Monte Transit Center Master Plan. Relocation of building will provide additional bus parking at Facility and allow for Phase II of joint development. Design work is underway, and contract is scheduled to be awarded July 04. Approximately hal of required funds are budgeted; however, need to request **additional funds from BOS** in February 2004.	0	4,000	0	0	0	0	0	4,000
Agency Wide Bus Division Security Upgrade Project	2	Metro Bus Operating Facilities could be potential targets to terrorist threat given that a probable objective of terrorist attack would be to cripple infrastructure such as public transportation, and access control into and out of the facilities is a primary concern. This proposed project would allow for electronic access control of all MTA bus facilities, including access gates and CCTV monitoring of the perimeter. MTA has applied for some funding from the Department of Homeland Security; however, more dollars would be needed to complete project.	0	4,000	0	0	0	0	0	4,000

Proposed Projects			Year $'s Requested Based on Priority and Need ($000s)							
Project Title	Priority	Project Description	FY04	FY05	FY06	FY07	FY08	FY09	>FY10	Project Subtotal
General Division Modernization Program	2	The majority of Metro Bus Facilities were last constructed or renovated in the early 80's, and division improvements such as lunch rooms, administrative offices, locker rooms, and employee day rooms are overcrowded and in disrepair. Many roofs and ceilings require replacement, as well as plumbing fixtures, sinks, restroom and kitchen appliances, and flooring. Many divisions are very limited on Transportation administrative space. This project would consist of building additions to administrative office space in both the Maintenance and Transportation buildings of several divisions, and general renovation of building interiors to provide world class and modernized facilities. At present, it is envisioned that this project would be a multi-year program, and would be first conducted at highest priority divisions based on employee numbers and current conditions.	0	0	5,000	5,000	5,000	5,000	0	20,000
Division 2 Reconstruction and Modernization	2	Division 2 is located within the Central Business District in a highly desirable location; however, the current division improvements are nearly 100 years old, equipment is antiquated or non-existent, and the division is highly inefficient due to parking and building layout. Due to the possible complications of finding new property in the Central Business District, a secondary approach would be reconstruction of a division at an MTA-owned property. This proposed project has not been studied in detail; however, it would likely consist of total building and yard demolition, and reconstruction of an urban, multi-level bus division. This project would require temporary relocation of up to 200 coaches during the construction process.	0	0	2,000	40,000	0	0	0	42,000
Division 5 Maintenance Expansion and Parking Deck Construction	2	Division 5 is located in South Central Los Angeles in an area of high ridership, and has been considered as an operating base for high capacity articulated buses. The facility is currently above capacity and is inefficient in operation due to space constraints. This proposed project, although not studied in deatil, would entail expansion and renovation of the maintenance building, improvements to the Transportation Building, and construction of a parking deck to store additional coaches.	0	0	0	2,000	18,000	0	0	20,000

Proposed Projects			Year $'s Requested Based on Priority and Need ($000s)							
Project Title	Priority	Project Description	FY04	FY05	FY06	FY07	FY08	FY09	>FY10	Project Subtotal
Division 9 Reconstruction: El Monte Transit Village Phase II	3	This project is a portion of a larger proposed joint development project between MTA, El Monte, a private developer, and other parties. This portion of the project would provide for demolition of the current maintenance building and other improvements (i.e. fueling, fare, wash, etc.), and construction of a new maintenance facility and appurtenances. Completion of this project would allow for an increase of approximately 50-75 coaches. The remaining portions of the joint development project, including improvements to transit center including parking, would likely be funded through non-MTA source or private funds.	0	0	0	1,000	15,000	20,000	0	36,000
Division 3 Expansion	3	This facility is slightly over capacity and could be expanded through acquisition of an adjacent park. Initial discussions have been held with elected representatives in the area, and it is understood by Metro that all parkland must be replaced in full per federal regulations. If politically and environmentally feasible, this project could net an increase of approximately 70-80 buses via expansion and construction of multi-level structure. This project has not been studied in detail.	0	0	0	0	500	1,000	20,000	21,500

Proposed Projects			Year $'s Requested Based on Priority and Need ($000s)							
Project Title	Priority	Project Description	FY04	FY05	FY06	FY07	FY08	FY09	>FY10	Project Subtotal
Regional Rebuild Center Expansion and Modernization	3	To account for modernization and increases to the MTA fleet, expansion of the Regional Rebuild center (RRC) would be required. The facility was constructed in the mid 80's and is in need of shop reconfiguration and modernization to keep up with the increasingly modernized fleet and assoicated electronic communication equipment. In addition, additional capacity for storage of buses would be required. This project has not been studied in detail; however, preliminary concepts entail site modernization and renovation, and construction of a parking deck on the adjacent Terminal 31 facility to accomodate bus storage, employee parking, and a layover zone for transit buses.	0	0	0	0	1,000	10,000	10,000	21,000
Solar Generation Project	3	Metro plans to install solar panels on roof tops at Divisions 8 and 15 in FY05. Installation of these solar panels will be capable of generating approximately 25% of the daily electrical usage for each facility. If successful, this proposed project would allow for solar panel installation at the remainder of Metro's operating facilities. Utilizing rebates from LADWP, SCE and the Gas Company, Metro can be reimbursed up to 85% of the capital costs of installation, and the payback for the project could be approximately two years on average. After payback, Metro would see electrical bills at these facilities reduced by 25%.	0	0	6,000	6,000	0	0	0	12,000

GRAND TOTAL FUNDS REQUIRED FOR PROPOSED PROJECTS (FY04-FY10)	0	31,000	122,000	54,000	39,500	36,000	30,000	**312,500**
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Note: Projects have been prioritized as Priority 1, 2, and 3. Priority 1 projects are required to be funded **immediately** in order to accomodate Consent Decree fleet increases and articulated buses that are currently on order. Priority 2 projects are required to support forecasted fleet increases beyond FY07, and Priority 3 projects are required for fleet increases beyond FY09.

Introduction and Summary of Assessment

As an element of Metro's Strategic Performance Program FY2003 – FY2007, it is a goal of Metro Facilities-Operations to improve bus service within Los Angeles County by enhancing and expanding Metro Bus Operating Facilities. Undertaken as a first step in that process, this Report presents a full assessment of existing Facilities, identifying improvements necessary to support the Metro Fleet Management Plan and the objective of Metro Executive Management to provide world class, efficient, and state-of-the-art bus operating and maintenance facilities.

Operating Divisions

Metro owns and operates eleven active bus-operating divisions, located throughout Los Angeles County, which maintain and dispatch a fleet of 2,423 CNG and diesel buses. Most divisions are staffed 24 hours a day, seven days a week. Division 6 in Venice does not operate at night, on weekends or on major holidays. Division 12, located in Long Beach, is presently inactive but has capacity to operate and maintain 135 diesel buses. Division 4 in Downey is currently equipped only to provide non-revenue vehicle maintenance for Metro automobiles, trucks and vans. None of the Metro bus operating divisions store, service or maintain buses operated under contracted services.

Five Metro Service Sectors have been established to improve bus service and enhance responsiveness to local service areas within L.A. County. Metro Gateway Cities (office located at Division 4), Metro San Fernando Valley (Location 35), Metro San Gabriel Valley (Location 33) and Metro South Bay (Location 36) are located within the Sectors they service. The Metro Westside/Central Service Sector office remains at the Gateway Building (Metro Headquarters) in downtown Los Angeles.

The typical operating division consists of a Transportation unit headed by a Transportation Manager and a Maintenance unit headed by a Maintenance Manager. The managers report to their respective Service Sector General Managers.

Transportation management at each division coordinates operator staff and schedules to ensure that bus run service assignments are met on a daily basis. Transportation management is also responsible for driver training and instruction, accident investigation, and personnel management. Maintenance management performs routine maintenance on coaches, including preventive procedures, running repairs and minor overhauls, to ensure that coaches meet service specifications and are otherwise roadworthy. The maintenance unit also responds to road calls for in-service breakdowns.

Currently, there are two primary system-wide concerns related to Metro's bus operating and maintenance facilities: (1) providing adequate capacity to efficiently service and maintain Metro's current bus fleet and forecasted increases to the bus fleet, and (2) the general condition of Metro's bus facilities as it relates to age of improvements, condition of

equipment, security, administrative space, and layout of the facilities. A discussion of each of these concerns follows below:

Division Capacity Limitations

As of February 2004, Divisions 1, 5, 6, 7, 10 and 18 store and service numbers of buses which exceed the design capacities of the Divisions. See Appendix A and B for Design Capacity data. Additionally, due to future service changes both planned and mandated (requirements of the Consent Decree, implementation of both articulated and 45-foot buses in-service, additional new services and service enhancement of existing bus lines), there is a compounded and immediate need to design increased bus parking capacity system-wide.

Based on the current service forecast, Metro must increase its facility capacity to support both articulated and 45-foot buses in the immediate future. Not only do these high-capacity vehicles require additional, larger parking spaces, but they also require more space for maneuvering within the division yards and maintenance buildings. The primary impact on facility capacity prior to the year 2010 will be the proposed introduction of 90 articulated coaches at Division 10. Although other capacity will be developed through the construction of new facilities and expansion of other divisions such as the new Division 6 and the expanded Division 1, design and construction for these projects is in early stages and won't be complete until FY06. Please refer to the Design Capacity Matrix included in the Appendix.

An equally important factor impacting future facility needs is the distribution of ridership growth. While the overall increase of the Metro fleet is a primary facility issue, proper geographic deployment of the increased fleet is also a critical focus. Although capacity exists to service an expanded fleet at divisions within the San Fernando Valley and San Gabriel Valley Sectors, the greatest ridership growth is occurring elsewhere, in the South Bay, Gateway, and Westside/Central Sectors. These sectors are also heavily impacted by the Consent Decree. As some bus lines servicing these sectors have been assigned to more remote locations, non-revenue, or "deadhead" hours have increased as a percentage of total vehicle hours, translating into an annual cost of about $3.5 million (Bus Fleet Management Plan 2003).

The key to controlling this cost is to develop additional facility capacity in the central portion of the service area. Future facility planning efforts are being directed at providing additional capacity in the South Bay, Gateway and Westside/Central Sectors and increasing the number of divisions that can support high-capacity vehicles.

General Division Condition and Needs Assessment

As part of this assessment, Facilities-Operations conducted individual on-site evaluations at each operating division, which also included interviews with transportation and maintenance management personnel. Specific information regarding the findings of each on-site assessment are discussed in the individual sections for each division; however, a brief summary of general needs at the operating divisions follows below:

- Pit extensions, installation of three-post hoists, modification to fuel and vacuum islands, and yard reconfiguration will be required to operate articulated buses.
- Administrative space additions and renovation of restrooms and locker rooms in Transportation and Maintenance buildings
- Roofs must be repaired, as many are over 20 years old.
- Underground Storage Tanks must be upgraded as required per State regulations.
- Angled or tandem parking would be preferred, as stacked bus parking is inefficient.
- Yard security is generally inadequate
- Divisions are between 20 and 100 years old, and many are in dire need of modernization and renovation.
- Repair and/or replacement of hoists, and modernization of maintenance pits
- Lighting upgrades in maintenance shops and yard are required to provide well lit and safe working environment
- Bus washing equipment, such as bus washers, steamers, and chassis jets, must either be renovated or replaced
- Yard reconfiguration is required to eliminate long queuing during the vaulting process at many divisions.
- Shortage of on-site and secure employee parking.
- HVAC equipment within transportation and maintenance buildings must be upgraded due to age and inefficiency.

The deficiencies listed above, although not present at all Divisions, are directly related to the general efficiency of the divisions, and therefore, are directly related to increases in operational costs. For this reason, there was a demonstrated need for Facilities-Operations to prepare a Long Range Plan to correct these deficiencies and improve MTA's operating divisions. Several of the general condition deficiencies listed above have been included in the FY04 to FY09 Capital Program; however, many deficiencies do not have dedicated funding at this time that would provide for correction, repair, or improvement.

Please see the Long Range Plan for details on Capital Projects that are currently funded and scheduled through FY09 (Constrained Plan), as well as projects where needs are foreseen but funding is currently not available (Unconstrained Plan).

Articulated Bus: Division Capabilities

Metro will be introducing 60-foot articulated buses to the fleet, and will begin to deploy articulated buses in FY 2005. By FY 2010 approximately 600 coaches, or 25 percent of the directly operated in-service fleet, will be comprised of higher-capacity articulated vehicles.

Divisions 5, 8, 10, 15 and 18 are being considered as host divisions for the initial deployment of the 60-foot coaches, as these are newer Metro divisions requiring only minor modifications to support articulated buses. Among key modifications required to support articulated buses at Divisions are: 1) Yard reconfiguration/restriping to

accommodate bus parking and turning movements, 2) Maintenance building modifications including provision of drive-through bays, 3) Extension of inspection pits, 4) Modifications to fuel and vacuum facilities, 5) Installation of additional in-ground bus hoists, and 6) possible adjustments to maintenance programs. Major facility modifications would be required at Divisions 2 and 6 or 7 in order to accommodate articulated vehicles. Notably, Division 6 does not currently have CNG fueling capabilities and Division 7 has no pull-through maintenance bays and would also require relocation of the bus washer.

The modifications discussed above must be completed in order to effectively and efficiently maintain articulated buses at the desired divisions. At present, funding is available in FY05 and FY06 to complete the required modifications. *

CNG Fueling Capabilities

As of March 2003, Metro has CNG fueling capacity to service a total of 2400 buses at ten of its operating divisions. As of June 2003, Metro had a fleet of approximately 1,900 CNG buses. Fueling capacity at Divisions 1, 9 and 15 presently exceeds requirements of the current fleet. CNG related safety-mandated modifications have been completed at all CNG divisions. CNG fueling capability neither exists nor is planned at Divisions 6 and 12. The current CNG infrastructure is adequate for the current fleet of CNG buses. To account for future conversion of the Metro fleet to all CNG buses, funding is available for capacity upgrades to the CNG systems at Division 10 and 18, as well as a new CNG system to be constructed as part of the new Division 6.

Metro Connections Hub and Spoke Route System: Terminal Development

To attract new ridership and to also improve operating cost efficiencies, a study is underway to evaluate the development of transit centers, or hubs, throughout Los Angeles County. A primary aspect of the hub and spoke system is the transit hub. Studies to determine exact locations of transit hubs are currently in process. Expected to be complete by early 2004, the study will be used by Facilities-Operations to formulate a development plan for construction and/or renovation of transit hub facilities. Development of transit hubs could begin as soon as FY06. The cost and schedule for implementation of hub facilities are unknown at this time but will be developed upon completion of the current hub and spoke studies. A presentation to the Metro Board is tentatively scheduled for early 2004.

Facility Planning Options

As stated above, the two primary concerns facing Facilities-Operations are facility capacity and facility condition. Due to the forecasted growth in Metro's bus fleet, as well as the fact that many of Metro's bus operating facilities are over capacity, increasing facility capacity is Facilities-Operations top priority.

Two options must be considered and pursued to allow increases to bus division parking and maintenance capacity: 1) Expansion of Existing Bus Operating Divisions and, 2) Development of New Bus Operating Divisions.

1) If property adjoining or near certain existing sites could be acquired, Divisions 1, 3, 5, 9, 10, and 18 could be expanded, within a 3-6 year period, to accommodate an additional 375 to 425 buses. Division 2 could also be expanded via reconstruction or acquisition of adjacent properties. The expansion concept for Division 2 would cost significantly more than other planned expansions, and given the expense and the current absence of funding, it is unlikely that this project could be completed prior to FY09.

2) The expansion of the Metro Rapid Bus system, the introduction of high-capacity vehicles, and the Consent Decree might be best supported by development of a new bus operating division. New divisions could be designed and constructed to store and service articulated buses. The nature of Metro bus service demand is such that a significant number of bus customers reside in, or must travel to and/or in, areas that are in proximity to downtown Los Angeles. Thus, the most cost effective approach would be to locate near the downtown Los Angeles area (Central Business District), minimizing operating and deadhead mileage costs.

Facility Planning Status

Expansion of Divisions

The Mid-City Westside Transit Corridor has $55 million set aside for expansion of Division 10 to accommodate 90 articulated buses. Preliminary engineering for the division is nearing completion; however, future State TCRP funding to support construction of the expanded facility is uncertain, and Metro must locate funds to provide for construction of the facility to accommodate the articulated buses that have already been ordered for the Wilshire Rapidway project

Metro is now conducting environmental clearance for a land exchange for relocation of Division 6. The San Fernando Valley East/West Transit Corridor has funds set aside for existing Divisions 8 and 15 to accommodate the addition of 22 articulated buses for the Metro Rapidway.

Facilities-Operations has funding for expansion of Division 1 to increase capacity by 80 buses and for construction of a new Transportation Building at Division 9. The Transportation Building at Division 9 constitutes a first phase of an otherwise unfunded master-planned facility expansion and renovation at Division 9.

Funding is available to expand Division 18 in Carson and construct an employee parking deck; however, funding is not available until FY09 for completion of this project.

Implementation of the expansion projects at Division 1 and Division 10, and construction of the new Division 6 facility in West Los Angeles, will yield a net increase of approximately 250 buses by at least FY07.

Based on the June 2003 Fleet Management Plan, the current fleet of 2,400 buses is just under the total available current parking capacity of 2,455 buses. Taking into account the expansions discussed above which would net 250 additional spaces, the excess capacity available by at least FY07 will be 305. Information from Service Planning indicates that this additional capacity will support fleet expansion and conversion into FY07, but additional facility expansions or rehabilitations will be required to support the impacts of the Consent Decree, forecasted fleet growth, and articulated conversion beyond FY07, and to provide efficient world-class facilities to operate and maintain the fleet.

Based on several factors, including geographic location, surrounding community, and service growth, Facilities-Operations has identified additional divisions in the desired geographical areas which have the ability to be expanded for accommodation of future fleet growth. These proposed projects are not funded in the Capital Program and would be further studied if funds were to become available.

Descriptions and a prioritized list of the proposed projects are provided in the Long Range Facility Plan.

New Bus Division

Metro Facilities-Operations staff and consultants are in the process of identifying land parcels in the downtown area and determining viability of those locations for new divisions. Potential constraints include obtaining a sufficient area of land at a reasonable cost in a location workable for both Metro and other affected parties.

Although forecasted fleet growth can be supported beyond FY09 by completing all of the expansion projects discussed above, the fleet would be best supported by construction of a new and modern bus operating facility in the central Los Angeles area. This would eliminate future operating cost increases from additional deadhead hours for travel to divisions outside of service growth areas.

Should Metro decide to construct a new operating facility, the project would likely require property condemnation and environmental clearance, which could take up to two years prior to the commencement of facility construction. No funding to acquire property and perform construction is currently available in the Capital Program.

Conclusion

The results of this bus facility assessment show that the majority of Metro's operating bus divisions are above capacity and inefficient due to space constraints, condition of the facilities, and overcrowding. The introduction of articulated buses, forecasted increases in ridership, and the impacts of the Consent Decree will require that Metro provide higher-capacity and improved facilities to continue to provide efficient, cost-effective, and world-class transit services to the public.

Several facility expansions and construction projects, such as expansion of Divisions 1 and 10 and the new Division 6, are in early phases of design but will only satisfy fleet growth and capacity issues into FY07. Additional facility capacity must be developed to efficiently accommodate and operate Metro's fleet of high capacity and standard buses beyond FY07. This required capacity can only be developed through expansion or reconstruction of Metro's existing facilities, or by construction of one or more new bus operating divisions in the Central Business District.

To address Metro's primary concerns of providing adequate facility capacity in the desired geographic locations, and improving operating conditions at the divisions, Facilities-Operations has prepared a Long Range Facility Plan detailing expansion and improvement projects which are currently funded and scheduled in the FY04 to FY09 Capital Program, and other proposed expansion and improvement projects which are required to support facility needs beyond FY07 but are otherwise unfunded.

The Long Range Facility Plan shows that Metro has approximately $158 million in Capital Project funding currently reserved for improvement to Metro bus facilities. As discussed above, these dollars are clearly not adequate for Metro to provide the required capacity and condition improvements to our bus facilities beyond FY07. The Long Range Plan shows that up to $312 million of additional funding would be required through FY10 in order to provide the facility capacity in the desired geographical area beyond FY07. A prioritized list of the proposed projects, cost estimates, and the years funding would be required are provided in the Long Range Facility Plan below.

If Metro is to continue providing efficient and cost-effective transit service, Metro must reevaluate funding priorities and invest in improvement of Metro's bus operating and maintenance facilities. These improvements and increases in system-wide capacity would provide for efficiency in operation and reductions in deadhead costs. Executive Management, Facilities-Operations, and the Board of Directors must work diligently to locate additional funding to ensure that Metro continues to provide world-class transit services to our customers within the County of Los Angeles.

Notes:

* - Forecasted budgets for outlying Fiscal Years 05-09 are accurate as of February 3, 2004 based on the proposed Capital Program for Fiscal Year 05. Historically, these amounts have been reduced or depleted from year to year due to budget constraints, and their availability at the time required in this Plan must be a priority for Executive Management and the Board.

Bus Divisions

Los Angeles County Metropolitan Transportation Authority

Division 8

Division 15

Division 7

Division 3

Division 9

Division 10

Division 1

Division 2

Division 6

Division 5

Division 18

Pacific Ocean

Legend

- Bus Divisions
- Blue Line
- Red Line
- Purple Line
- Gold Line
- Green Line
- Orange Line
- El Monte Busway
- Harbor Transitway
- Eastside Extension Phase 1
- Exposition Line Phase 1

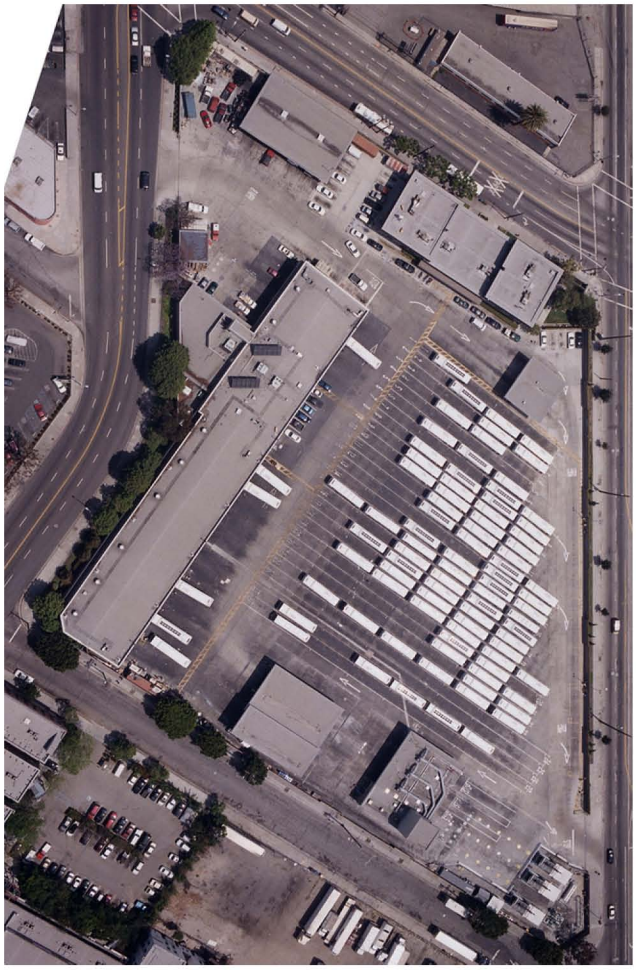
Miles

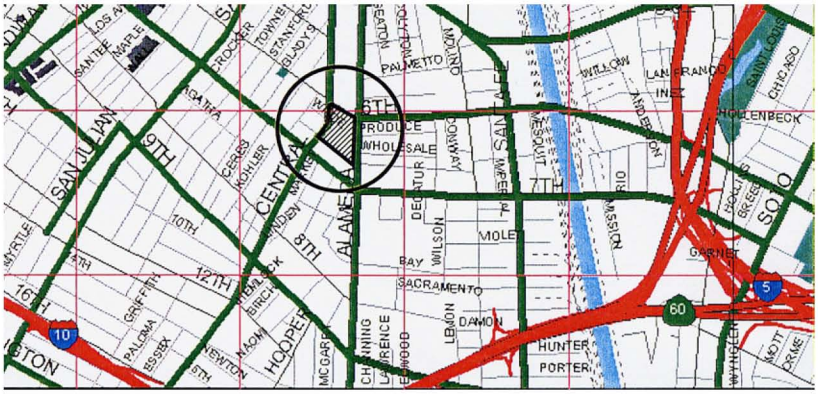
0 1 2 4 6 8

Map Produced By Countywide Planning and Development, LACMTA, January 2008
Thomas Bros. Data Used With Permission

DIVISION 1

(Central City Division)
1130 East 6th Street
Los Angeles, CA





DIVISION SUMMARY

Division One is located, optimally, in downtown Central Los Angeles. The Division is currently operating with 181 buses, exceeding the original design capacity of 170. The majority of employee parking is located adjacent off-site.

MTA has Federal BOS funding to expand the Division by purchasing the adjacent lot and vacating Industrial Street, adjacent to the south. Funding is allocated for land acquisition in FY04, and for construction in FY05 and FY06. The expansion will include paving, striping, utilities, fencing, etc., as well as additions to the fuel islands and expansion of inspection pits to accommodate articulated coaches. The expansion will net an additional 86 coaches and 120 employee parking spaces.

The project has been environmentally cleared pursuant to CEQA and NEPA. The expansion will increase the designed capacity to 272 buses. It is projected that expansion via condemnation would complete within FY06, but property acquisition via direct sale could accelerate the process. A purchase offer was issued to the current property owner in November, 2003, without response.

DIVISION 1
1130 East 6th Street
Los Angeles, California

A. SITE and YARD:

Division 1 is located on the East side of downtown Los Angeles. The property is a single parcel of 6.66 acres with two primary buildings. The Transportation Building was built in 1981. The Maintenance Building was built in 1987. The Division has been in operation for rail and bus maintenance activities since the early 1900's.

Surrounding Land Uses:

- North: 6th Street - Commercial Property
- South: Industrial Street - Vacant Lot/Hotel
- East: Alameda Street - Commercial Building Property
- West: Central Avenue - Commercial Property

Employee Parking (Off-Site):

6th Street and Central Avenue:	107 spaces
Industrial Street and Central Avenue:	65 spaces
Handicapped Parking:	6 spaces

Environmental:

Limited soil contamination exists at the site. The extent of contamination is approximately 80' by 80' in the area of the fueling island and extends 5' to 20' below grade. Groundwater is not impacted at the site. The presence of soil contamination beneath the fueling island is not expected to significantly impact the expansion project or other Capital Projects currently proposed. The environmental consultant has prepared a Remedial Action Plan (RAP) for Division 1, proposing natural attenuation due to the low level of contamination. A response from the Los Angeles Fire Department is pending.

B. FLEET ASSIGNMENT:

Parking Configuration:	In-Line, Tandem
Designed Capacity of Yard:	170 coaches
Maximum Capacity:	205 coaches
Size of current fleet:	181 coaches
Type of current fleet:	166 CNG fueled
	15 Diesel fueled

Potential for Fleet Increase:

The Division is currently operating above the 170-coach original design capacity with a fleet of 181 coaches. The capacity of the present property can be increased to a maximum of 205 if additional parking stalls are striped and buses are parked within maintenance bays. Refer to Attachment A for Bus Facility Service Data and Attachment B for further details on potential bus parking capacity increase under current configurations.

The current 240-bus CNG fueling capability would accommodate a potential 59-bus expansion from the present capacity of 181.

A proposed expansion of Division 1 could net an increase parking capacity for 40-ft. coaches by 80 spaces. Pending early acquisition of additional property, a completion date of June, 2006 could be realized.

Accommodation of Articulated Coaches:

It is anticipated that approximately 30 60-foot articulated coaches will be allocated to Division 1 during Fiscal Year 2007. To establish efficient operation and maintenance of the coaches the following minor modifications are required:

a. Pavement re-striping to create 65-foot long parking stalls. Re-striping will reduce the overall parking capacity at the yard;
b. Sealing of openings around the bellows of the existing vacuum system.
c. Lengthening of maintenance service pits;
d. Installation of three-post hoists in some maintenance bays.

Refer to Appendix C for further details regarding modifications required for operation of articulated coaches.

C. FACILITIES:

1. Transportation Building:

The Division 1 Transportation Building is a two-story structure with a 10,320 s.f. first floor and a 3,380 s.f. second floor. The building supports administrative functions, operator dispatch assignment, locker rooms, showers and recreation areas for operators during layover periods. There is a need for additional administrative space and renovation of office and restroom areas.

2. Maintenance Building:

The Division 1 Maintenance Building is a 60,800 s.f. structure used for repair of buses, preventive maintenance, inspection and maintenance administrative offices. Sixteen maintenance bays are available to adequately service the 181 assigned coaches, within a recommended 1:12 ratio.

Repair or replacement of the building roof and additional yard space will be required to alleviate operational deficiencies at the maintenance facility.

D. *EQUIPMENT:*

1. Hoists: Installed at Division 1 are eight 2-post axle hoists and five 2-post platform hoists in the Maintenance Shop as well as one 3-post platform hoist in the Steam Cleaning area. Refer to Appendix D for additional details.

2. Underground Storage Tanks and Fueling:

The underground storage tank (UST) system was upgraded in 1998, and all tanks except the solvent tank are currently compliant with State and Local regulations. Two issues regarding UST's are currently present:

- The Division is equipped with 5-30,000 gallon tanks for bulk storage of diesel fuel. This capacity is well over the amount required to fuel diesel-powered coaches located at the facility. State law requires legal abandonment or removal of tanks that are unused for more than one year. Unless division stores personnel coordinate closely to ensure that all tanks are used at least once per year, excess tanks must be removed.

- The 5,000 gal. solvent tank at the Division is currently out of compliance because underground storage of solvent is no longer required. This tank should be removed.

3. The CNG system at Division 1 was installed in 2000 and consists of three compressor stations with a fueling capacity of 240 buses.

E. *RECENT & CURRENT CAPITAL PROJECTS:*

Several key Capital Projects are recently completed, currently in design or under construction at the Division. Completion dates are:

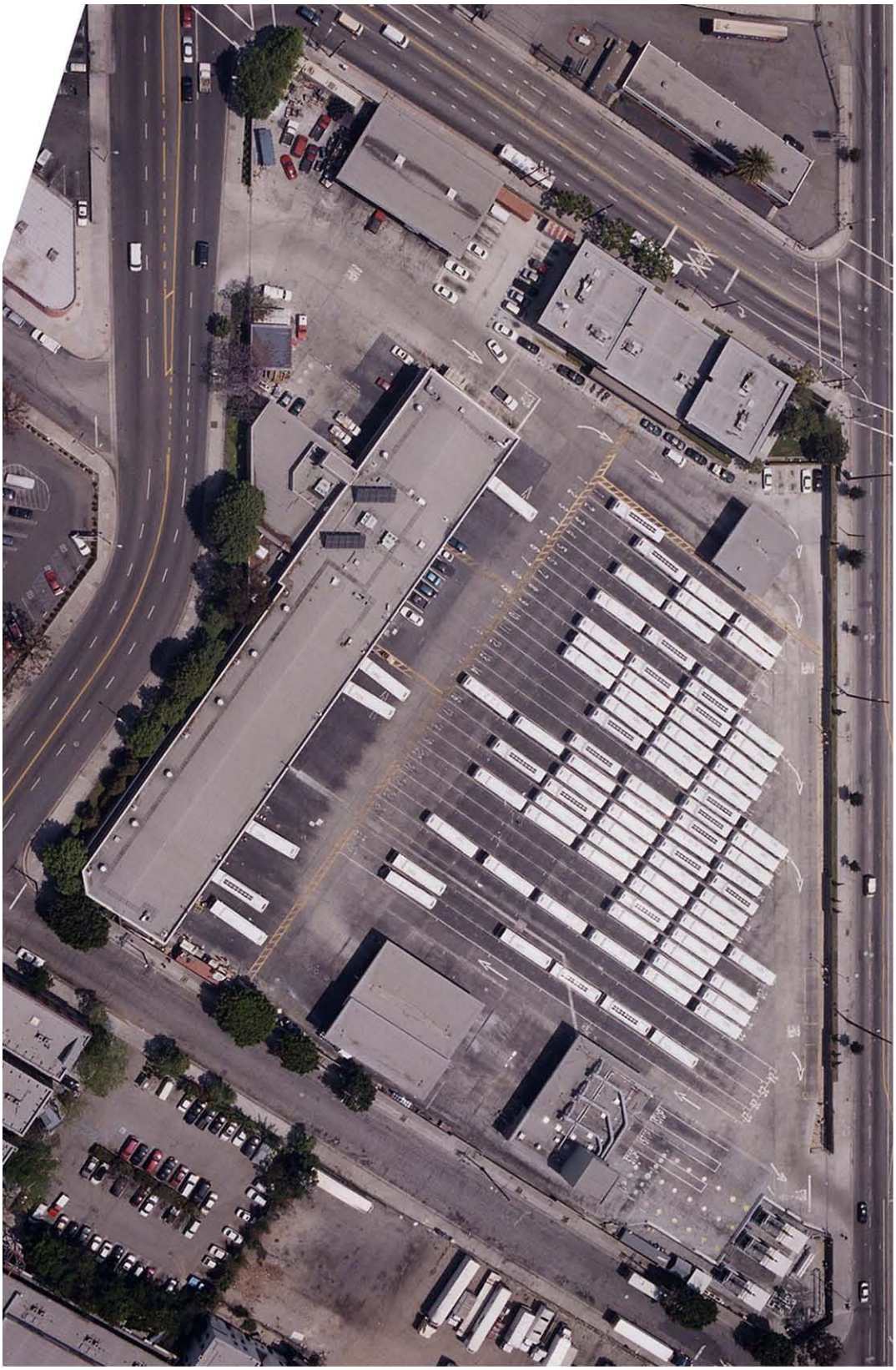
• Vacuum System Upgrade Project	September, 2003
• Bus Washer Replacement	August, 2003
• In-ground Hoist Replacement	June, 2004
• Reverse Osmosis System for Bus Washer	May, 2004
• Division 1 Expansion Project	June, 2006
• Underground Tank Upgrade Project	December, 2003

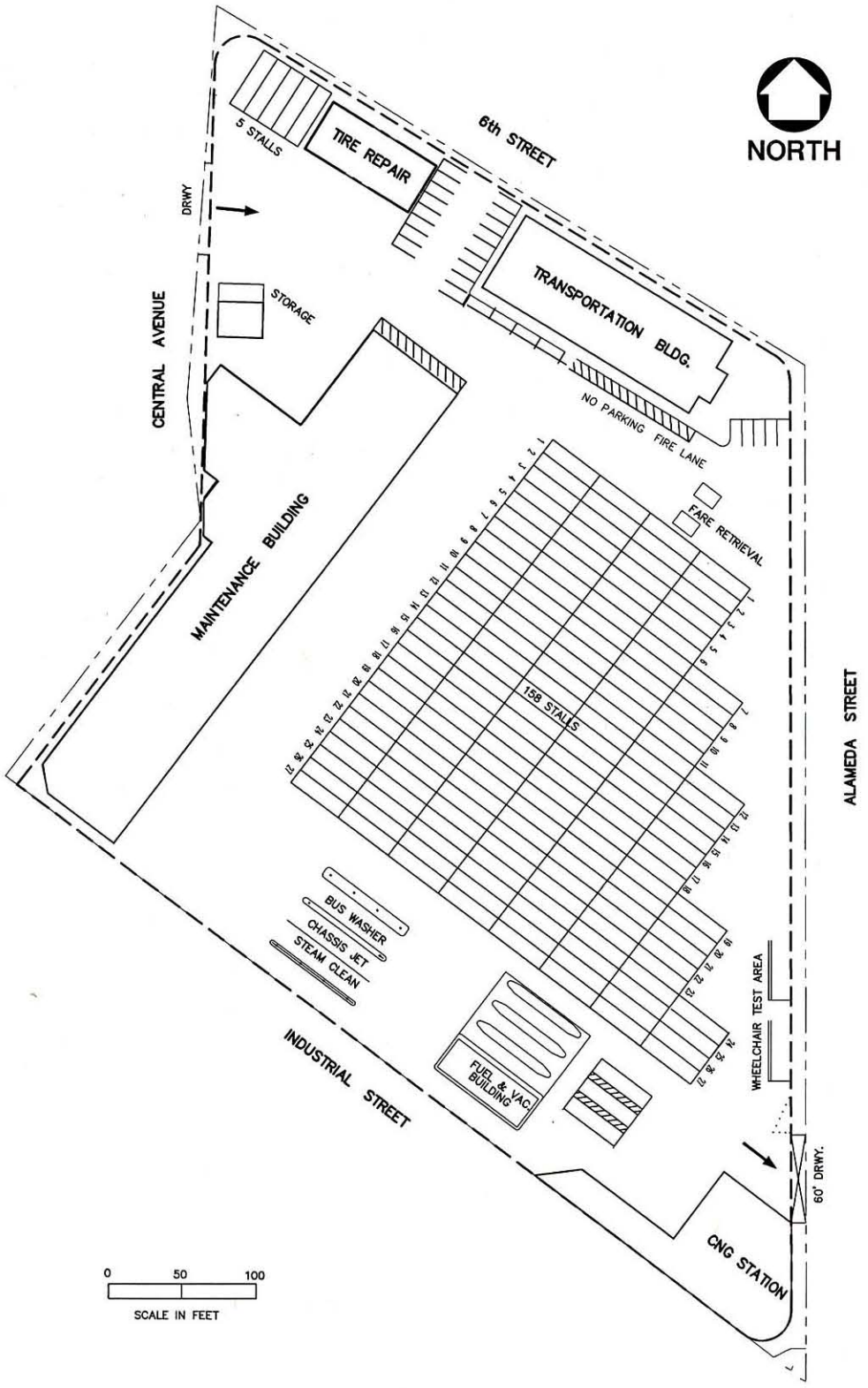
F. *POTENTIAL FOR SITE EXPANSION:*

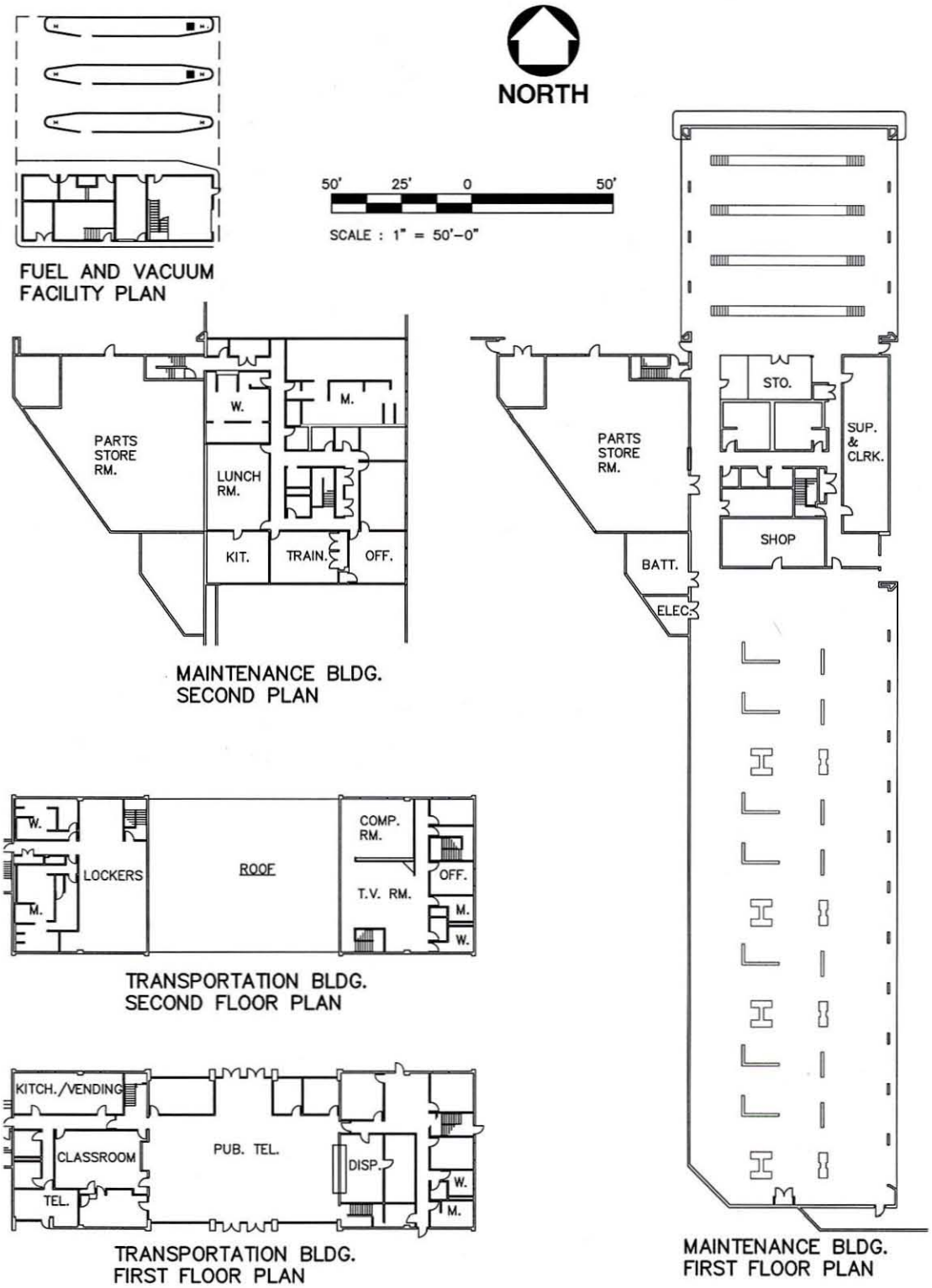
The Division 1 site is centrally located in an industrial and commercial neighborhood of downtown Los Angeles and is a prime candidate for expansion. The MTA has received BOS funding to acquire the property south of the Division (across Industrial Street) for expansion. This expansion would add space for 80 additional 40-foot coaches and 120 employee parking spaces. Funding for the expansion project is available in FY04 and FY05; however, the owner of the adjacent property has expressed unwillingness to sell the property to the MTA.

Condemnation proceedings may be required to obtain the property, which would push completion of the expansion project into FY06. A purchase offer was issued to the current property owner in November, 2003, without response.

The Division 1 Expansion project, as currently proposed and budgeted, consists primarily of property acquisition and paving to expand the yard storage capacity. Due to the prime location of Division 1 within the Central Business District, this Division is also a strong candidate for additional capacity increases. Increased capacity could also be achieved by building a parking structure on the site to be acquired. This structure would allow for increased bus and employee vehicle capacity. This project is not currently funded, and is also included within the Long Range Facility Plan.




NORTH
6th STREET
5 STALLS
TIRE REPAIR
DRWY
CENTRAL AVENUE
STORAGE
TRANSPORTATION BLDG.
NO PARKING FIRE LANE
MAINTENANCE BUILDING
FARE RETRIEVAL
158 STALLS
ALAMEDA STREET
BUS WASHER
CHASSIS JET
STEAM CLEAN
WHEELCHAIR TEST AREA
FUEL & VAC. BUILDING
INDUSTRIAL STREET
60' DRWY.
CNG STATION
0
50
100
SCALE IN FEET


NORTH
50' 25' 0 50'
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FUEL AND VACUUM FACILITY PLAN
PARTS STORE RM.
W.
M.
LUNCH RM.
KIT.
TRAIN.
OFF.
MAINTENANCE BLDG. SECOND PLAN
PARTS STORE RM.
STO.
SUP. & CLRK.
SHOP
BATT.
ELEC.
MAINTENANCE BLDG. FIRST FLOOR PLAN
W.
LOCKERS
M.
ROOF
COMP. RM.
T.V. RM.
OFF.
M.
W.
TRANSPORTATION BLDG. SECOND FLOOR PLAN
KITCH./VENDING
CLASSROOM
TEL.
PUB. TEL.
DISP.
W.
M.
TRANSPORTATION BLDG. FIRST FLOOR PLAN

Transportation Building

Maintenance Building

Maintenance Building

Maintenance Bays

Inspection Pit

Fuel & Vacuum Building

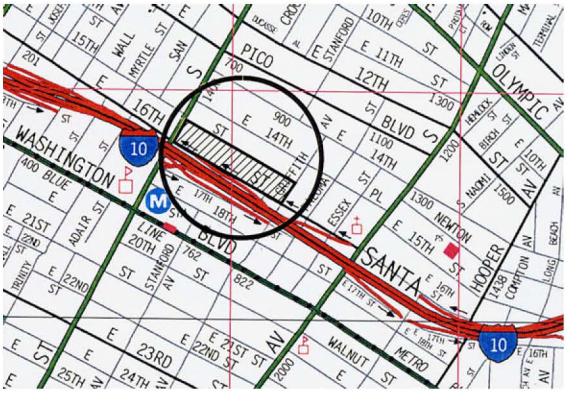
Transportation Building – Operator's Room

Vault Houses

Expansion lot across Industrial Street

DIVISION 2

(Crossroads Depot)
720 East 15th Street
Los Angeles, CA



DIVISION SUMMARY

Division 2 (Crossroads Depot) is located immediately south of the Central Business District. The Division has a design capacity of 201 coaches, and a current fleet of 185 (under capacity by 16). Due to age and historical usage as a former rail car division, modernization of the Division is an immediate priority. MTA currently has Federal BOS money in FY04 and FY05 to install hoists, expand and widen inspection pits, modernize the staff office and break amenities, and other tasks related to modernization.

The unique rectangular shape of the site and various physical constraints, this Division should not be used for general operation of articulated buses. The site will be modernized to be able to accept road calls or an occasional articulated coach, but not as a primary division for articulated coaches.

A separate building housing the Central Cash Counting facility is located at Division 2 and will remain for the foreseeable future.

Division 2 is located within the Central Business District in a highly desirable location; however, the current division improvements are nearly 100 years old, equipment is antiquated or non-existent, and the division is highly inefficient due to parking and building layout. Due to the possible complications of finding new property in the Central Business District, a recommended approach to expand capacity in the area would be to expand Division 2 via re-construction and possible adjacent property acquisition. This expansion concept would likely consist of total building and yard demolition, and reconstruction of an urban, multi-level bus division. The project would require temporary relocation of up to 200 coaches during the construction process.

DIVISION 2
720 E. 15th Street
Los Angeles, California

A. SITE and YARD:

Division 2 is one of the older bus facilities in Los Angeles. There are three primary buildings situated on a single parcel of 6.7 acres. The Maintenance Building, constructed as a rail maintenance facility in the 1920's, was renovated in 1998. The Transportation Building was constructed in 1987. The MTA Central Cash Counting Facility, situated on the west portion of the property, was constructed in 1963.

Surrounding Land Uses:

- North: 15th Street - Commercial Property
- South: 16th Street - Interstate 10 Freeway
- East: Griffith Avenue - Commercial Property
- West: San Pedro Street - Commercial Property

Employee Parking (Off-Site):

MTA Owned at 16th Street, under freeway:	233 spaces
Handicapped Parking:	6 spaces
Street Parking on 15th & 16th Streets	

Environmental:

No known soil or groundwater contamination exists at the site.

B. FLEET ASSIGNMENT:

Parking Configuration:	In-Line, Tandem
Designed Capacity of Yard:	201 coaches
Current Storage Capacity:	195 coaches
Maximum Capacity:	241 coaches
Size of current fleet:	185 standard 40-ft. coaches
Type of current fleet:	165 CNG fueled
	20 Diesel fueled

Potential for Fleet Increase:

The Division is currently operating within the 201-coach original design capacity with a fleet of 185 coaches. The capacity of the present property could be increased to a maximum of 241 if additional parking stalls are striped, buses are parked within maintenance bays, and employee and non-revenue parking is moved to an off-site location. Refer to Appendix A for Bus Facility Service Data and Appendix B for further details on potential bus parking capacity increase under current configurations.

The current 184-bus CNG fueling capability would not accommodate an expansion of the current CNG fleet.

Accommodation of Articulated Coaches:

To establish efficient operation and maintenance of articulated coaches at Division 2, the following minor modifications would be required:

a. Pavement re-striping to create 65-foot long parking stalls. Re-striping will reduce the overall parking capacity at the yard;
b. Sealing of openings around the bellows of the existing vacuum system.
c. Lengthening of maintenance service pits;
d. Installation of three-post hoists in some maintenance bays.

Although it has been proposed that approximately 14 60-foot articulated coaches will be allocated to Division 2 during Fiscal Year 2008 and 67 coaches in FY09, it is the recommendation of Facilities-Operations that no articulated buses be assigned to the Division due to an unsuitable configuration of the property and site facilities.

Please refer to Appendix C for further details regarding modifications required for operation of articulated coaches.

C. FACILITIES:

1. Transportation Building:

The Transportation Building is a 9,100 s.f. structure which accommodates administrative functions, operator dispatch assignment, locker rooms, showers and recreation areas for operators during layover periods. The need for additional space as required to efficiently support Operations at Division 2 as well as a general renovation of interior conditions. As identified in the Assessment, these issues can be addressed through the Capital Improvement process and are included within the Long-Range Facilities Plan.

2. Maintenance Building:

The Division 2 Maintenance Building is a 35,650 s.f. structure used for repair of buses, preventive maintenance, inspection and maintenance administrative offices. At a 1:8.3

ratio, twenty-six maintenance bays can adequately service the maximum bus capacity of 241 coaches.

The narrow configuration of the yard adjoining the building impacts exiting of buses from the maintenance bays. Installation of in-ground hoists, modification of inspection pits and elimination of manual drainage of fluid and oil lines are required to alleviate operational deficiencies at the maintenance facility.

The relocation of the A/C Shop and Body Shop to the steam clean area will improve Operational functions.

D. ***EQUIPMENT:***

1. Hoists: There are no in-ground hoists at Division 2. Four sets of portable hoists are in use. As an option under the current hoist replacement project, two 2-post axle hoists will be installed at the Division. Refer to Appendix D for additional details.

2. Underground Storage Tanks and Fueling: The current environmental plan for Division 2 is to upgrade the secondary containment systems for twelve (12) existing underground storage tanks to comply with State Senate Bill 989 and recent revisions to the California Code of Regulations. One 5,000-gallon solvent tank which had been out of service for more than twelve months was removed in November, 2003. Construction for tank upgrades has been initiated and is expected to be complete before the end of this year.

3. The CNG system at Division 2 was installed in 2000 and consists of three compressor stations with a fueling capacity of 184 buses.

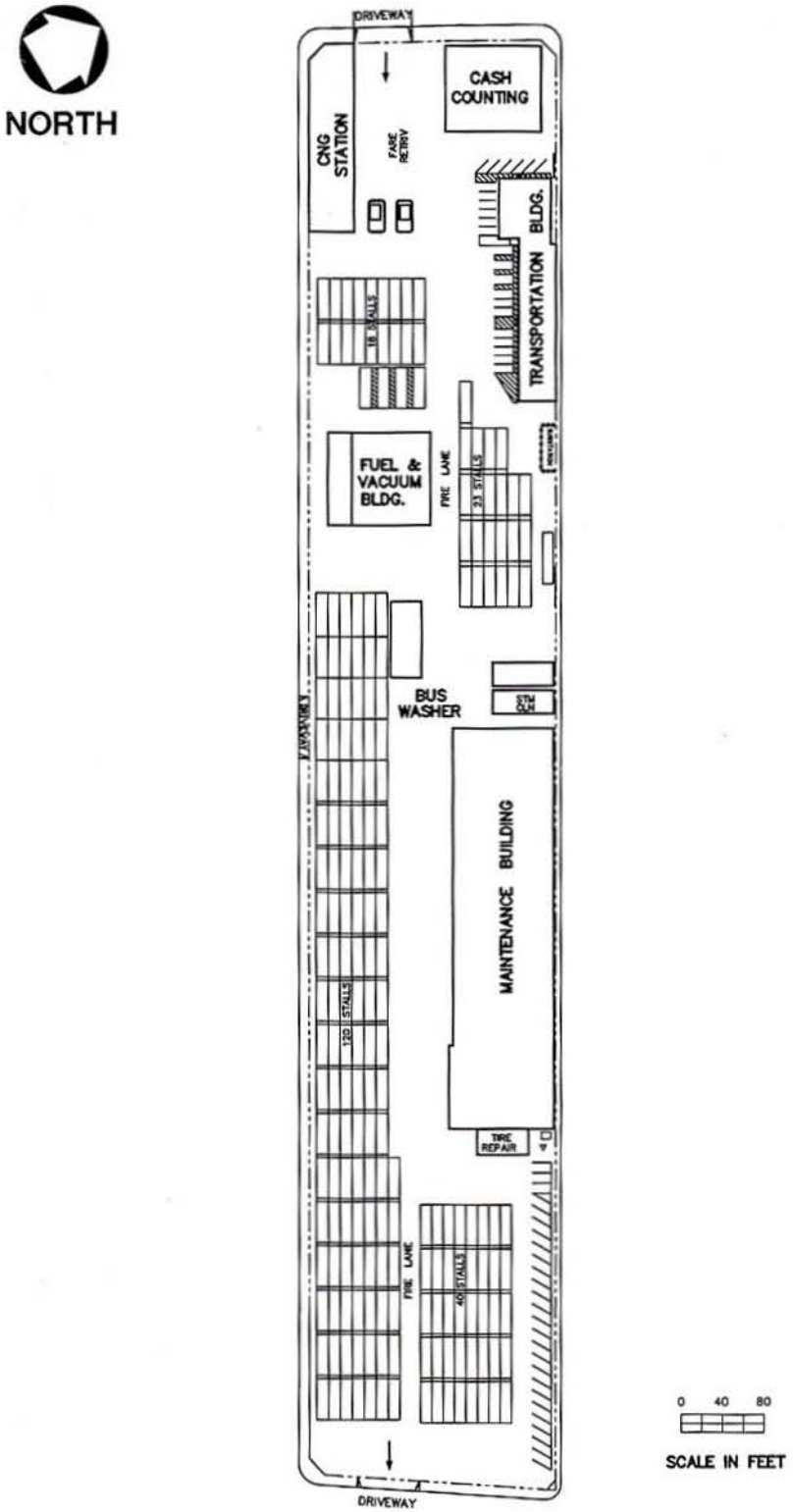
E. RECENT & CURRENT CAPITAL PROJECTS:

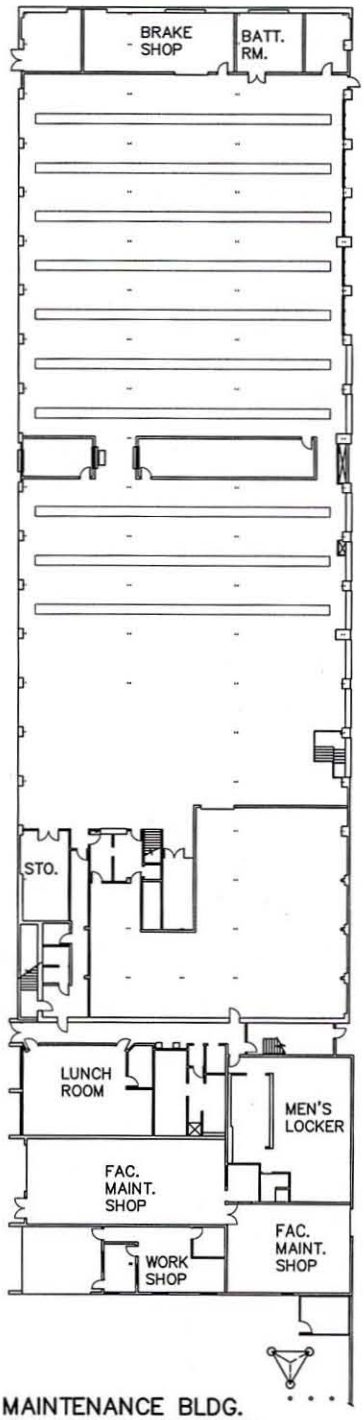
Several key Capital Projects are recently completed, currently in design or under construction at the Division. Completion dates are:

- Vacuum System Upgrade Project — September, 2003
- Transportation, Lunchroom Expansion — August, 2003
- Division Lighting Program — October, 2003
- Underground Tank Upgrade Project — December, 2003
- Bus Exhaust Extraction System — April, 2004
- Reverse Osmosis System for Bus Washer — May, 2004
- Division Remodel/Upgrade — May, 2004
- Annex Building — February, 2005
- Inspection Pit Extensions — April, 2005
- In-Ground Hoist Replacement — May, 2005

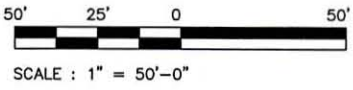
F. POTENTIAL FOR SITE EXPANSION:

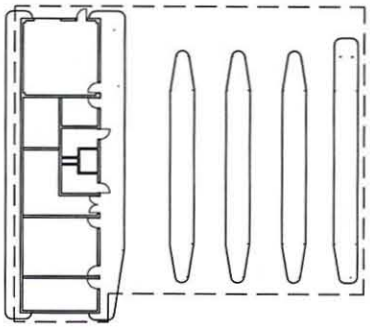
Division 2 is located within the Central Business District in a highly desirable location; however, the current division improvements are nearly 100 years old, equipment is antiquated or non-existent, and the division is highly inefficient due to parking and building layout. Due to the possible complications of finding new property in the Central Business District, a recommended approach to expand capacity in the area would be to expand Division 2 via re-construction and possible adjacent property acquisition. This expansion concept would likely consist of total building and yard demolition, and reconstruction of an urban, multi-level bus division. The project would require temporary relocation of up to 200 coaches during the construction process. This project is not currently funded, and has therefore not been studied in detail. A description of the concept and estimated costs are included in the Long Range Facilities Plan.


NORTH
DRIVEWAY
CNG STATION
FARE REMOV
CASH COUNTING
BLDG.
TRANSPORTATION
18 STALLS
FUEL & VACUUM BLDG.
FIRE LANE
23 STALLS
BUS WASHER
STM CLN
LAVATORIES
MAINTENANCE BUILDING
120 STALLS
TIRE REPAIR
FIRE LANE
40 STALLS
DRIVEWAY
0 40 80
SCALE IN FEET

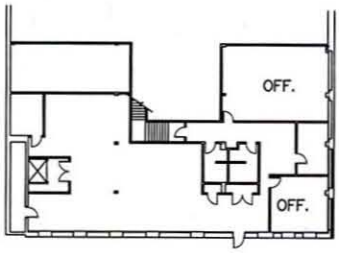


MAINTENANCE BLDG.
GROUND FLOOR PLAN

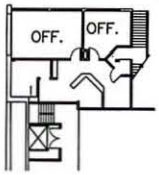




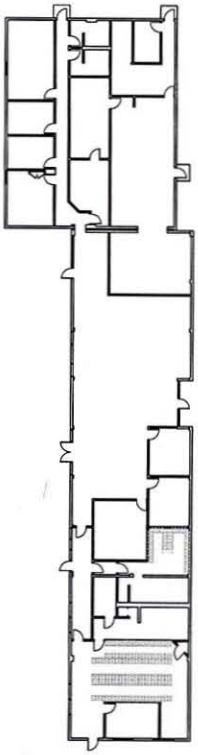
FUEL AND VACUUM
FACILITY PLAN



MAINTENANCE BLDG.
2ND FLOOR PLAN



MAINTENANCE BLDG.
MEZZANINE PLAN



TRANSPORTATION BLDG.
GROUND FLOOR PLAN

Transportation Building

Maintenance Building

Maintenance Building – Interior

Maintenance Building -Interior

Maintenance Building – Inspection Pit

Fuel and Vacuum Facility

Vault Houses

Steam Clean Area

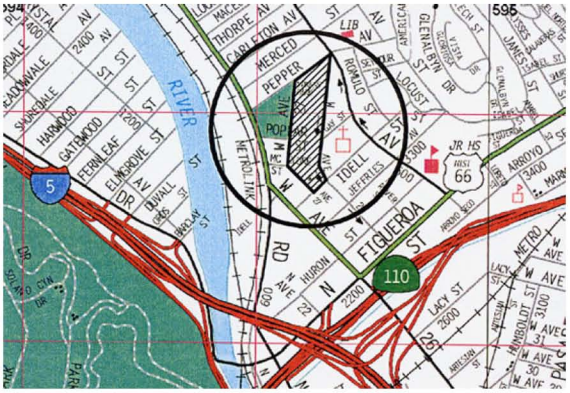
South Property Line, 15th St.

Transportation Building - Dayroom

Underground Tank Replacement

DIVISION 3

(North Los Angeles)
630 West Avenue 28
Los Angeles, CA



DIVISION SUMMARY

Division 3 (North Los Angeles) is located two miles northeast of the Los Angeles Central Business District in a predominantly residential neighborhood in Cypress Park. A baseball field and community park is located adjacent to and west of the site.

The Division has a design capacity of 220 coaches and a fleet of 200 coaches currently assigned.

Although the site has limited potential for expansion due to the residential nature of the surroundings, the Sector General Manager has initiated preliminary discussion with local council officials regarding possible expansion into the adjacent park. Concepts include relocation of park amenities to a preferred alternate location nearby or to an elevated deck below which buses might be parked. Political and environmental obstacles can be anticipated in either case. The use of federal funds for the project would, per Section 404(f), mandate replacement of any parkland acquired and converted for other use.

Further research is required to assess the fundamental feasibility of expansion at the Division. No funding is available for such a project through FY09. Due to the geographic location of the Division and the current size of the fleet, expansion of the Division to enable an increased bus fleet is not currently a high Agency priority as shown in the Long Range Facilities Plan.

The Division is scheduled to receive 30 articulated buses in FY08. The only modifications required will be installation of three-post hoists, re-striping, and minor modifications to the fueling and vacuum islands.

DIVISION 3
(North Los Angeles)
630 West Avenue 28
Los Angeles, California

A. SITE and YARD:

Division 3 is located northeast of downtown Los Angeles, in the Cypress Park area. Two primary buildings and a two-story parking structure are located on the 8.7 acre property. The Maintenance Building was built in 1977. The Transportation Building was completed in 1984. The Parking Structure was built in 1986. The site is adjacent to the Los Angeles River within a predominantly residential area.

Surrounding Land Uses:

- North: Pepper Avenue - Residential Property
- South: Idell Street - Residential Property
- East: Avenue 28 - Residential Property
- West: Avenue 27 - Residential Property, Public Park

Employee Parking (On-Site):

Parking Structure:	228 spaces
Handicapped Parking:	7 spaces

Environmental:

No known soil or groundwater contamination exists at the site. The current environmental plan for Division 3 is to upgrade the secondary containment systems for twelve (12) existing underground storage tanks in order to comply with Senate Bill 989 and recent revisions to the California Code of Regulations. The plan also includes the removal of one 2,000 gallon solvent tank, which has been out of service for more than 12 consecutive months. Construction on the tank upgrade program will commence in December, 2003.

B. FLEET ASSIGNMENT:

Parking Configuration:	In-Line, Tandem
Designed Capacity of Yard:	212 coaches
Current Storage Capacity	220 coaches
Maximum Capacity:	240 coaches
Size of current fleet:	200 standard 40-ft. coaches
Type of current fleet:	160 CNG fueled
	40 Diesel fueled

Potential for Fleet Increase:

The Division is currently operating within the 220-coach original design capacity with a fleet of 200 coaches. The capacity of the present property could be increased to a maximum of 240 if additional parking stalls are striped and buses are parked within maintenance bays. Please see Appendices A & B for further details regarding potential capacity increases.

The current CNG fueling capability is adequate only to accommodate the present storage capacity of 220 buses.

Accommodation of Articulated Coaches:

It is anticipated that approximately thirty 60-foot articulated coaches will be allocated to Division 3 during Fiscal Year 2008. To establish efficient operation and maintenance of the coaches the following minor modifications are required:

a. Pavement re-striping to create 65-foot long parking stalls. Re-striping will reduce the overall parking capacity at the yard;
b. Sealing of openings around the bellows of the existing vacuum system.
c. Lengthening of maintenance service pits;
d. Modification of existing hoists or installation of three-post hoists in some maintenance bays.

Please see Appendix C for further details regarding modifications required for operation of articulated coaches.

C. FACILITIES:

1. Transportation Building:

The Division 3 Transportation Building is a two-story structure with an 8,950 square foot first floor and a 5,460 square foot second floor. The building is used for operator dispatch assignment, administrative functions and restroom/locker rooms.

2. Maintenance Building:

The Division 3 Maintenance Building is a 45,600 s.f. structure used for repair of buses, preventative maintenance, inspection and maintenance administrative offices. Eighteen existing maintenance bays efficiently accommodate bus capacity at the Division at a recommended 1:12 ratio.

Renovation of the bus washer, repair or replacement of the building roof and additional yard space will be required to alleviate operational deficiencies at the maintenance facility.

D. *EQUIPMENT:*

1. Hoists: Eleven 2-post axle hoists are installed in the Division 3 Maintenance Shop. All are in satisfactory working condition. Please refer to Appendix D for additional information regarding hoists.

2. Underground Storage Tanks and Fueling:

   The underground storage tank (UST) system was upgraded in 1988, however the majority of tanks require retrofitting of secondary containment systems to achieve compliance with State and Local regulations. Two issues regarding UST's should be noted:

   - A design/build project is in process to upgrade twelve existing underground tanks as required by State and Federal regulations. Construction is scheduled to begin December, 2003.

   - The 2,000 gal. solvent tank at the Division is currently out of compliance because underground storage of solvent is no longer required. This tank will be removed.

3. The CNG system at Division 3 was installed in 2000 and consists of five compressor stations with a fueling capacity of 220 buses.

E. *RECENT & CURRENT CAPITAL PROJECTS:*

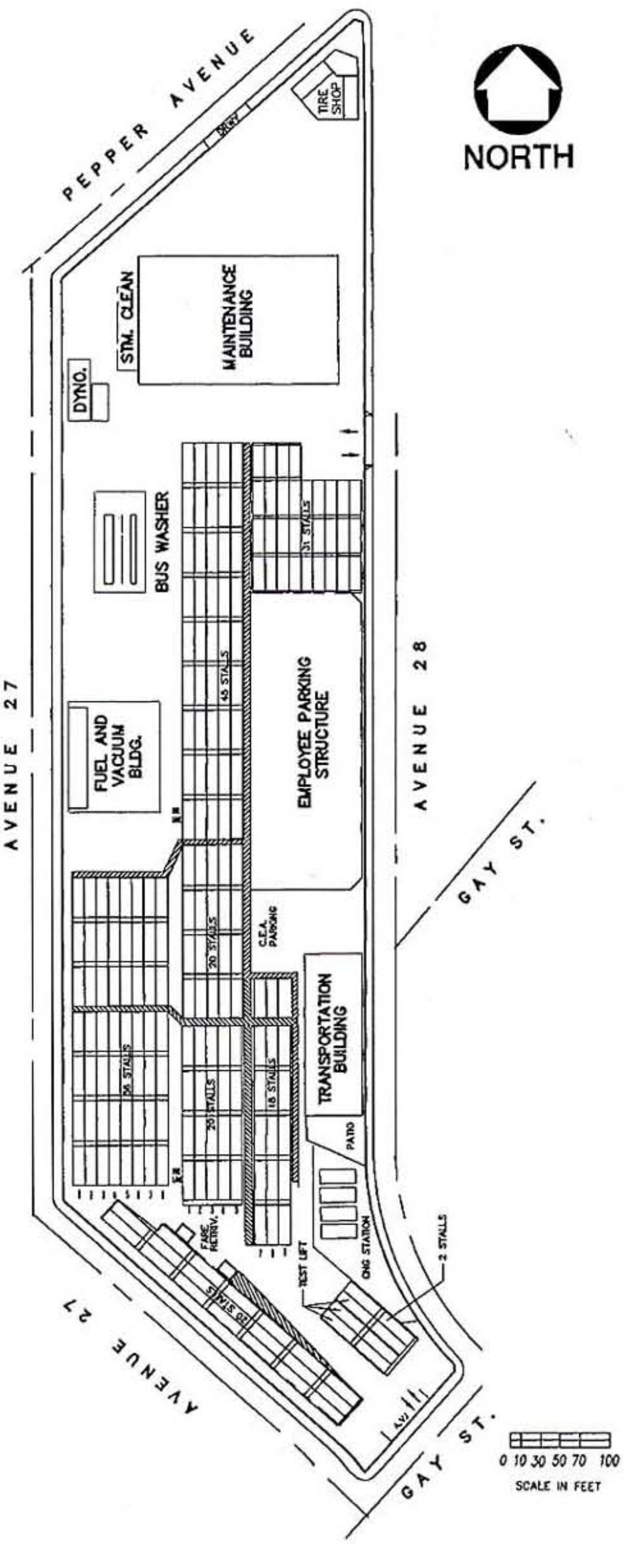
Several key Capital Projects are recently completed, currently in design or under construction at the Division. Completion dates are:

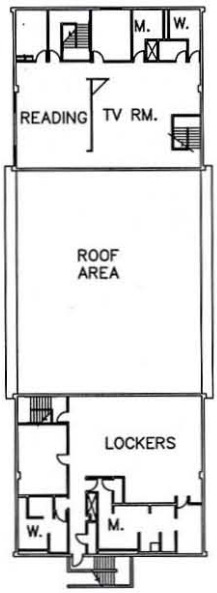
• Vacuum System Upgrade Project	September, 2003
• Underground Tank Upgrade Project	February, 2004
• In-ground Hoist Replacement	April, 2004
• Division Remodel/Upgrade	May, 2004

F. *POTENTIAL FOR SITE EXPANSION:*

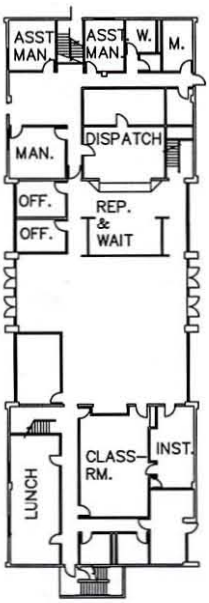
Although the site has limited potential for expansion due to the residential nature of the surroundings, the Sector General Manager has initiated preliminary discussion with local council officials regarding possible expansion into the adjacent park. Concepts include relocation of park amenities to a preferred alternate location nearby or to an elevated deck below which buses might be parked. Political and environmental obstacles can be anticipated in either case. The use of federal funds for the project would, per Section 404(f), mandates replacement of any parkland acquired and converted for other use.

Further research is required to assess the fundamental feasibility of expansion at the Division. No funding is available for such a project through FY09. Further, immediate needs for facility expansion to accommodate increased fleets are primarily located in the L.A. Central Business District and southerly geographic areas. This project is included within the Long Range Facilities Plan but is not listed as a high Agency priority.

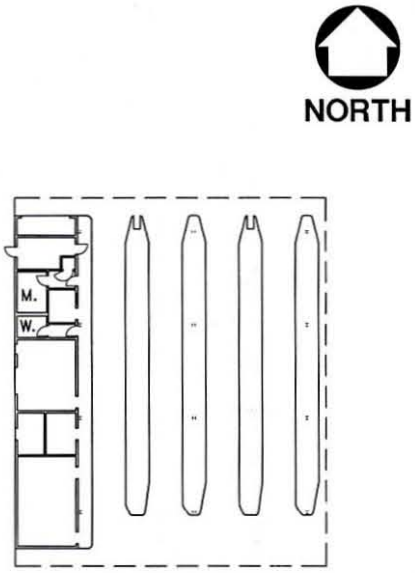

NORTH
PEPPER AVENUE
AVENUE 27
AVENUE 28
GAY ST.
TIRE SHOP
STM. CLEAN
MAINTENANCE BUILDING
DYNO.
BUS WASHER
FUEL AND VACUUM BLDG.
EMPLOYEE PARKING STRUCTURE
TRANSPORTATION BUILDING
31 STALLS
45 STALLS
20 STALLS
56 STALLS
29 STALLS
18 STALLS
PATIO
CNG STATION
TEST LIFT
FARE RETRIV.
2 STALLS
0 10 30 50 70 100
SCALE IN FEET



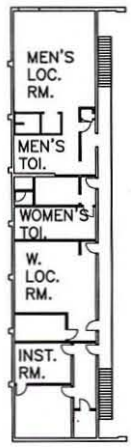
TRANSPORTATION BLDG.
SECOND FLOOR PLAN



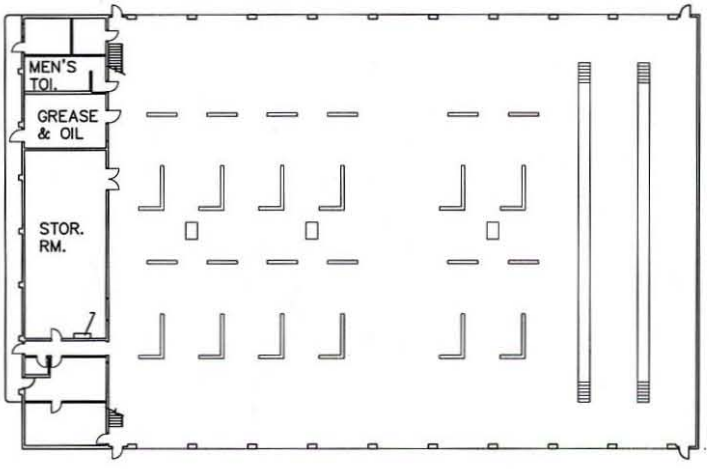
TRANSPORTATION BLDG.
FIRST FLOOR PLAN



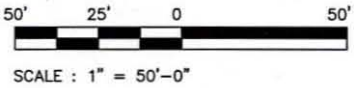
FUEL AND VACUUM
FACILITY PLAN



MAINTENANCE BLDG.
MEZZANINE PLAN



MAINTENANCE BLDG.
FIRST FLOOR PLAN



Transportation Building

Maintenance Building

Main Yard

Fuel Island

Outside Storage

Adjacent Cypress Press

DIVISION 4

(Non-Revenue)
7878 Telegraph Road
Downey, CA

DIVISION SUMMARY

Division 4 encompasses 9 acres in Downey, California, and is used for repair, storage, and maintenance of MTA's non-revenue support fleet. The Division also houses the Gateway Cities Service Sector office. Of the total 9 acres, 4 acres located between the functional Division boundary and the Rio Hondo Channel, are currently vacant and un-paved except for a Southern California Edison power line easement and a City of Downey water well pumping station.

Facilities-Operations has requested and received FY05 funds to provide for grading and concrete paving of the property, re-striping for parking and storage, installation of yard lighting, utilities, construction of perimeter walls, installation of a car-washing facility and construction of an annex building to provide additional maintenance bays. Paving of the adjacent property at Division 4 and other on-site improvements will be necessary in the future to accommodate non-revenue storage needs which will be realized due to consolidation of MTA non-revenue maintenance locations and closing of other MTA facilities such as South Park.

DIVISION 4
(Non-Revenue)
7878 Telegraph Road
Downey, California

A. SITE and YARD:

Division 4 is situated on a nine acre property in the City of Downey near the San Gabriel River flood channel. The Division is responsible for the maintenance of the MTA fleet of non-revenue automobiles and trucks. New vehicles are prepared for service at this facility. The site is also is the location of offices for the Gateway Service Sector.

Surrounding Land Uses:

- North: Telegraph Road - Commercial Property
- South: Interstate 5 Fwy. - Residential Neighborhood
- East: - Residential Neighborhood
- West: - Vacant Parcel/MTA Owned

Employee Parking (on-site):

Surface Parking, regular:	27 spaces
Surface Parking, Sector Office:	36 spaces
Handicapped Parking, regular:	0 spaces
Handicapped Parking, Sector Office:	2 spaces

Current parking for Non-Revenue and Sector staff is adequate.

Environmental: No known soil or groundwater contamination exists at the site.

B. FLEET ASSIGNMENT (non-revenue):

Parking Configuration:	In-Line, Tandem
Designed Capacity of Yard:	258 non-revenue vehicles
Maximum Capacity:	258
Size and type of current fleet:	258 Non-Revenue vehicles, 22 in bays

Potential for Fleet Increase:

Under consideration for the Division 4 site is a project to increase capacity of the non-revenue fleet. This project is funded in FY05, and preliminary engineering is currently underway.

C. FACILITIES:

1. Gateway Sector Office and Non-Revenue Bldg.:

The Division 4 Facility includes Offices for Non-Revenue Vehicle operation and maintenance as well as those of the Metro Gateway Service Sector. Administrative space is currently adequate for both Sector and Non-Revenue personnel.

2. Maintenance Building:

The Division 4 Maintenance Building, a 21,330 s.f. structure, is used for repair, preventive maintenance, inspection and maintenance of MTA non-revenue vehicles. Maintenance space for existing non-revenue fleet operations is considered adequate; however, an increase in fleet size will necessitate expansion of the present Maintenance Building.

D. *EQUIPMENT:*

1. Hoists: Installed at Division 4 Maintenance Bldg. are ten above-ground Automotive hoists.

2. Underground Storage Tanks and Fueling: One 500-gallon underground waste oil tank exists at the Division.

E. RECENT & CURRENT CAPITAL PROJECTS:

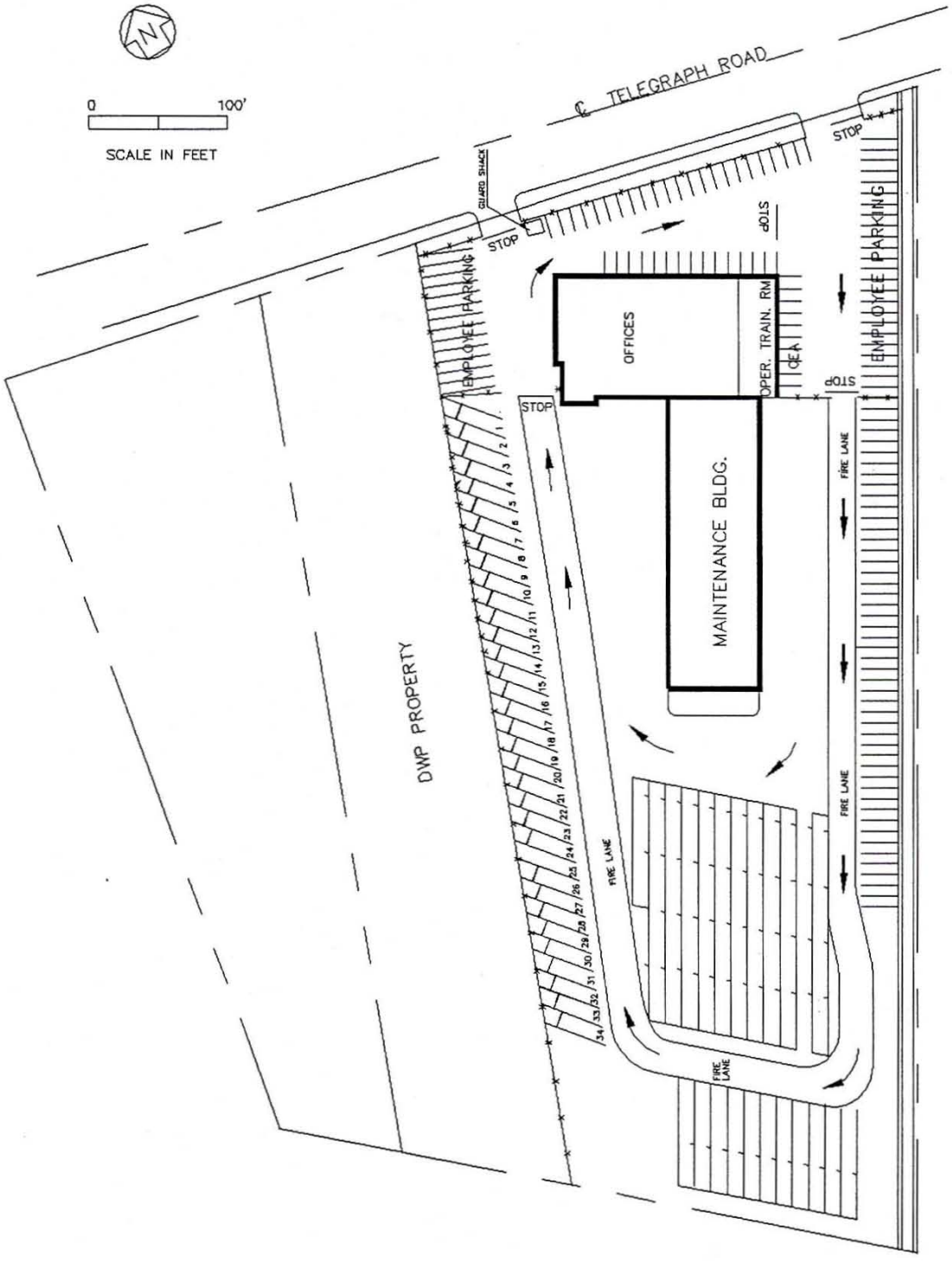
Several key Capital Projects are recently completed, currently in design or under construction at the Division. Completion dates are:

- Division 4 Expansion and Paving Project December, 2004
- Maintenance Bldg. Annex/ Car Wash July, 2005

Capital project requests include a safe brake test area and an increase in storage tank capacity.

F. POTENTIAL FOR SITE EXPANSION:

MTA owns a vacant 3.11 acre parcel of property on the west side of the site. Improvement of the parcel is feasible as use for vehicle storage. Paving of the adjacent property at Division 4 and other on-site improvements will be necessary in the future to accommodate non-revenue storage needs which will be realized due to consolidation of MTA non-revenue maintenance locations and closing of other MTA facilities such as South Park.


N
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SCALE IN FEET
℄ TELEGRAPH ROAD
GUARD SHACK
STOP
EMPLOYEE PARKING
OFFICES
OPER. TRAIN. RM
CEA
MAINTENANCE BLDG.
FIRE LANE
DWP PROPERTY

Administration Building

Maintenance Building

Entrance to Main Bays

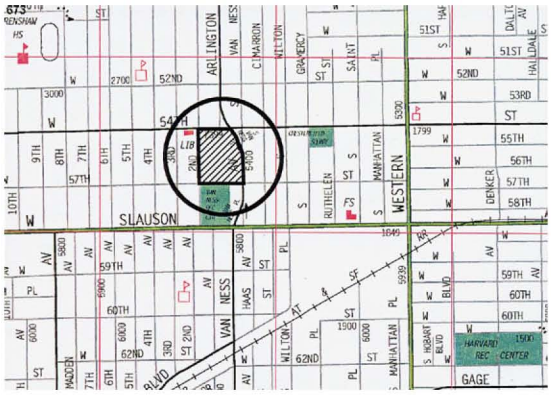
Adjacent MTA Property, West Side

DIVISION 5

(Arthur Winston)

2300 West 54th Street

Los Angeles, CA



DIVISION SUMMARY

Division 5 is located in south Los Angeles in a predominantly residential neighborhood. The Division has a design capacity of 229 coaches and a current fleet of 250, well above the designed facility capacity. The Division is currently capable of maintaining articulated coaches, and is scheduled to receive 37 in FY06 and 10 in FY07. Re-striping of the yard and minor modifications to the fuel and vacuum facility will be required.

The Division is located in an area of high ridership, and has been considered as an operating base for high capacity articulated buses. However, the Division is currently above capacity and is inefficient in operation due to space constraints, and expansion possibilities are limited due to the facilities location in a predominantly residential neighborhood. Since this facility is owned by MTA and located in a geographically desirable area of high ridership, the possibility of expanding the facility capacity must be evaluated. The facility capacity could be expanded via expansion and renovation of the maintenance building, improvements to the Transportation Building, and construction of a parking deck to store additional coaches. This project concept is not currently funded and is included in the Long Range Facilities Plan.

Various key projects will be completed at Division 5 during FY04, including a Reverse Osmosis System for Bus Washers, an Amenities Upgrade to enhance employee restrooms, lockers and kitchens, and an In-Ground Hoist Replacement.

DIVISION 5
(Arthur Winston)
2300 West 54th Street
Los Angeles, California

A. SITE and YARD:

Division 5, known as Arthur Winston Division, is located in central Los Angeles seven miles south of downtown Los Angeles. The operating division was renovated in 1979, and expanded in 1984, replacing an old Pacific Electric Facility. The site is located within a residential neighborhood between 54th Street and Van Ness. The 9.5 acre site has three primary structures, a Transportation building, a Maintenance Building and a Parking Structure, with smaller satellite buildings for support Maintenance functions. There are recurring incidents of security breach at the fenced perimeter of the property.

Due to restrictions of property configuration and limitations of a single entrance/exit to and from the yard, coaches queue onto 54th Street during the daily vaulting process. It has been proposed to relocate the vaulting operation to the fueling station to eliminate queueing outside the yard.

Surrounding Land Uses:

- North: 54th Street - Commercial Property
- South: City Park - (formerly owned by MTA), Residential beyond
- East: Van Ness Ave. - Residential Property
- West: 2nd Avenue - Commercial Property

Employee Parking (on-site):

Parking Structure:	365 spaces
Handicapped Parking:	6 spaces

The existing parking structure was built in 1984. Due to security issues, a portion of the roof deck is restricted from use and the structure is otherwise fully occupied. Employee parking is strained and a restoration of roof deck access is desirable. It is expected however, that the structure will remain fully occupied.

Environmental:

A Phase II Environmental Assessment was performed at the Division in January, 2001. Some soil contamination was discovered as a result of the recently completed hoist prototype installation project. Laboratory results indicate presence of low levels of hydrocarbons.

According to MTA records, approximately 390 barrels of hydraulic fluid are unaccounted for within the hoist system. Approximately 25 cubic yards of contaminated soil was removed and disposed of by the contractor during the hoist replacement. If soil contamination related to hoists is discovered during future hoist installations, it will be addressed per regulatory requirements.

B. FLEET ASSIGNMENT:

Parking Configuration:	In-Line, Tandem
Designed Capacity of Yard:	229 coaches
Current Storage Capacity:	247 coaches
Maximum Capacity:	260 coaches
Size of current fleet:	259 standard 40-ft. coaches
Type of current fleet:	235 CNG fueled
	24 Diesel fueled

Potential for Fleet Increase: The Division is currently operating a fleet of 250 coaches, in excess of the current storage capacity and approaching the maximum storage capacity of the facility. Additional parking would only be available if interior maintenance bays are utilized. If the fleet were to be increased, expansion of the facility storage and maintenance abilities would be required.

Accommodation of Articulated Coaches:

It is anticipated that approximately 37 60-foot articulated coaches will be allocated to Division 5 during Fiscal Year 2006 and an additional 10 coaches in Fiscal Year 2007. To establish efficient operation and maintenance of the coaches the following minor modifications are required:

a. Pavement re-striping to create 65-foot long parking stalls. Re-striping will reduce the overall parking capacity at the yard;
b. Sealing of openings around the bellows of the existing vacuum system.
c. Increase of CNG flow to reduce bus fueling time.

Please see Appendix C for further details regarding modifications required for operation of articulated coaches.

C. FACILITIES:

1. Transportation Building:

The Division 5 Transportation Building is a single-story structure of 10,320 sq. ft. The building is used for operator dispatch assignment, administrative functions and restroom/locker rooms. Inefficiencies of lighting and air conditioning systems have been reported and renovation of administrative office areas should be considered.

2. Maintenance Building:

The Division 5 Maintenance Building, a 34,440 s.f. structure used for repair of buses, preventive maintenance, inspection and maintenance administrative offices. The existing eighteen maintenance bays are generally adequate in number, at a 1:14 ratio, to service the currently assigned fleet of 259 coaches.

D. EQUIPMENT:

1. Hoists: Installed at the Division 5 Maintenance Bldg. are three 2-post axle hoists, one 3-post axle hoist, and five platform hoists. There is also one 4-post platform hoist in the Steam Cleaning area. Only three hoists are currently operating. Replacement of hoists is a priority to increase efficiency of maintenance. A current hoist renovation project is considered a pilot project for other divisions. Refer to Appendix D for additional information regarding hoists.

2. Underground Storage Tanks and Fueling:

The underground storage tank (UST) system was upgraded in 1998. Two issues regarding UST's are currently present: Current environmental plans for Division 5 include a design/build project to upgrade the secondary containment systems for 12 existing underground storage tanks to comply with SB 989 and recent revisions of the California Code of Regulations. Project construction should be complete in April of 2004.

- The 2,000 gal. solvent tank at the Division is currently out of compliance because underground storage of solvent is no longer required. This tank will be removed.

3. The CNG system at Division 5 was installed in 2000 and consists of three compressor stations with a fueling capacity of 240 buses. It has been requested that CNG flow capacity be increased to reduce fueling time.

E. RECENT & CURRENT CAPITAL PROJECTS:

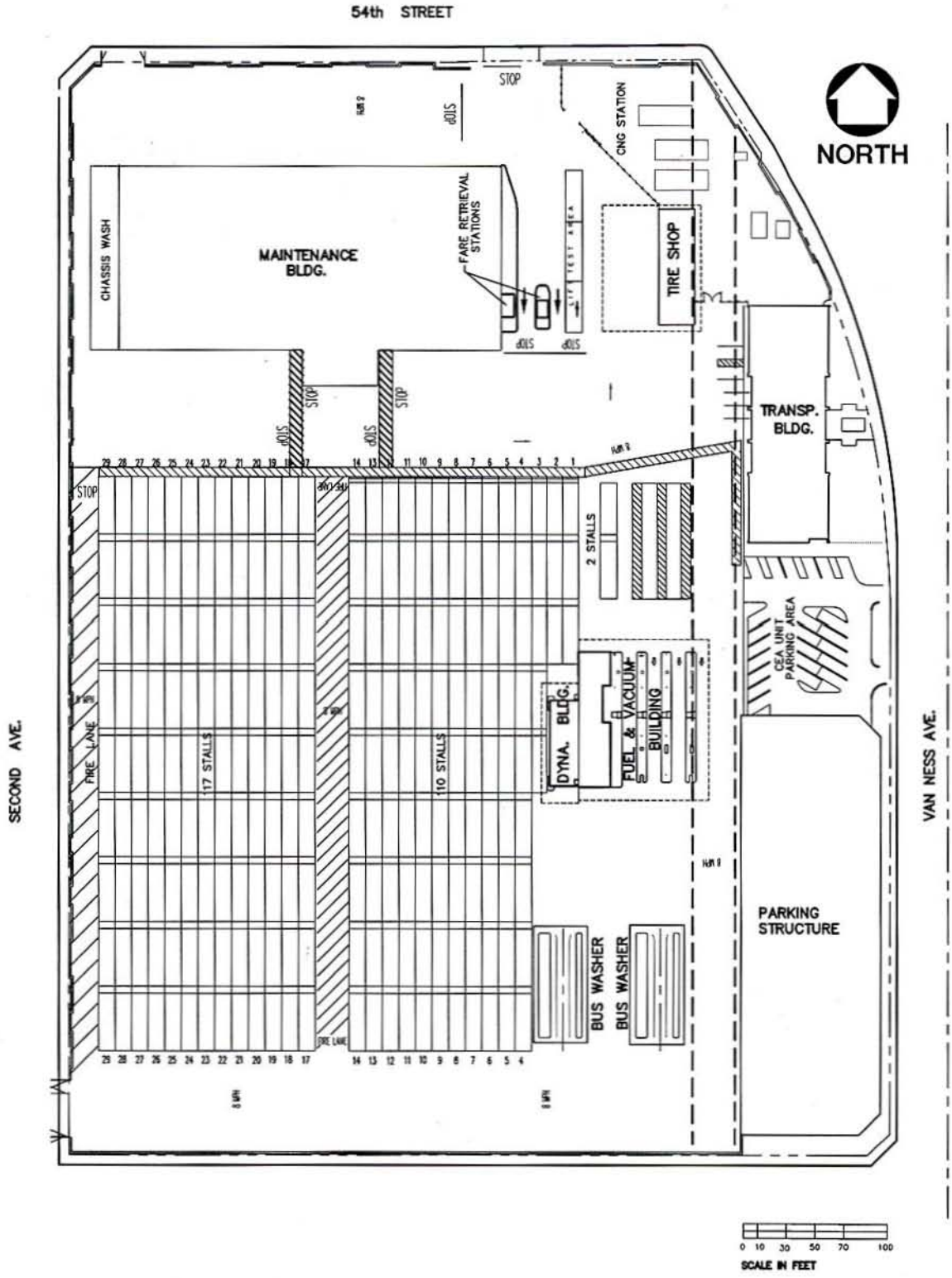
Several key Capital Projects are recently completed, currently in design or under construction at the Division. Completion dates are:

- Replace Emergency Generators — October, 2003
- Bus Exhaust Extraction System — January, 2004
- Underground Tank Upgrade Project — April, 2004
- Reverse Osmosis System for Bus Washer — May, 2004
- Division Remodel Upgrade — May, 2004
- In-Ground Hoist Replacement — June, 2004

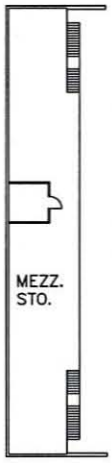
Capital project requests include a new bus washer, interior heating, ventilating and lighting systems as well as blowers at the fuel island and a parts storage room or bin.

F. POTENTIAL FOR SITE EXPANSION:

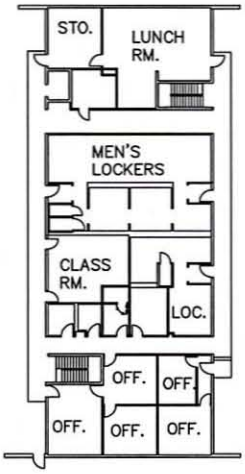
Division 5 is located in an area of high ridership, is centrally located, and has been considered as an operating base for high capacity articulated buses. However, the Division is currently above capacity and is inefficient in operation due to space constraints. Expansion possibilities are limited due to the facilities location in a predominantly residential neighborhood. Since this facility is owned by MTA and located in a geographically desirable area of high ridership, Facilities-Operations has studied the site to see how the capacity of this facility might best be expanded. A proposed project, although not studied in detail, would entail expansion and renovation of the maintenance building, improvements to the Transportation Building, and construction of a parking deck to store additional coaches. This project is not currently funded, and is included in the Long Range Facility Plan. The project would be studied in detail if funds for this project were to become available.


54th STREET
NORTH
CHASSIS WASH
MAINTENANCE BLDG.
FARE RETRIEVAL STATIONS
CNG STATION
TIRE SHOP
TRANSP. BLDG.
2 STALLS
CEA UNIT PARKING AREA
DYNA. BLDG.
FUEL & VACUUM BUILDING
117 STALLS
110 STALLS
FIRE LANE
BUS WASHER
BUS WASHER
PARKING STRUCTURE
SECOND AVE.
VAN NESS AVE.
STOP
0 10 30 50 70 100
SCALE IN FEET

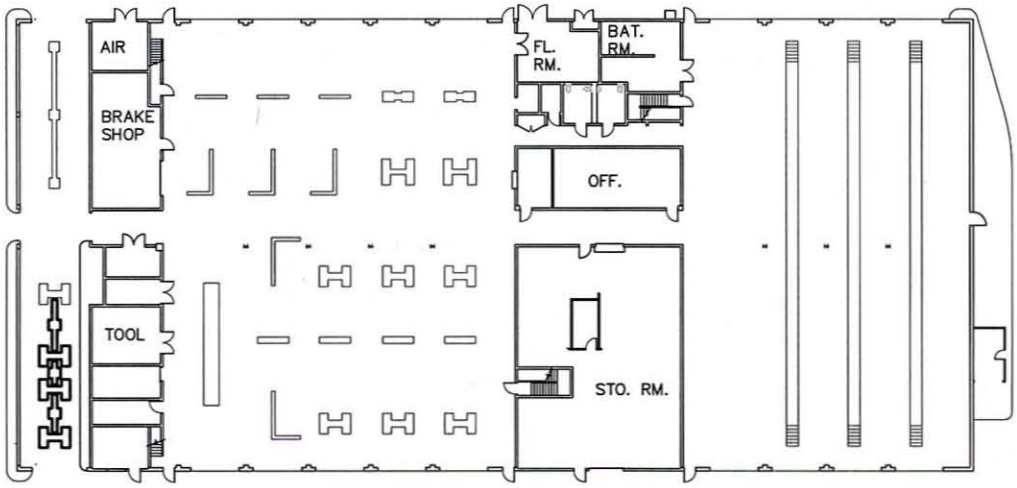
NORTH



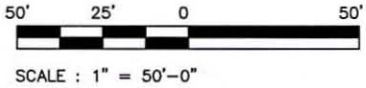
MAINTENANCE BLDG.
MEZZANINE PLAN



MAINTENANCE BLDG.
SECOND PLAN



MAINTENANCE BLDG.
FIRST FLOOR PLAN



Transportation Building

Maintenance Building

Maintenance Yard

Fuel Island

Primary Entrance to Yard

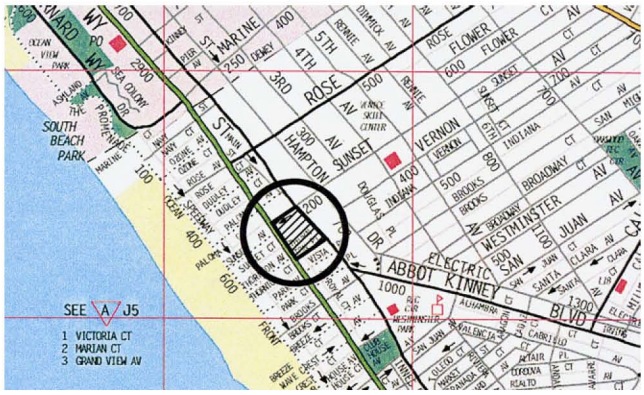
Rear Property Line, South Side

Restricted Roof Parking

Unimproved Former Police Office

DIVISION 6

(Venice Division)
100 Sunset Avenue St
Venice, CA



DIVISION SUMMARY

Division 6, a 3.13 acre property located within a residential neighborhood in Venice, California, has been operating as a maintenance facility since the early 1900's. The Division has a current storage capacity of 79 40-foot diesel buses. Compressed natural gas (CNG) fueling facilities are not available on the site due to the unavailability of adequate gas service. Noise and nuisance complaints from residents of the surrounding community over the last twenty years from residents of the surrounding community have forced Metro to discontinue 24-hour bus operations at the site. The Division operations are now restricted, including extremely limited night and weekend operations, no nighttime maintenance activity, limited use of compressed air tools, and time restrictions for pullouts and pull-ins. Due to such operating restrictions, the age of the facility, complaints from the surrounding community, deadhead costs related to lack of CNG fueling capability, and the constrained size and operational capacity of the facility, Metro has determined that the relocation of Division 6 to a more suitable location would be feasible, cost-effective, and generally advantageous, clearly in the best interest of the Agency.

Metro is currently working with a developer to exchange the current Division 6 (Venice) property for a new replacement property which will be developed as a bus operating facility. Due to the development agreement now in place, no capital improvements to Division 6 Venice are currently planned. Development of the new bus operating facility is currently awaiting completion of the CEQA environmental process, initiated in November 2003. The new facility is expected to be completed by June 2006.

DIVISION 6

100 Sunset Avenue
Venice, California

A. SITE and YARD:

Division 6 is located in Venice near the southern boundary of Santa Monica. The property has been an operating bus facility since 1930 with Transportation and Maintenance functions housed in a single structure. Three of its property boundaries are adjoined to residential property. The site is small at a total of 3.1 acres. Significant operating constraints are imposed due to the location of the site and the age of the physical facilities.

Surrounding Land Uses:

- North: Sunset Avenue - Residential Property
- South: Thornton Place - Residential Property
- East: Main Street - Commercial Property
- West: Pacific Avenue - Residential Property

Employee Parking (on-site):

Surface Parking:	60 spaces
Handicapped Parking:	02 spaces

Due to neighborhood complaints, staff parking has been relocated within a fenced area on-site. Bus parking is congested. Bus and auto circulation within the yard is not efficiently segregated.

Environmental:

Soil and groundwater contamination exists at the site. The soil contamination in several site areas extends from 5 feet below grade to the groundwater table, which is approximately 23 feet below surface grade around the vicinity of the fuel island. Natural attenuation and biodegradation of contaminants in soil and groundwater is underway and appears to be successful, however MTBE continues to be detected in on-site and off-site monitoring wells. Under the auspices of the Regional Water Quality Control Board, Metro Environmental Services is continuing to perform quarterly groundwater monitoring at the site.

Remediation and cleanup of environmental contamination at Division 6 is provided for in the development agreements for the new Division 6 facility.

B. FLEET ASSIGNMENT:

Parking Configuration:	In-Line, Tandem
Designed Capacity of Yard:	51 coaches
Current Storage Capacity	79 coaches
Maximum Capacity:	85 coaches
Size of current fleet:	78 standard, 40-ft. coaches
Type of current fleet:	78 Diesel fueled

Potential for Fleet Increase:

Existing bus parking is congested and the Division is above storage capacity. No increase in the number of coach assignments is anticipated at Division 6 within the next five years. The facility is scheduled to close in July 2006.

Accommodation of Articulated Coaches:

Due to severe site constraints, it is not feasible to introduce 60-foot articulated coaches at Division 6.

C. FACILITIES:

Maintenance/Transportation Building:

The Division 6 Maintenance Building is a 22,000 s.f. two-story structure used for repair of buses, preventive maintenance, inspection and maintenance administrative offices. Transportation offices include areas for operator dispatch assignment, administrative functions and restroom/locker rooms. Administrative space, management office and locker room facilities are inadequate. Ten maintenance bays are adequate to service the 78 coaches currently assigned to the Division.

D. *EQUIPMENT:*

1. Hoists: No hoists are installed at the Division 6 Maintenance Bldg. Portable hoists are being utilized but cannot be raised to any appreciable height within the building due to low overhead clearance.

2. Underground Storage Tanks and Fueling:

   The underground storage tank (UST) system was upgraded in 1988, and all tanks except the solvent tank are currently compliant with State and Local regulations. One issue must be addressed:

   - The Division is equipped with six tanks for bulk storage of 20,500 gallons of diesel fuel. State law requires legal abandonment or removal of tanks that are unused for more than one year. Unless division stores personnel coordinate closely to ensure that all tanks are used at least once per year, excess tanks must be removed.

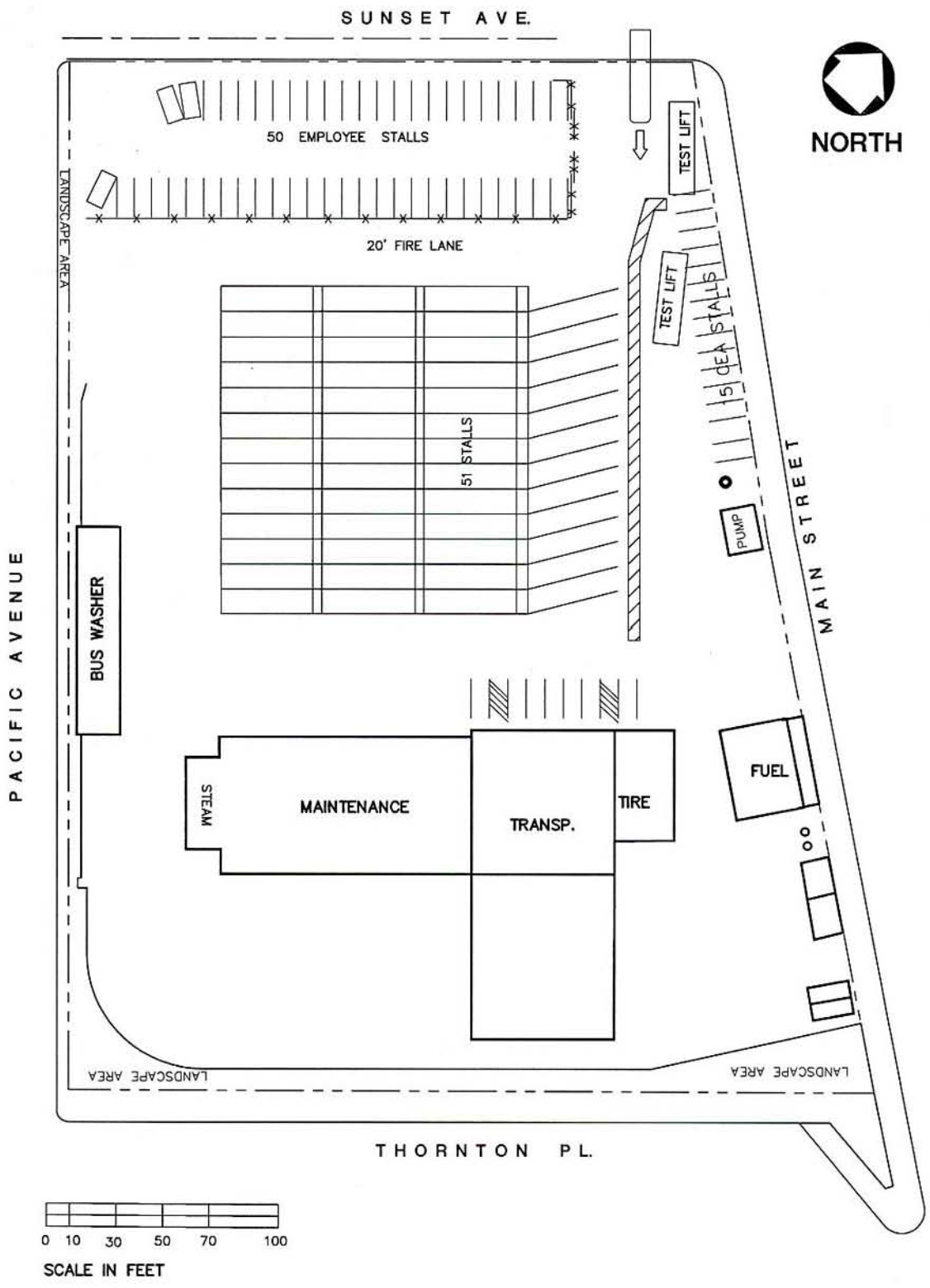
3. CNG Facility: No CNG fueling facility exists at Division 6.

E. RECENT & CURRENT CAPITAL PROJECTS:

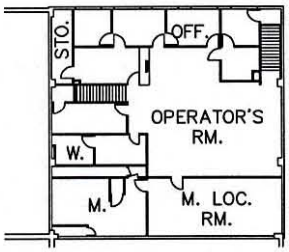
Due to the current project to relocate Division 6 to a new site, no major Capital Projects are under consideration at the Division.

F. POTENTIAL FOR SITE EXPANSION:

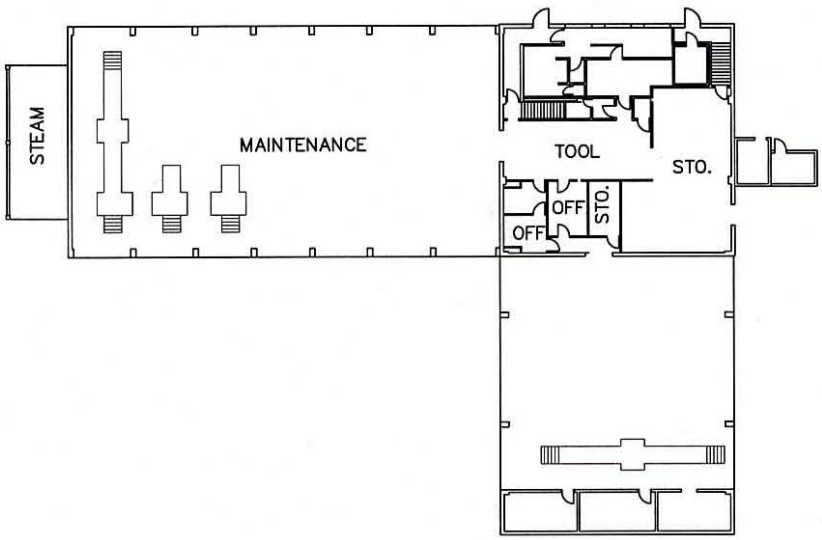
Bounded by city streets east and west, and by dense residential properties at the north and south, there can be no feasible opportunity for expansion of Division 6. The facility is scheduled to close in July 2006.


SUNSET AVE.
NORTH
50 EMPLOYEE STALLS
20' FIRE LANE
LANDSCAPE AREA
TEST LIFT
TEST LIFT
15 DEA STALLS
51 STALLS
PUMP
MAIN STREET
PACIFIC AVENUE
BUS WASHER
STEAM
MAINTENANCE
TRANSP.
TIRE
FUEL
LANDSCAPE AREA
LANDSCAPE AREA
THORNTON PL.
0 10 30 50 70 100
SCALE IN FEET

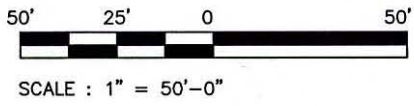
NORTH



MAINTENANCE BLDG.
SECOND FLOOR PLAN



MAINTENANCE BLDG.
FIRST FLOOR PLAN



Main Building & Yard

Entrance and Main Yard

South Property Line & Residences

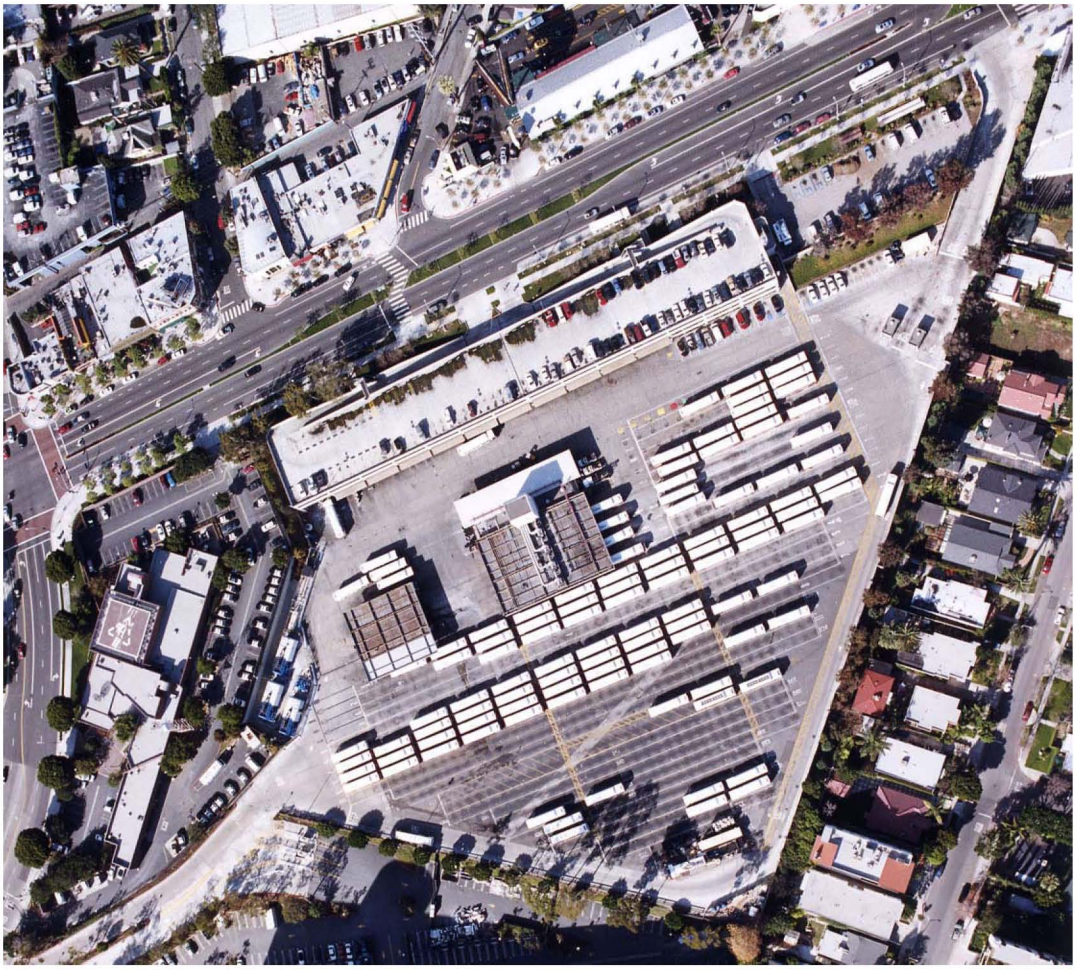
North Property Line & Residences

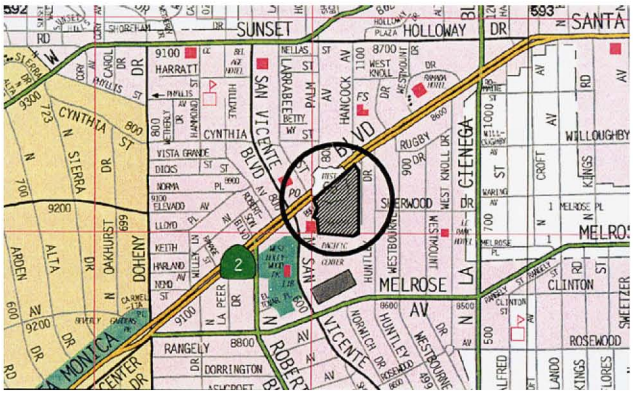
Relocation of Bus by Forklift

Cramped Dispatch Counter

DIVISION 7

(West Hollywood Division)
8800 Santa Monica Blvd.
West Hollywood, CA





DIVISION SUMMARY

With a design capacity of 228 buses, a current storage capacity of 248 buses, and a current fleet size of 258 buses, Division 7 is over capacity. Surrounded on all sides by residential and/or commercial uses, with Transportation, Maintenance and employee parking configured within a single structure, expansion of the Division would be quite difficult.

In lieu of physical expansion, and without increasing bus maintenance capacity, improvements to existing facilities and equipment can enhance the effectiveness and efficiency of operations. Additional capacity as might be needed in the area would be provided from other operating facilities within the system, such as a new Division 6 Facility, scheduled to begin operating in 2006.

Current capital projects include general facility improvements, upgrades to administrative spaces, hoist installation, A/C upgrades, yard re-paving, and relocation of the bus washer as well as other adjustments that may be required to support additional articulated buses.

The Division will be made accessible for maintenance of 60-foot articulated coaches, which are scheduled to be deployed at Division 7 in FY08. Due to relatively higher costs to modify Division 7 for operation of articulated coaches, the number of coaches that might be deployed to this location has not yet been determined.

DIVISION 7

8800 Santa Monica Blvd.
West Hollywood, California

A. SITE and YARD:

Division 7 is located on a 9-acre site in the City of West Hollywood. Renovated in 1977, the site has a long history of rail and bus service. Transportation Offices and all Maintenance functions are integrated in a single Operations Building that incorporates parking for employees.

Surrounding Land Uses:

- North: Santa Monica Blvd. - Commercial Property
- South: Pacific Design Center - Commercial Property
- East: Single Family Homes - Residential Property
- West: San Vicente Blvd. - Civic Property (L.A. Co. Sheriff)

Employee Parking (on-site):

Parking Structure:	217 spaces
Surface Parking:	41 spaces
Handicapped Parking:	3 spaces

Environmental:

Soil and groundwater contamination exists at the site as a result of the underground storage tank upgrade work in 1996. The soil contamination exists around the fuel island from 4 feet below grade to the water table. The depth to groundwater at Division 7 is approximately 12 feet below grade. The groundwater gradient at the site is to the south. Under the auspices of the Regional Water Quality Control Board, MTA has installed and is continuing to operate a groundwater treatment unit at the site. An environmental consultant is currently tasked with the preparation of a Remedial Action Plan for submittal to the RWQCB. Another engineering consultant is tasked with maintaining the groundwater treatment system and ongoing quarterly groundwater monitoring and reporting. Noise produced by groundwater treatment system pumps has generated complaints from residents at neighboring properties

B. FLEET ASSIGNMENT:

Parking Configuration:	In-Line, Tandem
Designed Capacity of Yard:	234 coaches
Current Storage Capacity	248 coaches
Maximum Capacity:	272 coaches
Size of current fleet:	258 standard 40-ft. coaches
Type of current fleet:	228 CNG fueled
	30 Diesel fueled

Potential for Fleet Increase:

Division 7 is currently operating well above the current storage capacity of 248 coaches, and is inefficient due to space constraints and overcrowding. If absolutely necessary, the capacity of the present facility could be increased to a maximum of 272 coaches if additional parking stalls were striped and buses are parked within maintenance bays. This alternative is not preferred, as overcrowding and inherent inefficiencies would only get worse. Please see Appendices A & B for further details regarding potential capacity increases.

The current CNG fueling capability is adequate to accommodate the present storage capacity of 248 buses.

Accommodation of Articulated Coaches:

It has been proposed that approximately 35 60-foot articulated coaches will be allocated to Division 7 during Fiscal Year 2008. This number might be reduced because of relatively high costs of modifying existing facilities at the Division. To establish efficient operation and maintenance of the coaches the following minor modifications will be required:

a. Pavement re-striping to create 65-foot long parking stalls. Re-striping will reduce the overall parking capacity at the yard;
b. Sealing of openings around the bellows of the existing vacuum system.
c. Construction of annex building for articulated maintenance, and installation of 3-post in-ground hoists.
d. Addition of a new bus washer or relocation of existing washer, since exiting from existing washer is restricted by proximity to the CNG station.

Please see Appendix C for further details regarding modifications required for operation of articulated coaches at the Division.

C. FACILITIES:

1. Transportation Building:

The Division 7 Transportation Offices are located on the upper level of the 25 year-old Operations Building. Limited administrative and storage space has been further reduced by recent DNCP telecommunications upgrades. Lacking an elevator seriously inhibits efficient circulation between lower level Maintenance, upper level Transportation and employee parking levels above in the structure. Significant renovation/enhancement of staff restrooms, locker rooms and kitchen areas was recently undertaken through the Capital Project's process.

2. Maintenance Building:

The Division 7 Maintenance Facility is located on the lower level of the Operations Building. Maintenance administrative space and parts warehousing space are both limited. Portable offices have been located in some repair bays to provide office space for maintenance staff. General lighting in maintenance bays is inadequate. At a ratio of

1/12.8, twenty maintenance bays are sufficient in number to service 258 buses currently assigned to the Division. Due to the insufficient length of the individual maintenance bays, an annex maintenance building must be constructed to maintain articulated buses.

D. ***EQUIPMENT:***

1. Hoists: Installed at Division 7 Maintenance Bldg. are eleven 2-post axle hoists. Four hoists are currently not operating. Replacement of hoists is a priority to increase efficiency of maintenance. Refer to Appendix D for other details regarding hoists.

2. Underground Storage Tanks and Fueling:

   The underground storage tank (UST) system was upgraded in 1998, and all tanks except the solvent tank are currently compliant with State and Local regulations. Two issues regarding UST's are currently present:

   - The Division is equipped with five tanks for bulk storage of 120,500 gallons of diesel fuel. State law requires legal abandonment or removal of tanks that are unused for more than one year. Unless division stores personnel coordinate closely to ensure that all tanks are used at least once per year, excess tanks must be removed.

   - The 2,000 gal. solvent tank at the Division is currently out of compliance because underground storage of solvent is no longer required. This tank should be removed.

3. The CNG system at Division 7 was installed in 2000 and consists of three compressor stations with a fueling capacity of 240 buses.

E. RECENT & CURRENT CAPITAL PROJECTS:

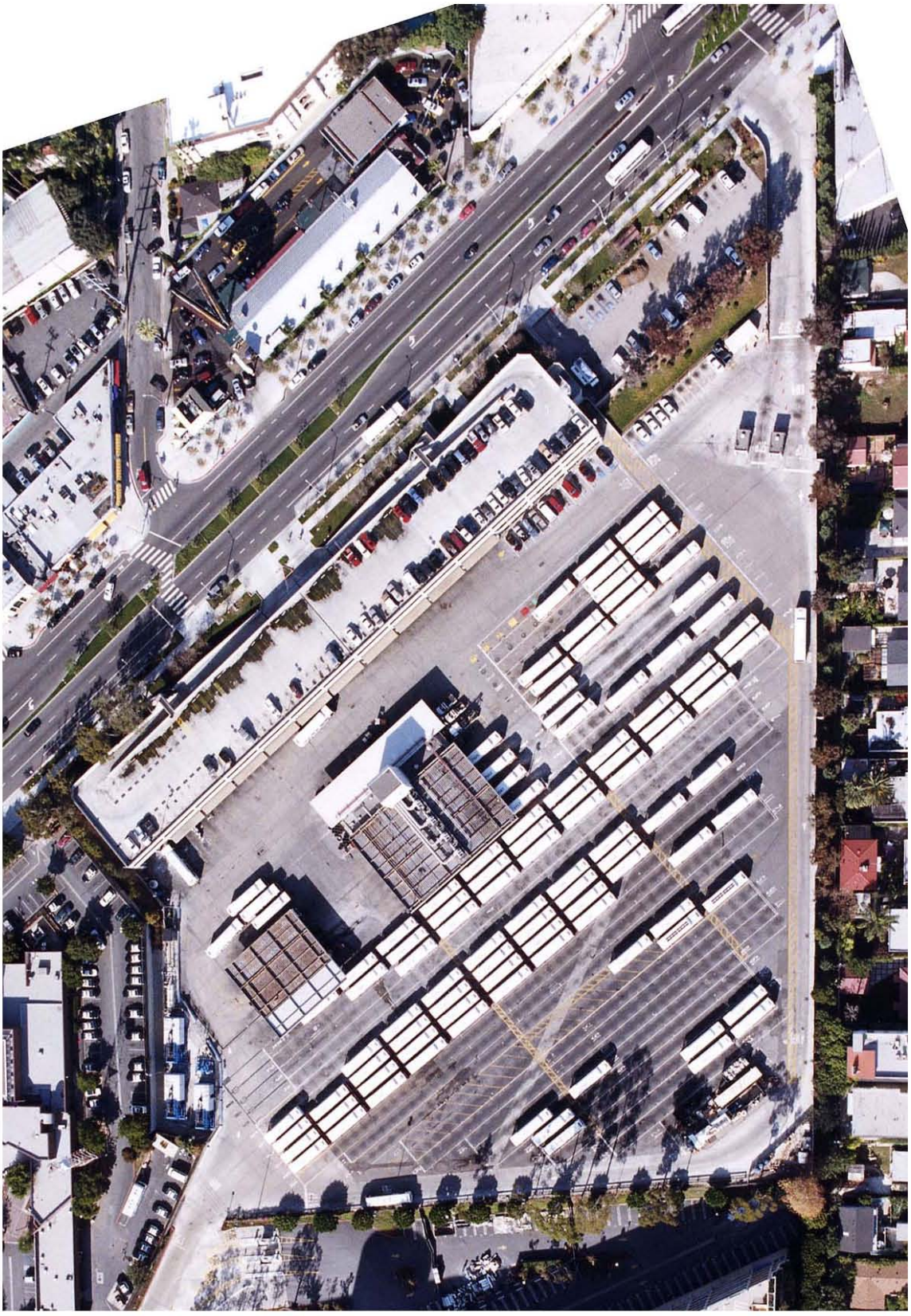
Several key Capital Projects are currently in design or under construction at the Division. Anticipated completion dates are:

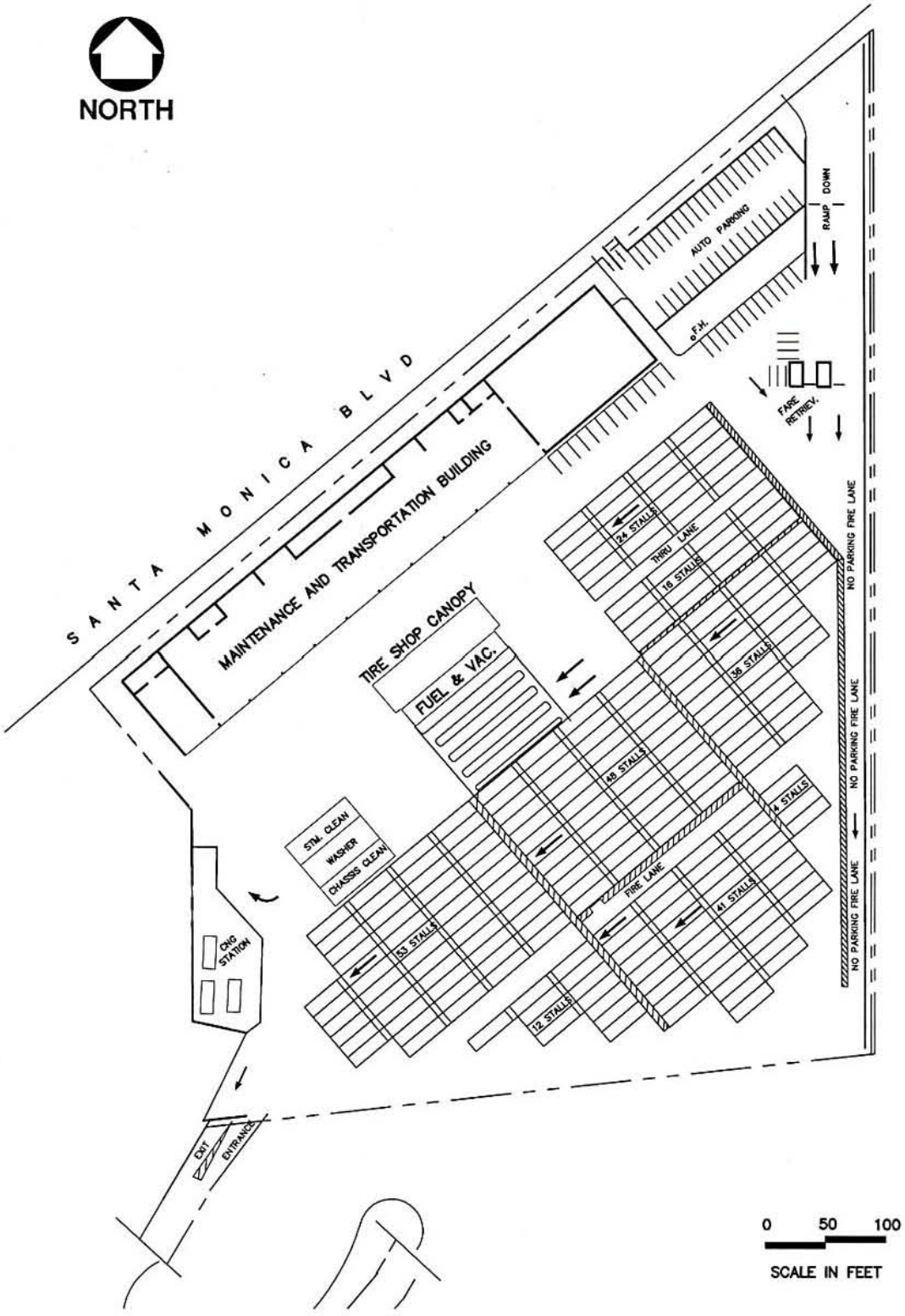
• Roll-Up Door Refurbishment	May, 2003
• Vacuum System Upgrade Project	September, 2003
• Concrete Apron Repair	October, 2003
• Division Remodel/Upgrade	November, 2003
• Bus Exhaust Extraction System	January, 2004
• Air Conditioning System Upgrade	February, 2004
• In-Ground Bus Hoist Replacement	April, 2004
• Reverse Osmosis System for Bus Washer	May, 2004
• Underground Tank Upgrade Project	December, 2003
• Division 7 Facility Improvements	June, 2005

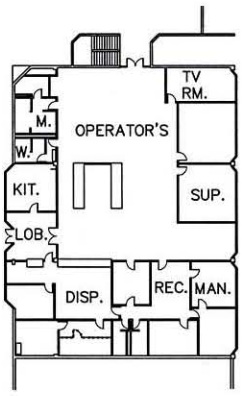
Design is also pending for upgrade of the Division 7 Chassis Washer, relocation of the existing bus washer, modifications as required to operate articulated buses, and other design activities for the Division 7 Facility Improvement project.

F. POTENTIAL FOR SITE EXPANSION:

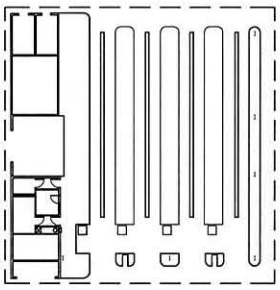
The Division 7 site is restricted for expansion due to existing dense residential property on the east side, a Sheriff's station on the west side and opposition from the City of West Hollywood to any MTA operational changes. Expansion of Division 7 has therefore not been included in the Long Range Facilities Plan.



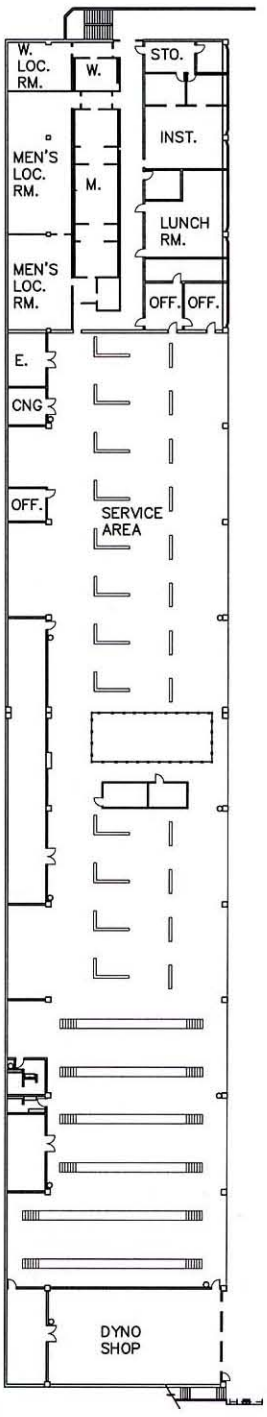

NORTH
SANTA MONICA BLVD
MAINTENANCE AND TRANSPORTATION BUILDING
AUTO PARKING
RAMP DOWN
F.H.
FARE RETRIEV.
TIRE SHOP CANOPY
FUEL & VAC.
24 STALLS
THRU LANE
16 STALLS
56 STALLS
48 STALLS
4 STALLS
NO PARKING FIRE LANE
STM. CLEAN
WASHER
CHASSIS CLEAN
CNG STATION
53 STALLS
FIRE LANE
41 STALLS
12 STALLS
EXIT
ENTRANCE
0 50 100
SCALE IN FEET



MAINTENANCE AND TRANSPORTATION BLDG. SECOND FLOOR PLAN



FUEL AND VACUUM FACILITY PLAN



NORTH

60' 30' 0 60'

SCALE : 1" = 60'-0"

MAINTENANCE AND TRANSPORTATION BLDG. FIRST FLOOR PLAN

Transportation Building

Transportation/Maintenance Building

Main Yard, Fuel Island Northward

Main Yard Parking

Yard, Looking West

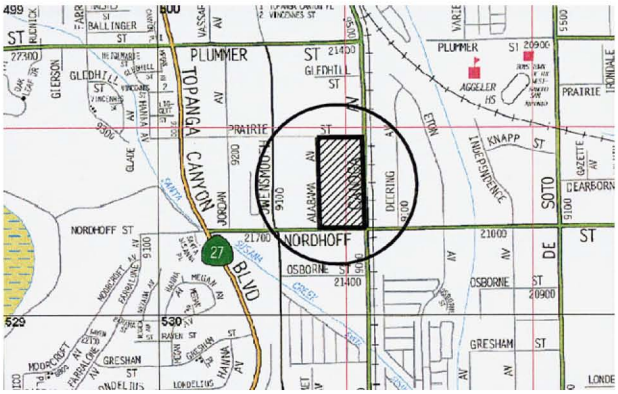
Transportation, Operator's Room

Transportation Building

Santa Monica Blvd., North Boundary

DIVISION 8

(West Valley Division)
9101 Canoga Avenue
Chatsworth, CA



DIVISION SUMMARY

Division 8, located in Chatsworth, primarily serves San Fernando Valley bus routes. The Division has a current storage capacity of 249 and a current fleet of 165 (under capacity by 84 coaches). Expansion of the facility is not required.

As required for service to the San Fernando Valley Rapidway, Division 8 will be receiving eleven articulated coaches in FY05. Modifications to the Division, in-progress as part of the Rapidway project include re-striping of yard pavement, modification of two existing maintenance bays, purchase of portable hoists, and installation of an overhead crane system. Facilities-Operations intends to install permanent three-post hoists as part of facility modifications to accommodate articulated coaches. Retrofitting of the fuel and vacuum operation might also be required.

Various key projects will be completed at Division 8 during FY04, including a Bus Exhaust Extraction System, a Reverse Osmosis System for Bus Washers, and an In-Ground Hoist Replacement. During early FY05 the Division Lighting Upgrade project will be complete.

DIVISION 8

9101 Canoga Avenue
Chatsworth, California

A. SITE and YARD:

Division 8 is the Metro Bus Operating division for West San Fernando Valley. The property is a single parcel of 18 acres with two primary buildings: the Transportation building and the Maintenance building, completed in 1982. The division is located less than 1 mile from the San Fernando Valley Sector Office.

Surrounding Land Uses:

- North: Prairie Street - Commercial Property
- South: Nordhoff Street - Commercial Property
- East: Canoga Avenue - Commercial Property
- Alabama Avenue - Commercial Property

Employee Parking (on-site):

Surface Parking:	233 spaces
Handicapped Parking:	03 spaces

Employee parking at the Division currently meets staff needs.

Environmental:

No soil contamination above regulatory levels is known to exist at the site.

B. FLEET ASSIGNMENT:

Parking Configuration:	Single Angled (capable of assigned parking)
Designed Capacity of Yard:	238 coaches
Current Storage Capacity:	249 coaches
Maximum Capacity:	297 coaches
Size of current fleet:	165 standard 40-ft. coaches
Type of current fleet:	141 CNG fueled
	24 Diesel fueled

Potential for Fleet Increase:

Division 8 is currently below capacity by 84 coaches, and could easily accept an increase of the fleet if so desired. At present, the Division can store and maintain a total of 249 buses. Please see Appendices A & B for further details regarding potential capacity increases.

The current CNG fueling capability is adequate to accommodate the present storage capacity of 249 buses.

Accommodation of Articulated Coaches:

It is anticipated that approximately 35 60-foot articulated coaches will be allocated to Division 8 during Fiscal Year 2008. To establish efficient operation and maintenance of the coaches the following minor modifications will be required:

a. Pavement re-striping to create 65-foot long parking stalls. Re-striping will reduce the overall parking capacity at the yard;
b. Sealing of openings around the bellows of the existing vacuum system.
c. Installation of 3-post in-ground hoists in some service bays, or use of portable hoists.

Please see Appendix C for further details on required modifications for operation of articulated coaches.

C. FACILITIES:

1. Transportation Building:

The Division 8 Transportation Building is an 8,000 s.f. facility built in 1982. Additional administrative space would improve operational efficiency and renovation of the office and restroom/locker areas is needed.

2. Maintenance Building:

The Division 8 Maintenance Building is a 39,200 s.f. structure, also built in 1982. Portions of shop floors, resurfaced five years ago, are deteriorating and require repair. At a ratio of 1/12.5, the 22 existing maintenance bays are quite adequate to service the 249-bus storage capacity at the Division.

D. *EQUIPMENT:*

1. Hoists: Installed at Division 8 Maintenance Bldg. are ten 2-post axle hoists. Two hoists are currently not operating. Replacement of hoists is a priority to increase efficiency of maintenance.

2. Underground Storage Tanks and Fueling:

   The underground storage tank (UST) system was upgraded in 1998, and all tanks except the solvent tank are currently compliant with State and Local regulations. Two issues regarding UST's are currently present:

   - The Division is equipped with 5 tanks for bulk storage of 120,500 gallons of diesel fuel. State law requires legal abandonment or removal of tanks that are unused for more than one year. Unless division stores personnel coordinate closely to ensure that all tanks are used at least once per year, excess tanks must be removed.

   - The 2,000 gal. solvent tank at the Division is currently out of compliance because underground storage of solvent is no longer required. This tank should be removed.

3. The CNG system at Division 8 was installed in 2000 and consists of three compressor stations with a fueling capacity of 250 buses.

E. RECENT & CURRENT CAPITAL PROJECTS:

Several key Capital Projects are recently completed, currently in design or under construction at the Division. Completion dates are:

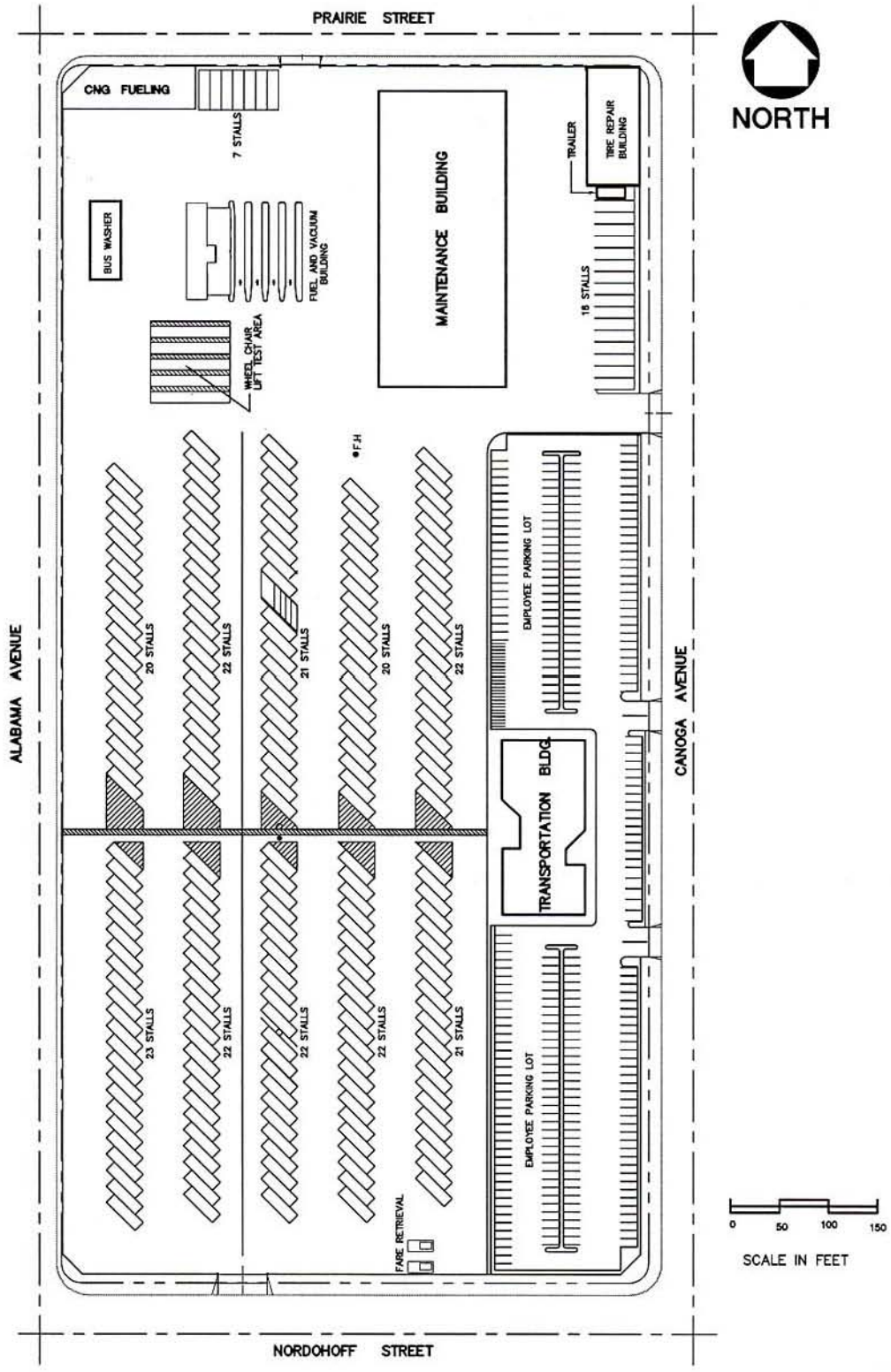
• CNG Fueling Facility Expansion	July, 2003
• Division Network Communication Project	July, 2003
• Vacuum System Upgrade Project	September, 2003
• Bus Exhaust Extraction System	April, 2004
• In-Ground Bus Hoist Replacement	May, 2004
• Paint Booth Construction	June, 2004
• Safety Cables Installation	June, 2004
• Elevator Modernization	June, 2004
• Reverse Osmosis System for Bus Washer	July, 2004
• Division Lighting Program	July, 2004

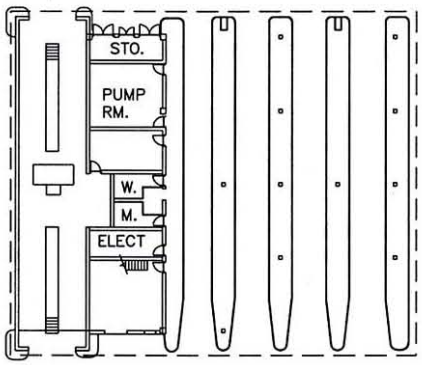
Capital project requests include: Resurfacing of deteriorating shop floor coating in the Maintenance Building, complete renovation of restrooms, re-paving of the Division yard and acquisition of a storage container.

F. POTENTIAL FOR SITE EXPANSION:

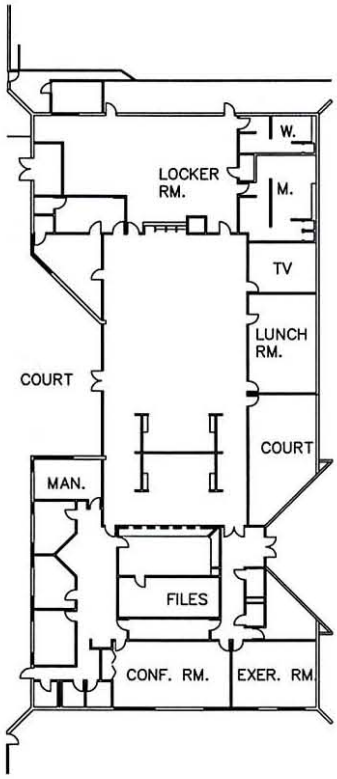
Pending completion of FY04 and FY05 Capital Projects in progress, the existing site, structures and equipment at Division 8 are adequate to accommodate and service current and foreseeable MTA fleet assignments.

Because of the facilities geographical location in the San Fernando Valley, and excessive "deadheading" time, this facility is not a candidate for facility expansion.


PRAIRIE STREET
CNG FUELING
7 STALLS
BUS WASHER
FUEL AND VACUUM BUILDING
WHEEL CHAIR LIFT TEST AREA
MAINTENANCE BUILDING
TRAILER
TIRE REPAIR BUILDING
15 STALLS
NORTH
ALABAMA AVENUE
CANOGA AVENUE
20 STALLS
22 STALLS
21 STALLS
20 STALLS
22 STALLS
EMPLOYEE PARKING LOT
TRANSPORTATION BLDG.
23 STALLS
22 STALLS
22 STALLS
22 STALLS
21 STALLS
EMPLOYEE PARKING LOT
FARE RETRIEVAL
NORDOHOFF STREET
0 50 100 150
SCALE IN FEET



FUEL AND VACUUM
FACILITY PLAN

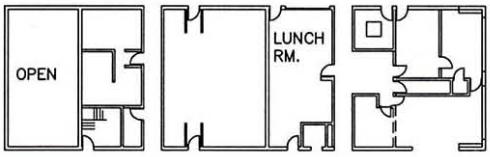


TRANSPORTATION BLDG.
FIRST FLOOR PLAN

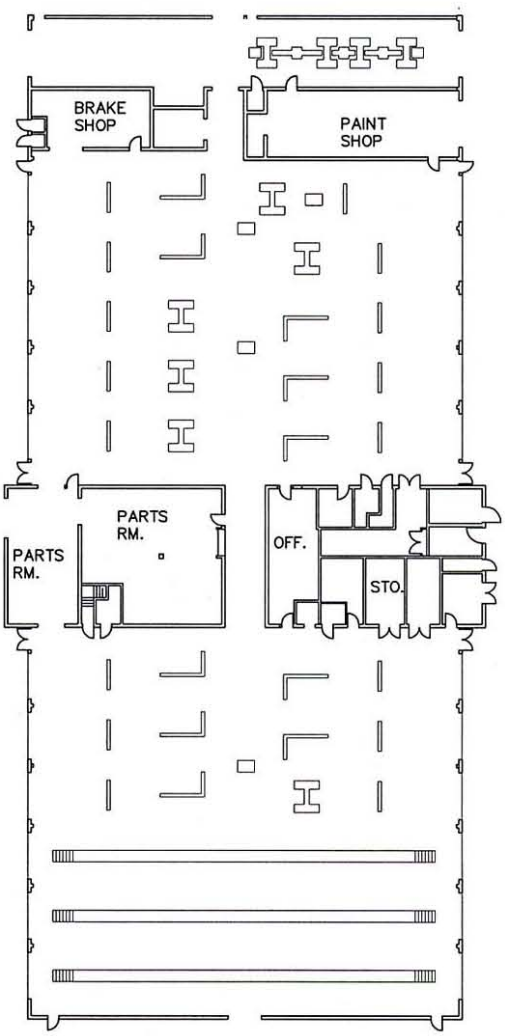
50' 25' 0 50'

SCALE : 1" = 50'-0"

NORTH



MAINTENANCE BLDG.
SECOND FLOOR PLAN



MAINTENANCE BLDG.
FIRST FLOOR PLAN

Administration Building

Maintenance Building

Main Yard Looking North

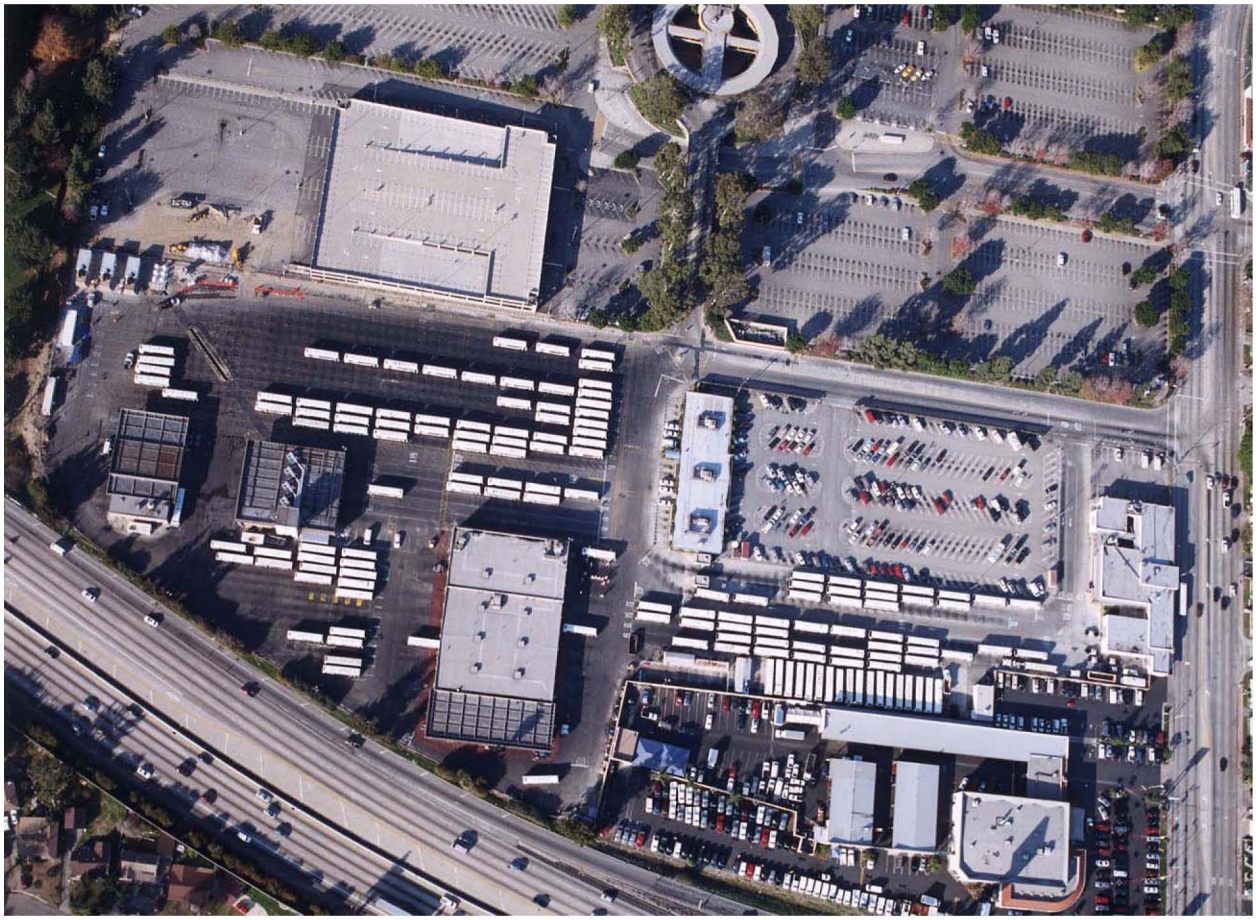
Fuel Island

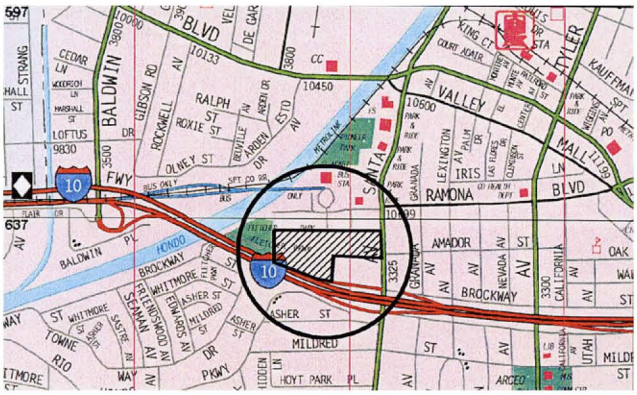
Shop Flooring Damage

Shop Flooring Patch Failure

DIVISION 9

(San Gabriel Valley)
3449 Santa Anita Ave.
El Monte, CA





DIVISION SUMMARY

Division 9, located in El Monte, serves San Gabriel Valley and eastern Los Angeles bus routes as well as MTA buses utilizing the El Monte Busway. The Division has a design capacity of 294 buses, and a current fleet of 192 coaches. Although the Division appears to be under capacity by more than 100 buses, Sector and Division management report that the maintenance building is undersized relative to the yard capacity and cannot efficiently service the higher amount of buses.

Since 2002, the MTA has been working with the City of El Monte and other agencies to coordinate implementation of a Division 9 Master Plan, within the context of a Redevelopment of the El Monte Transit Center and vicinity. As the initial element of the Master Plan, design is in progress for a Transportation Building at Division 9 that will house all normal transportation functions as well as Offices for the San Gabriel Valley Service Sector and quarters for the Los Angeles County Sheriff staff. Construction is projected to be complete in September of 2005.

Funding is currently unavailable for the Division reconstruction project in its entirety as envisioned in the Master Plan. However, approximately half of the funds required for construction of the Transportation Building have been secured through BOS. Additional BOS funding will be required in the short term to complete construction of the Transportation Building.

Division 9 is scheduled to receive 22 articulated coaches if FY08. Modifications required include installation of three-post hoists, re-striping, and modifications to the fuel/vacuum operation.

Other key projects in the current Capital Program include a Shop Renovation/Expansion, Division Lighting Program, Renovation and Expansion of Secondary Buildings, Reverse Osmosis System for the Bus Washers, and the Amenities Improvement Project.

DIVISION 9

3449 Santa Anita Avenue
El Monte, California

A. SITE and YARD:

Division 9 is situated on a 13-acre site adjacent to the El Monte Transit Station, a hub serving the San Gabriel Valley's transportation needs. The operating division was built in 1974 with one major addition, a parking structure, added in 1987.

Surrounding Land Uses:

- North: - El Monte Transit Station
- South: - Interstate 10 Freeway/Commercial
- East: - Santa Anita Ave., Commercial Property
- West: - City owned park land

Employee Parking (on-site):

Surface Parking:	247 spaces
Sector Office parking:	29 spaces
Handicapped Parking:	01 space

Current employee parking is adequate.

Environmental:

No known soil or groundwater contamination exists at the site.

B. FLEET ASSIGNMENT:

Parking Configuration:	In-Line, Tandem
Designed Capacity of Yard:	294 coaches
Current Storage Capacity:	235 Coaches
Maximum Capacity:	316 coaches
Size of current fleet:	192 standard 40-ft. coaches
Type of current fleet:	118 CNG fueled
	74 Diesel fueled

Potential for Fleet Increase:

Division 9 is currently below the original design capacity by 102 coaches. Sector and Division management report that the maintenance building is undersized relative to the yard capacity and cannot efficiently service a substantially higher amount of buses. Given that 16 bays are present in the maintenance building, and bus to bay efficiency ratios should be between 1:12 and 1:15, the Division should be able to maintain a fleet of between 200 and 250 coaches.

If desired, Division 9 could accept an increase of up to 50 additional buses. Although this Division is not located in an area of high forecasted ridership growth or Consent Decree violations, an increased fleet at this Division could be efficiently operated due to the presence of the El Monte Busway. Although current capacity needs are predominant in the South Bay and Westside/Central sectors, buses running lines in those sectors could be maintained out of Division 9 and "deadheaded" to the required service area on the busway. Please see Appendices A & B for further details regarding potential capacity increases.

The current CNG fueling capability is adequate to accommodate the present storage capacity of 235 buses.

Accommodation of Articulated Coaches:

It is anticipated that approximately 22 60-foot articulated coaches will be allocated to Division 9 during Fiscal Year 2008. To establish efficient operation and maintenance of the coaches the following minor modifications are required:

a. Pavement re-striping to create 65-foot long parking stalls. Re-striping will reduce the overall parking capacity at the yard;
b. Sealing of openings around the bellows of the existing vacuum system.
c. Installation of three-post hoists in some maintenance bays or use of additional portable hoists.

Please see Appendix C for further details regarding modifications required for operation of articulated coaches.

C. FACILITIES:

1. Transportation Building:

The Division 9 Transportation Building is a single-story structure of 6,480 sq. ft. The building is used for operator dispatch assignment, administrative functions and restroom/locker rooms. There exists a severe shortage of administrative and support function space. Renovation of operator related interior spaces is needed.

2. Maintenance Building:

The Division 9 Maintenance Building, a 19,330 s.f. structure built in 1986, is used for repair of buses, preventive maintenance, inspection and maintenance administrative offices. Inadequate administrative space hampers efficient operations. Insufficient overhead clearance in maintenance bays restricts efficient repair of CNG buses. Renovation of inspection/service pits is required. At a 1:19 ratio, sixteen maintenance bays are inadequate to service the 300 bus maximum capacity of the yard. It is recommended that the number of coaches assigned to the Division should not exceed 250 buses without expansion of the existing maintenance building.

D. *EQUIPMENT:*

1. Hoists: Installed at Division 9 Maintenance Bldg. are two 2-post axle hoists.

2. Underground Storage Tanks and Fueling:

The underground storage tank (UST) system was upgraded in 1988, however the majority of tanks require retrofitting of secondary containment systems to achieve compliance with State and Local regulations. Two issues regarding UST's should be noted:

- A design/build project is in process to upgrade twelve existing underground tanks as required by State and Federal regulations. Construction is scheduled to begin December, 2003.

3. The CNG system at Division 9 was installed in 2000 and consists of three compressor stations with a fueling capacity of 263 buses.

E. RECENT & CURRENT CAPITAL PROJECTS:

Several key Capital Projects are recently completed, currently in design or under construction at the Division. Projected completion dates are:

- Vacuum System Upgrade Project — September, 2003
- Division Lighting Program — October,2003
- Shop Renovation/Expansion — December,2003
- Air Conditioning System Modification — February, 2004
- In-Ground Hoist Replacement — April, 2004
- Reverse Osmosis System for Bus Washer — May, 2004
- Amenities Improvement Project — May, 2004
- Underground Tank Upgrade Project — May, 2004
- Division Network Communication Project — July, 2004
- Transportation Building/Sector Office — September, 2005

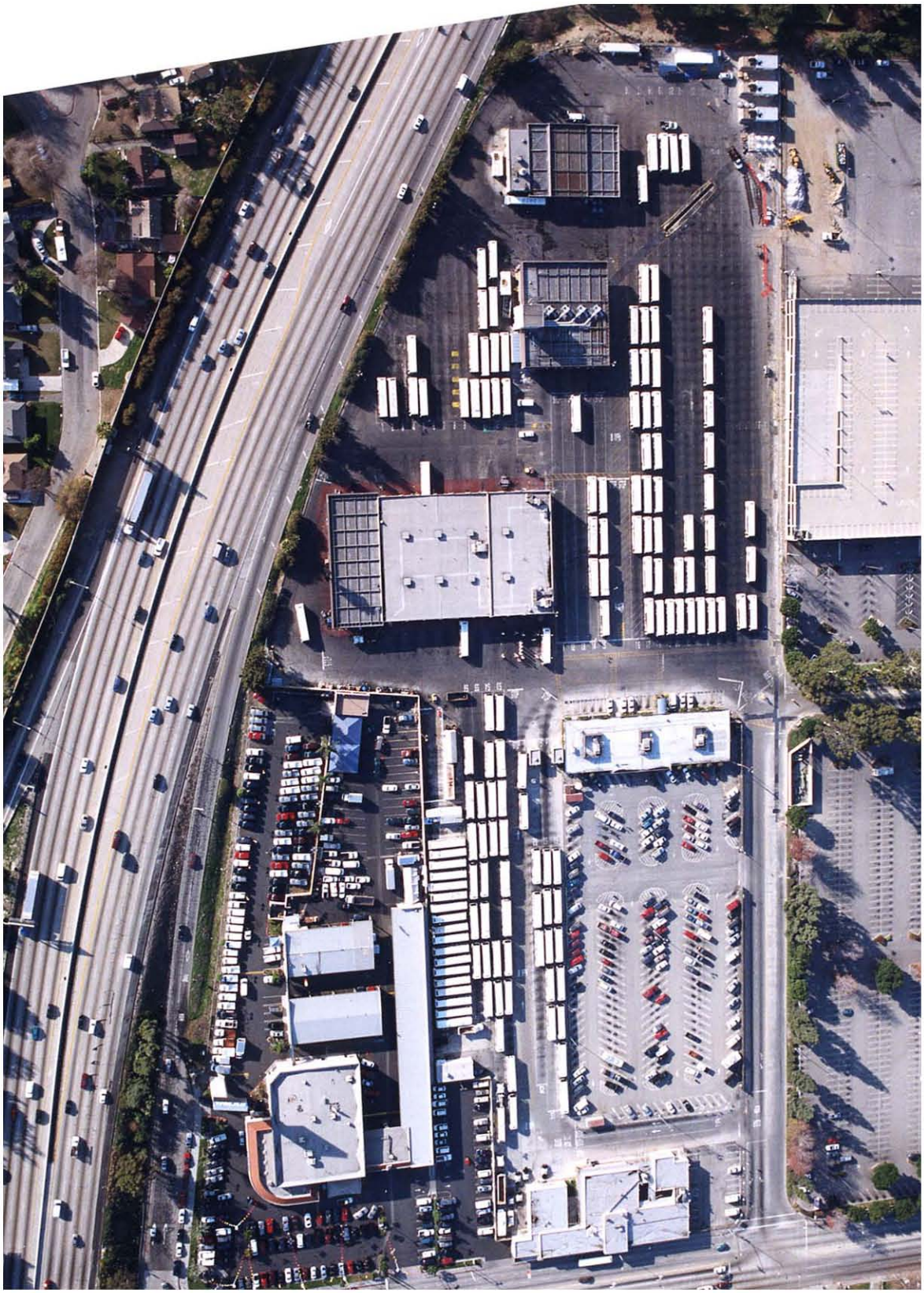
F. POTENTIAL FOR SITE EXPANSION:

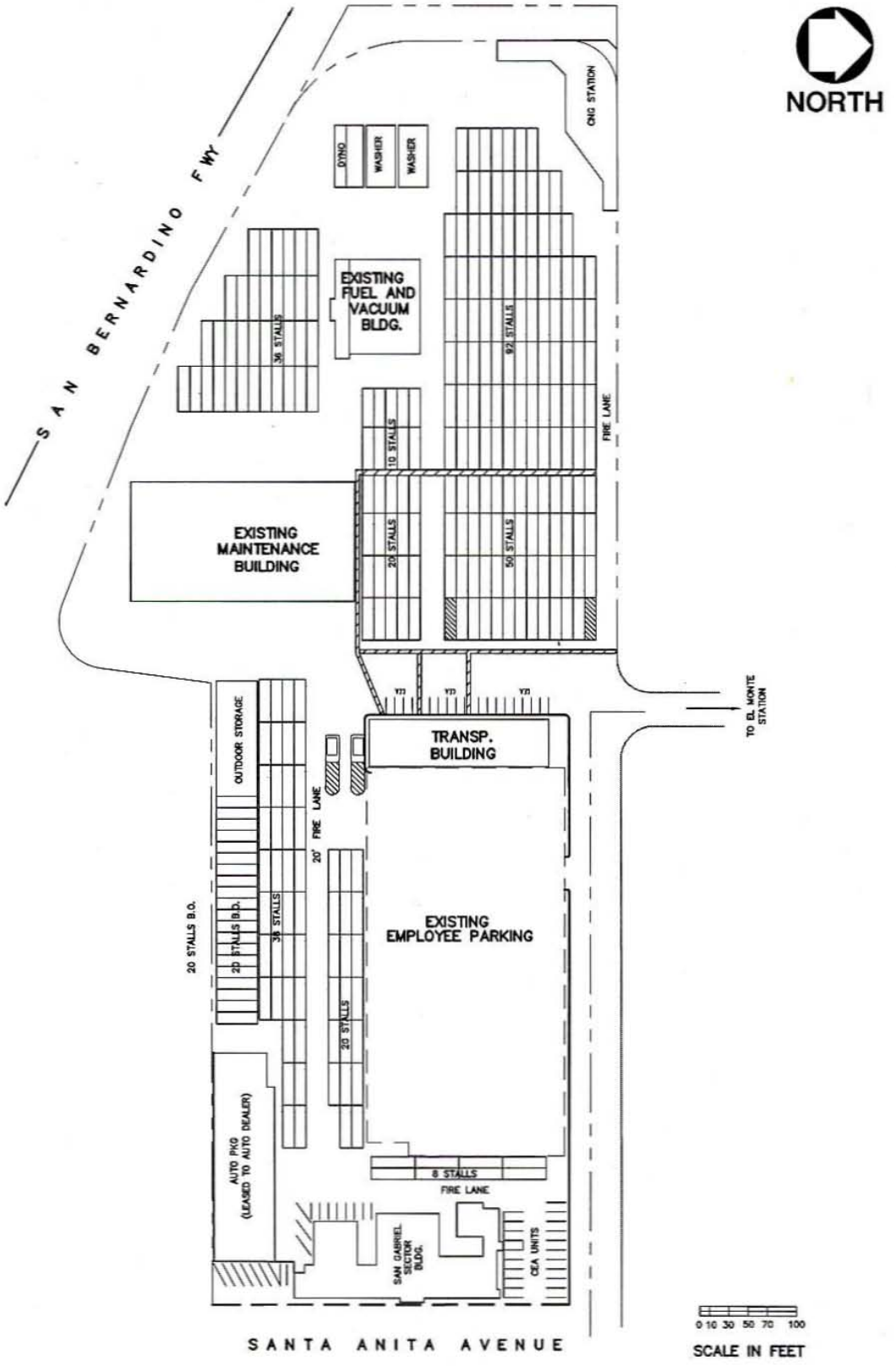
Since 2002, the MTA has been working with the City of El Monte, CalTrans, and a private developer on a large redevelopment project currently envisioned as the El Monte Transit Village. The majority of the proposed project is a commercial development to be spearheaded by the City of El Monte; however, the redevelopment project also includes a complete reconstruction of the Division 9 facilities as envisioned in the Division 9 Master Plan.

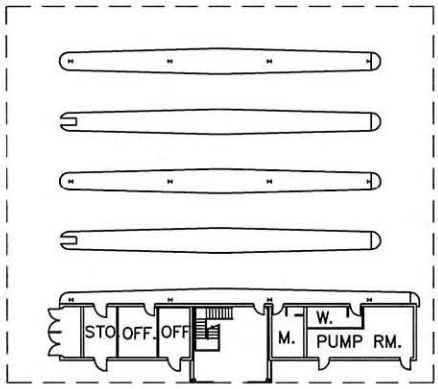
The Division 9 Master Plan portion of the El Monte Transit Village project includes demolition of the current maintenance building, transportation building, and other improvements (i.e. fueling, fare, wash, etc.), and construction of new maintenance and transportation facilities and appurtenances. Completion of this project would allow for an increase of approximately 50-75 coaches from the current storage capacity of 235. As the initial element of the Master Plan, design is in progress for a new Transportation Building at Division 9 that will house all normal transportation functions as well as Offices for the San Gabriel Valley Service Sector and quarters for the Los Angeles County Sheriff staff. Construction is projected to be complete in September of 2005.

Funding sources for completion of the El Monte Transit Village is currently unclear, but would likely come from private or City of El Monte sources. Approximately half of the funds required for construction of the Transportation Building have been secured through BOS, and additional BOS funding will be required in the short term to complete construction of the Transportation Building. No Metro funding is currently available for the Division reconstruction project in its entirety as envisioned in the Master Plan.

A summary of the Division 9 Master Plan project, including cost estimates, is included in the Long Range Facility Plan. However, due to the current below-capacity condition of the Division 9 facility, and other pressing facility needs in above-capacity divisions heavily impacted by the Consent Decree, the Division 9 Master Plan project is not currently a high priority for Metro funding.

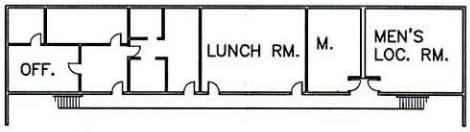



NORTH
SAN BERNARDINO FWY
CNG STATION
DYNO
WASHER
WASHER
EXISTING FUEL AND VACUUM BLDG.
36 STALLS
92 STALLS
FIRE LANE
10 STALLS
EXISTING MAINTENANCE BUILDING
20 STALLS
50 STALLS
TO EL MONTE STATION
TRANSP. BUILDING
OUTDOOR STORAGE
20' FIRE LANE
EXISTING EMPLOYEE PARKING
20 STALLS B.O.
20 STALLS B.O.
38 STALLS
20 STALLS
AUTO PKG (LEASED TO AUTO DEALER)
8 STALLS
FIRE LANE
SAN GABRIEL SECTOR BLDG.
CEA UNITS
SANTA ANITA AVENUE
0 10 30 50 70 100
SCALE IN FEET

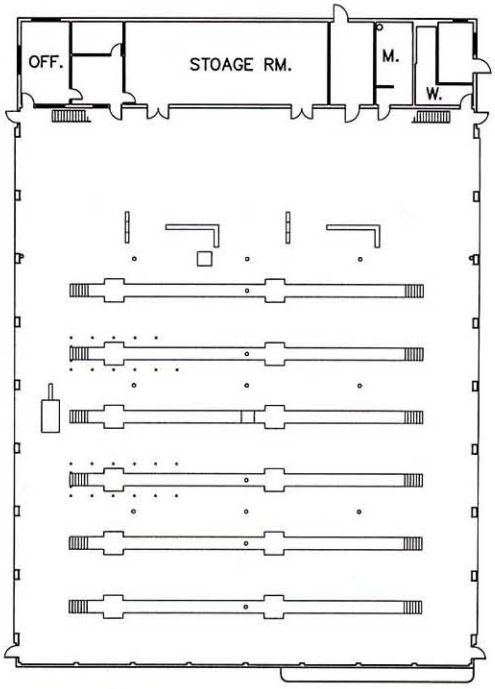


FUEL AND VACUUM
FACILITY PLAN

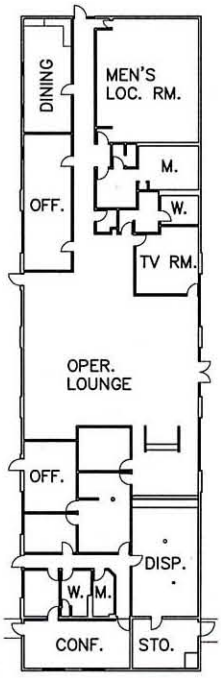
NORTH



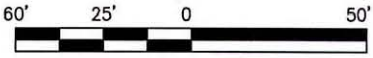
MAINTENANCE BLDG.
SECOND FLOOR PLAN



MAINTENANCE BLDG.
FIRST FLOOR PLAN



TRANSPORTATION BLDG.
FIRST FLOOR PLAN



SCALE : 1" = 50'-0"

Transportation Building

Maintenance Building

Main Approach to Transit Center & Yard

Main Yard Looking Toward Maintenance

Transit Center Parking Structure

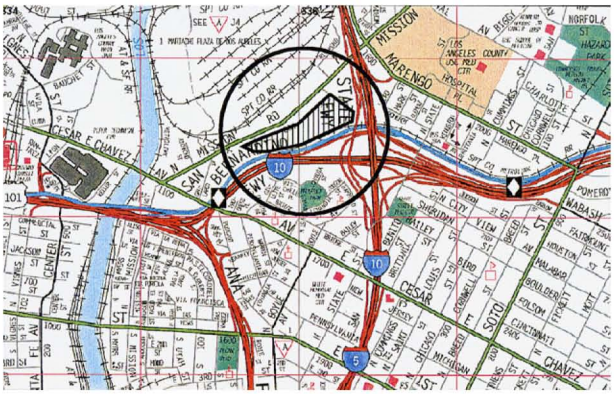
Low Ceiling in Maintenance Bays

Portable Hoists in Maintenance Repair

Transportation, Operator's Room

DIVISION 10

(Gateway Division)
742 North Mission Road
Los Angeles, CA



DIVISION SUMMARY

Division 10, among the most centrally located of MTA divisions, was built in 1984. The current fleet of 271 buses assigned to the Division exceeds the 259 coach storage capacity. Due to current over-capacity coach storage and the impending deployment of up to 100 articulated coaches associated with the Wilshire Boulevard BRT, expansion at the Division must be a high Agency priority.

The Wilshire BRT Project will acquire 100 60-ft single-articulated bus vehicles to operate on Wilshire Boulevard (Rte 720). These bus vehicles are planned to be operated and maintained out of Division 10. In order to accomplish this, the Wilshire BRT Project will upgrade and expand Division 10 to accommodate the additional 100 60-ft single-articulated bus vehicles. The Division 10 Expansion project includes acquisition of adjacent property, construction of a new transportation building, provision of additional coach parking, and extension of the existing maintenance building. Preliminary engineering is due to be completed in June 2004. The funding source for this Project is the State Transportation Congestion Relief Program (TCRP), which has been severely impacted by the recent State budget crises. Currently, it is expected that no TCRP dollars will be available for this project beyond FY04. Full implementation, which is currently funding and real estate driven, is expected to be complete in November 2008.

This Project has been cleared under State CEQA (EIR) and is currently being cleared under Federal NEPA requirements (Environmental Assessment) in order to allow this project to utilize Federal funds. The Project is expected to be federalized in late Spring 2004, at which time the actual acquisition of the real estate needed for expansion will begin. The MTA Board must locate the source of Federal funds as soon as possible to ensure completion of this project, which must be completed in order to accommodate the articulated buses.

The Division is scheduled to receive 90 articulated buses in FY06 and 40 in FY08. Modifications will be required prior to FY06 since articulated buses will be deployed for the Wilshire BRT prior to completion of the expansion project in 2008. If this is the case, modifications required will include repair of existing 3-post hoists, re-striping, and modifications to fuel/vacuum operation. This will enable the new 60-ft single-articulated bus vehicles to be maintained and operated out of Division 10, but because of parking capacity restrictions, Metro will need to shift as many as 135 regular coaches to other divisions to accommodate the articulated space requirements.

Current Capital Projects underway for Division 10 include In-Ground Bus Hoist Replacement and a Reverse Osmosis System for the Bus Washer.

DIVISION 10
742 North Mission Road
Los Angeles, California

A. SITE and YARD:

Division 10 is situated on a 20-acre site in East Los Angeles near the Los Angeles River channel. The facility is one of the most centrally located Divisions in the system. The Maintenance and Transportation buildings were constructed in 1984.

Surrounding Land Uses:

- North: Mission Road - Industrial Property
- South: Interstate 10 - Railway r/w
- East: Developed Property - Commercial Property
- West: San Vicente Blvd. - Commercial Property

Employee Parking (on-site):

Surface Parking:	293 spaces
Handicapped Parking:	2 spaces

Environmental:

Soil and groundwater contamination exists at the site as a result of the underground storage tank upgrade work in 1998. The contamination exists at two distinct locations, east of the maintenance storage shed and south of the fuel island. Metro is continuing to monitor and report to the Regional Water Quality Control Board on the quality of groundwater at the site. Natural attenuation and biodegradation of contaminants in groundwater is reported to be occurring.

B. FLEET ASSIGNMENT:

Parking Configuration:	In-Line, Tandem
Designed Capacity of Yard:	241 coaches
Current Storage Capacity:	259 coaches
Maximum Capacity:	276 coaches
Size of current fleet:	271 standard 40-ft. coaches
Type of current fleet:	250 CNG fueled
	21 Diesel fueled

Potential for Fleet Increase:

Division 10 is currently operating well above the current storage capacity of 259 coaches, and is inefficient due to space constraints and overcrowding. If absolutely necessary, the capacity of the present facility could be increased to a maximum of 276 coaches if additional parking stalls were striped and buses are parked within maintenance bays. This alternative is not preferred, as overcrowding and inherent inefficiencies would only get worse. Please see Appendices A & B for further details regarding potential capacity increases.

The current CNG fueling capability of 240 buses is not adequate to accommodate the present fleet of 250 CNG coaches. Modifications and enhancements to the CNG system will be required in the future as additional CNG buses are added to the Division 10 fleet.

As part of the Wilshire BRT project, preliminary engineering is nearing completion for an expansion of the Division. This expansion project is discussed in detail below.

Accommodation of Articulated Coaches:

It is anticipated that approximately 90 60-foot articulated coaches will be allocated to Division 10 during Fiscal Year 2006. To establish efficient operation and maintenance of the coaches the following minor modifications will be required:

a. Pavement re-striping to create 65-foot long parking stalls. Re-striping will reduce the overall parking capacity at the yard;
b. Sealing of openings around the bellows of the existing vacuum system.
c. Installation of 3-post hoists.

Please see Appendix C for further details regarding modifications required for operation of articulated coaches.

C. FACILITIES:

1. Transportation Building:

The Division 10 Transportation Building has a floor area of 13,340 s.f., and supports administrative functions, operator dispatch assignment, locker rooms, showers and recreation areas for operators during layover periods. There is a need for additional administrative space, renovation of office and restroom areas, expanded restroom and locker room space, and additional document storage space.

The transportation building is adequate for the current fleet size; however, any proposed fleet increases will adversely affect the adequacy of the building. Since it is likely that the Division 10 Expansion project and new transportation building will not be constructed by the time the articulated coaches arrive (FY06), Service Planning and Sector personnel must evaluate the possibility that other 40-foot buses will need to be moved to another division to make room for the 60-foot articulated buses. The current

transportation building cannot support an increase in operators, supervisors, and administrative staff.

2. Maintenance Building:

The Maintenance Building at Division 10 has a 32,790 square foot ground floor with a 9,120 square foot mezzanine. The building is used for repair of buses, preventive maintenance, inspection, and maintenance administrative offices. With a 1:15 bus to bay ratio, the 18 existing maintenance bays are barely sufficient for the current fleet size. Any increases to the fleet size will adversely affect the efficiency of the maintenance activities, as there will not be enough bays to service the additional buses. If increases to the fleet at Division 10 are planned, the maintenance building will require expansion.

D. *EQUIPMENT:*

1. Hoists: Installed at Division 10 Maintenance Bldg. are five 2-post axle hoists, five 3-post axle hoists, and three platform hoists. All hoists are leaking, and four hoists are currently not operating. Replacement of hoists is a priority to increase efficiency of maintenance.

2. Underground Storage Tanks and Fueling:

The underground storage tank (UST) system was upgraded in 1998, and all tanks except the solvent tank are currently compliant with State and Local regulations. One issue regarding UST's is currently present:

- The 2,000 gal. solvent tank at the Division is currently out of compliance because underground storage of solvent is no longer required. This tank should be removed.

3. The CNG system at Division 10 was installed in 2000 and consists of four compressor stations with a fueling capacity of 240 buses. Modifications and enhancements to the CNG system will be required in the future as additional CNG buses are added to the Division 10 fleet.

E. RECENT & CURRENT CAPITAL PROJECTS:

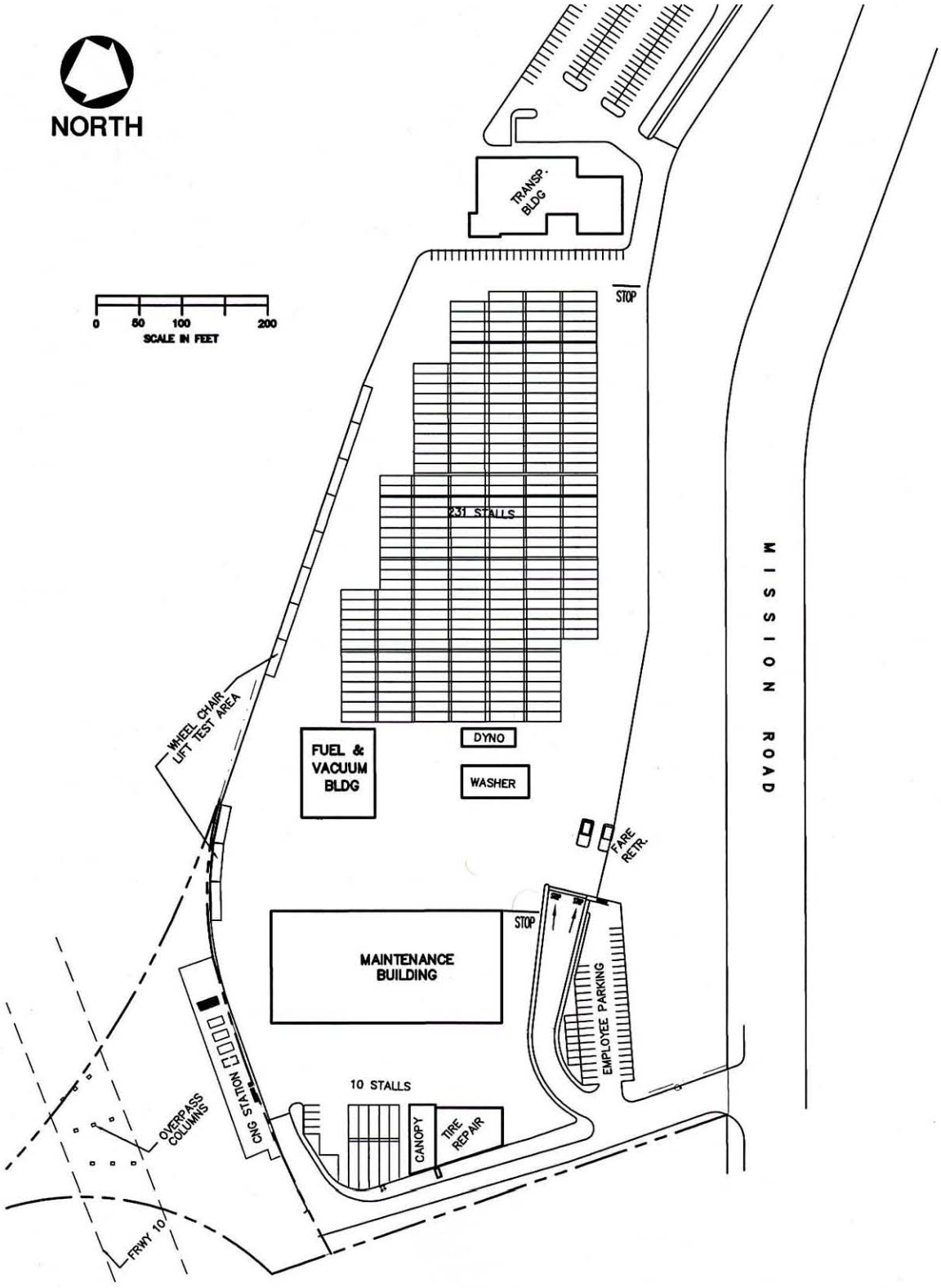
Several key Capital Projects are recently completed, currently in design or under construction at the Division. Completion dates are:

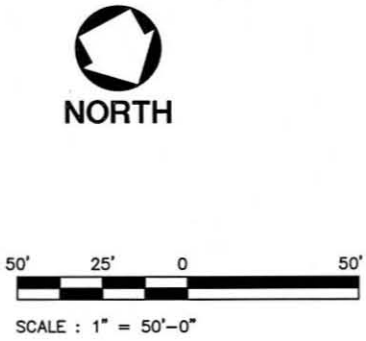
• Vacuum System Upgrade Project	September, 2003
• Replace Emergency Generators	October, 2003
• Bus Exhaust Extraction System	January, 2004
• In-Ground Bus Hoist Replacement	April, 2004
• Reverse Osmosis System for Bus Washer	May, 2004
• Division 10 Expansion (Wilshire BRT)	Need funds ASAP

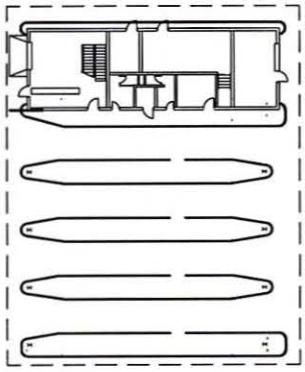
F. POTENTIAL FOR SITE EXPANSION:

The Wilshire BRT Project will acquire 100 60-ft single-articulated bus vehicles to operate on Wilshire Boulevard (Rte 720). These bus vehicles are planned to be operated and maintained out of Division 10. In order to accomplish this, the Wilshire BRT Project will upgrade and expand Division 10 to accommodate the additional 100 60-ft single-articulated bus vehicles. The Division 10 Expansion project includes acquisition of adjacent property, construction of a new transportation building, provision of additional coach parking, and extension of the existing maintenance building. Preliminary engineering is due to be completed in June 2004. The funding source for this Project is the State Transportation Congestion Relief Program (TCRP), which has been severely impacted by the recent State budget crises. Currently, it is expected that no TCRP dollars will be available for this project beyond FY04. Full implementation, which is currently funding and real estate driven, is expected to be complete in November 2008 (if replacement funding is located).

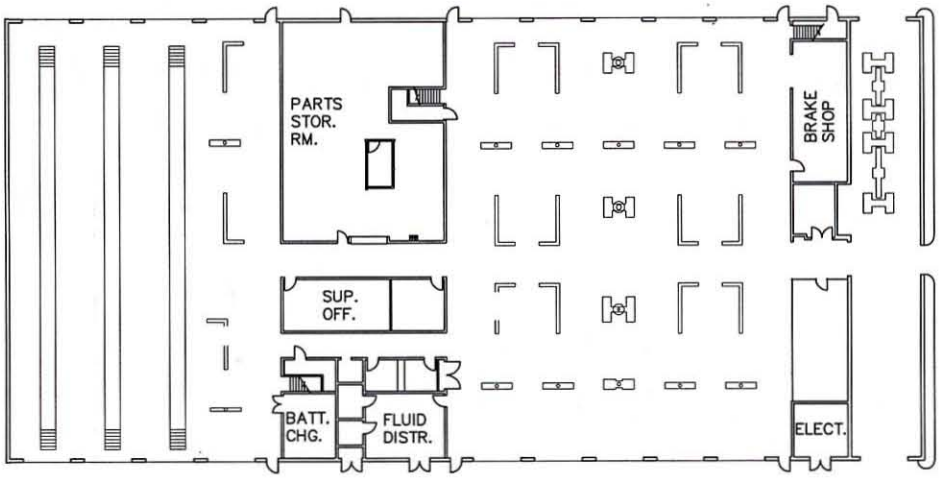
This Project has been cleared under State CEQA (EIR) and is currently being cleared under Federal NEPA requirements (Environmental Assessment) in order to allow this project to utilize Federal funds. The Project is expected to be federalized in late Spring 2004, at which time the actual acquisition of the real estate needed for expansion will begin. The MTA Board must locate and commit to the source of Federal funds as soon as possible to ensure completion of this project, which must be completed in order to accommodate the articulated buses. For this reason, the Division 10 Expansion project is included in the Long Range Facilities Plan as Metro's #1 priority facility expansion project.


NORTH
0 50 100 200
SCALE IN FEET
TRANSP. BLDG
STOP
231 STALLS
MISSION ROAD
WHEEL CHAIR LIFT TEST AREA
FUEL & VACUUM BLDG
DYNO
WASHER
FARE RETR.
STOP
MAINTENANCE BUILDING
EMPLOYEE PARKING
CNG STATION
10 STALLS
CANOPY
TIRE REPAIR
OVERPASS COLUMNS
FRWY 10

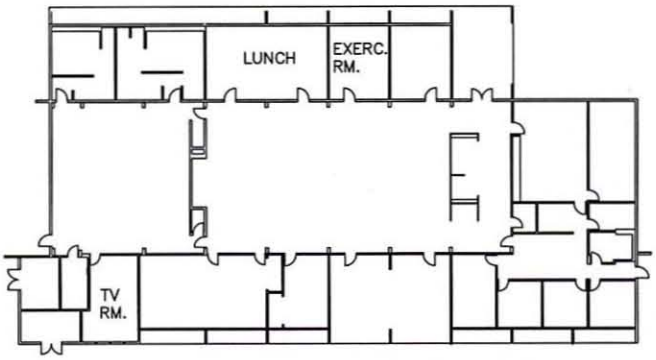




FUEL AND VACUUM
FACILITY PLAN



MAINTENANCE BLDG.
FIRST FLOOR PLAN



TRANSPORTATION BLDG.
FIRST FLOOR PLAN

Transportation Building, South End

Main Yard, Looking North

Maintenance Bays

Maintenance Building, South End

Maintenance Employee Parking

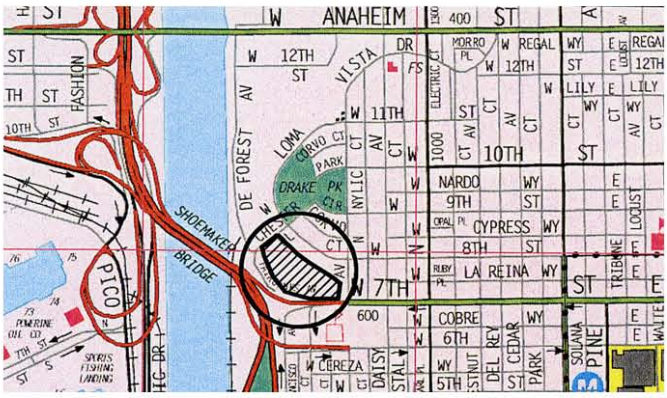
Lot Across Mission Road at Div. 10 Entry

Transportation Building General Office

Transportation Building, Restroom

DIVISION 12

970 West Chester Place
Long Beach, CA



DIVISION SUMMARY

Due to excessive deadhead costs and lack of CNG fueling capabilities, Division 12, located in Long Beach, California is currently out of service. With a capacity for 130 diesel buses, the Division is now used for storage of excess buses, parts, and other surplus material. Metro does not intend to reactivate the Division. The City of Long Beach has been working with Metro Real Estate to negotiate a sale price for the property. A proposal for sale of the property to the City will be submitted for Metro Board approval in early 2004. Upon disposal of the property, Metro will need to accelerate sale at auction of surplus buses and to also identify an alternate location for surplus storage.

No further improvements are currently planned for Division 12. A general property description, aerial photograph and plot plan are included for reference.

DIVISION 12

970 West Chester Place
Long Beach, California

A. SITE and YARD:

Located near downtown Long Beach, the 6.6 acre site of Division 12 is currently a storage facility for retired buses and other surplus items prior to auction. The Division was built in 1965, remodeled in the mid-1980's and closed as an operating facility approximately 10 years ago. Coaches stored here are used either for parts or are prepared for auction to outside transit companies.

Surrounding Land Uses:

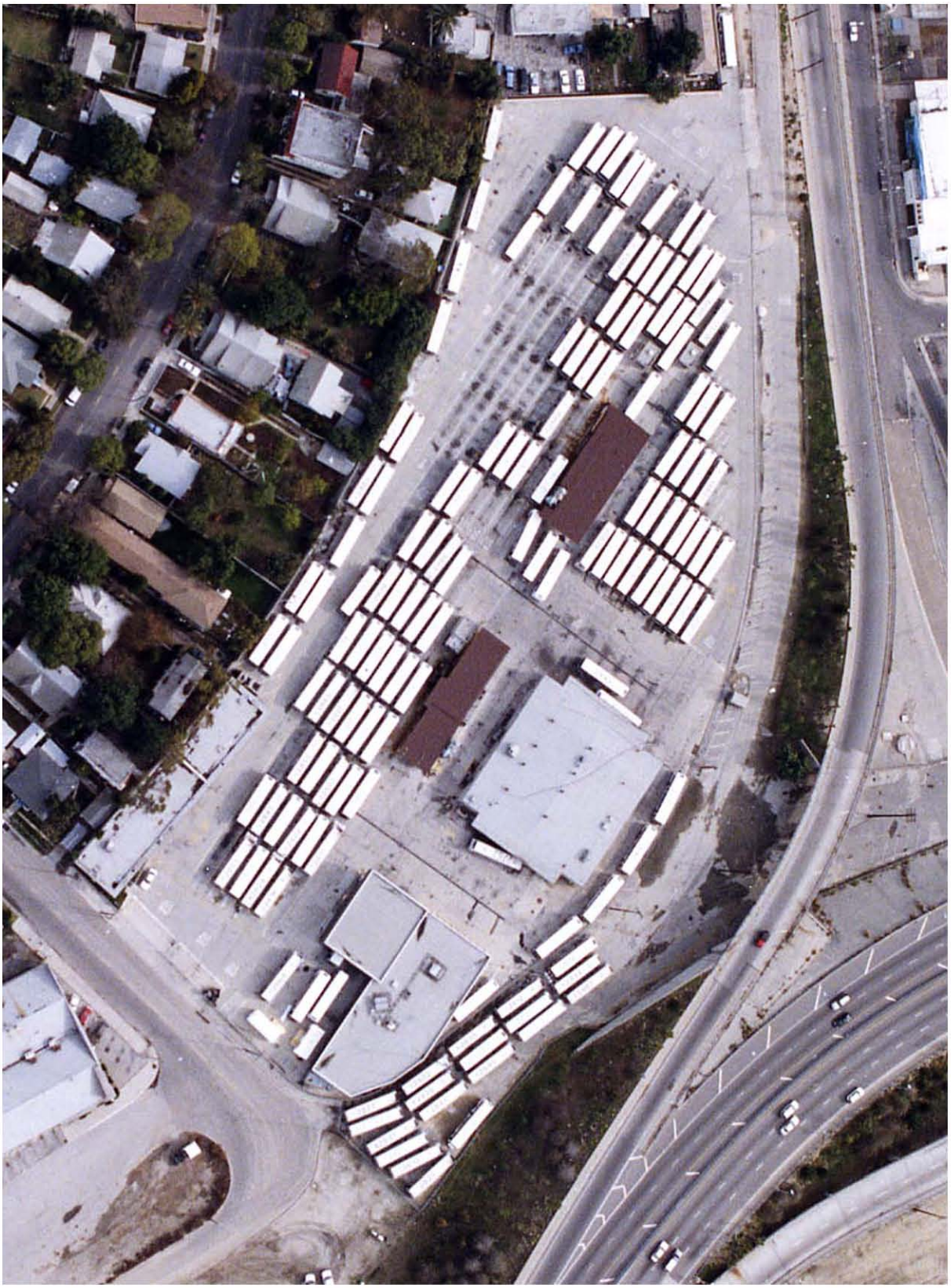
- North: West 8th Street - Residential Property
- South: - Interstate 710 Fwy. Transition Road
- East: Vista Drive - Residential Property
- West: Chester Place - Chester Place

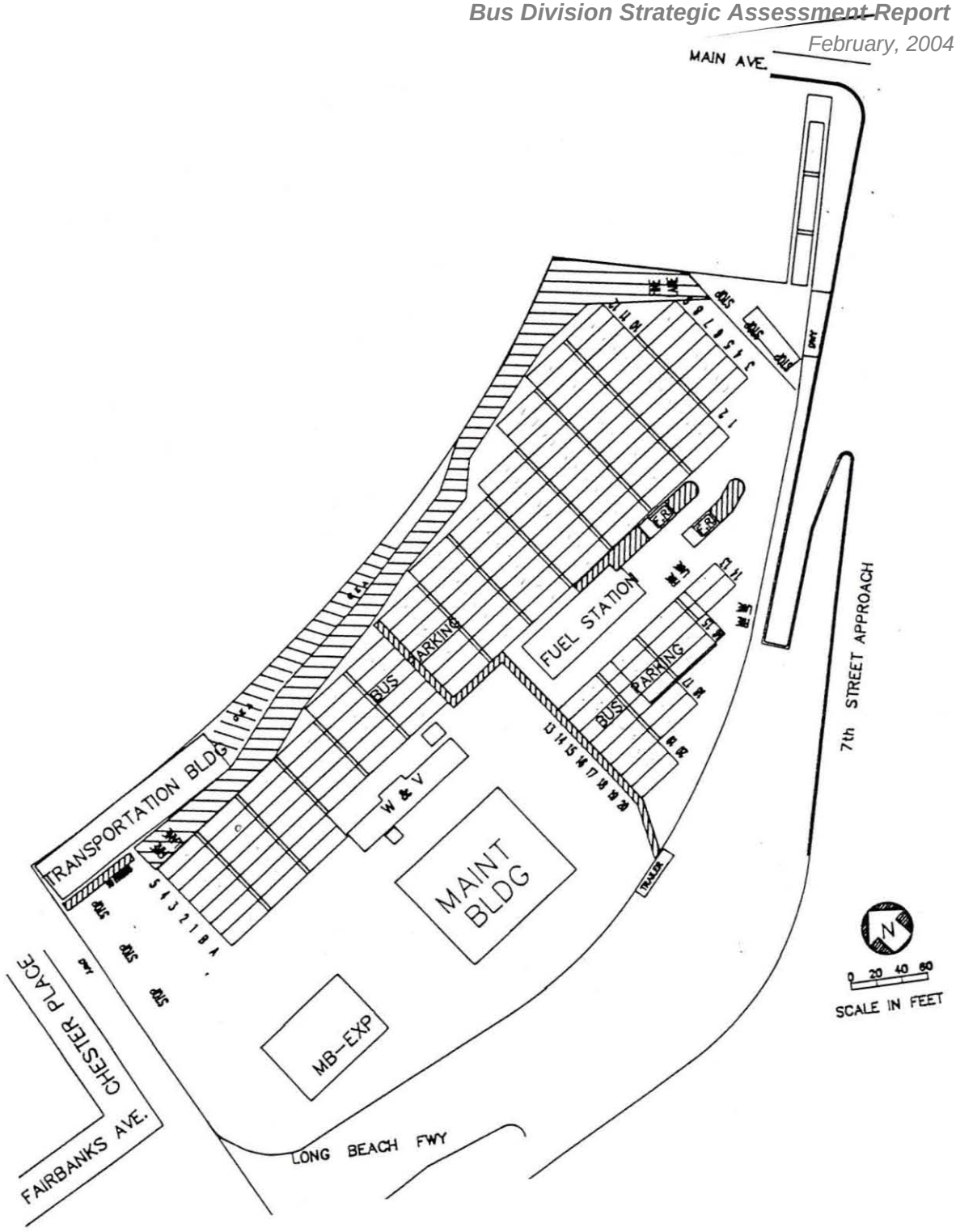
Employee Parking:

Formerly, on-site:	110 spaces
Handicapped Parking:	00 spaces

B. FLEET ASSIGNMENT:

Parking Configuration:	In-Line, Tandem
Designed Capacity of Yard:	170 coaches
Maximum Capacity:	170 coaches
Size of current fleet:	0 coaches




MAIN AVE.
7th STREET APPROACH
TRANSPORTATION BLDG
BUS PARKING
FUEL STATION
BUS PARKING
W & V
MAINT BLDG
MB-EXP
CHESTER PLACE
FAIRBANKS AVE.
LONG BEACH FWY
SCALE IN FEET

DIVISION 15

(East Valley Division)
11900 Branford Street
Sun Valley, CA

DIVISION SUMMARY

Division 15, located in Sun Valley, primarily serves San Fernando Valley bus routes. The Division has a design capacity of 228 and a current fleet of 245. Over time, the Division has been striped for as many as 266 coaches, so space is available for new coaches. Expansion of the Division is not required. To satisfy any future fleet increase, an area at the north end of the site, now used for Spare Storage, could be re-striped for additional bus parking, relocating bus storage to another MTA location. MTA plans for sale of Division 12 might, however, suggest an alternate need for the storage area . Addition space available at Division 8 in the West Valley enhances flexibility of the San Fernando Valley Service Sector facilities.

Division 15 will be receiving eleven articulated coaches in FY05 related to the San Fernando Valley Rapidway. The Division is currently equipped to maintain articulated coaches; however, re-striping and minor modifications to the Division such as retrofitting of the fuel and vacuum operation will be required. These modifications will be conducted by Facilities prior to deployment of the coaches.

Current Capital Projects for Division 15 include In-Ground Bus Hoist Replacement, Reverse Osmosis System for Bus Washer, the Division Remodel/Upgrade, and the Division Lighting Program.

DIVISION 15
11900 Branford Street
Sun Valley, CA

A. SITE and YARD:

Division 15 is located in the Northeastern San Fernando Valley in Sun Valley. It is a 21.6 acre site completed in 1982 and located in an industrial area. The Division serves various valley bus routes.

Surrounding Land Uses:

- North: Branford Street - Commercial Property
- South: Tujunga Wash - Flood Control
- East: Hansen Dam Recreation - Flood Channel
- West: Glenoaks Blvd. - Commercial Property

Employee Parking (on-site):

Surface Parking:	209 spaces
Handicapped Parking:	4 spaces

Environmental:

Minor soil contamination exists at the site. Groundwater is not impacted at Division 15. Environmental completed and submitted a Phase II site assessment report to the LA City Fire Dept. Pending closure notice from the LAFD

B. FLEET ASSIGNMENT:

Parking Configuration:	Herringbone
Designed Capacity of Yard:	266 coaches
Maximum Capacity:	278 coaches
Size of current fleet:	245 standard 40-ft. coaches
Type of current fleet:	195 CNG fueled
	50 Diesel fueled

Potential for Fleet Increase:

The San Fernando Valley East/West Transit Corridor has very minimal funds set aside to accommodate articulated buses. Division 15 is projected to have sufficient capacity after minimal alterations to satisfy the demand for space for additional articulated buses and equipment.

Accommodation of Articulated Coaches:

It is anticipated that approximately 15 60-foot articulated coaches will be allocated to Division 15 during Fiscal Year 2005. To establish efficient operation and maintenance of the coaches the following minor modifications will be required:

a. Approximately 40 parking stalls are available for articulated buses. Yard re-striping will be required to accommodate a greater number.
b. Sealing of openings around the bellows of the existing vacuum system.
c. Installation of an additional 3-post in-ground hoist in a service bay.

Please see Appendix C for further details on required modifications for operation of articulated coaches.

C. FACILITIES:

1. Transportation Building:

The Transportation Building, 113,530 s.f., was completed in 1982 and continues to meet operator and administrative requirements. Document storage is limited and the locker-restroom facilities need renovation. These projects can be completed through the Capital Project process.

2. Maintenance Building:

The Maintenance Building is a 34,790 s.f. structure, also built in 1982. The interior lighting system in the shop and existing hoists need replacement. Restrooms facilities are now 20 years old and need renovations. There are several breaks in the coating and surfacing of the bus repair bays which need repair. The existing bus chassis washer needs replacement. These renovations can be accomplished through the Capital Project process. At a ratio of 1/12.5, twenty-two maintenance bays can quite adequately service a 278 bus maximum yard capacity.

D. *EQUIPMENT:*

1. Hoists: Installed at Division 15 Maintenance Building and Tire Shop are eleven 2-post axle hoists, one 3-post axle hoist and seven platform hoists. Of eight portable hoists, two are currently not operating.

2. Underground Storage Tanks and Fueling:

The underground storage tank (UST) system was upgraded in 1988, and all tanks except the solvent tank are currently compliant with State and Local regulations. Two issues regarding UST's are currently present:

- The Division is equipped with 5 underground tanks for bulk storage of 120,500 gallons of diesel fuel. State law requires legal abandonment or removal of tanks

that are unused for more than one year. Unless division stores personnel coordinate closely to ensure that all tanks are used at least once per year, excess tanks must be removed.

- The 2,000 gal. solvent tank at the Division is currently out of compliance because underground storage of solvent is no longer required. This tank should be removed.

3. The CNG system at Division 15 was installed in 2000 and consists of three compressor stations with a fueling capacity of 284 buses.

E. RECENT & CURRENT CAPITAL PROJECTS:

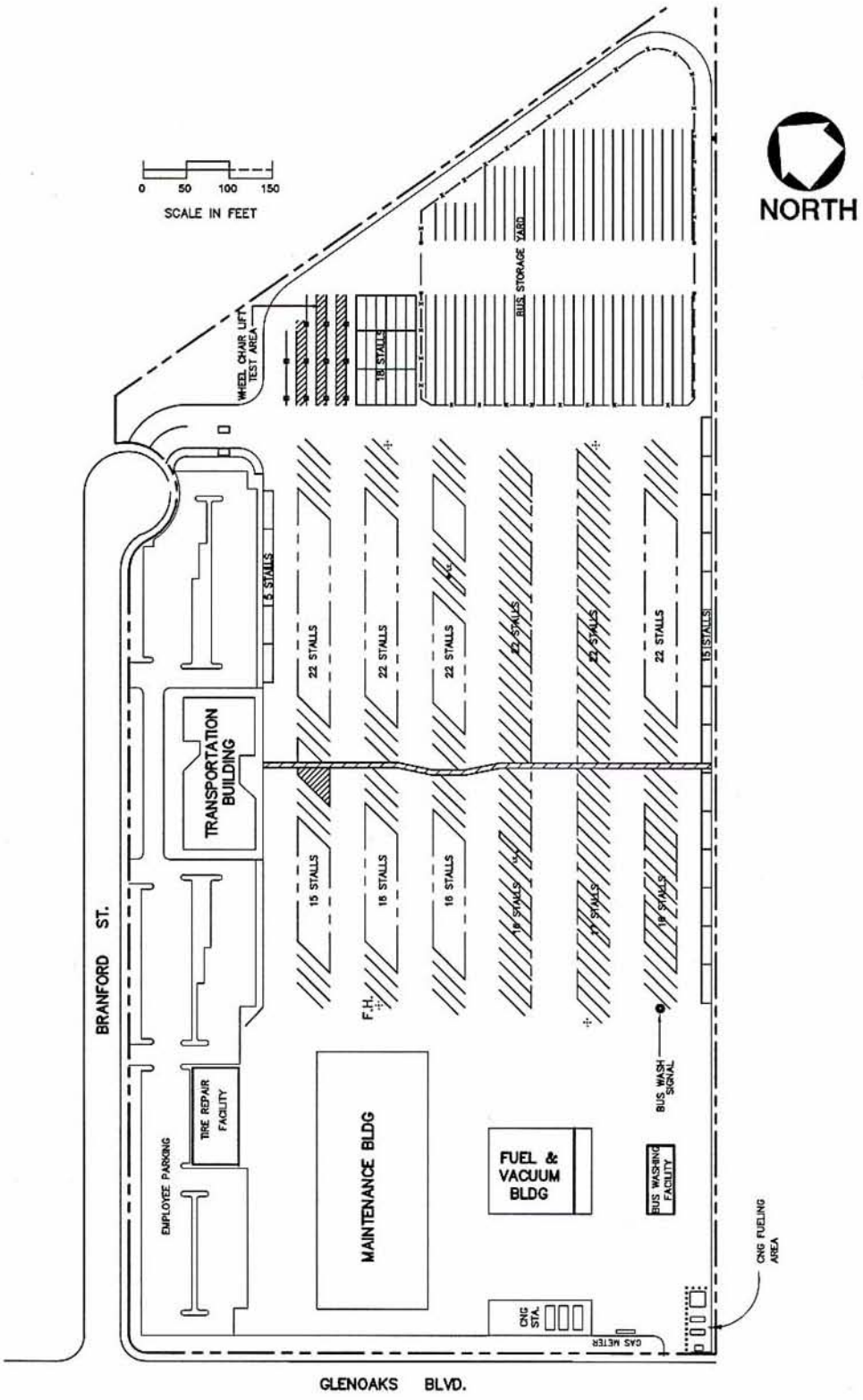
Several key Capital Projects are recently completed, currently in design or under construction at the Division. Completion dates are:

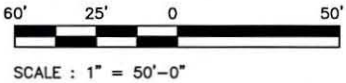
- Vacuum System Upgrade Project — September, 2003
- In-Ground Bus Hoist Replacement — April, 2004
- Reverse Osmosis System for Bus Washer — May, 2004
- Division Remodel/Upgrade — May, 2004
- Division Network Communication — July, 2004
- Division Lighting Program — December, 2004

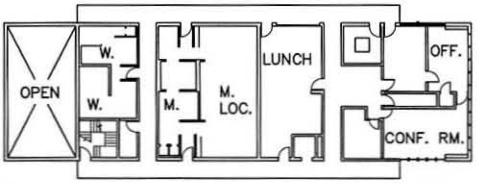
Design is pending for upgrade of the Division 15 Chassis Washer.

F. POTENTIAL FOR SITE EXPANSION:

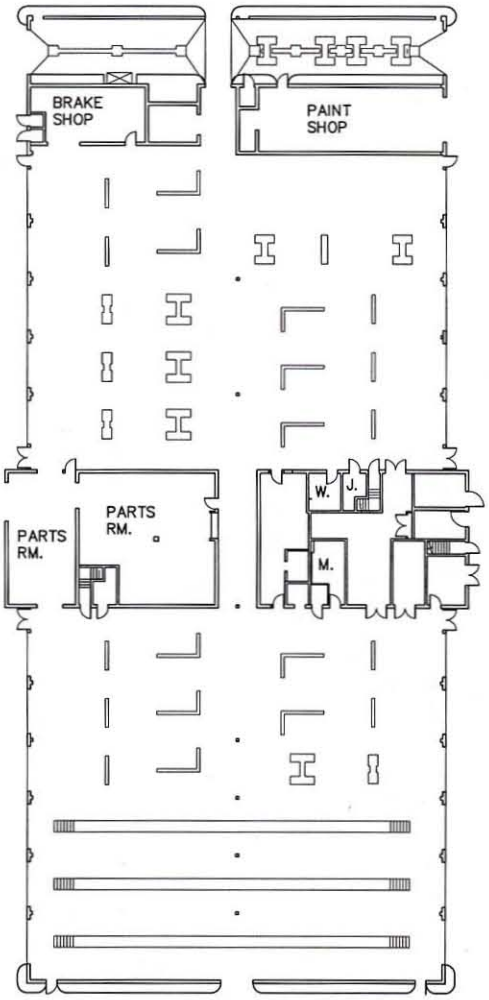
Pending completion of FY04 Capital Projects in progress, the existing site, structures and equipment at Division 15 are adequate to accommodate and service current and foreseeable MTA fleet assignments.


0 50 100 150
SCALE IN FEET
NORTH
WHEEL CHAIR LIFT TEST AREA
18 STALLS
BUS STORAGE YARD
15 STALLS
22 STALLS
22 STALLS
22 STALLS
22 STALLS
22 STALLS
15 STALLS
TRANSPORTATION BUILDING
15 STALLS
15 STALLS
16 STALLS
18 STALLS
18 STALLS
18 STALLS
F.H.
BRANFORD ST.
EMPLOYEE PARKING
TIRE REPAIR FACILITY
MAINTENANCE BLDG
FUEL & VACUUM BLDG
BUS WASH SIGNAL
BUS WASHING FACILITY
CNG FUELING AREA
CNG STA.
GAS METER
GLENOAKS BLVD.

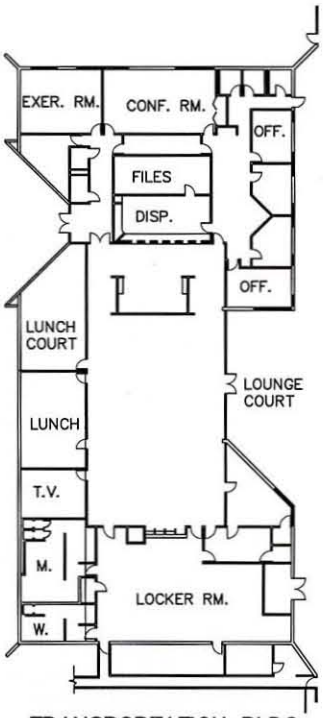




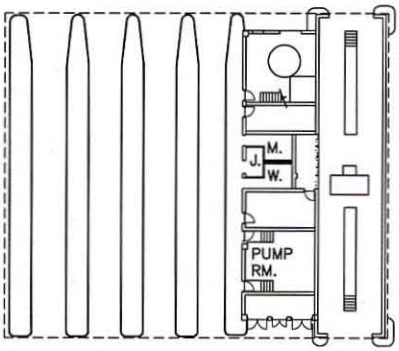
MAINTENANCE BLDG.
SECOND FLOOR PLAN



MAINTENANCE BLDG.
FIRST FLOOR PLAN



TRANSPORTATION BLDG.
FIRST FLOOR PLAN



FUEL AND VACUUM
FACILITY PLAN

Transportation Building

Maintenance Building

Transportation Employee Parking

Main Yard

Bus Storage Lot at Div. 15 Yard

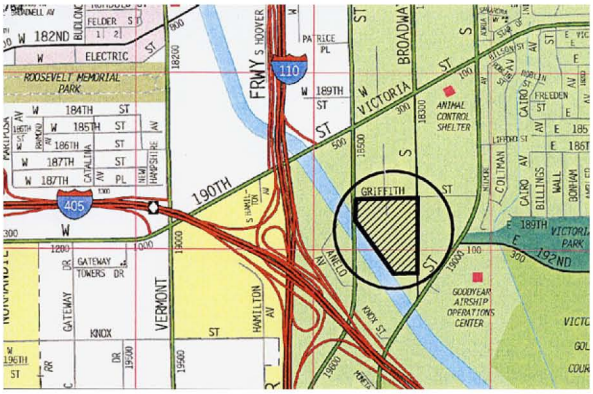
Maintenance Fuel Island

Existing Hoists

Existing Repair Bay Lighting

DIVISION 18

(South Bay Division)
450 West Griffith Street
Carson, CA



DIVISION SUMMARY

Division 18, located in Carson, California was built in 1984 and serves primarily South Bay bus routes. The design capacity of the Division is 268 and the current fleet is 284 coaches. Ridership is forecast to increase in the South Bay and it is likely that expansion or increase in capacity at this Division will be necessary in the future. Expansion could be achieved by acquiring the triangular parcel immediately south of the Division which is currently used as a truck storage yard. This expansion could net an increase of approximately 50 coaches. Employee parking at the Division is also over capacity. Construction of a parking garage in the current employee parking area, or acquisition of a vacant parcel for surface parking east of the maintenance building could provide additional on-site parking. Funding for expansion activities is not available until FY09, and this expansion option has not been studied in detail.

Division 18 is scheduled to receive 15 articulated coaches in FY06 and 47 in FY07. Modifications which will be required include re-striping and minor modification to the fuel and vacuum operation. Funding for an additional bus washer, required due to the increase of fleet size, is included in the FY05 budget.

Current Capital Projects underway at Division 18 include Air Conditioning refurbishment, Reverse-osmosis system for Bus Washers, In-Ground Bus Hoist Replacement, installation of Safety Cables, and the Division Lighting Program.

DIVISION 18
450 West Griffith Ave.
Carson, CA

A. SITE and YARD:

Located in the City of Carson, Division 18 is Metro's only South Bay Operating Division. The facility is situated in an industrial area on 15.3 acres near the 405 Freeway. The Division was built in 1984. A vicinity map, plot plan, and aerial photograph showing the division follow below.

Surrounding Land Uses:

- North: Griffith Street - Commercial Property
- South: Figueroa Street - Commercial Property, Flood Control Channel
- East: Broadway Street - Commercial Property
- West: Flood Control Channel

Employee Parking (on-site):

Parking Structure, on-site:	301 spaces
Handicapped Parking:	10 spaces

Environmental:

Soil and groundwater contamination exist at the site as a result of underground storage tank replacement work in 1998. Soil samples taken at the site indicated the presence of VOCs, gasoline and diesel contaminants. Groundwater samples indicate the presence of different VOCs than those found in the soil samples, suggesting that the contamination may have originated from an offsite location. Groundwater at the site ranges from 18.1 feet below grade to 20 feet below grade. Based on the presence of low concentrations of contaminants in the soil, and no correlation of the soil to the groundwater contaminants, Environmental has requested for a "no further action" from the RWQCB. The decision is still pending at the RWQCB.

B. FLEET ASSIGNMENT:

Parking Configuration:	In-Line, Tandem
Designed Capacity of Yard:	268 coaches
Current Storage Capacity:	280 coaches
Maximum Capacity:	335 coaches
Size of current fleet:	284 standard 40-ft. coaches
Type of current fleet:	260 CNG fueled
	24 Diesel fueled

Potential for Fleet Increase:

Division 18 is currently operating above the current storage capacity of 280 coaches, and is inefficient due to space constraints and overcrowding. If absolutely necessary, the capacity of the present facility could be increased to a maximum of 335 coaches if additional parking stalls were striped and buses are parked within maintenance bays. This alternative is not preferred, as overcrowding and inherent inefficiencies would only get worse. Please see Appendices A & B for further details regarding potential capacity increases.

The current CNG fueling capability of 240 buses is not adequate to accommodate the present fleet of 260 CNG coaches. Modifications and enhancements to the CNG system will be required in the future as additional CNG buses are added to the Division 18 fleet. Funding for enhancements to the CNG system is not available until FY08.

Funding for expansion of the division via property acquisition and construction of a parking structure is available in FY09. This proposed project is discussed in more detail below.

Accommodation of Articulated Coaches:

It is anticipated that approximately 15 60-foot articulated coaches will be allocated to Division 18 during Fiscal Year 2007 and 46 coaches during FY 2008. To establish efficient operation and maintenance of the coaches the following minor modifications will be required:

a. Pavement re-striping to create 65-foot long parking stalls. Re-striping will reduce the overall parking capacity at the yard;
b. Sealing of openings around the bellows of the existing vacuum system.

Please see Appendix C for further details on modifications required for operation of articulated coaches.

C. FACILITIES:

1. Transportation Building:

The Division 18 Transportation Building is a 13,530 square foot structure, and supports administrative functions, operator dispatch assignment, locker rooms, showers and recreation areas for operators during layover periods. There is a need for additional administrative space, renovation of office and restroom areas, and expanded restroom and locker room space. If the Division 18 fleet size were increased, the associated increase in operators would require additional administrative space, locker rooms, and restroom facilities. A capital request has been submitted to develop additional employee parking. Funding for this project is not available until FY09.

2. Maintenance Building:

The Division 18 Maintenance Building includes a 34,790 square foot first floor and a 9,310 square foot mezzanine. The building is used for repair of buses, preventive maintenance, inspection, and maintenance administrative offices. With a 1:16 bus to bay ratio, the 18 existing maintenance bays are not sufficient for the current fleet size. Any increases to the fleet size will adversely affect the efficiency of the maintenance activities, as there will not be enough bays to service the additional buses. If increases to the fleet at Division 18 are planned, the maintenance building will require expansion.

D. ***EQUIPMENT:***

1. Hoists: Installed at Division 18 Maintenance Bldg. are two 2-post axle hoists, three 3-post axle hoists, five platform hoists, and thirty-one portable hoists. Two hoists are currently not operating and three others are not fully functional. Replacement of hoists is a priority to increase efficiency of maintenance. Several hoists are currently scheduled for replacement.

2. Underground Storage Tanks and Fueling:

The underground storage tank (UST) system was upgraded in 1998, and all tanks except the solvent tank are currently compliant with State and Local regulations. Two issues regarding UST's are currently present:

- The Division is equipped with three tanks for bulk storage of 60,500 gallons of diesel fuel. State law requires legal abandonment or removal of tanks that are unused for more than one year. Unless division stores personnel coordinate closely to ensure that all tanks are used at least once per year, excess tanks must be removed.

- The 2,000 gal. solvent tank at the Division is currently out of compliance because underground storage of solvent is no longer required. This tank should be removed.

3. The CNG System at Division 18 was installed in 2000 and consists of four compressor stations with a fueling capacity of 240 buses. Modifications and enhancements to the CNG system will be required in the future as additional CNG buses are added to the Division 18 fleet. Funding for these enhancements is available in FY08.

E. RECENT & CURRENT CAPITAL PROJECTS:

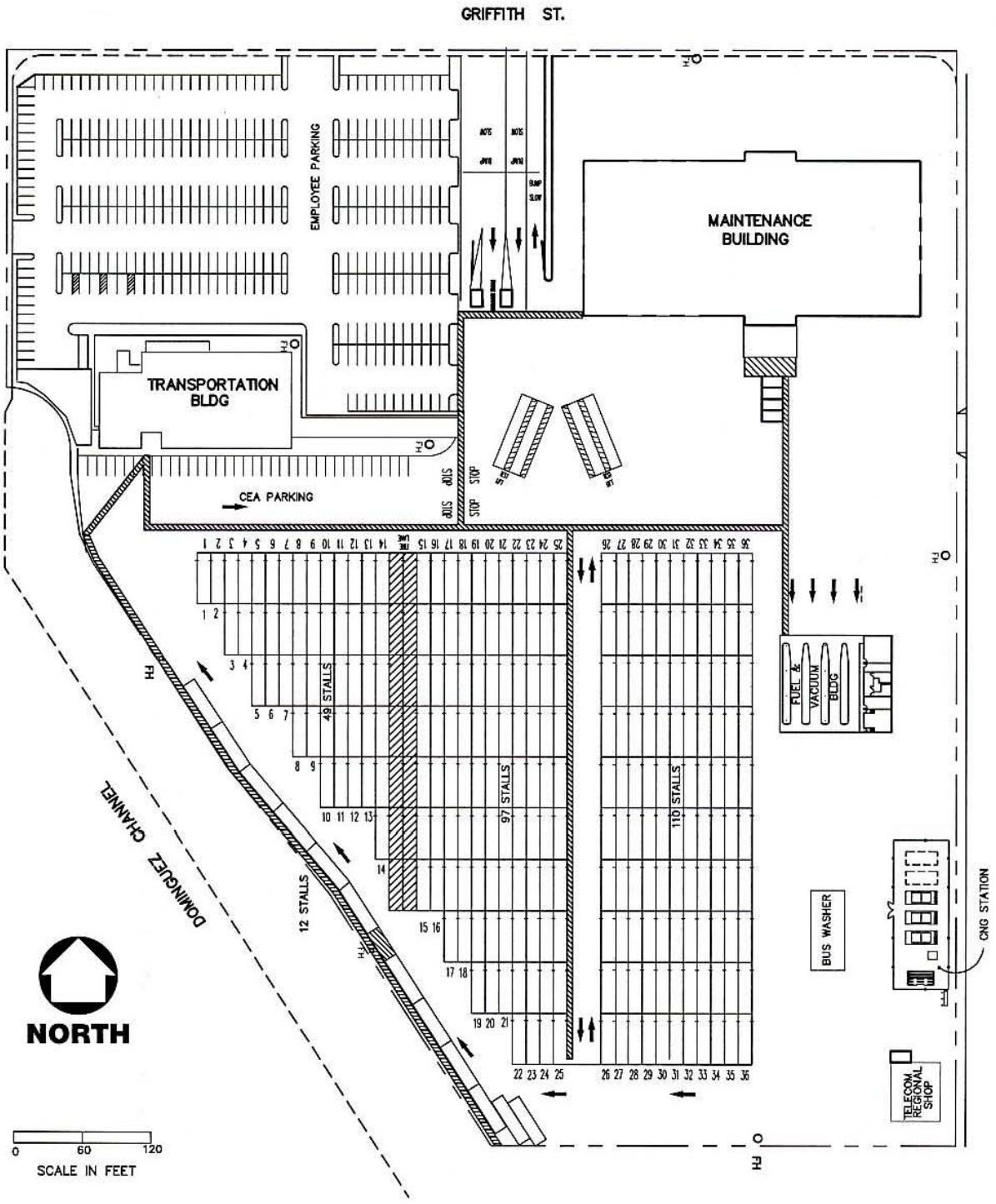
Several key Capital Projects are currently in design or under construction at the Division. Anticipated completion dates are:

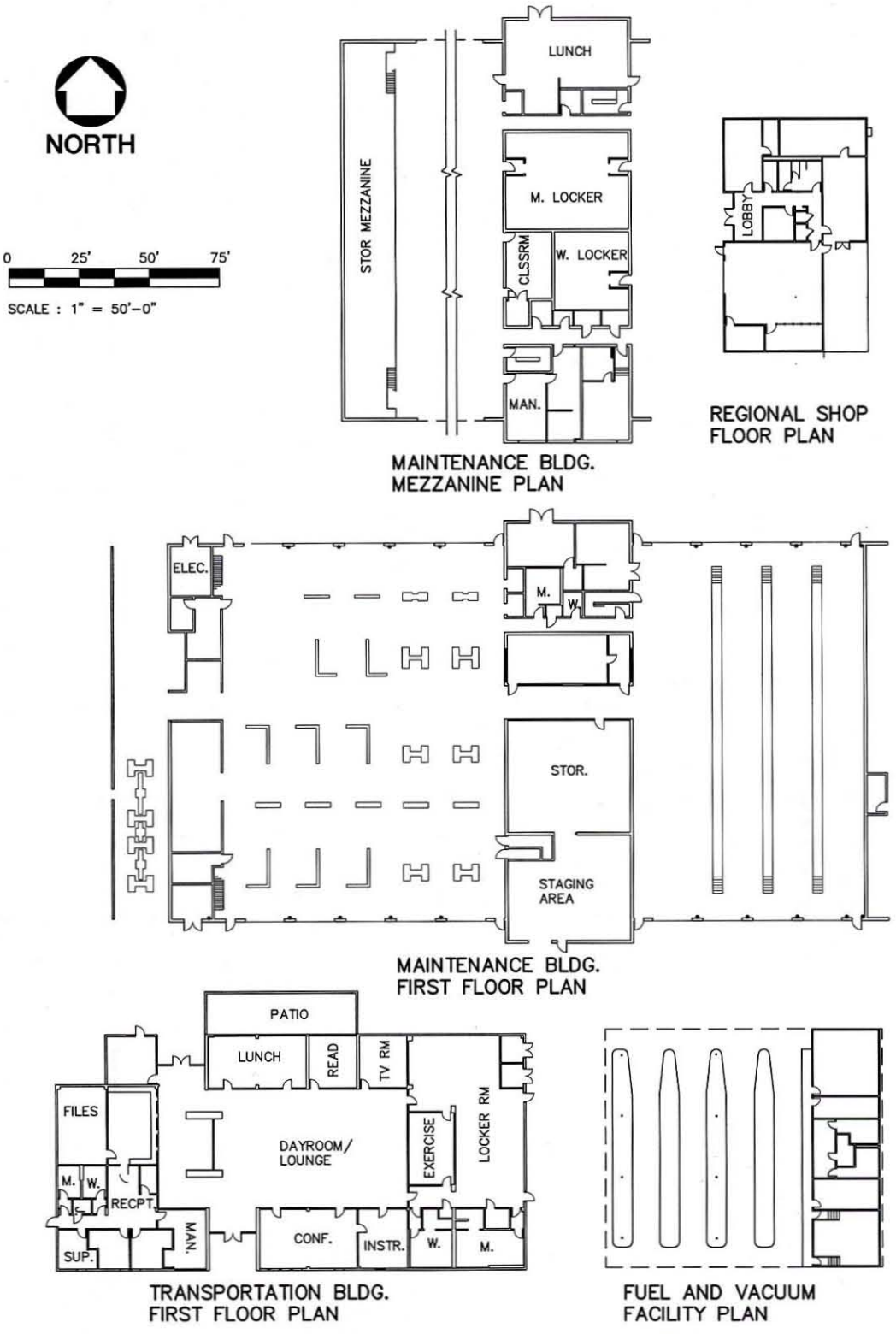
- Vacuum System Upgrade Project — September, 2003
- In-Ground Bus Hoist Replacement — September, 2003
- Air Conditioning System Upgrade — February, 2004
- Reverse Osmosis System for Bus Washer — May, 2004
- Division Lighting Program — December, 2004

Design is pending for upgrade of the Division 18 Chassis Washer. Funding is available in FY05 for installation of a second bus washer.

F. POTENTIAL FOR SITE EXPANSION:

Ridership is forecasted to increase in the South Bay and it is likely that expansion or increase in capacity at this Division will be necessary in the future. Furthermore, the South Bay sector is heavily impacted by recent rulings of the Consent Decree. Expansion of the facility could be achieved by acquiring the triangular parcel immediately south of the Division that is currently used as a truck storage yard. This expansion could net an increase of approximately 50 coaches. Employee parking at the Division is also over capacity. Construction of a parking garage in the current employee parking area, or acquisition of a vacant parcel for surface parking east of the maintenance building could provide additional on-site parking. The maintenance building would also need to be expanded to accommodate an increase in coaches. At present, funding for expansion activities at this facility is available in FY09.


GRIFFITH ST.
EMPLOYEE PARKING
MAINTENANCE BUILDING
TRANSPORTATION BLDG
CEA PARKING
STOP
STOP
FH
FUEL & VACUUM BLDG
49 STALLS
97 STALLS
110 STALLS
12 STALLS
DOMINGUEZ CHANNEL
BUS WASHER
CNG STATION
TELECOM. REGIONAL SHOP
NORTH
0 60 120
SCALE IN FEET


NORTH
0 25' 50' 75'
SCALE : 1" = 50'-0"
LUNCH
STOR MEZZANINE
M. LOCKER
CLSSRM
W. LOCKER
MAN.
MAINTENANCE BLDG.
MEZZANINE PLAN
LOBBY
REGIONAL SHOP
FLOOR PLAN
ELEC.
M.
W.
STOR.
STAGING
AREA
MAINTENANCE BLDG.
FIRST FLOOR PLAN
PATIO
LUNCH
READ
TV RM
LOCKER RM
EXERCISE
FILES
DAYROOM/
LOUNGE
M.
W.
RECPT.
SUP.
MAN.
CONF.
INSTR.
W.
M.
TRANSPORTATION BLDG.
FIRST FLOOR PLAN
FUEL AND VACUUM
FACILITY PLAN

Transportation Building

Maintenance Building

Main Yard at Fuel Island

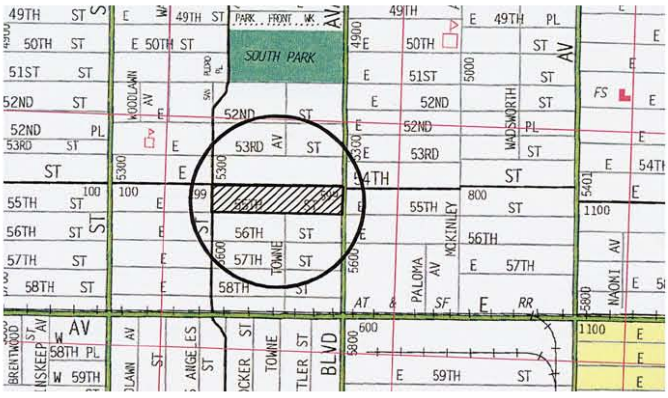
Adjacent Property, East of Div. 18

Adjacent Property, East of Div. 18

Artesia Transit Center, North of Div. 18

SOUTH PARK

5413 Avalon Blvd.
Los Angeles, CA



DIVISION SUMMARY

The South Park Facility (Location 14) accommodates several Operations functions such as Facilities Maintenance, Carpentry Shop, Sign Shop, Fairbox Repair/Storage, Equipment Storage, Non-Revenue Repair, and Materiel/Warehouse

The facility, developed in the early 1900's, is comprised of 7 buildings on approximately 8 acres. Because it is sizeable and quite spacious, Facilities has determined that this property is under-utilized.

The location of the South Park Facility however precludes conversion for efficient use as a bus operation and maintenance facility. The facility is located in a predominantly residential neighborhood adjacent to school property. Situated a considerable distance south of the I -10 Freeway and east of the 110 Freeway, operations from the location would involve excessive deadhead costs.

Due to the very poor physical condition of facilities at South Park and serious operating inefficiencies at the location, it is a goal of MTA Operations to close this property. MTA is currently in discussions with the City of Los Angeles and the City Council office, considering an exchange of the South Park property for a replacement site to be located by the City. If the City locates a suitable property in the right area, MTA would consider trading the property to enable development as a nature park.

The planned expansion of Division 4 will accommodate a consolidation of certain non-revenue functions from the South Park facility. Facilities Maintenance and Materiel/Warehousing functions will be relocated either to property acquired through exchange with the City, or possibly Vernon Yard (Location 34). Funds for Division 4 expansion are included in an FY05 Capital Project. Funds for property acquisition for FM and Materiel/Warehousing relocation are not yet budgeted. As City efforts to locate a replacement property become clearer, Facilities will program required capital funds to ensure efficient closure of the South Park facility and related transitions.

No further improvements are currently planned for Location 14. A general property description, aerial photograph and plot plan are included for reference.

LOCATION 14 (SOUTH PARK SHOPS)
5413 South Avalon Boulevard
Los Angeles, California

A. SITE and YARD:

The South Park Facility (Location 14) is located in South Los Angeles in a mixed industrial-residential area. The facility is comprised of seven buildings on approximately 8 acres and was developed as a rail maintenance facility in the early 1900's. The facility accommodates several Metro Operations functions such as Facilities Maintenance, Carpentry Shop, Sign Shop, Fairbox Repair/Storage, Equipment Storage, Non-Revenue Repair, and Materiel/Warehouse.

Surrounding Land Uses:

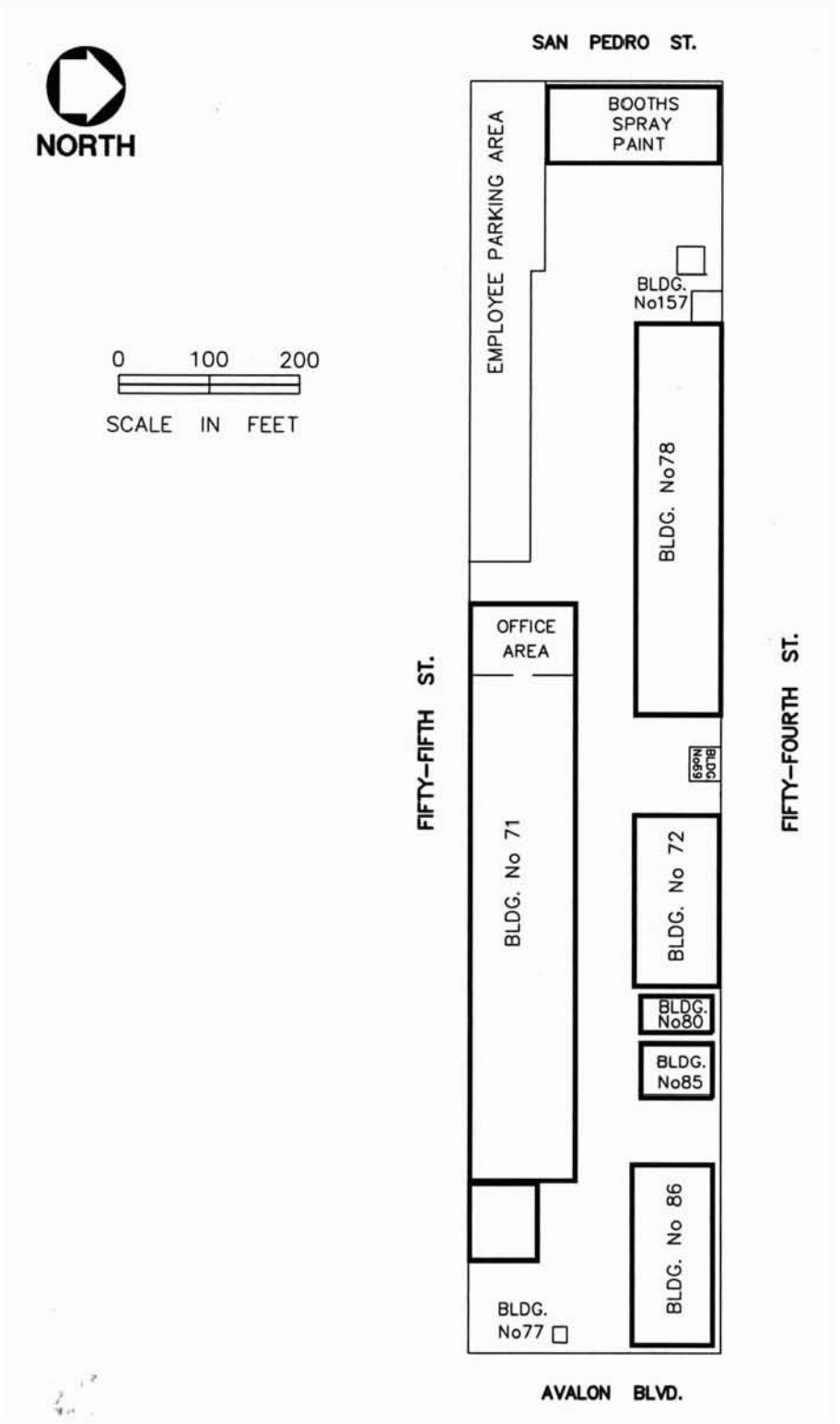
- North: 54th Street/Commercial Property
- South: 55th Street/Residential Property
- East: Avalon Boulevard/Commercial Property
- West: San Pedro/Residential Property

Employee Parking (onsite):

Regular parking	60 stalls
Handicapped parking	02 stalls

All parking is within the property.


SWAPMEET


NORTH
0 100 200
SCALE IN FEET
SAN PEDRO ST.
BOOTHS SPRAY PAINT
EMPLOYEE PARKING AREA
BLDG. No157
BLDG. No78
OFFICE AREA
FIFTY-FIFTH ST.
FIFTY-FOURTH ST.
BLDG. No 71
BLDG. No 72
BLDG. No80
BLDG. No85
BLDG. No 86
BLDG. No77
AVALON BLVD.

Shops, Looking West

Central Yard, North Side

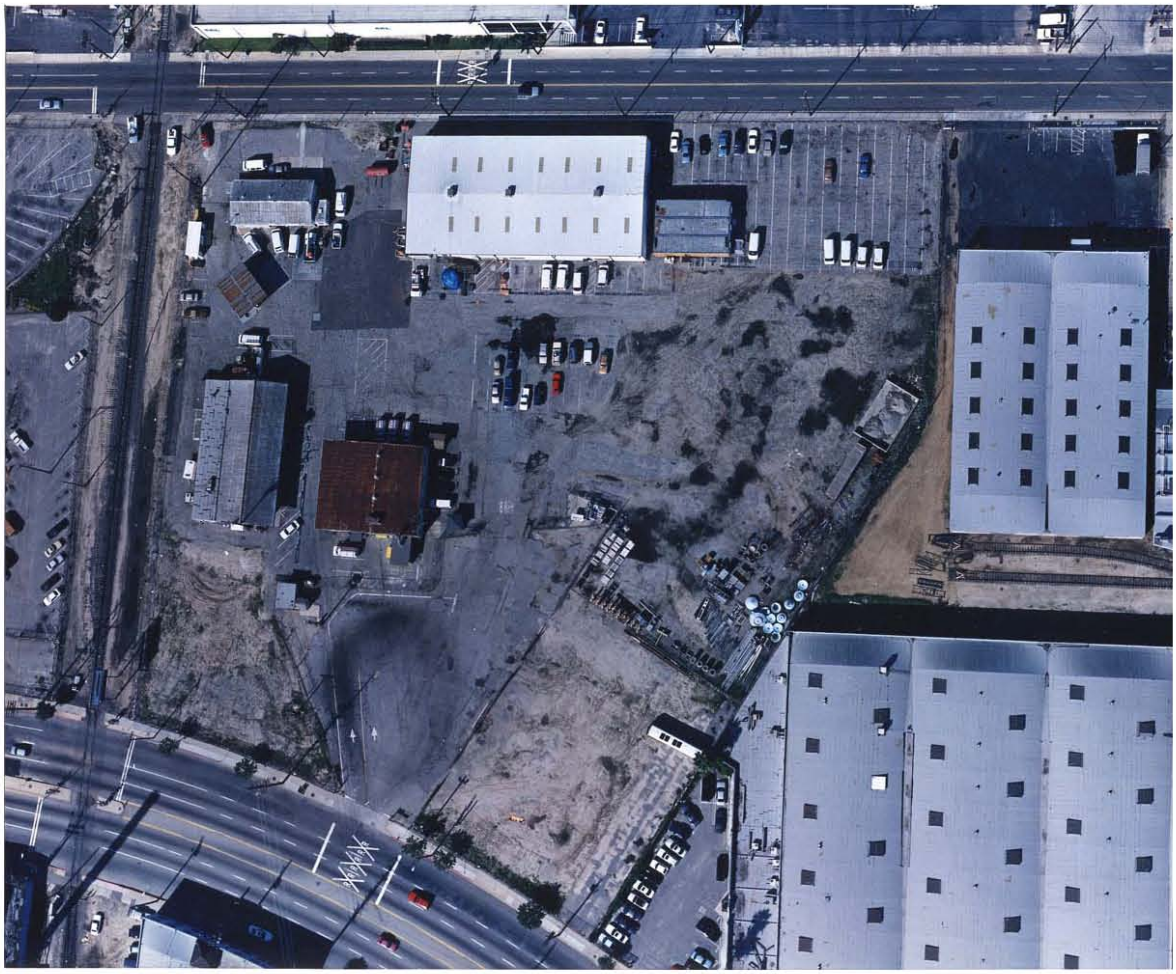
Central Workshop, Interior

Rear of Property, Westside

Central Workshop, Interior

VERNON YARD

4462 Pacific Blvd.
Vernon, CA



DIVISION SUMMARY

The Vernon Yard Facility, also referred to as Location 34, is located in the City of Vernon, on a 6.2 acre property. The facility is the location of the Facilities Rail Support Group, the General Fare Box Group (contractor), and a small number of Non-Revenue mechanics for rail service vehicles. The property includes ten shop buildings from 200 sq. ft. to 12,000 sq. ft. in area, including a small non-revenue support shop, a carpentry shop, a storage building and an office structure.

Although primarily a rail facility, it has been included in this assessment because it appears to be an under-utilized facility. Nearly half of the property is undeveloped and unused, other than minor outside rail storage. In FY04, the non-revenue shop will be relocated to a revitalized and expanded Division 4 in Downey. Facilities-Operations and Rail Facilities are currently considering the Vernon Yard property as a possible replacement site for storage or other functions that must be relocated upon imminent closure of the Metro South Park facility. This property and location may be suitable to address the demonstrated need for additional Metro materiel storage and warehousing capability. Facilities-Operations started preliminary engineering in February 2004 for construction of the new warehouse, shop building, and parking structure at the facility. Funds for construction will be budgeted in FY05 by Rail Operations.

Other than the proposed construction of the new warehouse and shop building, no further improvements are currently planned for Location 34. A general property description, aerial photograph and plot plan are included for reference.

VERNON YARD
4462 Pacific Boulevard
Vernon, California

A. ***SITE and YARD***:

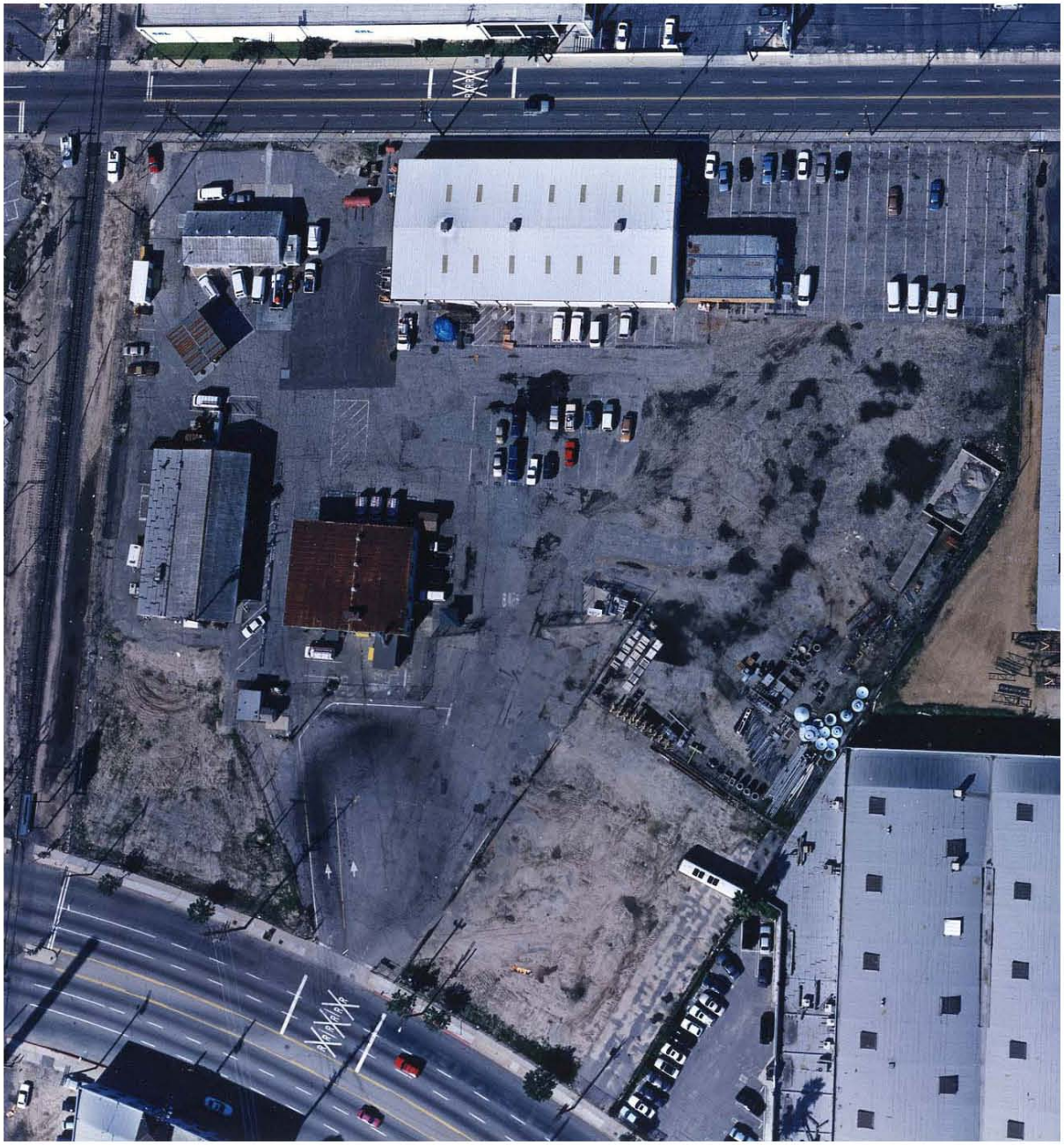
The Vernon Yard, also referred to as Location 34, is located in the City of Vernon on a site of 6.2 acres. The property is the location of the Facilities Rail Support Group, the General Fare Box Group (contracted) and a small number of Non-Revenue mechanics. The site is currently under-utilized and is being considered as the location for materiel and Facilities Maintenance functions currently located at South Park.

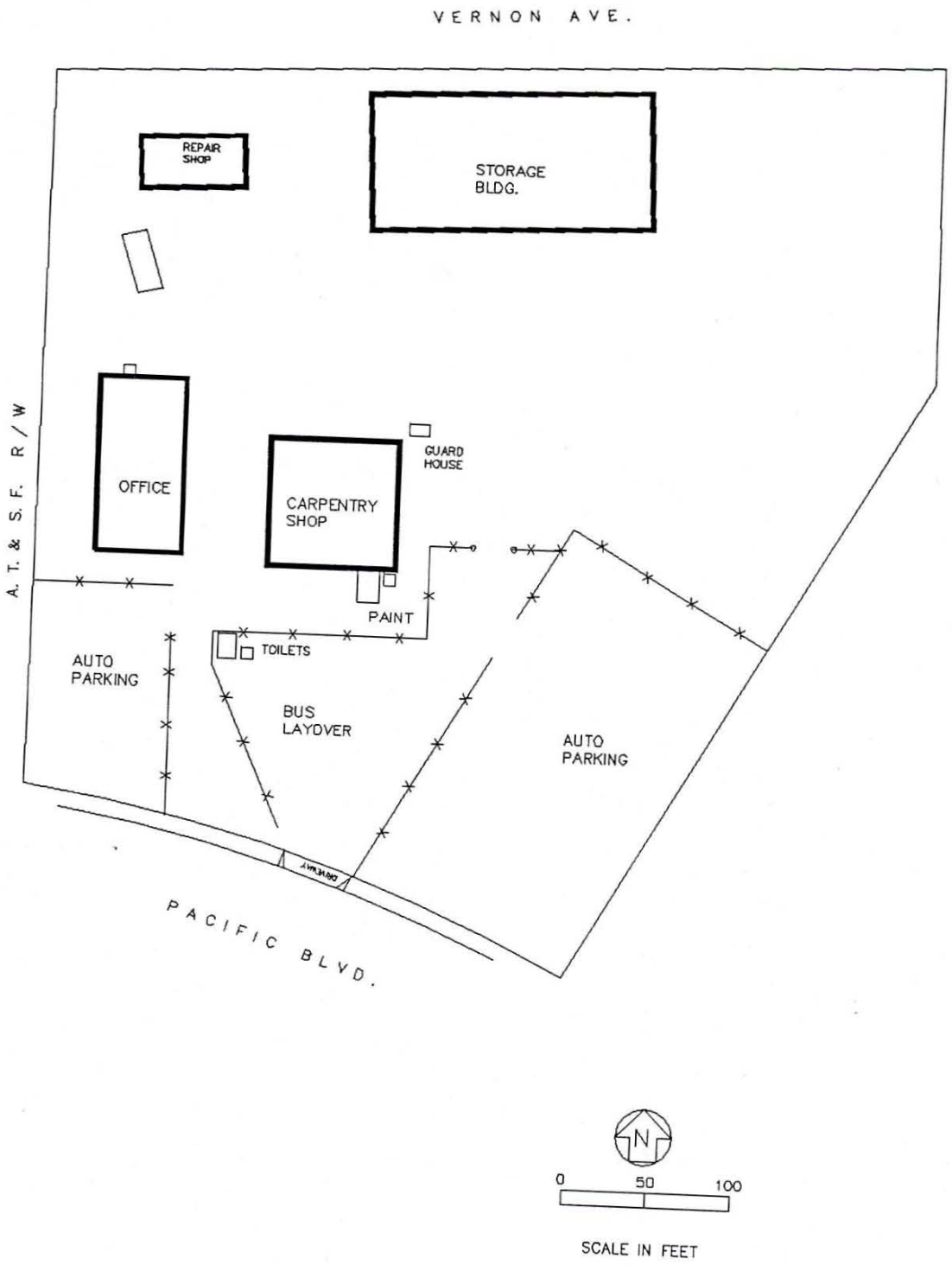
Surrounding Land Uses:

- North: Vernon Avenue/Commercial Property
- South: Pacific Boulevard/ Commercial Property
- East: Commercial Property
- West: Railroad Line/Commercial Property

Employee Parking (onsite):

Regular parking	96 stalls
Handicapped parking	0 stalls




VERNON AVE.
REPAIR SHOP
STORAGE BLDG.
OFFICE
CARPENTRY SHOP
GUARD HOUSE
A. T. & S. F. R / W
PAINT
TOILETS
AUTO PARKING
BUS LAYOVER
AUTO PARKING
PACIFIC BLVD.
N
0
50
100
SCALE IN FEET

General yard, Looking East

Facilities Maintenance, Rail Shop

Fare Box Building

Non-Revenue Repair Area

APPENDICES

Appendix A: Bus Divisions – Service Data

Appendix B: MTA Bus Parking Capacity at Divisions

Appendix C: Modifications Required to Accommodate Articulated Buses

Appendix D: MTA Bus Hoist Summary

Appendix E: MTA Operating Facilities Roofing Summary

APPENDIX A: MTA Bus Operating Divisions - Service Data

DIVISION	YEAR BUILT Transportion (T) Maintenance (M)	STORAGE CAPACITY (1)	AUTO PARKING (2)	COVERED BUS SERVICE BAYS (3)						BUS LIFTS (4)			BUS FUEL CAPACITY	
				MAINT. BLDG.	STEAM CLEAN	TIRE SHOP	FUELING STATION	DYNO SHOP	PAINT SHOP	MAINT. BLDG.	STEAM CLEAN	TIRE SHOP	LIQUID FUEL (Gal)	CNG COMPRESSORS
1	**1981(T) 1987(M)**	205	175 (Off-Site)	16	1	2	3	0	0	12	1	0	150,000	3 @ 2,000scfm
2	**1987(T) 1930(M)**	195	Off-Site (number unknown)	26	2	1	8	0	0	0	0	0	120,000	3 @ 2,400scfm
3	**1984(T) 1977(M)**	220	264	18	2	1	8	1	0	12	0	0	120,000	3 @ 1,200scfm 2 @ 1,300scfm
5	**1979(T) 1984(M)**	247	392	18	2	2	8	1	0	10	1	0	120,000	3 @ 2,000scfm
6	**1930**	79	50	10	1	1	2	0	0	0	0	0	20,000	0
7	**1977**	248	257	20	2	2	8	1	0	12	0	0	120,000	3 @ 2,000scfm
8	**1982**	249	303	22	2	2	8	1	1	16	1	2	120,000	3 @ 2,400scfm
9	**1975**	235	247	16 (17 with one bay next to bus washer)	2	1	8	1	0	2	0	0	140,000	3 @ 2,400scfm
10	**1984**	259	284	18	2	4	4	1	0	12	1	0	120,000	3 @ 1,100scfm 1 @ 1,200scfm
12	**1965**	130	24	10	1	1	4	0	0	0	0	0	90,000	0
15	**1982**	262	289	22	2	2	8	1	1	16	1	2	120,000	3 @ 2,400scfm
18	**1984**	280	301	18	2	2	8	0	0	9	1	0	120,000	3 @ 1,100scfm 1 @ 1,200scfm

Footnotes:
(1) For 40' buses and subject to field verification.
(2) Numbers subject to field verification.
(3) Defined as an area where a bus can be parked for minor repairs.
(4) See MTA Bus Hoist Summary for additional info.

APPENDIX B: MTA Bus Operating Divisions - Bus Parking Capacity

DIVISION	No. STD. COACHES ASSIGNED - 02/2004	CURRENT STORAGE CAPACITY	CURRENT STRIPED PARKING	POTENTIAL YARD PARKING		POTENTIAL MAXIMUM BUS PARKING		PROPOSED ARTICULATED BUS DEPLOYMENT					Auto Parking - Yard Capacity	Impact of Maximum Bus Parking - Yard
			Refer to Striping Plans (1)			Incl. Maint. Bays		FY05	FY06	FY07	FY08	FY09		
1	*181*	205	163	+13 =	176	+ 29 =	*205*	-	-	29	22	-	0	Will lose 26 on-site auto spaces.
2	*185*	195	201	+14 =	215	+ 26 =	*241*	-	-	-	14	67	0	Will lose 28 on-site auto spaces.
3	*200*	220	212	+ 10 =	222	+ 18 =	*240*	-	-	-	30	-	0	
5	*259*	247	229	+ 13 =	242	+ 18 =	*260*	-	37	10	-	-	0	
6	*78*	79	51	+ 24 =	79	+ 10 =	*85*	-	-	-	-	-	60	Will lose 50 on-site auto spaces.
7	*258*	248	234	+ 18 =	252	+ 20 =	*272*	-	-	-	35	13	41	Will lose 24 on-site auto spaces.
8	*165*	249	238	+ 37 =	275	+ 22 =	*297*	11	-	-	-	10	233	Requires changes to operating procedures.
9	*192*	235	294	+ 6 =	300	+ 16 =	*316*	-	-	-	-	9	247	
10	*271*	259	241	+ 17 =	258	+ 18 =	*276*	-	90	-	46	35	293	Will lose 20 on-site auto spaces. Requires changes to operating procedures.
15	*251*	262	266	+ 12 =	278	+ 22 =	*300*	11	-	-	-	35	289	More bus parking spaces can be obtained from adjacent Bus Storage Yard.
18	*284*	280	268	+ 49 =	317	+ 18 =	*335*	-	-	25	46	23	301	

Footnotes:
(1) Numbers do not include stalls for wheelchair lift test and staging spaces at Fuel Station.

APPENDIX C: Modifications to Accommodate 60' Articulated Buses (1)

Division	Driveway		Fare Retrieval		Yard Parking (2)		Fueling Station		Interior Vacuum Cleaning		Bus Washing Station	
	Present (3)	Modifications	Present (3)	Modifications	Present (3)	Modifications	Present (3)	Modifications	Present (3)	Modifications	Present (3)	Modifications
1	* Accessible to both 40' std. coaches and artics	None	* Accessible to both 40' std. coaches and artics	None	Tandem	***** Requires minor re-striping to create 65' long stalls for artics. ***** Will impact total parking capacity.	* 3 lanes @ 70' * CNG available	None	* At Fueling Station. * Operation takes place during bus refueling.	* None required for location of bellows. * May require modifications to "flaps" around bellow opening for air-tight operation.	* Automatic washer. * Length of vehicle not a factor.	None
2	* Accessible to both 40' std. coaches and artics	None	* Accessible to both 40' std. coaches and artics	None	Tandem	***** Requires minor re-striping to create 65' long stalls for artics. ***** Will impact total parking capacity.	* 4 Lanes @ 100' * CNG available	None	* At Fueling Station. * Operation takes place during bus refueling.	* None required for location of bellows. * May require modifications to "flaps" around bellow opening for air-tight operation.	* Automatic washer. * Length of vehicle not a factor.	None
3	* Accessible to both 40' std. coaches and artics	None	* Accessible to both 40' std. coaches and artics	None	Tandem	***** Requires minor re-striping to create 65' long stalls for artics. ***** Will impact total parking capacity.	* 4 Lanes @ 100' * CNG available	None	* At Fueling Station. * Operation takes place during bus refueling.	* None required for location of bellows. * May require modifications to "flaps" around bellow opening for air-tight operation.	* Automatic washer. * Length of vehicle not a factor.	None
5	* Accessible to both 40' std. coaches and artics	None	* Accessible to both 40' std. coaches and artics * May affect	None	Tandem	***** Requires minor re-striping to create 65' long stalls for artics. ***** Will impact total parking capacity.	* 4 Lanes @ 100' * CNG available	None	* At Fueling Station. * Operation takes place during bus refueling.	* None required for location of bellows. * May require modifications to "flaps" around bellow opening for air-tight operation.	* Automatic washer. * Length of vehicle not a factor.	None
6	* Accessible to both 40' std. coaches and artics	None	* Function is done at Fuel Station. * Accessible	None	Tandem	***** Requires minor re-striping to create 65' long stalls for artics. ***** Will impact total parking capacity.	* 2 Lanes @ 40' * CNG **not** available	* Add CNG capability * Acquire source of CNG elsewhere	* At Bus Washing Station prior to bus wash.	* None required for location of bellows. * May require modifications to "flaps" around bellow opening for air-tight operation.	* Automatic washer. * Length of vehicle not a factor.	None
7	* Accessible to both 40' std. coaches and artics	None	* Function is done at Fuel Station. * Accessible	None	Tandem	***** Requires minor re-striping to create 65' long stalls for artics. ***** Will impact total parking capacity.	* 4 Lanes @ 100' * CNG available	None	* At Fueling Station. * Operation takes place during bus refueling.	* None required for location of bellows. * May require modifications to "flaps" around bellow opening for air-tight operation.	* Automatic washer. * Length of vehicle not a factor.	* Exiting may be a problem due to adjacency to CNG compressors. * Add a new washer.
8	* Accessible to both 40' std. coaches and artics	None	* Accessible to both 40' std. coaches and artics	None	Angled Individual stalls	***** Approx. 40 stalls are available for artics. ***** Requires yard re-striping if more than 40 artics are assigned.	* 4 Lanes @ 100' * CNG available	None	* At Fueling Station. * Operation takes place during bus refueling.	* None required for location of bellows. * May require modifications to "flaps" around bellow opening for air-tight operation.	* Automatic washer. * Length of vehicle not a factor.	None
9	* Accessible to both 40' std. coaches and artics	None	* Accessible to both 40' std. coaches and artics	None	Tandem	***** Requires minor re-striping to create 65' long stalls for artics. ***** Will impact total parking capacity.	* 4 Lanes @ 100' * CNG available	None	* At Fueling Station. * Operation takes place during bus refueling.	* None required for location of bellows. * May require modifications to "flaps" around bellow opening for air-tight operation.	* Automatic washer. * Length of vehicle not a factor.	None
10	* Accessible to both 40' std. coaches and artics	None	* Accessible to both 40' std. coaches and artics	None	Tandem	***** Requires minor re-striping to create 65' long stalls for artics. ***** Will impact total parking capacity.	* 4 Lanes @ 100' * CNG available	None	* At Fueling Station. * Operation takes place during bus refueling.	* None required for location of bellows. * May require modifications to "flaps" around bellow opening for air-tight operation.	* Automatic washer. * Length of vehicle not a factor.	None
15	* Accessible to both 40' std. coaches and artics	None	* Accessible to both 40' std. coaches and artics	None	Angled Individual stalls	***** Approx. 40 stalls are available for artics. ***** Requires yard re-striping if more than 40 artics are assigned.	* 4 Lanes @ 100' * CNG available	None	* At Fueling Station. * Operation takes place during bus refueling.	* None required for location of bellows. * May require modifications to "flaps" around bellow opening for air-tight operation.	* Automatic washer. * Length of vehicle not a factor.	None
18	* Accessible to both 40' std. coaches and artics	None	* Accessible to both 40' std. coaches and artics	None	Tandem	***** Requires minor re-striping to create 65' long stalls for artics. ***** Will impact total parking capacity.	* 4 Lanes @ 100' * CNG available	None	* At Fueling Station. * Operation takes place during bus refueling.	* None required for location of bellows. * May require modifications to "flaps" around bellow opening for air-tight operation.	* Automatic washer. * Length of vehicle not a factor.	None

Notes:
1. Assumed 3-axle x 60' and CNG fueled articulated buses.
2. No consideration has been given to number of articulated buses assigned to each division.
3. "Present" refers to current practices or operating procedures for 40' standard coaches.
4. See Division Data and Bus Lift Summary for additional information on present conditions.

APPENDIX C: Modifications to Accommodate 60' Articulated Buses (1)

Division	Maintenance Service pits (2)		Maintenance Bays (2)		Tire Repair (2)		Steam Cleaning (2)		Dyno Shop (2)		Paint Shop (2)	
	Present (3)	Modifications	Present (3)	Modifications	Present (3)	Modifications	Present (3)	Modifications	Present (3)	Modifications	Present (3)	Modifications
1	* Has 4 pits @ 42' & ea. in 70' service bay * Has drive-thru capability	* Pits need to be lengthened or revise operating procedures to cont. using the pits.	* Has 12 stations & each in 70' service bays. * Has 12 in-ground bus lifts but none suitable for artics. * No drive-thru capability.	* Add 3-post in-ground hoists or use portable lifts	* 2 Service bays	None	* Has one steam cleaning bay and one chassis cleaning bay	None	* No dyno shop.	* Add dyno building. * Perform dyno function at RRC.	* No paint shop.	* Perform paint function at RRC.
2	* Has 10 pits @ 74' & ea. in 90' service bay * Each pit can serve 2 std. 40' coaches * No drive-thru capability.	None	* Has 3 service lanes at 90' suitable for 2 std. coaches. * Lanes have no drive-thru capability. * No in-ground bus lift.	* Add in-ground bus hoists or use portable lifts	* One service bay	None	* Has one steam cleaning bay and one chassis cleaning bay	None	* No dyno shop.	* Add dyno building. * Perform dyno function at RRC.	* No paint shop.	* Perform paint function at RRC.
3	* Has 2 pits @ 80' & ea. in 130' service bay * Each pit can serve 2 std. 40' coaches * Has drive-thru capability.	None	* Has 7 service lanes or 14 service bays. * Has 12 axle in-ground lifts. * Has drive-thru capability.	* Add 3-post in-ground hoists or use portable lifts	* Two service bays	None	* Has one steam cleaning bay and one chassis cleaning bay	None	* Has one dyno station but facility and equipment may not be suitable for artics	* Add dyno building or perform dyno function at RRC.	* No paint shop.	* Perform paint function at RRC.
5	* Has 3 pits @ 80' & ea. in 130' service bay * Each pit can serve 2 std. 40' coaches * Has drive-thru capability.	None	* Has 6 service lanes or 12 service bays. * Has 9 in-ground lifts w/ five 3-post for artics. * Has drive-thru capability.	None	* 2 Service bays	None	* Has one steam cleaning bay and one chassis cleaning bay	None	* One dyno service station but not suitable for artics	* Add dyno building. * Perform dyno function at RRC.	* No paint shop.	* Perform paint function at RRC.
6	* Width of building is 60' * Has 3 short pits @ various length *Has drive capability	* Length pits. *Pits to be used with portion uncovered.	* Has 7 service bays. * No in-ground bus lifts. * Has drive-thru capability.	* Building is too low for lifts. * Not recommended for any mods.	* One service bay	None	* Has one steam cleaning bay	None	* No dyno shop.	* Add dyno building. * Perform dyno function at RRC.	* No paint shop.	* Perform paint function at RRC.
7	* Has 4 pits @ 42' & ea. in 66' service bay * Has 2 pits @ 52' & ea. in 82' service bay * No drive-thru capability	* The two long pits were used for artics in early years. *No mods. required	* Has 12 stations & ea. in 66' bay * Each station has an axle type in-ground bus lift * No drive-thru capability	* Add 3-post in-ground hoists or use portable lifts	* 2 Service bays	None	* Has one steam cleaning bay and one chassis cleaning bay	None	* Has one dyno station but facility and equipment may not be suitable for artics	* Add dyno building or perform dyno function at RRC.	* No paint shop.	* Perform paint function at RRC.
8	* 3 pits @ 100' *Can be used as 6 service bays for 40' std. coaches * Has drive-thru capability	None	* Has 16 service bays * Each has in-ground bus lift * Has one 3-post platform lifts for artics * Has drive-thru capability	* None	* 2 Service bays	None	* Has one steam cleaning bay and one chassis cleaning bay	None	* One dyno service station but not suitable for artics	* Add dyno building. * Perform dyno function at RRC.	* Has one paint service bay.	* Perform paint function at RRC.
9	* Has 6 pits @ 90' & ea. in 110' service bay * Each pit can serve 2 std. 40' coaches * Has drive-thru capability.	None	* Has 4 service bays * Two bays have in-ground lift *Has drive-thru capability	* Add 3-post in-ground hoists or use portable lifts	* One service bay	None	* Has one steam cleaning bay and one chassis cleaning bay	None	* One dyno service station but not suitable for artics	* Add dyno building. * Perform dyno function at RRC.	* No paint shop.	* Perform paint function at RRC.
10	* 3 pits @ 100' * Can be used as 6 service bays for 40' std. coaches * Has drive-thru capability	None	* Has 12 service bays * Each has in-ground bus lift * Has two 3-post platform lifts for artics * Has drive-thru capability	* None	* Has 4 Service bays * 2 bays are used as A/C repair	None	* Has 2 bays - one steam cleaning bay and one chassis cleaning bay	None	* Has one dyno station but facility and equipment may not be suitable for artics	* Add dyno building or perform dyno function at RRC.	* No paint shop.	* Perform paint function at RRC.
15	* 3 pits @ 100' * Can be used as 6 service bays for 40' std. coaches * Has drive-thru capability	None	* Has 16 service bays * Each has in-ground bus lift * Has one 3-post platform lifts for artics * Has drive-thru capability	* None	* 2 Service bays	None	* Has one steam cleaning bay and one chassis cleaning bay	None	* One dyno service station but not suitable for artics	* Add dyno building. * Perform dyno function at RRC.	* Has one paint service bay.	* Perform paint function at RRC.
18	* 3 pits @ 100' * Can be used as 6 service bays for 40' std. coaches * Has drive-thru capability	None	* Has 12 service bays * 9 bays have in-ground lift * Has five 3-post lifts * Has drive-thru capability	* None	* 2 Service bays	None	* Has one steam cleaning bay and one chassis cleaning bay	None	* No dyno shop.	* Add dyno building. * Perform dyno function at RRC.	* No paint shop.	* Perform paint function at RRC.

Notes: 1. Assumed 3-axle x 60' and CNG fueled articulated buses.
2. No consideration has been given to number of articulated buses assigned to each division.
3. "Present" refers to current practices or operating procedures for 40' standard coaches.
4. See Division Data and Bus Lift Summary for additional information on present conditions.

APPENDIX D: MTA Bus Operating Divisions - Equipment Summary - Hoists

Location	Mfg'r	Year Installed	Maintenance Shop					Tire Shop		Steam Cleaning		Paint Shop	Total
			Axle Hoist		Platform Hoist			Axle Hoist		Platform Hoist		Platform	
			2 Post	3 Post	2 Post	3 Post	4 Post	2 Post	3 Post	3 Post	4 Post	2 Post	
Div. 1	**Rotary**	**1987**	8		4					1			**13**
Div. 2													**0**
Div. 3	**Rotary**	**1981**	12										**12**
Div. 4													**0**
Div. 5	**Weaver & Advantage**	**1984**	3	1	3 (1 - Advantage lift)	2	1				1 (Advantage Lift)		**11**
Div. 6													**0**
Div. 7	**Rotary**	**1978**	12										**12**
Div. 8	**Western**	**1982**	10		5		1	1	1		1		**19**
Div. 9	**Rotary**	**1975**	2										**2**
Div.10	**Rotary**	**1984**	5	5		1	1				1		**13**
Div. 12													**0**
Div. 15	**Western**	**1982**	10		5		1	1	1		1		**19**
Div. 18	**Weaver**	**1984**	2	3	2		2				1		**10**
Loc. 30	**Weaver**	**1984**	8	4	3						1	1	**17**
TOTAL			**72**	**13**	**22**	**3**	**6**	**2**	**2**	**1**	**6**	**1**	**128**

APPENDIX E: BUS OPERATING DIVISIONS - Roofing Summary

LOCATION	BUILDING	YEAR BUILT	AREA s.f.	TYPE/MFR.	YR. LAST ROOFED	WAR. (Yrs.)	REPLACEMENT COST
Division 1	Maintenance	1987	40,010	Built-Up/Mansville	1987	20	-
	Transportation	1981	10,320	Built-Up	1981	2	$60,000
	Fuel & Vacuum	1987	5,500	Built-Up/Mansville	1987	20	-
	Wash	1987	9,125	Built-Up/Mansville	1987	20	-
	Tire Shop	1987	8,000	Built-Up/Mansville	1987	20	-
	Fare Retrieval	1987	320	Built-Up/Mansville	1987	20	-
	Storage Canopy	1992	1,100	Metal Deck	1992	20	-
Division 2	Maintenance	1930	35,650	Built-Up	1984	1	$150,000
	Transportation	var.	9,100	Built-Up/Flintkote	1987	20	-
	Fuel & Vacuum	1989	7,000	Built-Up	1989	20	-
	Wash	1989	4,210	Built-Up	1989	20	-
	Tire Shop	1984	4,016	Built-Up	1984	2	$20,000
	Fare Retrieval	1989	320	Built-Up	1989	20	-
	Microwave	1988	200	Built-Up	1988	1	-
	Cash Counting	1969/1980	8,250	Built-Up	1994	20	-
Division 3	Maintenance	1977	45,600	Built-Up	1977	1	$150,000
	Transportation	1984	8,950	Built-Up	1984	1	$60,000
	Fuel & Vacuum	1981	10,260	Metal Deck	1981	1	-
	Wash	1981	3,440	Metal Deck	1981	1	-
	Steam	1977	2,440	Metal Deck	1977	1	-
	Tire Shop	1977	2,256	Metal Deck/Built-Up	1977	1	-
	Fare Retrieval	1985	340	Built-Up	1985	1	-
	Parking Structure	1989		Concrete	1989	1	-
	Dynomometer Bldg.	1981	1,280	Built-Up	1981	1	-
Division 4	Maintenance	Unk	Unk	Built-Up	1987	20	-
	Office	Unk	Unk	Built-Up	1987	20	-
Division 5	Maintenance	1984	34,442	Built-Up/Mansville	1984	2	$150,000
	Transportation	1979	10,320	Built-Up/Conglas	1993	20	-
	Fuel & Vacuum	1979	10,164	Metal Deck/Built-Up	1979	1	$60,000
	Wash - 1	1979	3,192	Metal Deck	1979	1	-
	Wash - 2	1989	3,192	Metal Deck	1989	2	-
	Tire Shop	1984	6,256	Built-Up	1984	2	$30,000
	Fare Retrieval	1984	340	Metal Deck	1984	1	-
	Parking Structure	1984	24,625	Concrete	1984	1	-
	Dynomometer	1987	960	Built-Up	1987	2	$20,000
	Storage Canopy	1992	1,180	Metal Deck	1992	1	-
Division 6	Maintenance	1960	18,000	Built-Up	1984	1	$50,000
	Fuel & Vacuum	1965	1,200	Built-Up	1980	1	$20,000
	Wash	1989	2,080	Metal Deck	1989	1	-
	Steam	1987	720	Metal Deck	1987	1	-
	Tire Shop	1985	800	Metal Deck	1985	2	-
	Pump Room	1987	340	Metal Deck	1987	2	-
Division 7	Maintenance	1977	38,250	Concrete Deck	1988	2	-
	Fuel & Vacuum	1978	10,300	Metal Deck	1978	1	-
	Wash	1978	2,100	Metal Deck/Built-Up	1978	1	-
	Tire Shop	1989	2,988	Metal Deck	1989	1	-
	Fare Retrieval	1985	340	Built-Up	1985	1	-
Division 8	Maintenance	1982	39,178	Built-Up/Mansville	1997	20	-
	Transportation	1982	8,000	Built-Up/Mansville	1997	20	-
	Fuel & Vacuum	1982	11,400	Built-Up/Mansville	1997	20	-
	Wash	1982	2,300	Built-Up/Mansville	1997	20	-
	Steam	1982	2,730	Built-Up/Mansville	1997	20	-

LOCATION	BUILDING	YEAR BUILT	AREA s.f.	TYPE/MFR.	YR. LAST ROOFED	WAR. (Yrs.)	REPLACEMENT COST
	Tire Shop	1982	6,900	Built-Up/Mansville	1997	20	-
	Fare Retrieval	1983	320	Built-Up/Mansville	1997	20	-
	Storage Canopy	1992	2,800	Metal Deck	1992	1	-
Division 9	Maintenance	1975	19,327	Built-Up/Mansville	1986	5	$50,000
	Transportation	1975	6,480	Built-Up/Mansville	1986	5	$30,000
	Fuel & Vacuum	1975	9,000	Metal Deck	1975	1	-
	Wash - 1	1975	3,000	Metal Deck	1975	1	-
	Wash - 2	1989	3,000	Metal Deck	1989	1	-
	Tire Shop	1975	3,807	Metal Deck	1975	1	-
	Fare Retrieval	1986	340	Built-Up	1986	1	-
	Dynomometer Bldg.	1988	2,600	Built-Up	1988	20	-
	Detail	1988	2,800	Metal Deck	1988	1	-
Division 10	Maintenance	1984	32,790	Standing Seam	1984	5	-
	Transportation	1984	13,340	Built-Up	1984	5	$60,000
	Fuel & Vacuum	1984	8,226	Standing Seam	1984	5	-
	Wash	1984	2,964	Standing Seam	1984	5	-
	Tire Shop	1984	5,020	Standing Seam	1984	5	-
	Fare Retrieval	1984	340	Standing Seam	1984	5	-
	Dynomometer Bldg.	1987	2,600	Built-Up	1987	20	-
	Storage	1992	1,100	Metal Deck	1992	1	-
Division 12	Maintenance	1965	11,700	Built-Up	1997	20	-
	Maintenance Add'n.	1991	7,450	Built-Up	1997	20	-
	Transportation	1965	3,400	Built-Up	1997	20	-
	Transportation Add'n	1983	5,576	Built-Up	1997	20	-
	Fuel & Vacuum	1976	2,800	Metal Deck	1976	1	-
	Wash	1978	2,200	Metal Deck	1976	1	-
	Fare Retrieval	1986	320	Built-Up	1986	1	-
Division 15	Maintenance	1982	39,178	Built-Up	1994	20	-
	Transportation	1982	8,000	Built-Up	1994	20	-
	Fuel & Vacuum	1982	9,600	Built-Up	1994	20	-
	Tire Shop	1982	6,900	Built-Up	1994	20	-
	Wash	1982	2,652	Built-Up	1994	20	-
	Fare Retrieval	1986	320	Built-Up	1986	20	-
	Storage Canopy	1992	1,100	Metal Deck	1992	1	-
Division 18	Maintenance	1984	34,786	Built-Up	1984	3	$60,000
	Transportation	1984	13,534	Built-Up	1984	3	$60,000
	Fuel & Vacuum	1984	8,670	Built-Up	1984	3	$60,000
	Wash	1984	2,652	Built-Up	1984	3	$20,000
	Fare Retrieval	1984	340	Built-Up	1984	3	-
	Storage Canopy	1992	110	Metal Deck	1992	1	-
	Facilities Maintenance	1991	3,000	Built-Up	1991	20	-
Location 14	Repair	1922	81,570	Foam	1996	5	-
South Park	Body	1922	52,500	Built-Up	1983	2	$120,000
Shops	Paint	1982	10,220	Metal Deck	1982	2	-
	Storage	1920	18,142	Metal Deck	Unk.	-	-
	Storage	1959	8,470	Metal Deck	Unk.	-	-
	Storage	1959	4,680	Metal Deck	Unk.	-	-
	Storage	1982	18,000	Metal Deck	1982	-	-
	Canopy	Unk	4,500	Metal Deck	Unk.	-	-
	Canopy	Unk	4,200	Metal Deck	Unk.	-	-
	Canopy	Unk	4,000	Metal Deck	Unk.	-	-