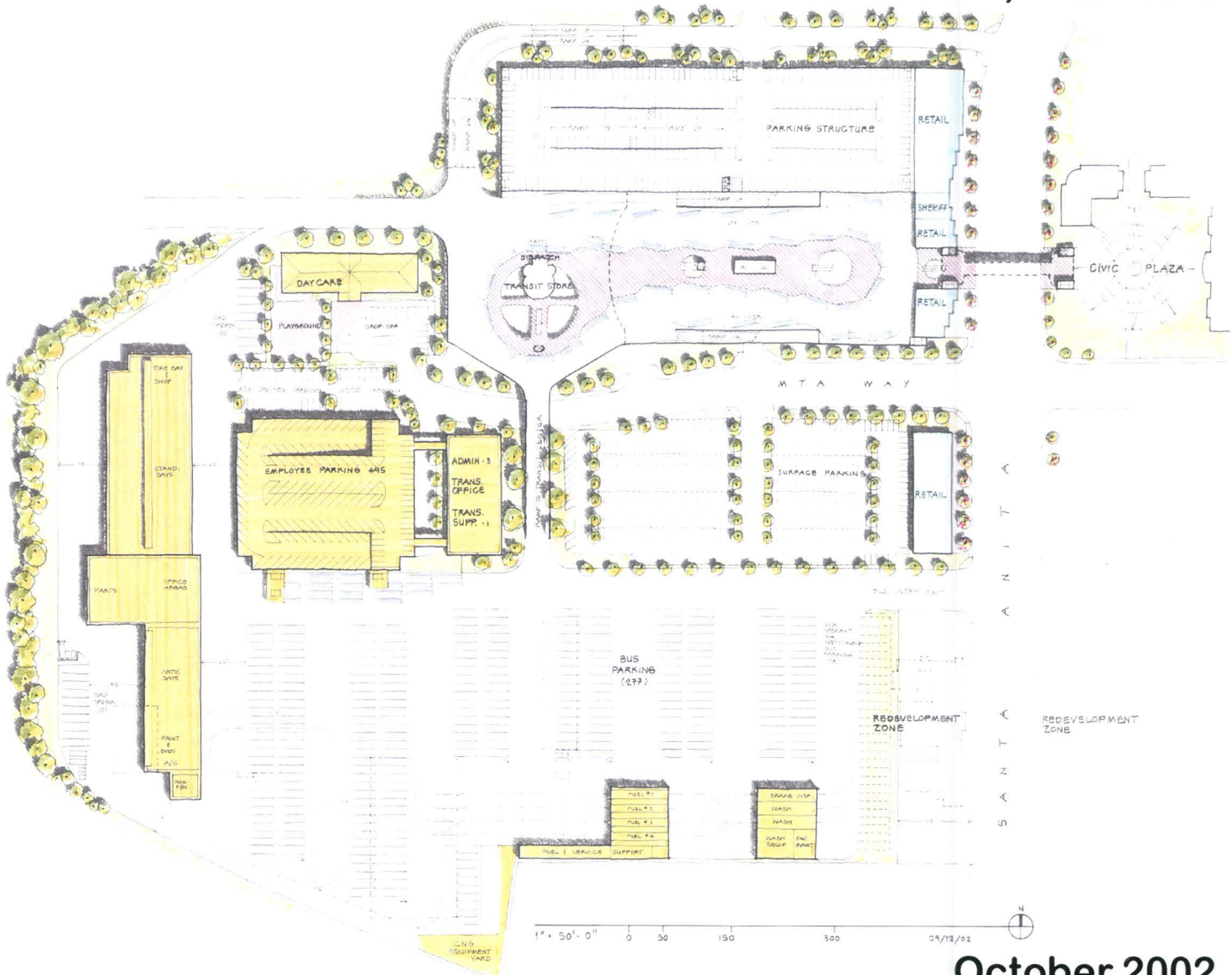




Los Angeles County Metropolitan Transportation Authority Division 9 Master Plan Report El Monte, California



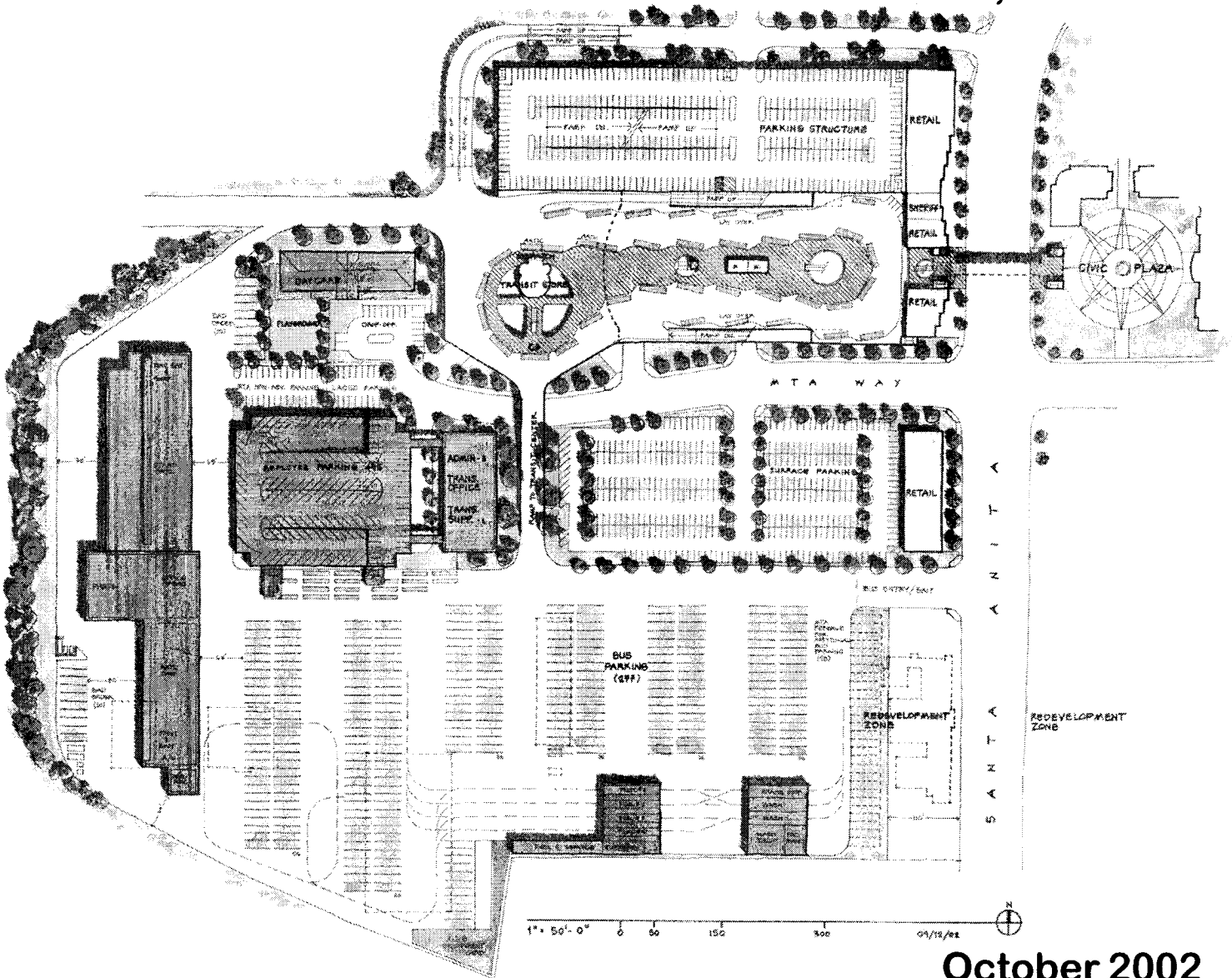
October 2002

prepared by





Los Angeles County Metropolitan Transportation Authority Division 9 Master Plan Report El Monte, California



October 2002

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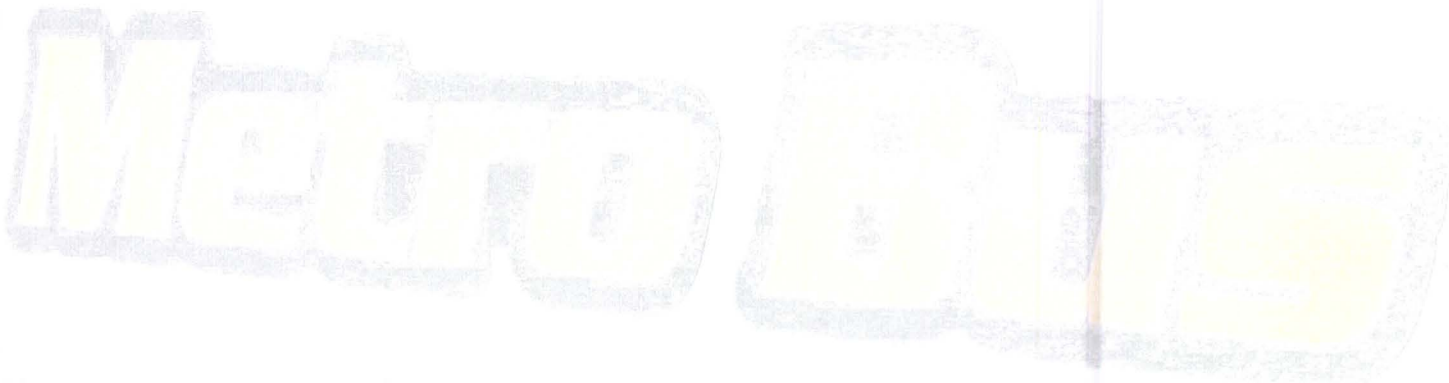
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**Section One
Introduction**





Section One Introduction

Introduction

As a part of an overall plan to improve its service and facilities, The Los Angeles County Metropolitan Transportation Authority (MTA) San Gabriel Valley Sector intends to develop, expand, and improve the Division 9 Bus Transportation and Maintenance Facility, the adjacent El Monte Transit Center, and the associated Caltrans park-n-ride Facilities. The initial and crucial step in this effort is the development of a comprehensive Master Plan for the entire site and possibly some adjacent commercial and City of El Monte-owned properties. The goal is to develop a comprehensive facility and site master plan, which would include all elements of the current facilities while providing an opportunity for MTA to:

1. Correct, enhance, and upgrade or replace aging, inefficient, and substandard facilities.
2. Increase the number of buses operated from the Division 9 Facilities from about 200 to 300, with a crush capacity of 350.
3. Enhance the capacity (passenger areas and bus berths) of the El Monte Transit Center.
4. Enhance the appeal and functionality of the Caltrans park-n-ride lots.
5. Reorganize the site layout to decrease unsafe mixing of buses and private vehicles and cross traffic patterns.
6. Reorganize the Bus Parking configuration to enhance circulation and reduce unnecessary bus movements.
7. Explore the possible redevelopment opportunities that may arise as a part of rethinking and master planning the Division 9 operation.
8. Incorporate the ideas and insights of the various project stakeholders in the most efficient way possible by utilizing an innovative, interactive, and creative approach resulting in unique master planning solutions.

A Planning Team, led by **Maintenance Design Group** (MDG) of Denver, Colorado and Houston, Texas was selected by MTA to provide comprehensive master planning services for this initial effort.

As a part of the planning process, this *Master Plan Report* was developed to document programming interviews, data collection efforts, facility assessment data, planning theory, planning ratios, space needs, and other technical data



the Purpose and Use of the document as well as the methodology employed by the Planning Team.

Section Two - General Facility Assessment: On-site observations of the existing facilities are documented in this section. The Functions, Adjacencies, Construction Types, Equipment, and Special Features of each building and functional area are assessed and recorded. ADA Deficiencies are also identified in this section. In addition, functional remarks have been included on the planned renovations to the Division 9 Facilities proposed by STV in 1996.

Section Three - Basis for Planning: Summaries of the on-site observations, interviews, and data collected during the initial on-site programming session are provided within Section Three. A "write-up" for each stakeholder group interviewed and for each functional group is presented with tables documenting staffing and vehicle counts. Deficiencies, Affinities, and Key Planning Issues are also included.

Section Four - Master Plan Program: This section presents the program requirements of space needs developed from the data collected from and provided by San Gabriel Valley Sector Office, the Los Angeles County Sheriff's Department, and the Division 9 Transportation and Maintenance Departments.

Section Five - Master Plan Charrette: The events which occurred during the on-site design charrette the week of August 5 to 9, 2002 are chronologically documented within this section. The process can be followed on a day by day basis, beginning with the 'big picture' urban planning ideas, leading to a Site Master Plan, a Division 9 Master Plan, and conceptual floor plans for the Division 9 facilities. Final concepts can be found at the end of this section, while preliminary concepts can be found Appendices C, D, and E.

Section Six - Project Implementation/Phasing: A detailed phasing plan describes and illustrates a method of project implementation through series of three phases, allowing the Operations of both the Division 9 Maintenance functions, as well as the El Monte Transit Center to continue uninterrupted.

Section Seven - Project Budget: A preliminary estimate of probable construction costs for each new proposed structure and space on the Division 9/El Monte Transit Center site is included in this section in order to identify costs by phase and by individual building/area. Estimates of soft costs, including design and construction management fees, permitting furniture, data/communication systems, and administrative



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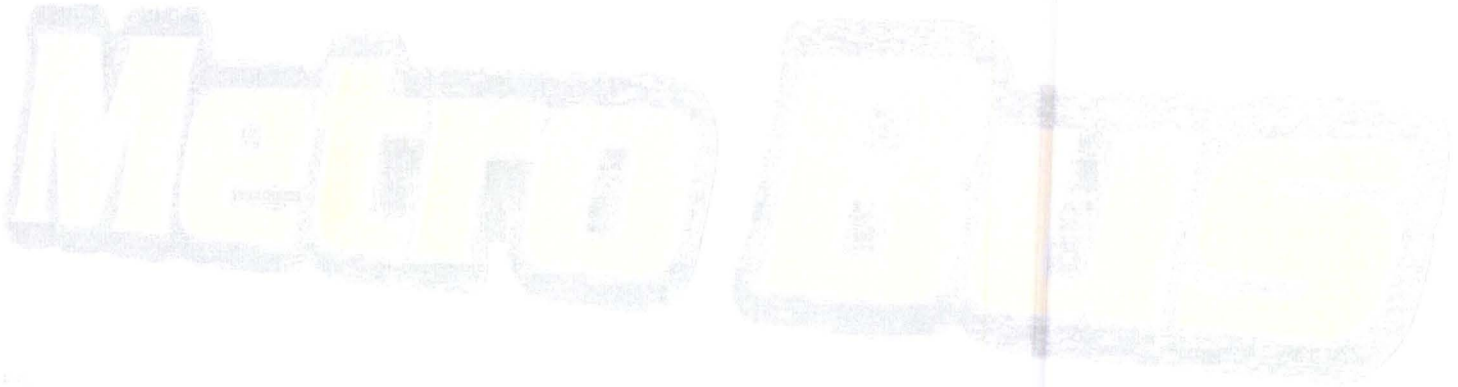
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Los Angeles County
Metropolitan Transportation
Authority

Division 9 Master Plan Report

Section Two General Facility Assessment







Section Two General Facility Assessment

Introduction

MTA Division 9 Bus Transportation and Maintenance facilities are currently located at the corner of Santa Anita Avenue and Ramona Boulevard just north of the San Bernardino Freeway (Interstate 10) in the City of El Monte. Adjacent to Division 9 is the MTA El Monte Transit Center served by a dedicated Busway from the San Bernardino Freeway and from four Caltrans park-n-ride lots. All of the facilities and parking areas encompass approximately 30 acres.

This general condition and functional assessment will focus on the facilities owned by MTA at this site. These facilities include the areas and structures utilized by Division 9 and the El Monte Transit Center. MTA's several buildings include a Sector Office Building, Bus Maintenance Facility, Transportation Building, Fuel/Interior Cleaning Building, and Wash Building.

This assessment of the existing facilities at the Division 9 site is a "snapshot in time" assessment of their current facilities, space utilization, and future viability as a major bus Operations and Maintenance Division as well as an integral transit element in the San Gabriel Valley. The following table is a summary of the major structures on the site as well as the year they were built. Area provided for the parking structure is its single level footprint.

BUILDING NAME	YEAR BUILT	AREA (sf)
Sector Office Building	pre-1940	15,500
Transportation Operations Building	1974	10,200
Bus Maintenance Facility	1974	32,110
Fuel/Interior Cleaning Building	1974	12,800
Bus Wash Building	1974	9,600
Parking Structure (760 spaces, 3 levels)	1987	57,200
El Monte Transit Center	1974	24,000
Total All Buildings		161,410

Summary of Deficiencies

One of the initial efforts by the MDG Planning Team was to conduct a tour of the Division 9 grounds and the adjacent related facilities to gain a better understanding of the existing conditions and deficiencies. A more in-depth review of the facilities was conducted at a later date in order to gather



detailed information for the condition assessment. The following is a summary of the primary deficiencies identified

Sector Office Building

- The San Gabriel Valley Sector Offices have been relocated into a recently renovated existing building (adaptive reuse).
- Sector Offices have no true 'front door' or reception area.
- Many interior doorways to common spaces and restroom interiors within the Sector Offices are not yet ADA compliant.

Transportation Building

- Transportation Building lacks a true 'front door' or reception area.
- Many interior doorways to common spaces and restroom interiors within the Transportation Building are not yet ADA compliant.
- Exterior of Transportation Building is in 'fair' condition, showing signs of deterioration.
- Storage space within Transportation Building is inadequate.
- Office size and quantity is inadequate for current needs.

Bus Maintenance Building

- A large amount of bulk parts storage is located in secured uncovered fenced area outside of the Bus Maintenance Building.
- Inadequate parts storages in Bus Maintenance Building
- Inadequate toolbox storage and lay-down space in Bus Maintenance Facility.
- Some storage functions are located in converted shipping containers outside of the Bus Maintenance Building.
- Inadequate number of repair bays for current and future fleet size.
- The apron of Bus Maintenance Building is utilized as additional bus repair bays, complete with plumbed lubrication commodities and compressed air.
- Office and other support areas within the Maintenance Building are accessed via two stairs. No elevator is provided.
- Equal and Accessible facilities are not provided on the ground floor of the Maintenance Building to meet ADA compliance.
- Bus Repair and Inspection Bays are 16 feet wide, much more narrow and more cumbersome to work within than the industry standard of 20 feet.
- New ductwork and methane-sensing equipment have been installed in the Bus Maintenance Building. New ventilation



- system interferes with the continuous operation of the fall protection system for staff working on bus roofs.
- Bay and pit floors in Bus Maintenance Building show extreme signs of deterioration.
 - No fall protection is provided over the inspection pits, and lighting within the pits is very limited.
 - Body Bay lacks a ventilation system for welding and is not physically separated from the rest of the Maintenance Bays (code compliance issues).
 - The in-floor vehicle exhaust system of Bus Maintenance Building appears not to be used/non-functional.
 - The secure tool storage (tool crib) is located in caged area within a flat repair bay, negating its use as much needed repair bay.

Fuel/Wash Buildings

- Fuel/Interior Cleaning Building is in generally poor condition.
- Dynamometer Bay in the Wash Building is used as an A/C Repair Bay/Shop.

Transit Center/Parking Structure

- The upper level of Parking Structure on Caltrans lot appears to be under/unutilized and all spaces are marked for compact vehicles.
- The El Monte Transit Center is in general poor condition in need of numerous functional as well as cosmetic upgrades.
- The El Monte Transit Center has only 10 bus berths on upper level (local and express service) and only 1 Greyhound bus berth on the lower parking lot level. At least 3 or 4 more berths are currently needed to improve operating efficiency at the Transit Center.
- The Busway is limited in its access to and from Interstate 10. It only allows eastbound access to the Transit Center and westbound exit from the Transit Center.

General Facility Assessments

The following provides general statistical and assessment data for each building and for major areas and spaces within each building. The data provided includes a description of: Function, Adjacencies, Area and Dimensions, Space Construction, Equipment and Furnishings, and Deficiencies/Comments (if applicable). A more detailed inventory of each building's spaces is provided as a part of the Program Detail included in Appendix A.



SECTOR OFFICE BUILDING

Function: Office and support areas for the San Gabriel Valley Sector Office staff. Staff functions include: Administrative and Financial, Planning and Scheduling and Sector Management. The Administration Building also includes a large Community Room, office and support areas for the LA County Sheriff Department Staff, Facility Maintenance Shops and Storage Areas, and the Division 9 Exercise Room.

Adjacencies:

- Employee Parking Lot
- Transportation Building

Area and Dimensions:

- 15,500 square feet

Space Construction:

- CMU enclosure over concrete pad

Equipment/Furnishings:

- Typical office furnishings and open workstations.
- Sheriff Department area includes: typical office furniture, special staff lockers, and secure weaponry safes and storage equipment
- Facility Maintenance Shop and Storage areas include general shop equipment

Deficiencies/Comments:

- Building was recently renovated and converted from the MTA Training Facility into the Sector Offices
- Interior finishes of the building are in "like new" condition (as they have recently been replaced and upgraded)
- Exterior facade has recently been repaired and painted but is still showing signs of deterioration due to age
- Roof was recently replaced
- No "Front Door" or true reception area
- ADA Issues:
 - + Recent addition of ramps at front entry addressed the access to the building compliance issues



ADA Access Ramp



Community Room



Limited Wheelchair Turning Radius at Restrooms



Updated interior finishes throughout



Deficiencies/Comments continued:

- + Outstanding accessibility issues within the office areas and Restrooms are:
 - ADA compliant stalls and toilet fixtures were installed but entryways and door hardware into the Restrooms do not meet ADA standards
 - No ADA compliant sinks or urinals in Men's Restrooms
 - Lavatory piping is exposed and requires ADA compliant padded covers
 - Not all doors and entryways to common areas include ADA compliant door hardware and required clear space adjacent to the doors
 - Required panic hardware is not yet in place at all exits
 - Fire Alarm notification system may need to be evaluated



TRANSPORTATION BUILDING

Function: Office and support areas for the MTA Division 9 Transportation staff. Staff functions include: Management, Dispatch, Driver and Road supervision, training, and bus operators (Drivers). Facility includes a Driver's Room, TV Room, Locker Room, Restrooms, vending and Kitchen Areas, Dispatch areas, and office areas for supervisors and management staff.

Adjacencies:

- Employee Parking Lot
- Bus Parking Areas

Area and Dimensions:

- 10,200 square feet – single story

Space Construction:

- CMU enclosure over concrete pad
- Typical Stud and Gypboard wall construction

Equipment/Furnishings:

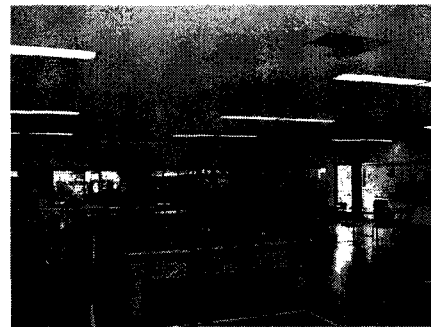
- Typical office furnishings and open workstations in office areas
- Driver's Room includes: typical dining furniture, recreational tables, video games, route map storage bins, and computer workstations
- Locker Room includes individual secure lockers for all Drivers

Deficiencies/Comments:

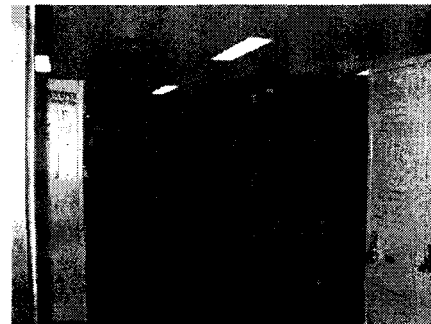
- Interior finishes of the building are in "fair" condition. Exterior facade has had several repairs but is still showing signs of deterioration due to age.
- No "Front Door" or true reception area
- ADA Issues:
 - + Interior modifications have created some Access and other ADA compliance issues
 - + Outstanding accessibility issues within the building are:
 - Not all doors and entryways to common areas include ADA compliant door hardware and required clear space adjacent to the doors
 - Fire Alarm notification system may need to be evaluated



Driver's Room



Pool Table and Dining Areas



Driver's Locker Room



Parking Adjacent to the Building



BUS MAINTENANCE FACILITY

MAINTENANCE ADMINISTRATION

Function: Provide administrative support for the bus maintenance operation.

Adjacencies:

- Bus Maintenance

Area and Dimensions:

- 780 square feet

Space Construction:

- 2nd floor enclosure over slab
- Gypboard walls and suspended ceiling

Equipment/Furnishings:

- Cubicles and office equipment
- Copier, fax, computers, and printers

Deficiencies/Comments:

- Space has private offices for management staff with workstations for clerks. Exhaust and noise from the maintenance below permeate into the space.
- Office and other support areas are accessed via two stairs. No elevator is provided.
- Equal and Accessible facilities are not provided on the ground floor to meet ADA compliance.



Maintenance Administration



MAINTENANCE SUPERVISOR OFFICE

Function: Dedicated office area to provide supervision of the mechanics working the repair bays. Allow mechanics to receive work orders.

Adjacencies:

- Running Repair Bays
- Manuals Area

Area and Dimensions:

- 160 square feet

Space Construction:

- Typical Stud and Gypboard construction
- Office has a Window looking onto the Shop floor

Equipment/Furnishings:

- Typical Office furniture and Computer



*Manuals Area outside the
Supervisor's Office*

RESTROOMS/LOCKERS

Function: Provide bathroom facilities and lockers to store personal items and uniforms.

Adjacencies:

- Bus Maintenance areas

Area and Dimensions:

- 985 square feet

Space Construction:

- CMU enclosure over concrete slab
- Ceramic tile floor and walls

Equipment/Furnishings:

- Toilets
- Showers
- Lockers



BREAK ROOM

Function: Provide a resting area, lunch facilities, and vending machines for mechanics to take a break.

Adjacencies:

- Bus Maintenance areas

Area and Dimensions:

- 150 square feet (approx.)

Space Construction:

- Typical stud and Gypboard construction

Equipment/Furnishings:

- Vending machines
- Chairs and tables



RUNNING REPAIR BAYS (Interior)

Function: Dedicated and specially equipped area to maintain and repair buses.

Adjacencies:

- Parts Storeroom
- PM/Inspection Bays

Area and Dimensions:

- 6 Bays 16' x 55' (2 are co-utilized as Brake Bays)
- 5,280 square feet

Space Construction:

- CMU enclosure over concrete pad
- Column supports between every two bays

Equipment/Furnishings:

- No lifts. All interior Running Repair Bays are Pit Bays
- Facility was originally equipped with "in-floor" vehicle exhaust system
- Radiant heaters and work benches

Deficiencies/Comments:

- Pit entry via end access design stairs
- No Pit Protection system
- No overhead vehicle exhaust system
- Bays include new Methane detection system and elimination system (see photo)
- Floor surface is deteriorating in some high traffic areas (see photo)
- New ventilation ducting impacts the fall protection system's continuous connection



Running Repair Bay over a Pit



Work Areas adjacent to O.H. Doors



New Exhaust Duct



Deterioration of the Floor Surface



RUNNING REPAIR BAYS (Exterior)

Function: Dedicated areas to maintain and repair buses.

Adjacencies:

- Bus Repair Bays (Interior)

Area and Dimensions:

- 16 Bays 16' x 55'
- 14,080 square feet of the building apron

Space Construction:

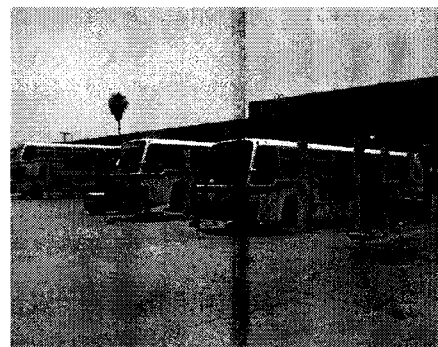
- No enclosure or canopy over concrete apron area

Equipment/Furnishings:

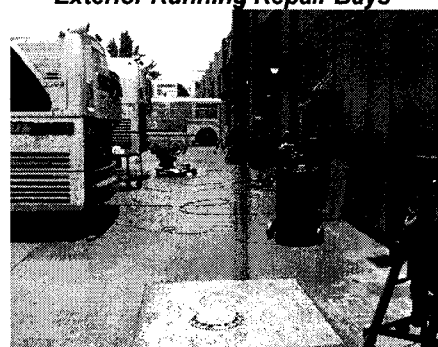
- Portable wheel engaging lifts (4 sets)
- Central lube and compressed air reels

Deficiencies/Comments:

- Repair Bays are simply spaces allocated just outside the interior bays on the building apron
- Mechanics utilize Wheel Engaging Portable Lifts (see photo)
- No protection of mechanics or equipment from the natural elements
- No dedicated portable equipment storage areas or workbench areas (see photo)
- Possible violation of NPDES and other environmental laws and local code



Exterior Running Repair Bays



Exterior Work Area



Portable Lifts being used outside



Area Between Exterior Repair Bays



PM/INSPECTION BAYS

Function: Dedicated and specially equipped bays to provide regularly scheduled preventive maintenance on buses.

Adjacencies:

- Running Repair Bays
- Parts Storeroom

Area and Dimensions:

- 6 Bays 16' x 55'
- 5,280 square feet

Space Construction:

- CMU enclosure over concrete pad
- Column supports between bays

Equipment/Furnishings:

- Concrete inspection pits with central lube and compressed air reels
- Radiant heat fixtures

Deficiencies/Comments:

- Each bay has pit to access the underside of the bus
- Two bays are shared and also utilized as Body Repair Bays
- Bays are also used on second shift for Brake Inspection efforts



Inspection Bay Pit Opening



BRAKE BAYS

Function: Dedicated and axle engaging lift equipped bays to provide regularly scheduled brake maintenance on buses.

Adjacencies:

- Running Repair Bays
- PM/Inspection Bays
- Parts Storeroom

Area and Dimensions:

- 2 Bays 16' x 55' (Bays are also utilized for general Running Repair functions)
- 1,760 square feet

Space Construction:

- CMU enclosure over concrete pad
- Column supports between bays

Equipment/Furnishings:

- Two post axle engaging, adjustable post lifts
- Suspended radiant heat fixtures

Deficiencies/Comments:

- Bays are too narrow (16') to allow for efficient removal/replacement of wheels during brake work



Brake Bay with Lift



BRAKE SHOP

Function: Repair and turning of brake drums and rotors.

Adjacencies:

- Brake Repair Lift Bays
- Running Repair Bays
- Parts Storeroom

Area and Dimensions:

- 450 square feet (approx)

Space Construction:

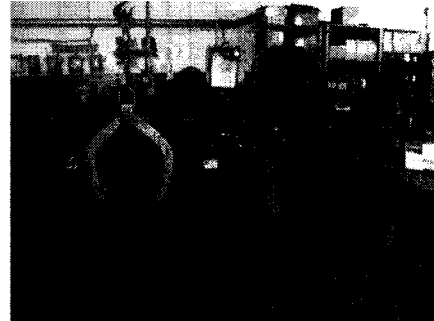
- CMU enclosure over concrete pad

Equipment/Furnishings:

- Two Transfermatic® brake drum and shoe lathes
- Jib crane

Deficiencies/Comments:

- Equipment has a dust collection system



*Brake Shop with Transfermatic®
Brake Lathe*



TIRE BAY AND SHOP/STORAGE

Function: Repair and change tires for all buses.

Adjacencies:

- Chassis Wash Bay
- Steam Clean Area

Area and Dimensions:

- 1 Bay 22' x 55'
- 1,200 square feet including Shop and Storage

Space Construction:

- Canopy enclosure over concrete pad with CMU separation walls

Equipment/Furnishings:

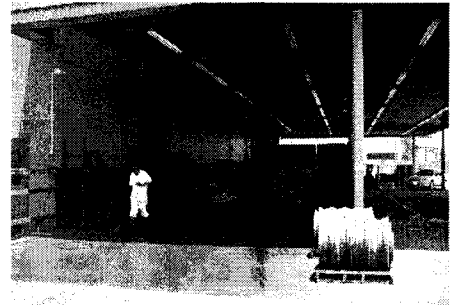
- Tire changing equipment and rolling jacks
- Tire racks

Deficiencies/Comments:

- Additional tires are stored outside
- Contractor operated and maintained areas



Tire Bay and Shop



Tire Bay, Shop and Tire Storage areas



CHASSIS WASH BAY

Function: Washing of bus undercarriage prior to PM/Inspection and maintenance activities. Utilizing a special robotic washer that travels on rails imbedded in the bay floor.

Adjacencies:

- Tire Repair Bay and Shop/Storage
- Steam Clean Areas

Area and Dimensions:

- 1 Bay - 26' x 55'
- 1,430 square feet including equipment

Space Construction:

- Canopy over special concrete drainage infrastructure. CMU separation walls

Equipment/Furnishings:

- ChassisJet® robotic undercarriage washer
- Special high-pressure water supply and oil/water filtration system

Deficiencies/Comments:

- Recent infrastructure improvements to drainage and installation of a new ChassisJet® System



Chassis Wash Bay with ChassisJet®



TOOLBOX STORAGE

Function: Storage for mechanic's personal toolboxes when not on a work shift.

Adjacencies:

- Running Repair Bays
- PM/Inspection Bays

Area and Dimensions:

- 450 square feet (approx.)

Space Construction:

- CMU enclosure over concrete pad

Equipment/Furnishings:

- None

Deficiencies/Comments:

- Tool boxes are stored in open unsecured areas



Tool Box Storage Near Repair Bays

TOOL CRIB

Function: Secure storage of unique and expensive specialty tools utilized by the mechanics.

Adjacencies:

- Running Repair Bays
- Brake Shop

Area and Dimensions:

- 300 square feet (approx.)

Space Construction:

- Chain link fencing on concrete floor

Equipment/Furnishings:

- Storage shelving

Deficiencies/Comments:

- Area is located on Shop floor in an area that could be utilized as a bus repair bay



BODY BAY AND BODY SHOP

Function: Shared Repair Bay utilized to repair damaged bus panels and frames.

Adjacencies:

- PM/Inspection Bays
- Body Shop and Welding Booth Area

Area and Dimensions:

- 1 Bay 16' x 55'
- 850 square feet plus an additional 300+ square feet for adjacent Body Shop area and Welding Booth area

Space Construction:

- CMU enclosure over concrete pad

Equipment/Furnishings:

- Frame pulling equipment, welding machines
- Metal fabrication and bending equipment

Deficiencies/Comments:

- There are no existing fume exhaust systems currently being used in association with this function
- The Welding Area is not code compliant as currently configured
- The Body Repair work area is not physically separated from the Bus Maintenance Areas. Migration of fumes and dust particles cannot be addressed in the current configuration.



AIR CONDITIONER REPAIR SHOP

Function: Repair and maintain air conditioning systems on buses.

Adjacencies:

- Dynamometer Bay (now used as A/C Shop Area)
- Running Repair Bays
- Parts Storeroom

Area and Dimensions:

- 750 square feet (approx.) A/C Shop only

Space Construction:

- Repair Positions are exterior.
- Shop Area - CMU enclosure over concrete pad

Equipment/Furnishings:

- Workbench, Freon® recovery equipment, test equipment
- Storage racks

Deficiencies/Comments:

- The Dynamometer Bay has been converted into a A/C Shop and Storage area. The A/C Repair Bays are located just outside of this space
- Bays are exterior with no protection from the elements
- No ability to test A/C units in a controlled environment
- Mechanics must use ladders and rolling platforms to access the A/C units on the Buses



Dyno Bay Converted into A/C Shop



Bus in exterior A/C Repair Bay Position with Mechanic accessing the A/C unit while on a ladder



COMPRESSOR ROOM

Function: Provide compressed air to the Bus Maintenance Building.

Adjacencies:

- Running Repair and PM/ Inspection Bays

Area and Dimensions:

- 100 square feet (approx.)

Space Construction:

- CMU enclosure over concrete pad
-

Equipment/Furnishings:

- Air compressors
- Air dryers
- Storage tanks

STOREROOM

Function: Storage of Bus Parts and Materials utilized by the Maintenance Department in the daily maintenance of the Buses. Area is secure and staffed by procurement staff. All bus parts including warranty parts and reissued parts are stored in this area.

Adjacencies:

- Running Repair Bays and PM/Inspection Bays
- Parts Office, Tool Crib, Manuals Area

Area and Dimensions:

- 1,900 square feet

Space Construction:

- CMU enclosure over concrete pad

Equipment/Furnishings:

- Special moving shelving units
- Storage racks

Deficiencies/Comments:

The Storeroom aisles are too narrow to move a pallet between the shelving units. All large parts are stored at the Exterior Stores Enclosure. There is not dedicated shipping and receiving area.



Issue Window



Special Moving Shelving Utilized in Storeroom



EXTERIOR BULK STORES

Function: Storage of bulk items and material utilized by the Maintenance Department and by other departments within the Sector.

Adjacencies:

- Running Repair Bays and PM/Inspection Bays
- Parts Office and Tool Crib

Area and Dimensions:

- 3,000 square feet

Space Construction:

- Secure fence enclosure with large gated opening forklift access

Equipment/Furnishings:

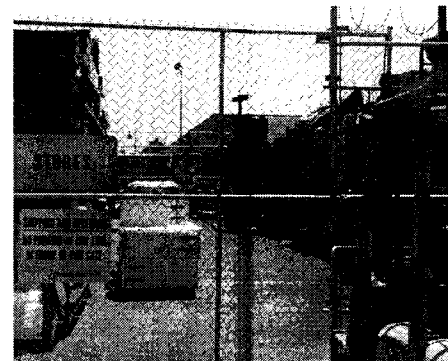
- Storage racks
- Pallet racks

Deficiencies/Comments:

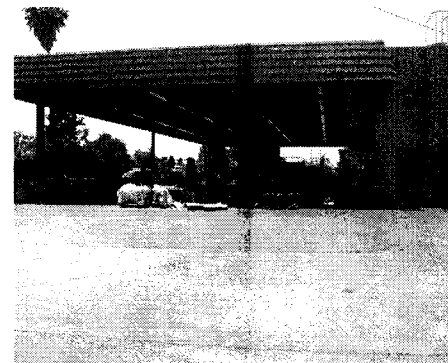
- Stores area is exterior with no Canopy Cover to protect materials from the natural elements
- Additional Covered Storage is being accommodated adjacent to the Steam Cleaning Area (see photo)



Exterior Stores Enclosure



Storage Equipment in Exterior Stores Enclosure



Additional Covered Stores Area



BATTERY AREA

Function: Store and charge bus batteries.

Adjacencies:

- PM/Inspection Bays

Area and Dimensions:

- 110 square feet (approx.)

Space Construction:

- Steel panel screen wall

Equipment/Furnishings:

- Battery benches
- Battery chargers

Deficiencies/Comments:

- Battery Area in current configuration is not a code compliant area
- Exhaust hoods used to extract acid laden battery exhaust



FARE RECOVERY BUILDINGS

Function: Two secure outbuildings where Service Personnel utilize fare recovery equipment (housed in the buildings) to probe the incoming bus for data relating to passenger boardings and fares. The Service Personnel also recover the day's fares by removing and emptying the bus's farebox by inserting it into a special vault/receiver. Buses currently queue while waiting for this process in one of two site entry lanes. All MTA buses must have their fares removed as they enter the site.



South Fare Recovery Building

Adjacencies:

- Fuel/Interior Clean Lanes

Area and Dimensions:

- 2 Fare Recovery positions 12' x 40'
- 2 outbuilding 120 square feet each

Space Construction:

- Split Face CMU enclosure over concrete pad
- Roll-up overhead access doors to vault storage areas

Equipment/Furnishings:

- Specialized farebox recovery and storage equipment specific to MTA's on-board fare taking equipment

Deficiencies/Comments:

- Separate Buildings require separate security and A/C systems
- Access to site and bus circulation is impacted by the current location of the buildings
- ADA Issues:
 - + Building may not meet ADA compliance due to the proximity of the bus path to the building and the available maneuvering area within the building when vaults are being stored
 - + ADA compliance may not be in force for this special use structure



FUEL/INTERIOR CLEAN BUILDING (Lanes)

Function: Service Personnel clean the interior of each bus while the bus is being fueled with either Compressed Natural Gas (CNG) or diesel fuel

Adjacencies:

- Bus Wash Building
- CNG Fuel System Equipment Area

Area and Dimensions:

- 4 lanes with four positions at 14' x 50'
- 12,800 square feet including equipment

Space Construction:

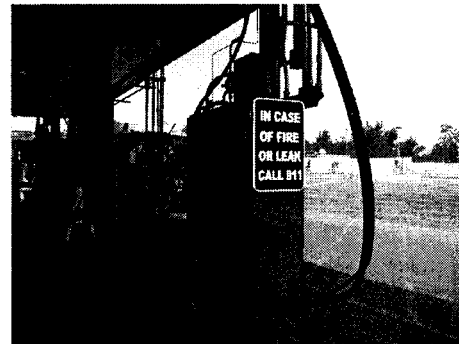
- Canopy enclosure over concrete pad CMU enclosure for equipment and support areas
- Steel structural canopy with plaster ceilings to prevent fume collection
- East to west entry. Exit to separate Wash Building

Equipment/Furnishings:

- CNG and diesel dispensers
- CNG control systems
- "Cyclone" Bus Interior Vacuum System

Deficiencies/Comments:

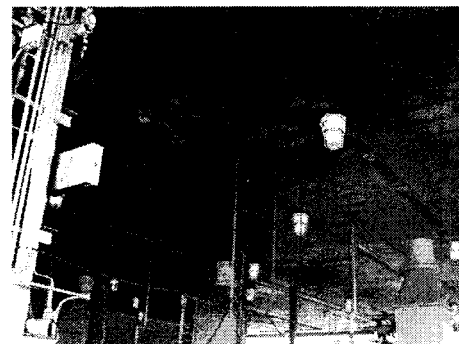
- The fueling and cleaning positions are a stacked layout configuration
- Entry to Fuel/Interior Cleaning lanes is dictated and limited by the adjacent Bus Parking and by the bus queuing process. The orientation of the Fuel/Interior Clean and Wash Buildings in relation to the Bus Parking Areas and the Fare Recovery Building also impacts the ability to move buses through the service cycle in a counter-clockwise motion.
- Ceiling and building structure look aged but adequate
- Clear height below the canopy structure is adequate for existing fleet
- New methane detection system
- New CNG delivery system



CNG Fueling Dispenser



Fuel/Interior Cleaning Building



Ceiling in the Fuel Lanes



"CYCLONE" VACUUM EQUIPMENT AREA

Function: Provide vacuum waste storage for debris from interior cleaning of buses. Also called the Trash House.

Adjacencies:

- Fuel/Interior Cleaning Building

Area and Dimensions:

- 145 square feet (approx.)

Space Construction:

- CMU enclosure with access to debris collection area

Equipment/Furnishings:

- Separator
- Waste container

Deficiencies/Comments:

- Area is integral to the "Cyclone" Vacuum System function
- "Cyclone" Vacuum System is old and will need significant upgrades. Bellows replacement project is in process of being funded.



Vacuum Equipment



BUS WASH BUILDING

Function: Clean exterior of buses every day after they exit the Fuel/Interior Cleaning Building.

Adjacencies:

- Bus Wash Equipment Area
- Fuel/Interior Cleaning Building

Area and Dimensions:

- 2 Drive-Thru Wash Bays at 22' x 50' each
- 9,600 square feet including equipment and other storage areas within the structure

Space Construction:

- CMU walls surrounding steel frame structure. No overhead doors. Wash equipment area is between washers.

Equipment/Furnishings:

- N/S wash equipment
- Tire guides at wash entrance

Deficiencies/Comments:

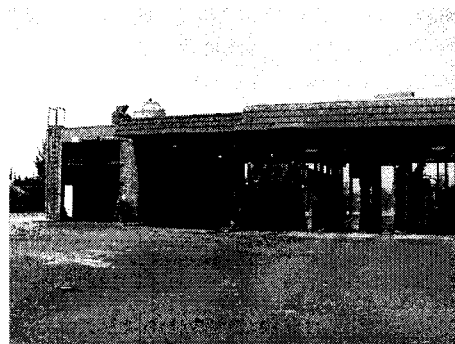
- 2 drive-through washers available although typically only the newer of the two washers is used.
- Entry to Wash Building is dictated and limited by the adjacent Fuel/Interior Cleaning Building and by the bus queuing process. The orientation of the Wash Building also impacts the ability to move buses through the service cycle in a counter-clockwise motion.
- Day clean positions are also included in this area just adjacent to wash bays. Some positions are exterior with no Canopy Cover.



Bus Washer



Wash Building



Wash Building



CNG EQUIPMENT FARM

Function: Dedicated exterior area for CNG Equipment. Equipment provides compression and storage of the compressed natural gas (CNG) for buses at the Fuel Building.

Adjacencies:

- Fuel/Interior Cleaning Building

Area and Dimensions:

- 5,000 square feet

Space Construction:

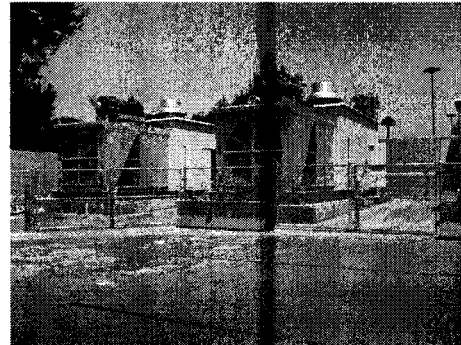
- Secure and gated exterior enclosure. Equipment is protected from vehicle impact by jersey barriers.

Equipment/Furnishings:

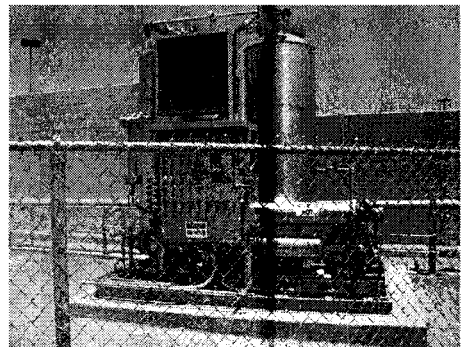
- Compressor skids
- CNG storage vessels
- De-fueling location

Deficiencies/Comments:

- CNG Equipment installation is relatively new. Location may not be optimum for reorganized Division 9 site.



CNG Equipment



CNG Equipment



EL MONTE TRANSIT CENTER

Function: MTA Bus/Transit transfer and park-n-ride facility in the City of El Monte. The Transit Center also includes passenger amenities; ticket and pass sales, and a Greyhound Terminal.

Adjacencies:

- Caltrans park-n-ride facilities
- Division 9 Transportation and Maintenance Facility

Area and Dimensions:

24,000 square feet plus additional exterior area for 10 bus berths and circulation areas in a circular configuration. Central core includes elevator, escalator, and passenger amenities.

Space Construction:

- CMU, concrete, steel (varies). Canopy enclosures and enclosed office and passenger amenities
- Two level design to separate passenger crossing bus paths.

Equipment/Furnishings:

- Passenger seating
- Schedule and Route Boards, other destination and Public Address systems

Deficiencies/Comments:

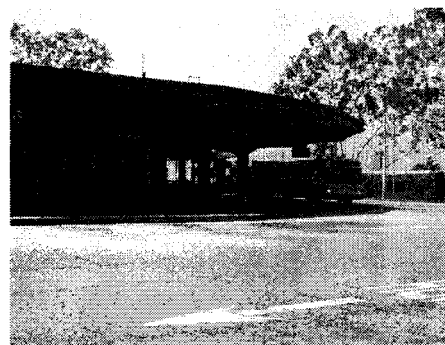
- General condition of facility is poor
- Capacity is limited by two level access and dedicated Busway access to and from Interstate 10
- General Renovation is planned but is limited to cosmetic improvements and the addition of a Foothill Transit Ticket Store
- Additional bus berths are required
- Additional dedicated Bus Layover Areas are required
- Separation of the local and express buses may be possible by separating them onto two levels
- Dedicated Busway is limited to access from the East Bound HOV Lanes and to the West Bound HOV Lanes of Interstate 10
- Busway is elevated as it connects to the El Monte Transit Center



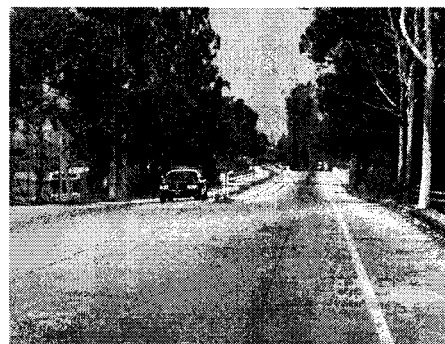
Bus Berths and Loading Areas



Passenger Waiting Areas



Bus Berths and Loading Areas



Busway Access



CALTRANS PARK-N-RIDE LOTS

Function: Provide dedicated parking for transit passenger personal vehicles. The Caltrans lots provide approximately 2000 parking spaces. Current utilization is estimated at approximately 65%.

Adjacencies:

- MTA Division 9 Facilities
- El Monte Transit Center

Area and Dimensions:

- 680,000 square feet (approx.)
- 2,000 parking spaces (1,300 surface and 700 compact in Parking Structure)

Space Construction:

- Asphalt pavement, concrete curbs, and various types of landscaping
- Concrete parking structure

Equipment/Furnishings:

- None

Deficiencies/Comments:

- Parking Structure is marked for all compact car parking
- Structure was constructed by MTA in response to an increase in the parking demand. Demand decreased and additional capacity was never fully utilized.



Dedicated Park-n-Ride areas



MTA constructed Compact Car Parking Structure on Caltrans Property for additional parking capacity



Park-n-Ride Parking Areas



Assessment of Previous Design

In 1995 MTA contracted with STV Incorporated to develop concepts for the renovation and additions to the maintenance facility at Division 9. In 1996 STV completed the final design documents for the proposed renovations and additions. Portions of the STV design documents can be found in Appendix G of this document. The following is a general assessment of these plans. The purpose of this assessment is to review the plans to determine their current viability and usefulness to MTA in light of the expanded vision MTA has for the Division 9 operation and the San Gabriel Valley Sector.

The general program goals driving the selected concept for the renovation/expansion plan was to:

- Provide additional repair bay space
- Upgrade the administrative and support facilities
- Provide additional storage areas
- Relocate the Brake Shop to free up valuable bay areas
- Provide a code compliant Battery Storage and Charging area
- Provide the Tire Contractor a separate and securable area away from the maintenance bays.

The STV design concept basically accomplishes these tasks. However, the criteria on which the facility was based provides an interim fix and not a long-term solution. This is typically associated with the concept of reusing and renovating existing spaces in the Maintenance Building and the location of the planned new facilities.

Reuse and Renovation

The concept of reuse and renovation of existing facilities is a very typical approach to providing physical upgrades and “squeezing out” more maintenance space. In this case, the approach assumes that the current maintenance areas are adequate and by simply modifying the office and support areas and providing new shop space that this will have a significant impact on the function of the existing repair bays. This could have had the intended impact except no renovation or upgrades were proposed for the areas vacated by the Brake Shop and no renovation was included the existing bays to address deteriorating finishes, sub standard exhaust systems, poor lighting, and other physical limitations of the facility that, at the time, was more than 20 years old.



The concept also converts the existing office and support areas into new accessible Restrooms, Locker Rooms and Training Space. A new passenger elevator is also included in the upgrades. The plan assumes that Maintenance Administration and Parts Stores will be moved into the new Maintenance Facility Annex. This relocation of function allows the proposed renovation to take place.

Planned New Facilities

The STV design includes the construction of a new Maintenance Facility Annex due east of the existing Maintenance Building in the areas currently being used for exterior storage, Bad Order Bus Parking, and Stacked Bus Parking. The new facility would include:

- Six Repair Bays in an opposing bay layout configuration separated by a 10 aisle, the bays are 18' wide by 60 feet long (1,080 SF), and are equipped with lifts (4 bays with two post axle engaging and 2 bays with 3 post platform lifts)
- Each bay was planned to share lubricant reel banks with Antifreeze, Engine Oil, "Torque Oil", and Compressed Air
- The proposed Parts Storage room (3,100 SF) included provisions for a "Conveying Parts Rack " 24" deed Shelving Units and 8' 3 tier Pallet Racks. No provision was made for a mezzanine storage area
- Office areas included an office for the Manager and the Deputy, a File Storage Room, a Conference Room, a large Lobby area, Men's and Women's Restrooms, a Janitor Closet, a Telephone/Communication Room, and a Electrical Panel Room

The Plan also included a new Tire Shop to be located in the far south corner of the site adjacent to I-10 Freeway and the automobile dealership. The new Tire Shop included the following:

- A triangular "winged" layout with two Bay Work areas and a center Tire Storage and Office area
- The Bays were planned as canopied areas, not enclosed
- The Tire Storage area was to be secured with chain link fencing
- The entire southern face of the Tire Shop would be screened and protected from the I-10 Freeway by a 8-1/2 foot tall, 8 inch CMU block wall
- No designated area for Tire Shop equipment was indicated on the plan



- It is assumed that compressed air would be provided from either the existing facility or the proposed annex

Assessment Comments

The overall concept of providing renovations and new planned annex facilities seems to be sound, if the entire Division 9 site were not negatively impacted by the location of the new buildings. The placement of the annex building however, would impact the already cumbersome and tight site flow and the already tight stacked parking areas. Also, the renovation plans do not address existing bay inefficiencies and system issues.

Value to MTA

As to the value of the proposed facilities in relation to the estimated cost of this project, two things must be considered:

1. *Are the proposed renovations and new facilities fully addressing the existing shortcomings in space and support areas?* The STV plan provides for 6 new bays and possibly 1 additional bay in the existing facility. As is the current situation and as it was reported to MDG, in 1996 at the time of the STV design, Division 9 maintenance staff was utilizing at least 14 exterior bay locations for a significant portion of the day.
2. *Is MTA paying a premium for the addition of only 7 bays?* Based on the proposed \$6.8 million budget (as reported to MDG by MTA staff) each bay would cost MTA almost \$1 million and still not provide for an adequate number of repair bays. Additional expansion would be required beyond these 7 bays.

Conclusion

The concept of reuse and renovation of the existing facilities in conjunction with the construction of new planned facilities does address some of the issues impacting the Division 9 Maintenance Facility. However, the proposed placement of the new facilities does not address the overall limitations and constraints within the maintenance facility and the site constraints created by the existing facilities and the proposed new facilities.





3

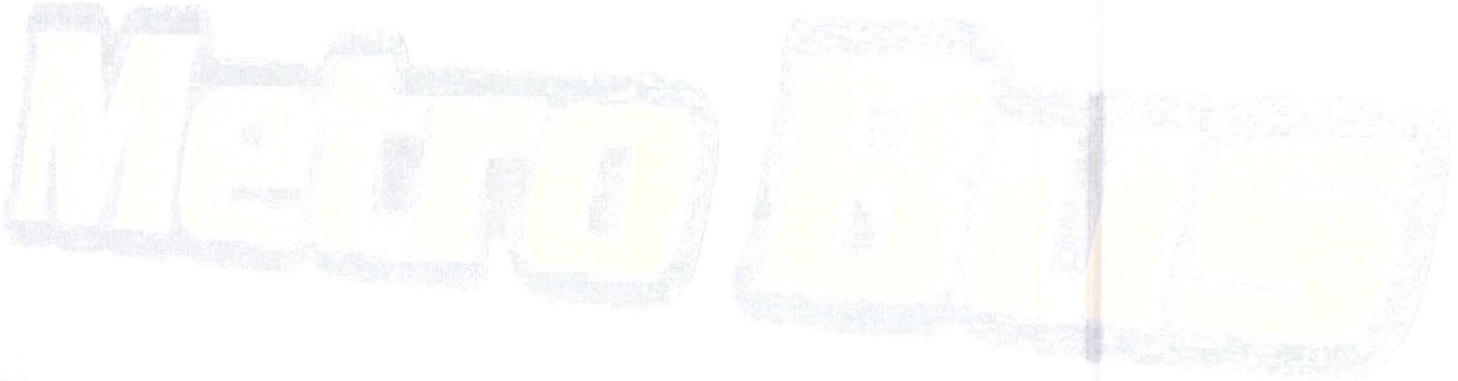




Los Angeles County
Metropolitan Transportation
Authority

Division 9 Master Plan Report

Section Three Basis For Planning







Section Three Basis For Planning

Introduction

The MDG Planning Team spent the week of July 8 to 12, 2002, at the MTA San Gabriel Valley Sector Office in El Monte, California, interviewing staff from all organizations currently understood to be stakeholders in this Master Planning effort. Information gathered from these interview sessions, programming questionnaires, and from the site and facility tours was used to develop the Master Plan Program. This program provided direction for the concept development effort during the on-site Master Planning Charrette session.

The following is a summary of the events that took place each day during the programming Interview sessions. For stakeholders who will eventually reside on-site at the Division 9 facility, staffing summaries and vehicle counts, as well as affinities and key planning issues have been identified and included below. These staffing and vehicle summaries have been provided under three headings: Existing, Program 2002, and Master Plan 2022. The figures provided for Program 2002 accommodate the immediate needs of the Division 9 facilities and El Monte Transit Center (what is needed in order to 'right-size' the facilities today), while the Master Plan 2022 information includes programmed space to accommodate the estimated needs of the facilities to support a 200-bus fleet on a 20-year horizon.

For all other stakeholders, only the key points from the interview sessions that may have an impact on the master planning process have been included.

Interview Session #1: City of El Monte Redevelopment

As the site is located adjacent to the downtown area of El Monte, it was decided that any redevelopment plans which may affect the surrounding area should include the input of the City. The following are highlights from the interview session with representatives from the City of El Monte Redevelopment Department.

- The City envisions a community 'feel' to the area, with residential, retail, and government development planned for area across from site on Ramona Boulevard and Valley Boulevard.
- The City is very interested in working with MTA to develop a truly comprehensive master plan for the site, with a multi-



modal transit center and overall transit oriented development.

- The City is interested in having a Metrolink station incorporated into the plan for a new transit center.
- The City wants to maintain car dealerships on both sides of Santa Anita Avenue, possibly expand both to enhance tax-base for City.
- The City is confident MTA-occupied land on Santa Anita Avenue Corridor would lease/sell quickly to hotel/car dealership if opened for development.
- The City would be willing to relocate its corporate yard if needed to accommodate Division 9/Transit Center expansion; could be tied into a comprehensive redevelopment plan for the Santa Anita Avenue Corridor.
- The City would like to see expanded parking, compatible with evening use functions such as retail/theatre/food service.

Interview Session #1 concluded with a brief discussion of El Monte's demographics, and the fact that home ownership is on the rise in the area. This would help to support the development of the retail tax-base, which the City envisions for the Santa Anita/I-10 Corridor.

**Interview Session #2:
Los Angeles County
Sheriff's Department**

Function

The Los Angeles County Sheriffs Department is under contract with the MTA to provide Transit Police and security services along bus routes, at transit centers, and as undercover officers on buses and trains. In addition to their role as security providers, they serve as a liaison between the MTA and the numerous law enforcement agencies in the Los Angeles Metropolitan Area.

**Hours of
Operation**

24 hours a day, seven days a week



Staff

For planning purposes, it is necessary to identify all Los Angeles County Sheriffs Department staff and possible future staff that will be located at the Division 9 site. Existing, Program 2002, and Master Plan 2022 staffing figures are as follow.

Position	Existing	Program 2002	Master Plan 2022
Sergeant	1	1	1
Lieutenant	1	1	1
Analyst/Utility	2	2	2
Team Leaders	4	4	4
Officers	6	17	17
Total	14	25	25

Vehicle Parking

The vehicles in the following table are utilized by the Los Angeles County Sheriffs Department. These vehicles will be parked on site at Division 9.

Vehicle	Existing	Program 2002	Master Plan 2022
Cruisers	12	15	18
Total	12	15	18

Vehicles Maintained

Vehicles will not be maintained by the Los Angeles County Sheriffs Department at the Division 9 site.

Affinities

The following functional relationships should be provided in the Master Plan.

- Los Angeles County Sheriff's Facility should be located adjacent to highway on-ramp with dedicated/securable access.
- Adjacency to San Gabriel Valley Sector Office area should be considered for sharing of some functions such as Large Conference/Community Room and Training Room.
- Office areas should be located adjacent to a central meeting/briefing room.

Key Planning Issues

The following list of planning issues was compiled for consideration during master planning efforts:

- Provide women's restroom/locker/shower facilities.
- Provide men's shower facilities.
- Provide securable storage for tactical items, weaponry, radios, and files.



Afternoon Site Tours

After Interview Session #2, additional site tours were conducted by the MDG Planning Team to investigate some issues that were discussed at the morning meetings.

Fletcher Park

Mention was made by the Sector staff of possibly utilizing this small triangular shaped area to the west of the Division 9 site. In addition to being approximately 15 feet below the grade of the Division 9 site, the park appears to be well kept, and is used by the adjoining neighborhood for leisure as well as for community outreach to children. It is the opinion of the Planning Team that Fletcher Park is most valuable to the community as currently utilized.

Metrolink Train Station

A visit was made to the station to examine the passenger facilities, the platform, and parking areas. Metrolink passenger parking is approximately 250 spaces.

El Monte Local Trolley

The main Transit Station for the City-operated Trolley is located adjacent to the El Monte Metrolink Station. It would be desirable to integrate this Trolley Transit Station into any multi-modal transit center that may be planned.

Interview Session #3: Foothill Transit

Foothill Transit (West Covina, California) is a major user of the El Monte Transit Center and has recently allocated funds for the upgrade of the center, including the addition of a Transit Store.

Because of their heavy utilization and commitment to the El Monte Transit Center, MTA wanted Foothill Transit to be an integral part of the Master Planning effort for the Division 9 and El Monte Transit Center sites. Any plans to design a new multi-modal transit center on the El Monte site may have an impact on Foothill Transit's plans that are already under way for the rehabilitation of the existing Center. This in mind, representatives of Foothill Transit shared the following information.

- The scope of El Monte Transit Center Rehabilitation is primarily cosmetic, with the addition of Transit Store.



- Foothill Transit buses make up approximately 60% of the El Monte Transit Center's pull out traffic.
- Improved bus ingress/egress from I-10 would be critical for a new transit center, as El Monte is an anchor station for their routes to the west (express and local).
- Foothill Transit would be uncertain of the status of the Rehabilitation Project if a new center were planned, although they believe that the enhancements are still necessary for the passengers.
- Foothill Transit alone could currently use up to 14 berths at certain times during the day (only 10 berths are available on the upper loading level).
- Foothill Transit would be interested in a possible joint development of new multi-modal transit center with Metrolink (it was thought to be mutually beneficial with an increase in ridership for both systems).

There was some question as to whether Foothill Transit would continue with their planned upgrades to the El Monte Transit Center if plans to build a new facility were seriously being considered. It was pointed out by the MDG Planning Team that even if the process were completed as quickly as possible, a new Transit Center facility would not be operational for 3 to 5 years. This would allow ample time for Foothill Transit and its passengers to benefit from any upgrades provided as a part of the Rehabilitation Project.

Interview Session #4: Caltrans

Caltrans (State of California Department of Transportation) was interviewed to understand the relationship and requirements of the existing park-n-ride facilities and also to get information as to the future planning for the HOV lanes on Interstate 10 and the dedicated Busways. It was hoped that several of the El Monte Transit Center's access issues could be addressed during the meeting with the representatives from Caltrans. The following are the highlights of this meeting.

- Caltrans plans for the Interstate 10 HOV lanes to be extended from Santa Anita Avenue to Interstate 605 by the end of 2003.
- Caltrans plans for the continued extension of the I-10 HOV lanes from Interstate 605 to Claremont by the end of 2006.
- Dedicated west-inbound or east-outbound access to/from the El Monte Transit Center has not been considered by Caltrans; however, they are looking at various other systems such as signal coordination as a means of expediting the departure of buses from the Center.



- Caltrans owns the El Monte surface commuter parking (±1,300 spots), as well as the land the MTA built parking structure (±700 spots) sits upon.
- Double deck HOV lanes along I-10 corridor are part of the Caltrans 20-year plan.

**Interview Session #5:
MTA Facilities
Maintenance**

Function MTA Facilities Maintenance for the San Gabriel Valley Sector is responsible for the scheduled and demand maintenance of the buildings, building systems, parking lots, bus service equipment, and bus communication systems for Division 3, Division 9, and all bus stations and transit centers within the sector.

Hours of Operation 5:30 AM to 10:30 PM, seven days a week

Staff For planning purposes, it is necessary to identify all MTA Facilities Maintenance staff (for this sector) and possible future staff that will be located at the Division 9 site. Existing, Program 2002, and Master Plan 2022 staffing figures are as follow.

Position	Existing	Program 2002	Master Plan 2022
Facilities Maintenance Supervisor	1	1	2
Property Maintainer	3	3	7
Electrician	3	3	6
Electronic Communication Technician	3	3	6
Custodians	10	10	12
Analyst	0	1	1
Total	20	21	34



Vehicle Parking

The vehicles in the following table are utilized by the MTA Facilities Maintenance Department. These vehicles will be parked on-site at Division 9.

<u>Vehicle</u>	<u>Existing</u>	<u>Program 2002</u>	<u>Master Plan 2022</u>
Sedan	1	1	2
Vans/Trucks	15	15	25
Total	16	16	27

Vehicles Maintained

Vehicles will not be maintained by the Facilities Maintenance Department at the Division 9 site.

Affinities

The following functional relationships should be provided in the Master Plan.

- Facility Maintenance Shop should be located adjacent to/within Maintenance Building.

Key Planning Issues

The following list of planning issues was compiled for consideration during master planning efforts:

- As of 12/01/02, this department as a part of the San Gabriel Valley Sector will be centralized at the Division 9 location.
- Elevator/escalator maintenance, Landscaping, and Tree Service is all out-sourced.
- All CNG compressor work is handled by another group, the Fuel Station Division.
- Provide a Common Work Area, and a Shop capable of electronics repair, A/C repair, and general carpentry.

**Interview Session #6:
San Gabriel Valley
Sector Office**

Function

Full administrative services for the San Gabriel Valley Sector of MTA including financial analysis, program administration, safety program management, human resources, budget preparation, management of procurement, accounting, and labor relations.

Hours of Operation

7:30 AM to 4:30 PM, Monday through Friday

Staff

For planning purposes, it is necessary to identify all Sector Office staff and possible future staff that will be located at the Division 9 site. Existing, Program 2002, and Master Plan 2022 staffing figures are as follow.



Position	Existing	Program 2002	Master Plan 2022
General Manager	1	1	1
Administrative Assistant	1	1	1
Schedule Development Manager	1	1	1
Transportation Planning Manager	1	2	2
Schedule Supervisor	1	1	1
Stops and Zones Representative	0	1	1
Schedule Maker	3	4	4
Admin and Finance Manager	1	1	1
Chief Admin Analyst	1	1	1
Admin Analyst	2	2	4
HR Manager	0	1	1
HR Analyst	1	1	1
Assistant HR Analyst	0	1	1
Senior Safety Specialist	1	1	1
Workers Comp Analyst	1	1	1
Employee Relations Rep	0	1	1
Communications Manager	1	1	1
Communications Officer	1	3	3
Total	17	25	27



Vehicle Parking

The vehicles in the following table are utilized by San Gabriel Valley Sector Office. These vehicles will be parked on-site at Division 9.

<u>Vehicle</u>	<u>Existing</u>	<u>Program 2002</u>	<u>Master Plan 2022</u>
Sedan	4	5	7
Total	4	5	7

Vehicles Maintained

Non-revenue vehicles will not be maintained by the San Gabriel Valley Sector Office at the Division 9 site.

Affinities

The following functional relationships should be provided in the Master Plan:

- Planning and Scheduling Offices should be located close to the administrative function of Division 9 Transportation, as they work closely together for scheduling.
- Each of the groups within Sector Office should be located within close proximity to one another in a decentralized fashion to facilitate communications across groups.

Key Planning Issues

The following list of planning issues was compiled for consideration during master planning efforts:

- San Gabriel Valley Sector Office is currently divided into 3 main groups: Planning and Scheduling, Administration and Finance, and Communications. A fourth group (Human Resources) will be added in the future. Space for the Human Resources Group must be included in the program.
- Sector Office handles the Administrative needs for MTA Operating Divisions 3 and 9.
- Provide each group their own filing area, and access to a small conference room.
- Provide a large, shared conference room for the meeting of all Sector Office personnel.
- Provide a large training facility, possibly for shared use with Los Angeles County Sheriff's Department.
- Provide a reception area for public access and application drop-off.
- Provide a secure filing room for Human Resources.

**Interview Session #7:
Division 9 Transportation**

Function

Oversees and ensures the normal day-to-day operations of all bus routes operated from Division 9, and the management of all associated personnel, including bus operators.



Hours of Operation 24 hours a day, seven days a week

Staff For planning purposes, it is necessary to identify all Division 9 Transportation staff and possible future staff that will be located at the Division 9 site. Existing, Program 2002, and Master Plan 2022 staffing figures are as follows.

Position	Existing	Program 2002	Master Plan 2022
Division Manager	1	1	1
Assistant Manager	2	3	3
Stenographer	1	1	1
Admin Clerk	2	2	6
Training Instructor	1	1	2
Transit Operations Supervisors	10	10	15
Dispatch Clerk	3	3	4
Operators	360	360	540
Total	380	381	572

Vehicle Parking The vehicles in the following table are utilized by the Transportation Department. These vehicles will be parked on site at Division 9.

Vehicle	Existing	Program 2002	Master Plan 2022
Sedan	14	14	21
Total	14	14	21

Vehicles Maintained Vehicles will not be maintained by the Transportation Department at the Division 9 site.

Affinities The following functional relationships should be provided in the Master Plan:

- Transportation Administrative offices should be located adjacent to Sector Office, as they work closely with Planning and Scheduling.
- Driver's Areas and Dispatch Areas must be adjacent and must have direct access to Bus parking areas.

Key Planning Issues The following list of planning issues was compiled for consideration during master planning efforts:

- Provide a dedicated bus wheelchair lift testing area.



- Examine possible need for increase fare recovery capacity, reducing driver down time at shift's end.
- Provide an exterior employee area or patio area for use by drivers.
- Provide a replacement exterior area for the golf practice area.
- Provide interior secure transfer storage area adjacent to the Dispatch Area.
- Provide dedicated locker/shower/restroom facilities for both men and women.
- Provide expanded shower/restroom facilities for men.
- Provide additional Operator amenities such as quiet, TV, and exercise rooms.
- Provide a private conference room for use by Transportation Manager and his management staff.
- Provide upgraded facility lighting (current lighting is inadequate).
- Examine possibility of providing access from Operator's area to Fletcher Park amenities.

Interview Session #8: Greyhound Bus Lines

Greyhound Bus Lines currently utilizes the El Monte Transit Center as a point of departure for many of its routes to the Central and Eastern parts of the United States, as well as for its package shipping service. MTA wants to include Greyhound in the Master Planning process and to solicit their input on the future plans for the site, and on Greyhound's plans for future growth or expansion of services at the El Monte Transit Center. Key points from the programming interviews with representatives from Greyhound follow.

- They would like to be able to have visual contact with their berth on the lower level of the transit center from their offices.
- Twenty-five to thirty buses pass through the Transit Center each day, with three to four buses sometimes present at once during peak periods.
- Greyhound is currently diverting traffic away from larger cities such as Los Angeles, toward their passenger base in the suburbs, such as the El Monte Transit Center.
- They could use additional berths if they were currently available, and can see the need for 3 to 5 berths currently and up to 10 in the long-term.
- Canopy coverage at berths for passenger/package loading/unloading would be very desirable.
- Currently the terminal and the spaces leased by Greyhound within the El Monte Transit Center are adequate. Greyhound may wish to participate in the



center's rehabilitation efforts. Review of the lease agreement is required.

- Greyhound related to the MDG Planning Team that they were interested in participating in a new multi-modal transit center project and that they have access to some federal funding for capital projects.

**Interview Session #9:
Division 9 Bus Maintenance**

Function	To provide a clean, safe, and reliable fleet of buses for the MTA Operators and the riding public through regular service and maintenance of the entire Division 9 fleet. Non-revenue vehicles operated by Division 9 staff members are also maintained by Division 9 Maintenance.
Hours of Operation	24 hours a day, seven days a week
Staff	For planning purposes, it is necessary to identify all Bus Maintenance staff and possible future staff that will be located at the Division 9 site. Existing, Program 2002, and Master Plan 2022 staffing figures are as follow.



Position	Existing	Program 2002	Master Plan 2022
Maintenance Manager	1	1	1
Assistant Manager	0	0	2
Senior Equipment Maintenance Supervisor	1	1	0
Equipment Maintenance Supervisor	5	5	7
Facilities Supervisor	1	1	2
Production Control Supervisor	0	1	1
General Clerk	1	1	1
Typist Clerk	0	1	1
Mechanics	60	64	91
Service Attendants	34	36	54
Equipment Records Specialist	5	5	7
Stores Supervisor	0	0	1
Store Keeper	1	1	1
Stock Clerk	4	4	6
Farebox Technicians	3	3	5
Warranty Mechanic	1	1	3
Mopper/Waxer	6	6	9
Non-Revenue Mechanic	1	1	2
Total	124	132	194

Vehicle Parking

The vehicles in the following table are utilized by the Bus Maintenance Department. These vehicles will be parked on site at Division 9.



<u>Vehicle</u>	<u>Existing</u>	<u>Program 2002</u>	<u>Master Plan 2022</u>
Tow Truck	1	1	1
Tow Truck – Flat	0	0	1
Mule	1	1	2
Pick Up	1	2	2
Pool Vehicle	2	2	2
Yard Cart	1	3	3
Total	6	9	11

Vehicles Maintained

The following vehicles will be maintained by the Bus Maintenance Department at the Division 9 site.

<u>Vehicle</u>	<u>Existing</u>	<u>Program 2002</u>	<u>Master Plan 2022</u>
40' Transit Bus	199	200	300
Non-Revenue Vehicles	52	59	77
Total	251	259	377

Affinities

The following functional relationships should be provided in the Master Plan.

- All storage functions (storeroom, bulk storage, tool crib, related offices) should be centralized for greater operational/spatial efficiencies.
- Bus Repair Bays should be adjacent to parts storage and other shop areas.
- PM/Inspection Bays should be adjacent to parts storage and other shop areas.

Key Planning Issues

The following list of planning issues was compiled for consideration during master planning efforts:

Site and Bus Circulation Issues

- Use of 'smart' card should be considered to eliminate need for Operator delays with bus while fares are being retrieved.
- The stacked, unconsolidated bus parking has rendered the current service cycle very inefficient.
- Individual or tandem bus parking is preferred (similar to Division 8 and 15) although it may not be practical at this Division.
- Space must be provided to allow buses to queue prior to having fares pulled. In a plan where bus are to be stacked consideration must be given as to the Service Cycle and



the need to provide staging or queuing areas for buses waiting to be fueled and cleaned.

- Simplification of the parking arrangement is desired
- Site security/access issues must be addressed in Master Plan.
- Site signage must be addressed in Master Plan.
- Provide a block wall separating I-10 access road from site for sound and screening purposes.

Bus Maintenance Facility

- Provide adequate space in storeroom to handle storage needs currently accommodated in outdoor containers.
- Provide a Body Repair Bay with anchor pots.
- Provide a Paint Bay (can be co-located with the Body Repair Bay).
- Provide a dedicated Steam Cleaning Area with special drainage and clarification systems adjacent to the Chassis Wash Bay but with access from the Brake Shop.
- A dedicated code compliant Welding/Fabrication Area is needed adjacent to the Body Repair Bay.
- Provide dedicated detailed interior clean locations for scheduled "Deep Cleaning" activities.
- Provide adequate restroom/locker/shower facilities for both male and female staff members.
- Provide a code compliant Battery Room.
- Provide adequate number of Repair and PM/Inspection Bays. Number should be based on the size of the fleet being maintained.
- Provide Brake Repair Bays with axle engaging lifts.
- Lower Level Work Areas (LLWA) are preferred for PM/Inspection activities. Provide code compliant LLWA's with dedicated compliant entry/exits.
- Provide vehicle exhaust system.
- Facilities must be designed for maintenance of CNG and other lighter than air fuels.
- Provide a larger Parts Storage area with high bay storage areas for bulk item storage and long-term storage of material used sector wide.
- Repair Bays should be flexible and should adhere to MTA standards.

Interview Session #10: Facilities Engineering

A meeting with representatives from MTA Facilities Engineering Department was conducted to gather information of MTA Bus Operating Division facility standards. The following are the key points from this meeting.



- MTA does not have “official” or “approved” office space standards.
- MTA does not have “official” or “approved” bus maintenance space standards although several general design standards were related to the MDG Planning Team. It is MTA’s practice to solicit facility design criteria during the planning and design of facilities. The philosophy being that the design of each facility should be specific for each operation and property.
- The issue of primary importance to MTA Facilities Engineering with regards to any work or planning at the Division 9 site would be Phasing. It would be essential that the Division 9 Maintenance functions be minimally/un-impacted by improvements or modifications to the site.
- A graffiti removal area within the Wash Building should be provided.
- MTA Divisions 8 and 15 should be looked at for possible examples of office and shop space standards.
- Storeroom inadequacy at Division 9 may be partially attributed to the large variety of buses being maintained, the MTA goal is to maintain fewer types of buses in the future and therefore be able to stock fewer parts.

**Interview Session #11:
Metrolink**

The last stakeholder group interviewed for this programming effort was Metrolink. Metrolink operates the commuter rail system for the Los Angeles region. The meeting focused around the possibility of integrating the El Monte Metrolink Station with a new multi-modal replacement for the El Monte Transit Center. Highlights from this meeting follow.

- Union Pacific may need Metrolink to use the Alhambra rail line west of the current El Monte Station in order to begin utilizing the San Gabriel rail line (current Metrolink route west of El Monte) for more efficient freight movement. If this change occurs, the Metrolink station would likely remain in its current location.
- Metrolink stations are built, operated, maintained, and secured by the cities where they are located.
- Metrolink would like to have their station located adjacent to the El Monte Transit Center to take advantage of the increased modal split.
- El Monte is primarily a destination for Metrolink passengers.
- The current platform at the El Monte Metrolink Station is only 6 cars long (85’ each). Metrolink’s new design criterion is for new stations to be able to accommodate an



- 8-car assembly. Therefore the Station Platform must be at least 16' wide x 270' long.
- Metrolink provided general Station Design Criteria to the MDG Planning Team.





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Quick Reference Index System



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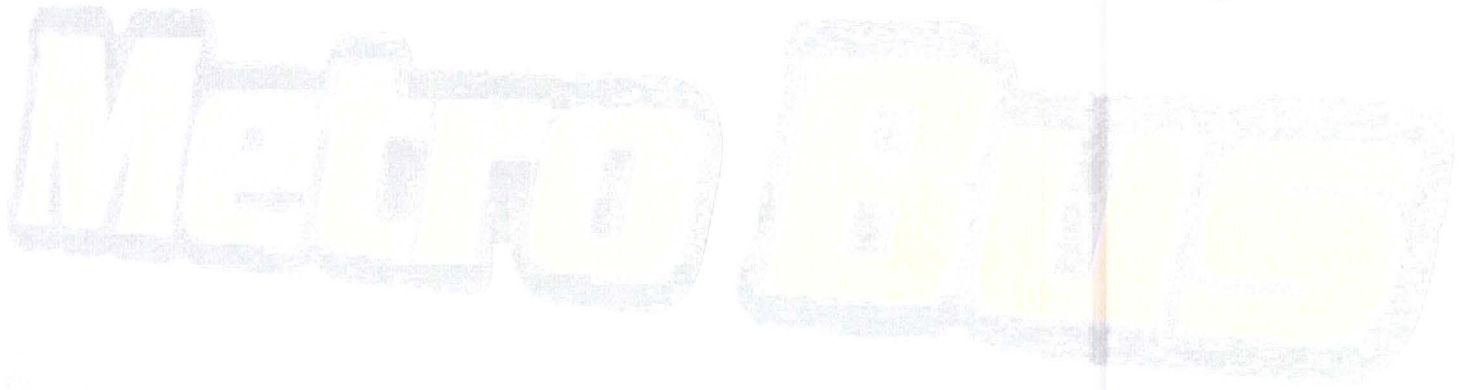




Los Angeles County
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Division 9 Master Plan Report

Section Four Master Plan Program







Section Four Master Plan Program

Introduction

This section presents the Master Plan Program developed for MTA Division 9 Transportation and Maintenance facilities, the adjacent El Monte Transit Center, and the Caltrans park-n-ride lots. The detailed program (presented in Appendix A) compares the current spaces with the functional requirements of a 200- and a 300-bus operation. The program quantities presented in this section are summarized totals. This macro level review of space needs allows the site master planning to proceed efficiently without becoming “bogged down” with overly detailed information. Eventually, the program detail will be accessed to further develop more detailed concepts for the various site elements and implementation plans.

The summary tables in this section include building square footages that are subtotaled into net square footages. For projected needs, a factor is then added to account for building walls, mechanical systems, structural columns, and electrical chases. Exterior parking areas and the various service buildings are also included as line items. Site circulation, setbacks, and landscaping requirements are calculated at 100% of the total square footage of all other areas and then added to the total.

An urban and a suburban variation was applied to both the 200 and the 300 bus model, providing a total of four facility models. Design features of an urban facility allow the space needs to be accommodated in a smaller area. Urban facilities are usually multi-story with stacked bus parking and an employee parking area integral to the structure. The facility usually covers the site from ‘sidewalk to sidewalk’ within a city block with no setback or easements. The total project budget for an urban facility is usually 50% more costly than a suburban facility. The savings recognized by reduced land acquisition costs are offset by higher construction costs because of the completely enclosed, internalized nature of the design. However, this design allows the facility to be constructed closer to the urban service area, thus reducing operating costs.

A suburban facility requires more site area but is less costly to build due to the fact that the bus and employee parking areas are externalized. Typically, larger parcels of land are available in suburban areas, allowing for less costly construction methods.



Also included in this section will be the MDG Planning Team's method of identifying space needs, programming techniques, calculations, and space standards utilized to develop the Space Needs Program. It is important for all groups that are being considered for inclusion in the Master Plan to understand and agree with these methods and calculations since the design of the facility will be based directly upon this program.

**MTA Staff
Summary**

Facility staffing levels are crucial to the Planning Team when determining the number of parking spaces and the size of support facilities and developing occupancy levels. The following table is a summary of the projected staffing levels for each department as they are currently organized. These staffing levels were taken directly from interviews and the programming questionnaires during the programming on-site sessions.

Position	Existing	Program 2002	Master Plan 2022
Sector Office	17	25	27
MTA Facilities Maintenance	20	21	34
LASD	14	25	25
Division 9 Transportation	380	381	572
Division 9 Maintenance	124	132	194
Total	555	584	852

**MTA Employee
Parking Summary**

Effort must be made to ensure that adequate employee parking is provided for in the Master Plan Program. This will be accomplished by utilizing two different methods.

Using a 9' x 18' standard sized parking space and including a 100% circulation factor calculates to 324 square feet per parking space. The main employee parking area at the current Division 9 site contains 271 spaces. During the Planning Team's two weeks at the site, there were always many spaces available in this parking area.

In addition to the main employee parking area, it is estimated that approximately 25 employees park in the Caltrans park -n- ride lots, and another 25 utilize the existing patron parking structure adjacent to the El Monte Transit Center. This brings



the total number of employee parking spaces currently available on the Division 9 site to 321.

As there is currently adequate employee parking available at the Division 9 site, assuming no operational changes, it will be the goal of the Planning team to match or surpass the existing ratio of approximately .58 parking spaces per employee.

Parking Spaces to Employee Ratio

	<u>Main Employee Lot</u>	<u>Caltrans Lot</u>	<u>Parking Structure</u>	<u>Total</u>
Square Footage	88,000 sf	8,100 sf (estimated)	8,100 sf (estimated)	88,000 sf
Standard Spaces	271	25	25	321

Parking Spaces to Employee Ratio

<u>Available Spaces</u>	<u>Employee Count</u>	<u>Spaces per Employee</u>
321	555	.58:1

Bus to Employee Parking Ratio

In operations such as those in place at Division 9, there exists a relationship between the number of buses maintained at the facility, and the number of employee parking spaces, which usually falls within a fairly narrow range. It is the experience of the Planning Team that this range is normally between .68 and .82.

Two hundred buses are currently maintained at Division 9 and, as calculated above, there are approximately 321 employee parking spaces available, this gives the Division 9 site a bus to employee parking ratio of .62. This ratio of .62 is a bit lower than the range MDG normally applies for such operations, translating into more parking spaces per bus maintained than is average.

This variance from the normal range can be explained. In addition to parking for the Maintenance and Transportation departments, there is currently adequate parking at Division 9 for Sector Office, Sector Facilities Maintenance, and for the Los Angeles County Sheriff's Department, functions not normally associated with a Maintenance Division. To demonstrate this fact, if the 51 spaces that are occupied by these 3 additional functions were taken from the total number of available spaces of 321, the new employee parking space total would be 270. The new bus to employee parking ratio



would be 200/270 or .74, which falls directly in the middle of the average range.

The Master Plan concepts which are developed for the Division 9 site must ensure adequate employee parking by meeting or exceeding both of the above planning ratios. This is accomplished by utilizing the existing parking structure which is adjacent to the Division 9 site.

At 57,200 square feet per level, this 3-level structure has an area of approximately 171,200 square feet. If re-striped for standard sized vehicle spaces (9' x 18'), it is estimated this structure can accommodate 495 vehicles. With a projected employee count of 852, and 279 buses maintained, this gives us a bus to employee parking ratio of 279/495, or .56, and a parking space to employee ratio of 495/852, or .58. Both of these ratios satisfy the goal of providing as much or more parking than under the current situation.

Employee Parking Ratios

	<u>Current</u>	<u>Planned</u>
Bus to Employee Parking	.62	.56
Parking space to Employee	.58	.58

Vehicle Parking Summary

Vehicle and equipment quantities are essential to the Planning Team when determining the number of parking spaces and size of support facilities. The following chart is a summary of the **Current, Program, and Master Plan** vehicles and equipment, which are utilized by Bus Operations, Maintenance, and CNG Fueling Facility. The numbers were obtained directly from the interviews and the questionnaires provided to the Planning Team.



Non-Revenue Vehicles

Position	Existing	Program 2002	Master Plan 2022
Sector Office	4	5	7
MTA Facilities Maintenance	16	16	27
LASD	12	15	18
Division 9 Transportation	14	14	21
Division 9 Maintenance	6	9	4
Total	52	59	77

Space Standards

Space standards were applied to the Master Plan Program. Area requirements for office, administrative, shops, and storage areas were derived from functional requirements and equipment space needs. The space standards listed below are examples of those utilized to develop the facility program.

Office Areas

General Manager	400 square feet (20' x 20')
Transportation Manager	168 square feet (12' x 14')
Supervisor	150 square feet (10' x 15')
Technician	80 square feet (8' x 10')
Administrative or Assistant Workstation (Medium)	80 square feet (8' x 10')

Transportation Areas

Driver's Room	±7 square feet/operator
Training Room	±3.5 square feet/operator
Locker Rooms	4 square feet/operator

Bus Maintenance Areas

Standard Running Repair Bay	1160 square feet (20' x 58')
Standard PM/Inspection Bay	1160 square feet (20' x 58')
Artic Running Repair Bay	1500 square feet (20' x 75')
Artic PM/Inspection Bay	1500 square feet (20' x 75')
A/C Repair Bay	1500 square feet (20' x 75')
Tire Repair Bay	1500 square feet (20' x 75')

Bus Service Areas

Drive-Through Wash Bay	1,600 square feet (20' x 80')
Fare Recovery Lanes	1,200 square feet (20' x 60')
Fuel/Interior Cleaning Lanes	1,600 square feet (20' x 80')

Vehicle/Equipment Parking

Standard Non-Rev. Sedan or Van	200 square feet (10' x 20')
Standard 40' Transit Bus	540 square feet (12' x 45')
Articulated Transit Bus	780 square feet (12' x 65')
Employee/Visitor Parking	162 square feet (9' x 18')
Disability Accessible Parking	234 square feet (13' x 18')



Comparative Data

The MDG Planning Team felt the best analysis of maintenance capacity would be one that compared the MTA maintenance situation with an industry standard. To do this, the MDG Planning Team collected data on a number of similar transit systems. This data was then analyzed to produce industry standard relationships of maintenance space to fleet size.

Data used for comparison came from a variety of sources. In the case of the maintenance capacity analysis, MDG selected data from previously published facility data, MDG project files, APTA data, and FTA data on 12 facilities across the nation. The results of this comparison are shown in the following table.

- Ann Arbor Transit, Ann Arbor, Michigan
- BT/CBS Facility, Bloomington, Indiana
- RTD East Metro, Denver, Colorado
- Admin, O&M, Des Moines, Iowa
- CTransit, Hartford, Connecticut
- RTC, Las Vegas, Nevada
- MTA Division 5, Los Angeles, California
- Foothill Transit, Irwindale, California
- Foothill Transit, Pomona, California
- O&M, Riverside, California

Comparative Data and Averages for Maintenance Garages

Facility Location & Identity	Design		Running Repair		Inspection	
	Fleet Size	# Bays	Buses/ Bay	# Bays	Buses/ Bay	
Ann Arbor, MI Ann Arbor Transit	100	7	14.29	2	50.00	
Bloomington, IN BT/CBS Facility	60	7	8.57	2	30.00	
Denver, CO RTD East Metro	250	12	20.83	6	41.67	
Des Moines, IA Admin, O&M	100	9	11.11	2	50.00	
Hartford, CT CTransit	300	25	12.00	6	50.00	
Las Vegas, NV RTC IBMF	250	18	13.89	6	41.67	
Los Angeles, CA Division 5	250	12	20.83	6	41.67	
Irwindale, CA Foothill Transit	150	8	18.75	3	50	
Pomona, CA Foothill Transit	150	9	16.67	3	50.00	
Riverside, CA	60	4	15	2	30	
Average			15.194		43.501	

*Space quantities of zero were not included in the averages.
Data Source: MDG Project Files and APTA.



Planning Ratios

The size and quantity of the maintenance and shop areas provided in the Space Needs Program can be calculated using "Rule of Thumb" planning ratios. The method of applying planning ratios to vehicle quantities has always been an effective way to calculate maintenance space needs and bay quantities. These ratios are derived from data and space utilization information gathered from national averages and numerous other successful facilities analyzed throughout the country by Maintenance Design Group and its staff over a 20-year period. The ratios are as follows:

Maintenance Bays

Standard Repair Bay	1 Bay for every 15 to 17 Buses
Articulated Repair Bay	1 Bay for every 8 to 10 Buses
Standard Inspection Bay	1 Bay for every 50 Buses
Articulated Inspection Bay	1 Bay for every 30 Buses

Service Lanes

Fueling Positions	1 Lane for every 75 to 90 Buses
Bus Wash	1 Lane for every 150 Buses

El Monte Transit Center

Analysis was done using El Monte Transit Center departure information (see Appendix E - El Monte Bus Departure Data) to determine the current utilization of the facility. Bus departures were charted in 10-minute intervals over a 24-hour weekday period (June 30, 2002) in order to determine the period of peak utilization.

This data shows a total number of departures for June 30, 2002 of 976. Of this total, MTA departures account for 30% of the Transit Center's express departures (200), and 46% of the Center's total departures (451), while Foothill Transit accounts for 70% of the express departures (457), and 54% of the total departures (525). In addition to these 976 departures, there are approximately 200 bus routes which terminate at the El Monte Transit Center each day which are not accounted for in this list of departures.

The bar graph presented in Appendix E labeled *El Monte Station Departure Data* shows that the peak departure period for the facility occurs during the interval from 6:40 AM to 6:49 AM, with 18 departures. With the peak period identified, the analysis required an approximation of the number of buses present in a berth at any given minute during that peak interval. This approximation was accomplished using a simple model. The data for this model can be found in Appendix E titled *El Monte Station Peak Period Analysis*.



This model assumes that all incoming buses will have a passenger service interval of two minutes, during which time they will occupy a berth. The MTA Scheduling department indicated that this is the average amount of time a bus will occupy a berth before departing the Transit Center. Starting at 6:29 AM, the analysis sheet details bus departures, arrivals, and the net number of buses at the Transit Center. Under this model, peak utilization of the Transit Center occurs around 6:43 AM with 9 berth occupancies. When the 200 arrivals that are not accounted for in the El Monte Station Departure Data are factored in, the berth requirement increases to 11.

Assuming a passenger service interval of 2 minutes for all incoming buses, the model indicates that the current Transit Center would need only 11 berths, however, this is not the case. The passenger service interval may often be extended for a variety of reasons: the full loading of an empty bus for morning departures, the off-loading of bicycles from racks or of large loads from within, or engagement of a wheelchair lift. Buses which do stay in their berth for even 30 seconds longer than average occupy a berth which could be required by another incoming bus (buses come into the Transit Center every minute of the peak period). In addition to extended passenger service intervals, it is not uncommon for buses to arrive at the Transit Center early or late, creating unplanned traffic and the need for a berth.

Taking these factors into consideration, it is reasonable to assume that a 10% factor is needed, and should be added to the calculated berth requirement of 11, bringing the current berth requirement of the El Monte Transit Center to 12 (the facility currently has only 10 berths). Stated plainly, for the current volume of buses passing through the El Monte Transit Center, 12 berths are needed, 2 more than the 10 which are available.

For future projections, information has been provided by MTA that predicts an increase in bus departures as well as passenger boardings of 50% over the next 20 years. Taking this figure into account, the number of berths required for the El Monte Transit Center for the Master Plan would be 18.

Program Summaries

A Program Summary for each major site element is provided below. The program reflects **Existing, Program**, and the **Master Plan** projected space needs. These summaries are for all areas including Office/Support Areas, Shop Areas, Storage Areas, Exterior Areas, and Common Areas. Site circulation, setbacks, landscaping requirements (at 100



percent of the total areas), and total acres required are also shown.

Program Detail

The Program Detail is provided in Appendix A. The detail begins with the identification of each space by name, and a **Space Standard** (if applicable). Three major headings, **Existing**, **Program 2002**, and **Master Plan 2022** follow. The **Existing** space heading takes into account all existing square footages from the facilities that are currently occupied at the existing Division 9 Transportation and Maintenance Facility. The **Program 2002** heading represents the estimate of space required to effectively fulfill the existing operation. The **Master Plan 2022** heading represents spaces required to fulfill a facility to accommodate the prescribed growth.

Within each heading there is a **Quantity** column identifying either the number of **Staff** or **Space** required, an **Area** column listing the amount of area in square feet (sf), and a **Remarks** column listing relevant notes about each space.

The space requirements shown for each function are net usable area. A Circulation/Mechanical/Electrical/Structural (CMES) factor has been applied to the total net usable area to arrive at gross square footage requirements. In addition to circulation (hallways, stairs, and elevators), the factor also provides for spaces such as walls, mechanical/electrical rooms, and custodial closets. CMES figures for existing spaces are either actual or calculated as shown on the program.



Area Description	Division 9			Remarks	Space Standard	Space Program			Remarks	Master Plan			Remarks
	198 Buses					200 Buses				300 Buses			
	Staff	Space	Area			Staff	Space	Area		Staff	Space	Area	
SAN GABRIEL VALLEY													
SECTOR ADMINISTRATION													
General Management			490				930				930		
Planning and Scheduling			1,800				1,900				1,900		
Administration and Finance			750				890				1,050		
Human Resources			400				1,420				1,420		
Communications			250				890				890		
Sector Facility Maintenance			1,285	to relocate 12/01/02			0	see Maintenance			0	see Maintenance	
Los Angeles County Sheriff			1,830				2,860				2,860		
Common Areas			3,860				3,950				3,950		
TOTAL - SECTOR ADMINISTRATION			15,500				17,334				17,550		
EL MONTE TRANSIT CENTER			50,000				94,290				178,500		
TOTAL - EL MONTE TRANSIT CENTER			50,000				94,290				178,500		
CALTRANS													
CALTRANS Parking													
Surface Parking			512,832				430,560				112,068		
Parking Structure			57,000				56,000				106,920		
TOTAL - CALTRANS Parking			569,832				486,560				218,988		
DIVISION 9													
TRANSPORTATION													
Administration			1265				1680				2350		
Training			500				1850				3100		
Dispatch			1200				3040				4420		
Driver Areas			6400				5990				8160		
TOTAL - TRANSPORTATION			10,200				16,956				24,341		
MAINTENANCE													
Office Areas			780				2810				4470		
Support Areas			2900				2630				3900		
Repair Bays			25610				27140				39420		
Tire Shop/Bay			incl.				4360				5360		
Shop/Storage Areas			incl.				3600				6700		
Storeroom			1900				10330				15400		
Sector Facility Maintenance			0				3,050				3,200		
TOTAL - MAINTENANCE			32,110				66,025				96,000		
FUEL/WASH													
Fuel Lane			12800				9180				12120		
Wash Lane			9600				5600				6600		
TOTAL - FUEL/WASH			22,400				17,736				22,464		
PARKING & EXTERIOR													
Stacked Bus Parking Subtotal			215,548				219,888				323,520		
Tandem Bus Parking Subtotal			0				230,640				339,600		
Employee/Visitor Parking Areas			88,000				124,138				166,598		
Exterior Storage Areas			10,050				10,050				10,650		
TOTAL - PARKING & EXTERIOR			313,598				364,828				516,848		





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**Section Fiv
Master Plan Charrett**



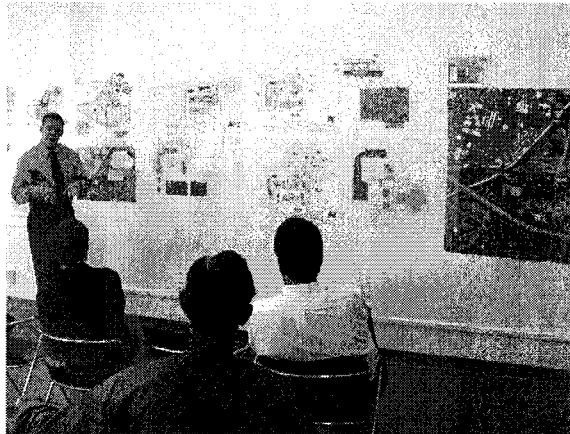




Section Five Master Plan Charrette

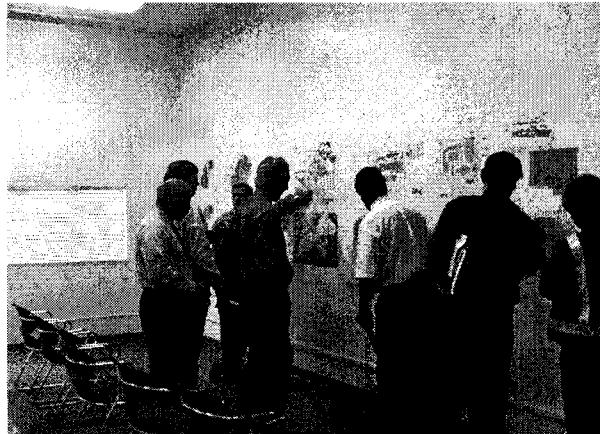
Introduction

The Planning Team returned to the MTA San Gabriel Valley Sector Office during the week of August 5 to 9, 2002 to conduct the on-site Master Planning design charrette. The goal for this session was to develop concept alternatives for Division 9 which improve the efficiencies of the entire operation and accommodate the future fleet size of 277. In addition to enhancing Division 9, a primary aim for the team was to develop concepts for the El Monte Transit Center which increase capacity to forecasted levels in a manner that works in harmony with the City of El Monte's plans for the development of their new City Center and its associated civil retail, and residential components. An aerial photo (*MTA Division 9 & The El Monte Transit Center*) detailing the site and related components can be found at the back of this section.



Charrette: An interactive design session involving the Design Team and the Facility Stakeholders where concepts are developed, reviewed, evaluated, discussed, and refined to arrive at a consensus concept

Concept alternatives developed during the charrette process were presented at daily review meetings to all interested stakeholders (see Section One). The purpose of these review meetings was to interactively discuss the merits and deficiencies of each concept, with the end product being a concept that most completely fulfills the goals of all stakeholders. All concept drawings developed during the charrette can be found in Appendix B - Charrette Concepts. The final Site Master Plan, as well as the final Division 9 Master Plan can be found at the end of this section (*MTA Division 9 and El Monte Transit Center Master Plan*, and *MTA Division 9 Master Plan (rev. 3)*, respectively).



Interactive input from the Stakeholders immediately following the review presentation

The following is a detailed description of each day's events at the charrette.

Day One (08/05/02)

Overview

The first day of the charrette served primarily as a working day for the Planning Team. With no review meetings scheduled, the Team had the opportunity to take an extensive walking tour of the site to review and inventory existing conditions.

After this review of the site, discussions were focused on the impact and importance of the urban planning component of the project. The MTA staff reinforced the need to address the civic, retail, and residential components relating to the City of El Monte were made clear, and the desire to develop a truly multi-modal transit center. It was also expressed during the programming interviews that Metrolink, Foothill Transit, and MTA would all be interested in the development of such a multi-modal center, and it was the goal of the Planning Team to develop initial concepts around this idea.

With the site tours and planning discussions complete, the Planning Team began the development of site concepts in earnest, producing numerous alternatives for discussion at the next day's review meeting.



The temporary studio allows the Planning Team to work together to solve site and urban planning issues

Day Two (08/06/02)

Overview

The first review meeting of the charrette began with a discussion of the 'big picture' urban planning issues as they pertain to the Division 9 site and its impact on the surrounding area. It was made clear to the stakeholders that the functionality of the Division 9 site must be enhanced, and that it was the Planning Team's intention to develop ideas for these improvements that could actually benefit the surrounding areas.

One opportunity for such a mutually beneficial improvement can be found in the upgrade of the El Monte Transit Center. If developed as a multi-modal center, bringing in the El Monte Trolley as well as Metrolink, there exists the opportunity not only for increase ridership for all modes of transit, but also for an intense area of concentrated activity that can be spatially tied into the planned redevelopment of the downtown area. When examined in conjunction with the improvements to Division 9, this expansion of the transit center is an opportunity not only to provide a new and positive identity to Division 9, but also to provide a new center of vitality connecting directly to the City Center.



Concepts are developed by hand allowing the team members the ability to explore dozens of options and create numerous working alternatives in a matter of hours

Another opportunity for partnership became apparent once it was realized that the Transit Center expansion and redevelopment would probably require some or all of the land currently occupied by the City of El Monte's Public Works Facility. One concept for this plan included a "land swap" in which city owned land in the northern finger of the site (needed for the Transit Center expansion), and MTA owned land which fronts Santa Anita Avenue could possibly be traded. Although the Public Works Facility would still be displaced in favor of tax revenue-generating retail development along Santa Anita Avenue, this would provide MTA the space where it is needed to develop the Transit Center, and it would provide the City of El Monte with more land fronting a major roadway for potential retail expansion and tax revenue generation.

After some discussion of these planning related issues and the related drawings (Urban Design Issues), discussion turned to the six site concepts which were developed for this meeting (Concepts A through F), focusing primarily on the entire area of influence. The following are highlights for each of the concepts.

Concept A

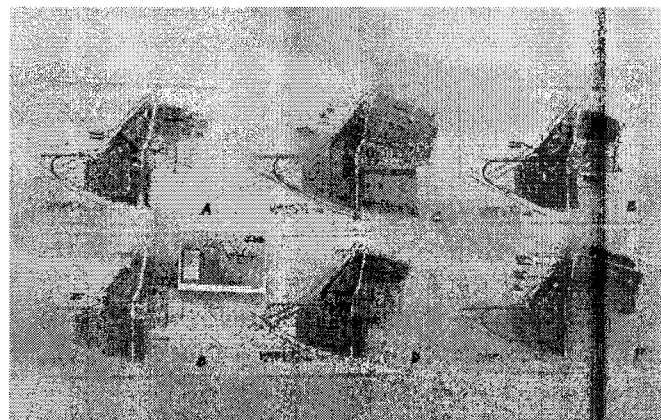
- Retail (auto dealership) expansion on both the east and west sides of Santa Anita Avenue
- Civic re-development on eastern side of Santa Anita Avenue directly across from Transit Center
- Utilizes existing Transit Center
- Potential for office/retail/residential redevelopment adjacent to Transit Center (northern part of site)
- New elevated Metrolink station directly tied into bus Transit Center



- Parking structure located adjacent to rail tracks, walk off top-level to train platform
- Division 9 Maintenance Facility in northwest corner of site to allow for continued operation during project phasing (see concepts)
- Existing MTA constructed parking structure remains (all concepts) to serve as Division 9 Employee Parking

Concept B

- Linear connection between rail and bus Transit Centers
- Does not utilize existing bus Transit Center
- Retail development along Santa Anita Avenue as in Concept A
- Indirect linkage from Transit Center to Civic/park spaces across Santa Anita Avenue (retail along Santa Anita Avenue faces the Civic component across street)
- Potential for overhead walkways connecting Transit Center/retail/civic components



Initial
concepts
"pinned" for
Stakeholder
review

Concept C

- Bus and rail Transit Centers combined into a single center
- Concept does not utilize existing El Monte Transit Center
- Provides for a direct pedestrian linkage to Civic functions across Santa Anita Avenue
- Retail redevelopment along Santa Anita Avenue as shown in Concept A

Concept D

- Utilizes existing El Monte Transit Center
- Direct connection to new Metrolink station



- Strong site linkage to a very prominent Civic redevelopment across Santa Anita Avenue
- Retail redevelopment along Santa Anita Avenue as shown in Concept A

Concept E

- East-west linear orientation of Transit Center
- Transit Center comes all the way to Santa Anita Avenue, prominent view
- Does not utilize existing El Monte Transit Center
- Retail development along Santa Anita Avenue as in Concept A

Concept F

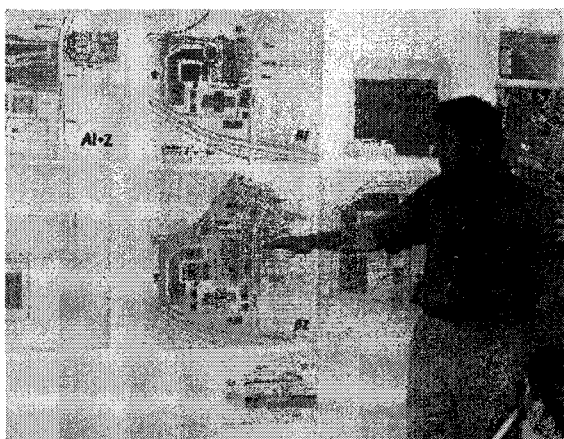
- Transit Center Concept similar to Concept C and B
- Existing El Monte Transit Center not utilized
- Indirect connection between Transit Center and Civic redevelopment component
- Retail redevelopment along Santa Anita Avenue as shown in Concept A

Concept A through F: Synopsis

Upon examination of each of the concepts (see Appendix B - Charrette Concepts), it is obvious that the primary difference between each is the location and function of the Transit Center expansion. They all explore the different possible relationships between the Division 9 operation and the Transit Center development, and the resultant development and activity that would be possible for the City. Additionally, all concepts utilize the existing parking structure as future Division 9 Employee Parking, as it is highly underutilized, and in like-new condition.



Day Two: Issues Discussed



Detailed objective presentations of each concept allow the Stakeholders to evaluate and comment on all aspects of the plan. This provides the team with ideas for the refinement of the concepts.

- Traffic dispersion (bus and vehicle) from the site onto an off of Santa Anita Avenue was a large concern, and it was determined that studies would be needed to examine the effect of bringing more traffic onto/off of the Division 9 site. This in mind, the new I-10 eastbound bus-way departing the Transit Center (shown on all of the above concepts) was regarded as critical to the expansion of the site. Getting bus traffic on and off of the site quickly and safely is regarded as a top priority by the stakeholders.
- The El Monte Redevelopment was discussed at some length during this first review meeting. After review of the concepts, it was learned that the City's developers would be willing to do some additional design work taking the development of the Division 9/Transit Center site into consideration. Previously un-addressed in the redevelopment plans, it was seen that this site could play a valuable role in the future of the City's Gateway identity.
- Division 9 components of the site were not addressed in this first review meeting; however, it was made clear that the Planning Team was confident the entire operation could be housed on the portion of the site indicated on each of the concepts. Phasing issues were readdressed as an important consideration of the plan, and the cost-impacts of phasing versus not phasing were pointed out. It was stated during programming interviews that the daily functions of the Division operation must continue during construction, however, there would be a cost associated with the work-around issues. Similarly, it was pointed out that the current El Monte Transit Center would need to remain operational for some period of time under each of the concept alternatives.



- The Urban Planning Concept (see Appendix B - Charrette Concepts) was presented as an alternative to the Division 9 layouts which appear on each of the six concepts. Rather than utilizing separate buildings, this plan houses all Division 9 functions under one roof. With this plan, there are substantial savings in site space (even making additional space available for extra auto/big-box retail); however, the multi-level building costs will be approximately 40% more. The Division 9 site and facilities will be addressed in greater detail during the next several review meetings.
- The Metrolink Station should not be considered so integral a part of this plan as was previously believed. As Metrolink may be moved off the line which passes through the site, the new station, if planned, may not even be served.

With the information gleaned from the review meeting of Day Two, The Planning Team proceeded to develop the following schemes for review on Day Three.

Day Three (08/07/02)

Overview

During Day Two's meeting, several points were revealed that had an impact on the concepts for Day Three.

1. The Metrolink station would no longer be a part of the expanded Transit Center. This was considered to have a big impact, as this was the focal point of all of the concepts reviewed on Day Two.
2. It was decided that the Planning Team would attempt to develop the site independently of land currently occupied by City or County functions such as the Public Works Facility or the County Fire Department. Review of the day's concepts follows.

Site Concept A1+2

- Site Development does not utilize and City owned land to the north of the current busway
- Capacity limited, once built, it is landlocked
- Division 9 layout as detailed in Division 9 Concept A
- Retail expansion on both sides of Santa Anita Avenue and at the southeastern corner of Santa Anita Avenue and Ramona Boulevard
- Bi-level Transit Center with 19 berths on top level, 6 Greyhound berths on the lower level
- Concept does not utilize existing El Monte Transit Center



- Strong linkage between the Transit Center and Civic redevelopment component across Santa Anita Avenue
- Transit Center patron parking to be located in multi-level structure. Only one access point to parking structure, possible congestion issues

Site Concept B1

- Site Development does not utilize and City owned land to the north of the current busway
- Capacity limited, once built, it is landlocked
- Division 9 layout as detailed in Division 9 Concept B
- Retail expansion on both sides of Santa Anita Avenue (less than in Concept A1+2)
- Utilizes current El Monte Transit Center, in addition to a separate 'bus island'
- Transit Center parking to be located in multi-level structure, only one access point to parking structure (continuation of Ramona Boulevard), potential congestion issues

Site Concept B2

- Transit Center site expands into City owned property (park space and Public Works Facility) to the north
- Extra land to the north allows for potential future expansion as needed
- Utilization of the City land to the north allows for additional access point to parking structure, easing congestion issues
- Division 9 layout as detailed in Division 9 Concept B
- Retail expansion on both sides of Santa Anita Avenue (less than in Concept A1+2)
- Does not utilize existing El Monte Transit Center
- Transit center has very strong tie-in to Civic redevelopment components along Santa Anita Avenue

Section

- A section through the Transit Center/Center of Site Concept B2

Division 9 Concept

- Provides parking and maintenance for 300 buses
- Location of the Maintenance building in northwest corner, dictated by phasing, need for continued operation



- Administration, Transportation, Sheriff Department staff in same building
- Construction of entire concept would lend well to phasing requirements



Confirmation of MTA planning standards during the charrette ensures that MTA will ultimately construct facilities that are consistent with MTA most recent standards

Division 9 Concept B

- Provides parking and maintenance for 300 buses
- Maintenance building on southern edge of site, dictated by phasing, need for continued operation
- Administration, Transportation, Sheriff's Department in same building
- Fuel and Wash Buildings adjacent to the Maintenance Building
- Construction of entire concept would lend well to phasing requirements
- Bus parking not as orderly and efficient as in Concept A

Division 9 - Urban Planning Concept

- Detail of entire operation under one roof
- Approximately 40% more costly than Concepts A or B, but with substantial savings in land
- No need to maintain existing parking structure for use as the Division 9 Employee Parking area

Day Three: Issues Discussed

- The Site Concepts were reviewed in an afternoon meeting with City officials. It was the opinion of all present that Concept B2 was the preferred site concept. Despite the need under this concept to relocate both the ballparks and the Public Works Facility, the officials felt that the Transit



- Center's capacity and flexibility which characterizes this concept, best addresses the goals of the City.
- The future capacity of the El Monte Transit Center was discussed, and projections were provided by the MTA Scheduling department. A 50% increase in both passenger boarding and bus departure figures over the next 20 years is predicted. Bus departure data for June 30, 2002 was provided, and will be used to calculate the number of berths required now, and in the Master Plan. For more information on this matter, see Section Four - El Monte Transit Center, and Appendix E - El Monte Bus Departure Data.
 - The functions and operations of Division 9 were reviewed at length at this day's meeting. There was some concern about the workflow on each of the concepts, primarily the fare retrieval/fueling/washing operation. There were also questions about the amount of queuing space for vehicle entering the site which are waiting to have fares pulled. It was pointed out that a wheelchair-testing zone, bad order area, and at least 15 layover spaces need to be provided on the Division 9 Site Plan.
 - Adequate Division 9 employee parking was a subject that came up several times at this review meeting, primarily, whether or not there would be enough space in the existing parking structure for the projected number of employees on the 20 year horizon. This question has since been resolved, and the parking structure will accommodate the entire projected staff. See Section 4 - MTA Employee Parking Summary for a detailed explanation.

Day Three continued with the development of additional Site Concepts based on the input from the participants of the morning's review meeting. While attempting to develop a new site plan from Site Concept B2, it was determined that this concept was far too complicated and contrived to be an economically constructed structure. Work on this concept was therefore halted, and Concept C was developed, taking from Concept B2 what was feasible.

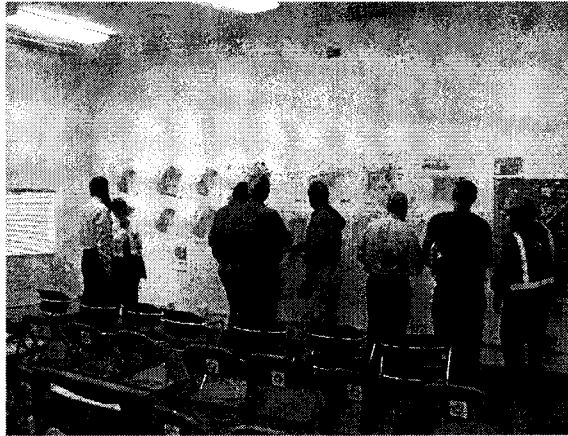
Day Four (08/08/02)

Overview

Day Four saw the continued refinement of the Master Plan (Concept C), as well as the Division 9 site (Concepts A1, B1, and B2). The review meeting began with a brief summary of the week's events, and then headed into an explanation of the days Master Plan. While Site Concept A1+2 from Day Three was limited by not using the City-owned property to the north,



Concept B2 was far too complicated to actually construct. From these two concepts, came Site Concept C.



Close study of each concept by the Stakeholders helps them provide the Planning Team with valuable feedback

Site Concept C

- Two level Transit Center: Express service berths to be on top, Greyhound and local service berths located on the bottom level
- Use of tunnels/stairs/escalators prevents the mixing of vehicular and pedestrian traffic
- Division 9 site as shown on Concept A1
- Multiple ingress/egress points for vehicular traffic
- Strong connection with Civic redevelopment component on northeast corner of Santa Anita Avenue and Ramona Boulevard
- Plan works well with initially developed phasing requirements

Division 9 Concept A1

- Derived from previous Concept A
- Bad order parking added adjacent to Maintenance Building
- Fuel and Wash Building combined to eliminate 'dead' space
- All parking is potentially assignable, no stacking
- Plenty of queuing space (greater than 15 spots) for fare retrieval should operation remain as is
- 165 foot deep frontage along Santa Anita Avenue possible for retail redevelopment
- Maintenance Building on Caltrans property



Division 9 Concept B1

- Maintenance Building located in southeastern corner of site
- 200 foot deep parcel along Santa Anita Avenue possible for retail redevelopment
- All bus parking is stacked
- Adequate staging for fare retrieval should operation remain as is
- Los Angeles County Sheriff provided with securable parking and busway access
- Fuel and Wash Building located behind the employee parking structure, out of view, away from main circulation aisles

Division 9 Concept B2

- Similar to Concept B from Day Three, with more ordered bus parking, and more than adequate fare retrieval staging detailed for current operation (maximum of 15 buses in queue at once)

Day Four: Issues Discussed



Detailed explanation of concept function enhances the understanding of the Stakeholders

- Phasing was again discussed, and it was stated that all of the concepts developed thus far would phase in a manner consistent with the goal of continuing site operations throughout the construction process.
- The fare retrieval, fuel and wash function was discussed at some length on Day Four. Concern over the location of the fare retrieval function led to continued discussions on Day Three regarding the current procedure for retrieving fares from buses. MTA procedures require that a bus coming onto a Division Maintenance Site have the fares



pulled before being parked on the site. As the operators are responsible for their buses until the fares are pulled, drivers queue their buses in front of the fare retrieval buildings upon entering the site. After the fare is pulled, a Service Attendant then takes the bus, fuels and washes it, parks it, and walks back to the fare retrieval area to take another bus through the cycle. Operating in this manner does require that adequate (at least 15) queuing spaces be provided in front of the Fare Retrieval Building as well as in front of the Fuel Island; however, it is the experience of the Planning Team that this method is far more time consuming than that which was recommended: Fare is pulled, Operator parks the bus in it's assigned space, Service Attendant walks to the bus, takes it through the fuel and wash cycle, and returns the bus to it's assigned space. The service attendant then gets into the next bus in an assigned space, and repeats the cycle. This method was proposed to the Maintenance Staff for consideration as a possible operational improvement. The Division 9 concepts presented were all able to accommodate either method of fare retrieval/fuel and wash.

- Division 9 Concepts were reviewed and the characteristics of each were discussed for elimination from or inclusion in the final concepts. The non-stacked Parking of Concept A1 was considered desirable, but most everybody preferred the location of the building in the B concepts to the location in A1. Regardless, it was decided that the location of the Maintenance Building in the B concepts was too close to Santa Anita Avenue, so for safety/security reasons, it would remain in the back of the site. It was also decided that the final Division 9 Concept would take advantage of the space saving layout of the combined Fuel and Wash Building, if possible, while also utilizing the Maintenance Building location of Concept A1. Parking would remain non-stacked, and some bad order spaces would remain adjacent to the Maintenance Building.

Day Five (08/09/02)

Overview

The goal on this final day of the charrette was to present concepts resulting from the entire weeks effort and interaction with the participating stakeholders. The concepts developed for this final review meeting were as follows.

- Conceptual Building Block plans
- Division 9 Master Plan
- Transit Center Master Plan Concept C



Conceptual Building Block Plans

The goal of producing the Conceptual Building Block Plans was to determine that the building envelopes met the space program requirements. It was found that for each of the three buildings, the program requirements were satisfied. This process, as it pertains to the buildings, is purely conceptual, and as such, the drawings show spaces blocked out for each interior function. More detailed layouts will be provided when the project enters the design phases. See the Conceptual Building Block Plans, which appear in Appendix B - Charrette Concepts.

Division 9 Master Plan

Characteristics of the Division 9 Master Plan developed for the last review meeting of this charrette include the following:

- Tandem bus parking for 292 buses, and an additional 42 bad order spaces adjacent to the Maintenance Building
- A linear Maintenance Building along the western edge of the site
- CNG equipment relocated to the southern "wedge" of the site to accommodate the new location of the Maintenance Building
- Combined Fuel and Wash Building (5 lanes each), adjacent to Maintenance Building
- More than adequate fare retrieval staging due to site gate movement toward Santa Anita Avenue
- Combined Administration, Transportation, and Los Angeles County Sheriff Department functions in building adjacent to employee parking structure
- Dedicated LACSD parking adjacent to offices
- Dedicated MTA non-revenue parking adjacent to Maintenance Building

While this concept did develop from the meetings and discussions of the entire week, there were still recommendations for improvement, which included the physical separation of the tire shop from the maintenance function, and the relocation of the wash function away from the maintenance function to avoid the wet and slippery pavement. A copy of this Division 9 Master Plan can be found in Appendix B - Charrette Concepts. The final Division 9 Master Plan (Revision 3) takes into account the comments from the final review meeting, as well as changes to the Master Plan Program occurring after the completion of the charrette (see below), appears at the end of this Section.



Division 9 Master Plan: Post Charrette Developments

Following the Master Plan Charrette, there were several requests to modify the Master Plan Program. These changes include a decrease in the number of buses maintained from 300 to 277, as well as the addition of a Daycare Center. As the Daycare Center and associated Play Area were not included in the initial programming effort, the Planning Team drew upon their past experience in designing similar facilities. This new feature of the Division 9 site (sized to accommodate 100 children) along with the modified bus capacity can be found on the final Division 9 Master Plan.

Features of this final Division 9 Master Plan include the following.

- Tandem bus parking for 277 buses, with site area reserved for 28 potential spaces
- Revised Maintenance Building layout to accommodate the new number of buses
- 20 bad order parking spaces located adjacent to each half (10 at each end) of the Maintenance Building
- Fuel and Wash functions located on the southeastern corner of the site, away from all maintenance activity
- Daycare Center with Play Area and dedicated parking/drop-off located in the northern edge of the site, adjacent to the Transit Center
- CNG yard relocated along I-10 access road
- Dedicated redevelopment zone (retail) along Santa Anita Avenue
- Phasable in such a way to allow for continued operation of Division

For a complete set of concepts leading up to the Division 9 Master Plan - Revision 3 included at the end of this Section, please see Appendix C - Division 9 Post Charrette Development.

Master Plan C

Characteristics of the Site Master Plan developed for this final review meeting include the following:

- Division 9 layout as in the Division 9 Master Plan presented at the Day Five meeting



- Expanded retail along I-10 frontage, both sides of Santa Anita Avenue, and in current location of Public Works Facility and ball fields
- Two-level Transit Center, separating local from express service
- Parking structure adjacent to the Transit Center, connected by overhead walkways and elevators, preventing the mixing of pedestrian/vehicular traffic
- Strong linkage between Transit Center and Civic redevelopment on eastern side of Santa Anita Avenue
- Two points of egress onto Santa Anita Avenue for both private-auto and transit traffic

This plan was in direct response to the comments which its precursor (Concept C from Day Four) had received. In addition to responding to stakeholder concerns, it was also developed to enhance the interaction between the transit center and the City's planned core of redevelopment. Additionally, all Caltrans parking which was either allocated for building space or Division 9 employee parking was replaced with the development of the Transit Center Parking structure. While utilized primarily for transit patrons during the day, it could serve as additional retail/downtown parking during the evening hours. Master Plan C can be found in Appendix B - Charrette Concepts.

Master Plan: Post Charrette Developments

Just prior to the Day Five review meeting, a concept was outlined by a stakeholder that warranted development and consideration. The concept idea involved converting the Transit Center to a large single level platform, rather than a two-level configuration as in Concept C. This concept can be seen in Appendix D - Site Master Plan Post-Charrette Development, Concept D.

As with Division 9, there was considerable input after the charrette, and significant modifications were made to Concept D. Eventually, the final plan, El Monte Transit Center Master Plan was developed, which represents the sum of all input received before and after the charrette. This final plan can be found at the back of this section.

Concept D was further developed after the charrette. It was soon discovered that the site would not easily accommodate the building of such a large structure over the existing Caltrans surface lot and MTA Way. Such a structure would require extensive excavation below the southern portion of the



platform to allow for the passage of buses, fire trucks, and other large vehicles along MTA Way.

Once this excavation was deemed unreasonable, alternate plans were once again advanced for a multi-level center. In addition to the revised Transit Center, this final El Monte Transit Center Master Plan includes modified functions along Santa Anita Avenue, and contains the final (Revision 3) Division 9 Master Plan. Additional features of this El Monte Transit Center Master Plan include the following.

- Utilizes the existing Transit Center
- Phasable to allow for continued operation of the Transit Center
- Provides multi-use patron parking below the new portion of the Transit Center, as well as in a new multi-level structure to the north of the Center
- Provides 2 access points to/from parking structure
- Provides a total of 15 layover spaces and 38 bus berths (2 which can accommodate articulated buses)
- Provides strong connection via sky-bridge to El Monte Civic functions
- Provides some space for retail development along Santa Anita Avenue, in front of the parking structure
- Provides a strong street-front present along Santa Anita Avenue for the Los Angeles County Sheriffs Department, Greyhound, and Foothill Transit (Transit Store)
- Provides dedicated parking spaces and bus-way access directly from the main level of the Transit Center for the Los Angeles County Sheriffs Department

Possible Modifications to the Final Master Plan

- Daycare Center

After development of this final plan, it was recommended that the Daycare Center possibly be relocated to a more central portion of the site. While adequate space has been allocated to this function, it is currently located adjacent to both the bus-way and the Maintenance Building. This location may be perceived as an undesirable location due to its proximity to these functions.

It was suggested that a portion of the surface parking south of MTA Way be examined as a potential location for the Daycare Center. The parking displaced could be offset by leaving the parking currently in place at the planned Daycare Center location.



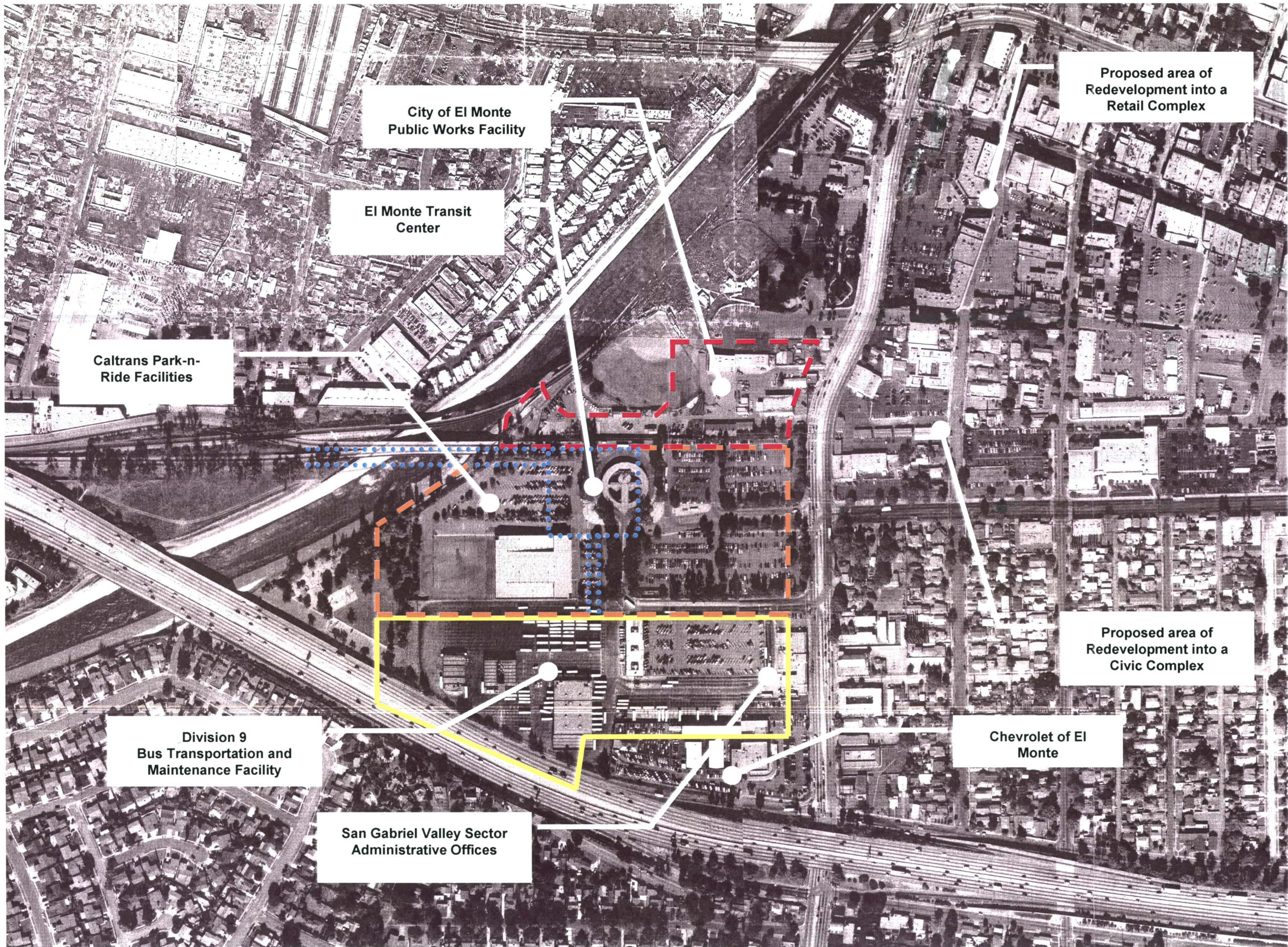
- Other No-Build Scenarios

There are numerous no-build scenarios that could occur as alternatives to the Final Master Plan:

- ✓ If the Transit Center were not to be expanded and remain in its present configuration, the Division 9 Master Plan could still be implemented.
- ✓ If the parking structure could not be built on the site currently occupied by the City of El Monte's Corporation Yard, a similar structure could be built on the surface parking lot south of MTA Way.
- ✓ The upper level of the Transit Center does not have to be built in any scenario. Any final design efforts should, however, consider the possibility that it could be added at a future date.
- ✓ In any no-build scenario, construction of the parking structure would have to occur prior to displacing any current parking.

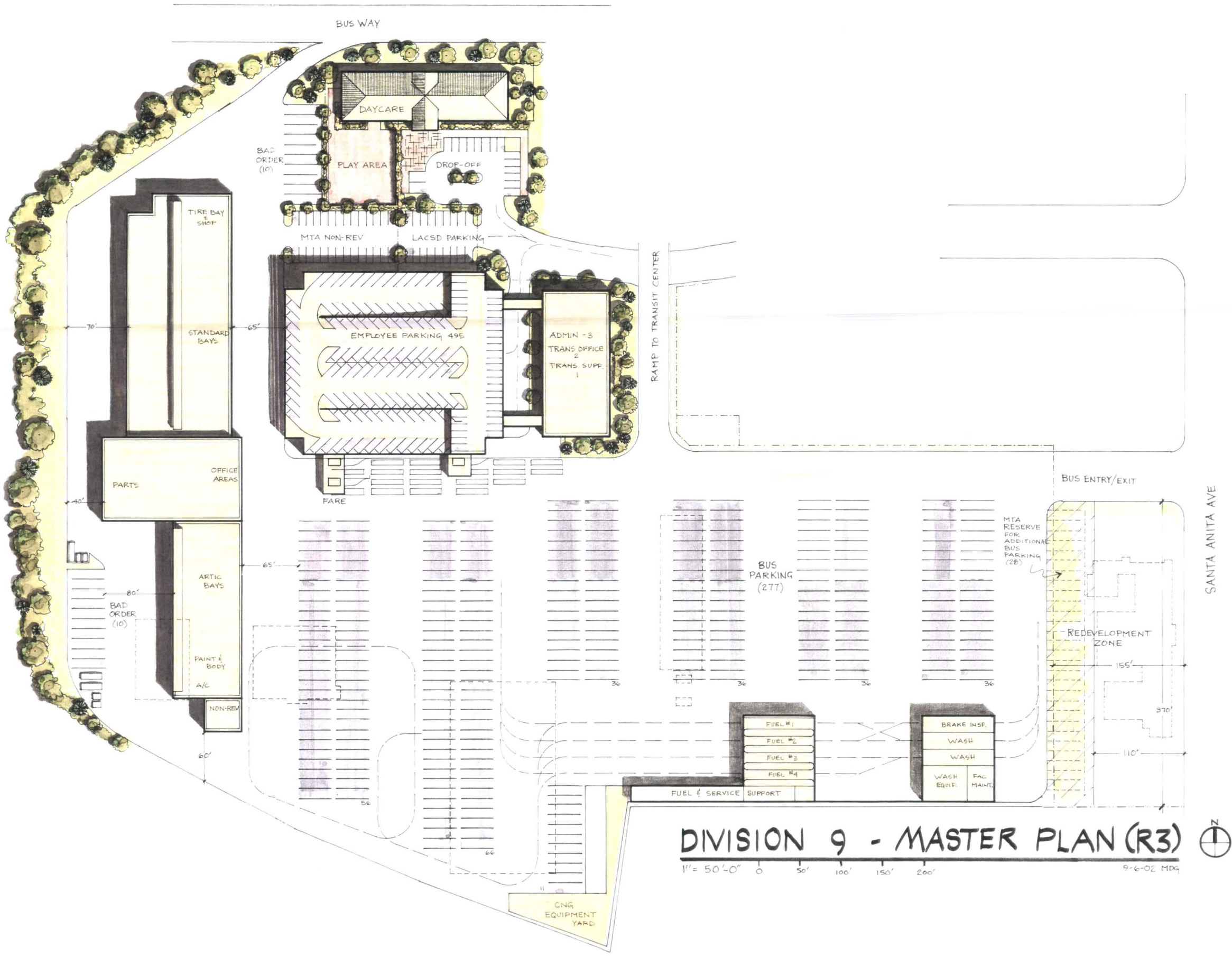
Final Concepts

The final concepts for both Division 9 and the El Monte Transit Center can be found on the following pages, along with a modified aerial photo of the existing site conditions.



Division 9 and the El Monte Transit Center





Parking

Assigned Bus Parking	279
Bad Order Bus Parking	20
Employee Parking (Structure)	495
MTA Non-Rev Vehicle	28
LACSD Parking (Secure)	18
Day Care Parking	16

Maintenance Facility Stats

Standard Running Repair Bays	14
Standard PM/Inspection Bays	4
Artic Running Repair Bays	4
Artic PM/Inspection Bays	1
Tire Bays	
Standard	1
Artic	1
A/C Repair Bays (Artic)	1
Paint Booth Bay (Artic)	1
Body Repair Bay (Artic)	1
Chassis Wash Bays	
Standard	1
Artic	1
Non Revenue Repair	1

Fuel & Wash

Fuel Lanes (Sized for Artics)	4
Wash Lanes (Sized for Artics)	2
Brake Inspections Pits	1

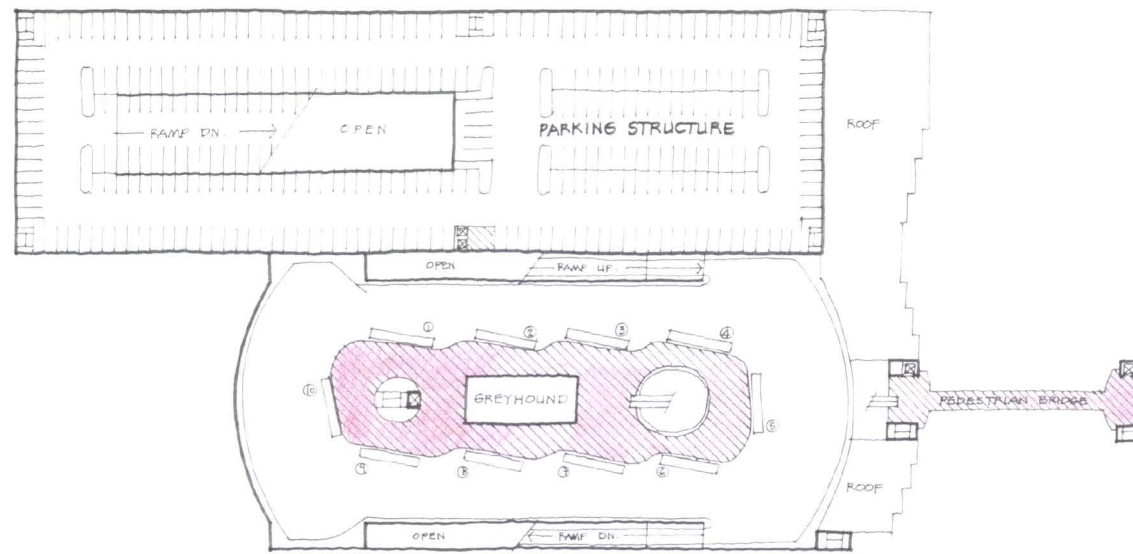
DIVISION 9 - MASTER PLAN (R3)
 1" = 50'-0" 0 50' 100' 150' 200' 9-6-02 MDG



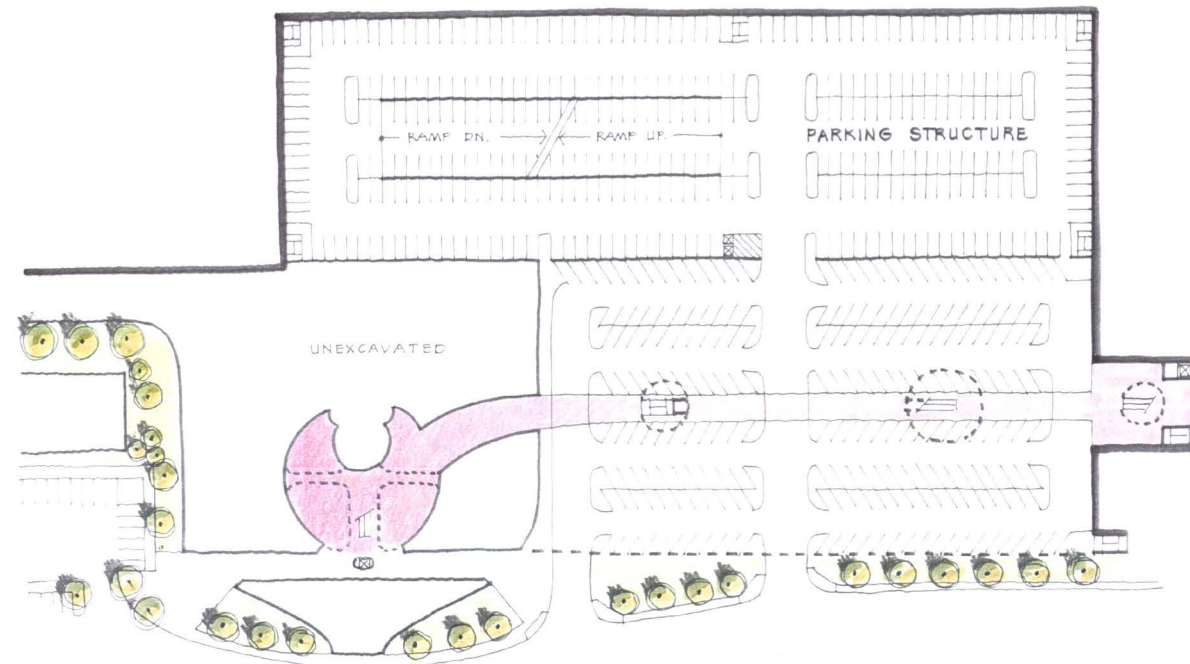
Division 9 Master Plan (rev. 3)







N
 EL MONTE BUS STATION MASTER PLAN
 UPPER LEVEL TRANSIT CENTER 1"=50'-0" 0 50 150 300
 09/12/02



N
 EL MONTE BUS STATION MASTER PLAN
 LOWER LEVEL PARKING 1"=50'-0" 0 50 150 300
 09/12/02



El Monte Transit Center Master Plan



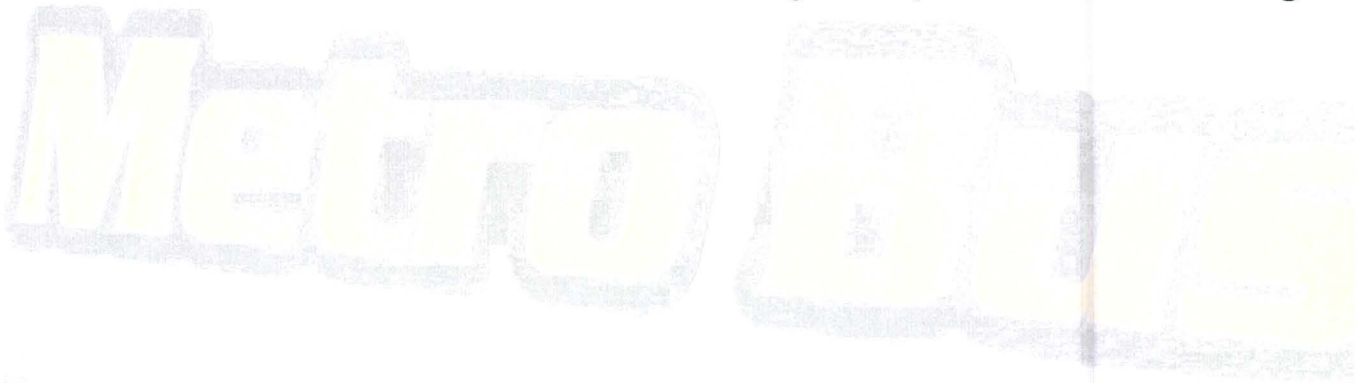


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**Section Six
Project Implementation/Phasing**





Section Six Project Implementation/ Phasing

Introduction

The Preliminary Implementation Plan outlined below and illustrated on the following pages was developed to consolidate the construction of the revitalized Division 9/EI Monte Transit Center/Caltrans site master plan into three constructible, but fiscally unconstrained, phases. While fiscal constraints may impact the timing of each phase or elements within each phase, the work must be accomplished as shown in order to not have any negative impact on the existing daily operation of Division 9, the EI Monte Transit Center, or the parking capacity of the Caltrans parking lots. For instance, any major element of Phase I can be accomplished independent of any other. However, all Phase I elements must be completed before proceeding to Phase II.

Major phasing tasks are delineated in this Preliminary Implementation Plan. There will be some minor intermediate phasing tasks (including delineating interim parking concepts and storage areas) that must be developed as part of detailed design efforts. Given the constraint that this is an existing site, the construction phasing is limited and concise, allowing for a timely replacement and expansion of antiquated facilities.

The redevelopment of the street frontage along Santa Anita Avenue by the City of El Monte can occur during practically any phase of the implementation plan. Relocation of the City of El Monte's Public Works Yard is the key to allow commencement of the first phase of the Implementation Plan. It is anticipated that Foothill Transit's current plans to remodel the existing Transit Center will be completed by mid 2003.

The following three phases allow a methodical and constructible approach to implementation of the Division 9/EI Monte Transit Center Master Plan. It must be noted that breaking Phase I into two parts, A and B, would require that a parking waiver be obtained from Caltrans. Caltrans has stated that they would be open to development on their property as long as the total number of patron parking spaces is not reduced. Phase IA, which would allow the immediate construction of a new Administration and Transportation Building, would require the restriping and MTA use of the existing parking structure. Recent surveys performed by MTA staff have shown there to be between 700 and 1000 vacant parking spaces in the Caltrans parking lots on any given



weekday (approximately 1/3 of the number of Caltrans patron spaces on the site). The immediate use of the existing parking structure by MTA staff would have the same effect as filling up a portion of those patron spaces usually vacant during a weekday, reducing the total number of patron parking spaces available, but still serving all patrons who currently utilize the Caltrans parking lots. Should a Caltrans parking waiver not be obtained, Phase IA and Phase IB could be combined into a single, independent phase.

Diagrams detailing each of the following phases and the final site configuration can be found at the end of this section.

Overall Phasing Plan

Phase IA

1. Construct 3-story Administration/Transportation Building.
2. Construct new Fare Recovery facilities.
3. Re-stripe and reconfigure MTA Parking Structure to accommodate standard vehicles (9' x 18') using a 45-degree-angle parking configuration (495 estimated parking spaces).
4. Relocate Division 9 employee parking into reconfigured Parking Structure.
5. Relocate Administrative and Transportation functions into the new 3-story Administration/Transportation Building.
6. Relocate Fare Recovery function to new Fare Recovery facilities.

Phase IB

7. Demolish "old" Administration, Transportation, Wash, and Fare Recovery Buildings.
8. Construct 5-story Transit Center Parking Structure.
9. Construct new Fuel, Storage, and Wash Buildings and new CNG Fuel Equipment Farm.
10. Relocate Transit Center patron parking into new parking structure.
11. Reconfigure bus service cycle to utilize new Fuel and Wash Facilities.
12. Reconfigure "old" Fuel Building to be utilized as temporary maintenance areas during the construction of the new Maintenance Facility. Demolish "old" Wash Building.
13. Re-pave and stripe area previously occupied by Transportation Building and Employee Parking for Bus Parking.
14. Relocate Bus Parking to vacated employee parking lot and former location of Transportation Building.
15. Remove "old" CNG Fuel Equipment Facility and relocate the reusable equipment to another compatible MTA property.



Phase II

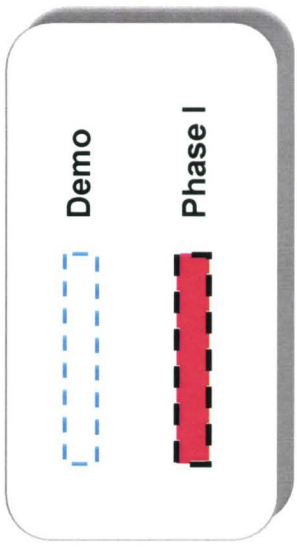
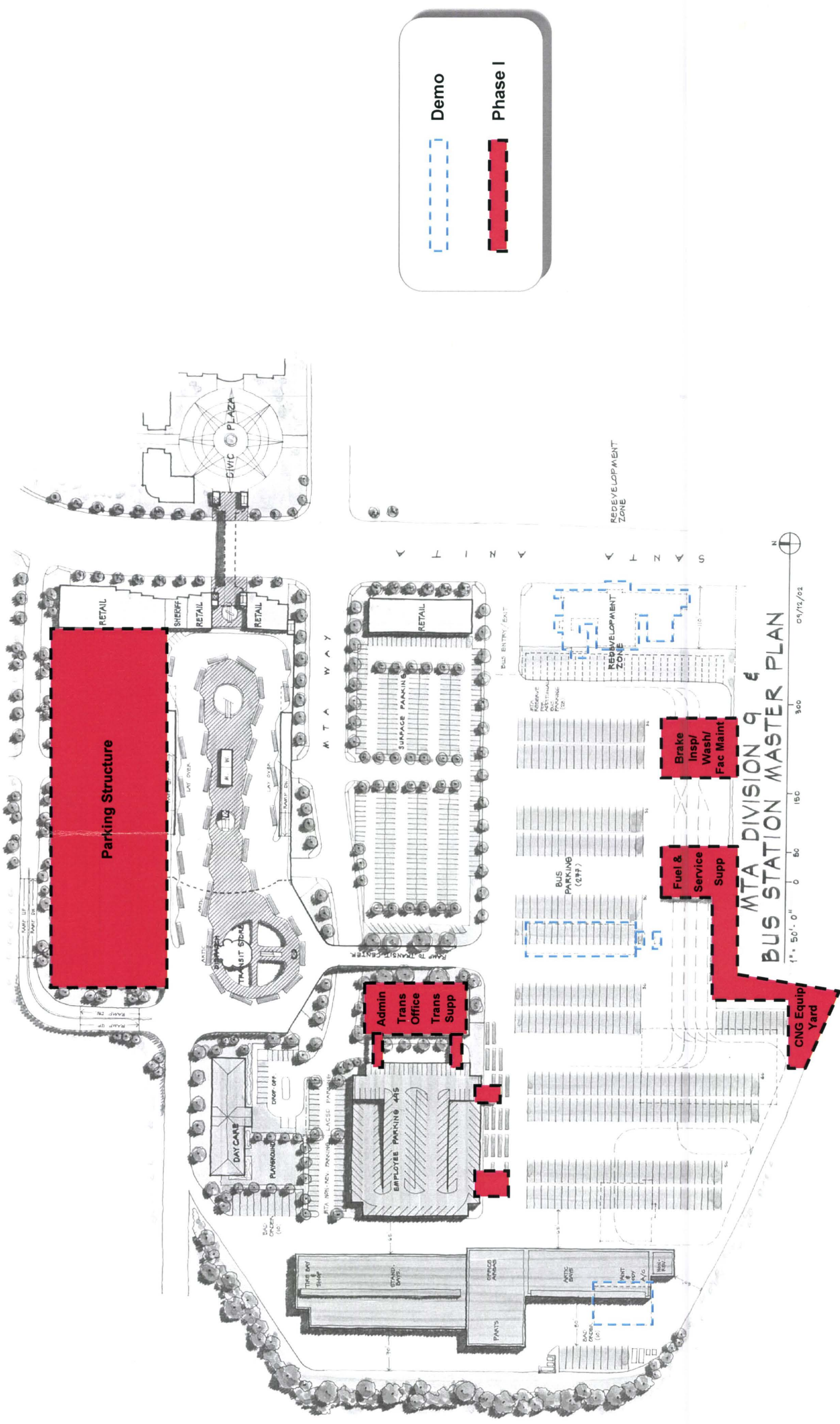
16. Construct main portion of new 3-level Transit Center.
17. Construct new Maintenance Building west of the MTA Employee parking structure.
18. Construct new Daycare Center. (The Daycare Center could be located in the location shown on the Master Plan or on the west end of the Surface Parking Lot south of MTA Way.)
19. Relocate all maintenance functions into new Maintenance Facility.
20. Demolish "old" Fueling Facility.
21. Demolish "old" Maintenance Building.
22. Remove underground tanks from area west of "old" Maintenance Building.
23. Re-pave and re-stripe all remaining Bus Parking areas in stages to allow for continuous operations.
24. Re-stripe and reconfigure the Bus Parking areas in to final configuration.

Phase III

25. Complete the remodel of the existing Transit Center and re-pave bus circulation areas on west and south sides. (Bus circulation from south side of new Transit Center circulates through east side of existing Transit Center during the repaving.)
26. Fill in island configuration between existing Transit Center and New Transit Center and re-pave circulation area north of existing Transit Center. (Accomplished in 2 phases to allow uninterrupted bus circulation.)

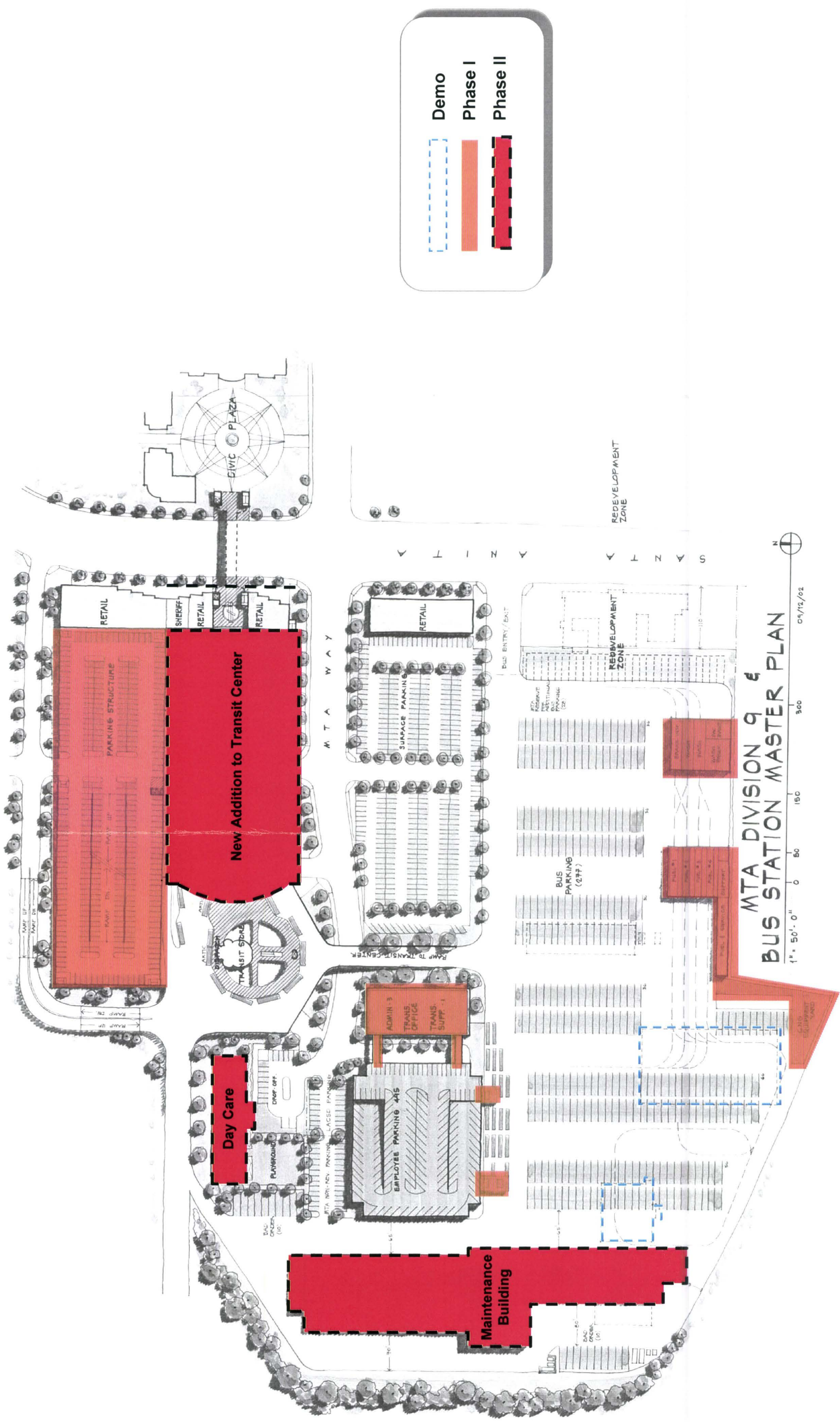


Division 9 and El Monte Transit Center – Phase I

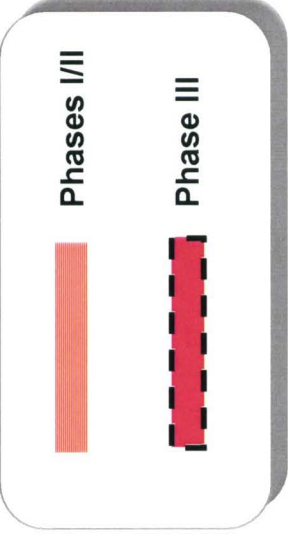
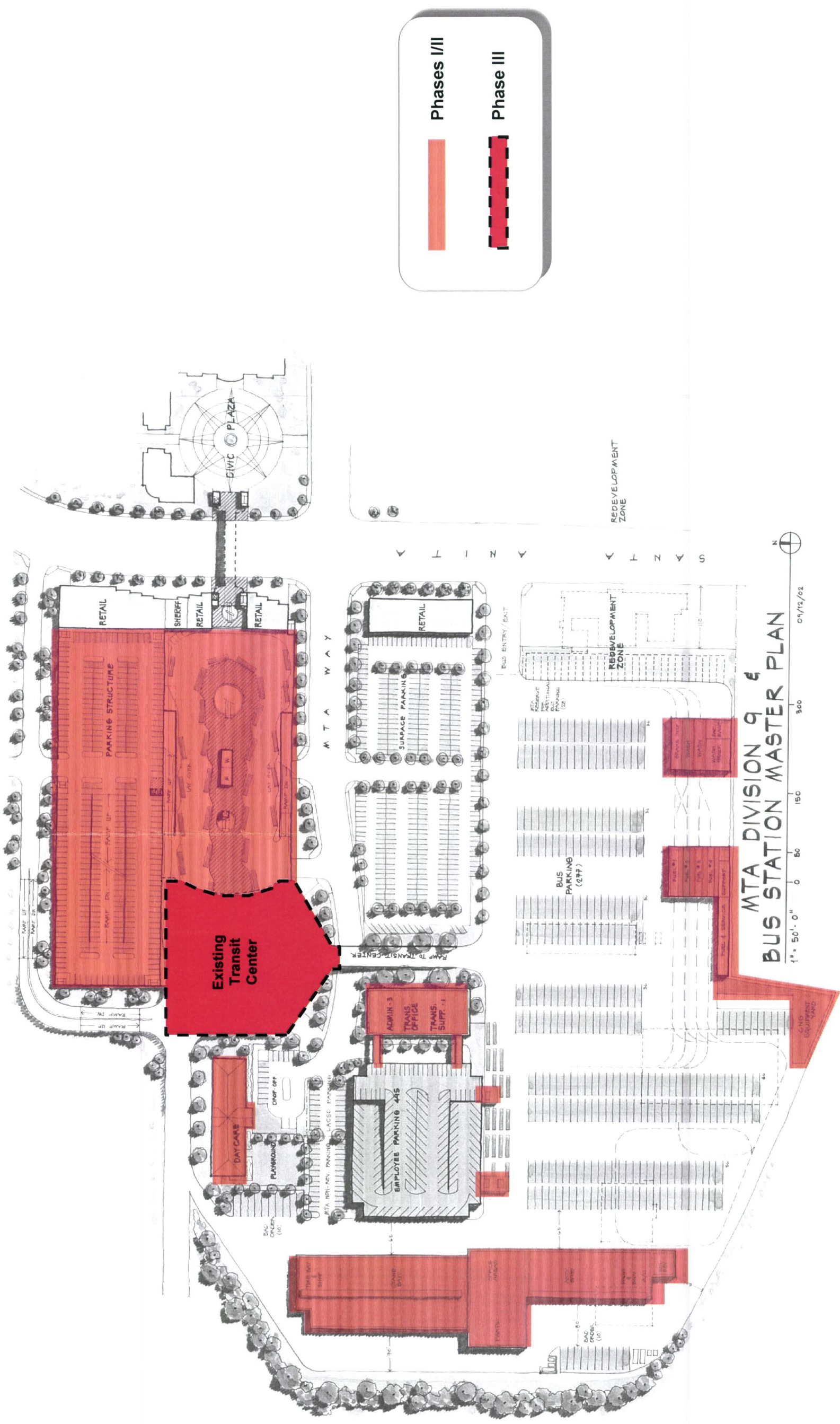




Division 9 and El Monte Transit Center – Phase II

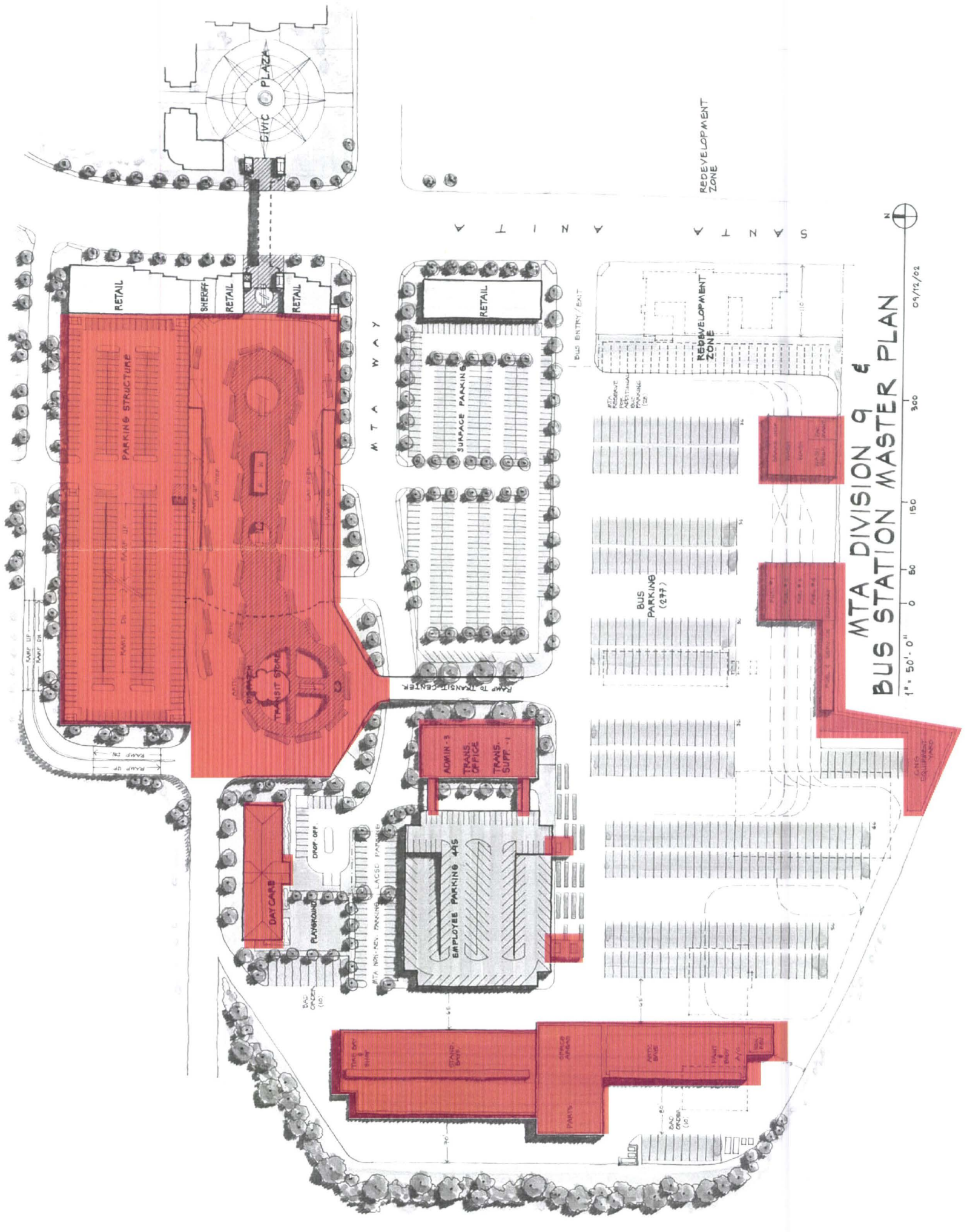


Division 9 and El Monte Transit Center – Phase III





Division 9 and El Monte Transit Center – Final Site Configuration





Division 9 Phasing Plan The Project Phasing Plan and subsequent Project Budget address the entire Division 9/EI Monte Transit Center site. The basic premise of any phasing plan is to accomplish a complicated construction effort in the most efficient manner. There is the potential for numerous variations to any phasing plan, including doing only certain elements of the plan based on need or available financial resources.

This narrative was developed to address the possibility of implementing only the Division 9 portion of the Master Plan. The parking structure is key in order to meet the criteria maintaining 2,100 Transit Center patron parking spaces. The MTA and Caltrans could come to an agreement on a minimum *interim* number of patron spaces which would meet the current demand and allow construction of replacement MTA facility. With this agreement in place, the following Division 9 phase plan could be implemented.

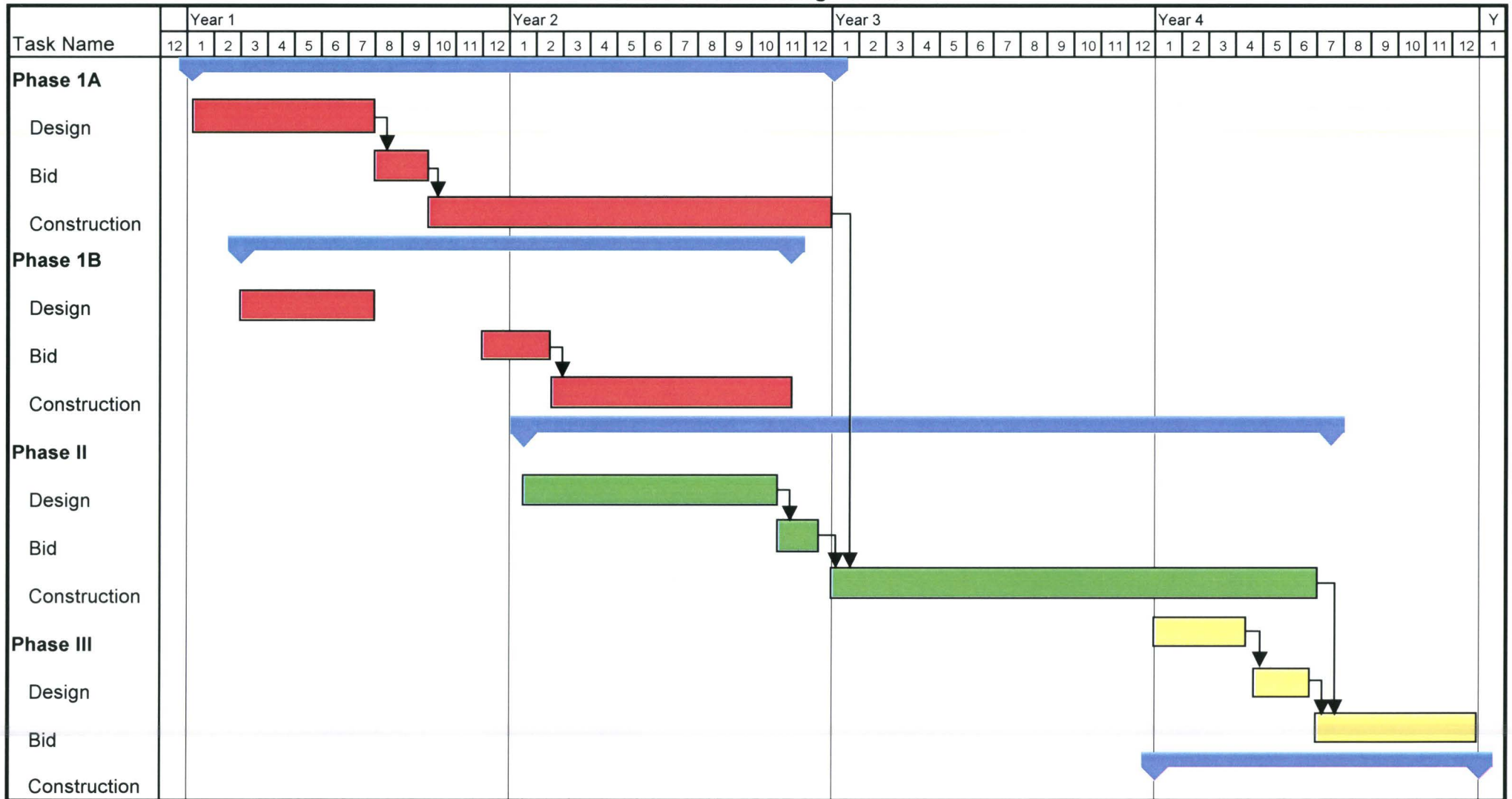
- Construct the northern portion of the Maintenance Building. This only displaces a few of the current patron parking spaces on the west end of the northwest patron parking surface lot. Minor modifications to the Maintenance Building conceptual floor plan will need to be made to accommodate the interim configuration.
- Construct the new Administration/Transportation Building. The current employee parking lot east of the existing Transportation Building will have to remain in place until the new parking structure (or a single level structure over the surface parking lot south of MTA Way) is constructed.
- Demolish old Administration/Transportation Buildings.
- Construct new Fuel/Wash Buildings.
- Demolish old Fuel/Wash Building.
- Construct remainder of new Maintenance Building.
- Demolish old Maintenance Building and remove underground tanks.

Phasing Schedule

The following unconstrained phasing schedule graphic conveys the timelines of the Overall Phasing Plan. The schedule shows the duration in months required to accomplish each Phase unconstrained by availability of funds. The critical path shows the importance of designing and bidding each phase prior to completing construction of the previous phase.



Unconstrained Phasing Schedule



Project: LACMTA Division 9 and El Monte Transit Center	Task - Phases IA and IB	[Red bar]	Summary	[Blue arrow]
	Task - Phase II	[Green bar]	Critical Path	[Arrow]
	Task - Phase III	[Yellow bar]		

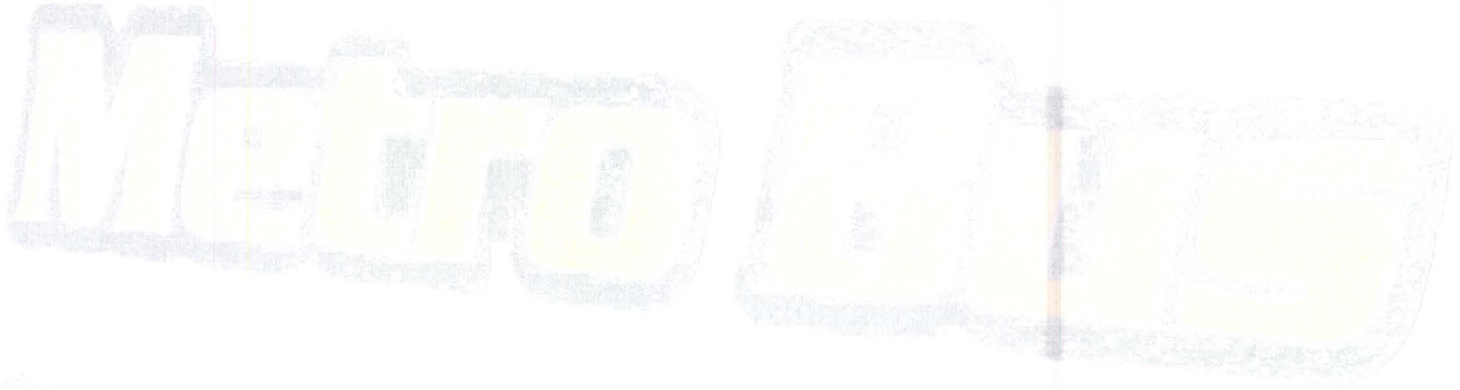




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Division 9 Master Plan Report

Section Seven Project Budget





Section Seven Project Budget

Introduction

One of the primary issues to be addressed as part of the Division 9 Master Plan effort was to identify the projected capital project budget for new, expanded, and upgraded facilities. A Preliminary Estimate of Probable Costs was developed by Yuang Tai to be used as baseline data for construction costs. ***This estimate was prepared based on 2002 dollars. As a specific timeframe for funding has not been identified, these costs should be inflated about 5% per year thru the estimated midpoint of construction.***

The total project budget, ***in 2002 dollars***, identifies construction costs, or hard costs, and administrative cost, or soft costs.

- Hard costs can best be defined as everything you would receive in a bid from a construction contractor including labor, materials, installed equipment, equipment rentals, prorates, mark-ups, and profit.
- Soft costs are costs incurred in the administration of a project including design fees and expenses, construction management fees, MTA administrative fees, traffic studies, survey, soils/materials testing/monitoring, permits, furniture/fixtures/office equipment, and telephone/data/communication systems.

Hard Costs

The Project Budget for the MTA Division 9 facilities and new El Monte Transit Center has been organized by cost per new structure/site area. This was done in an effort to facilitate the estimation of the entire project in total, by phase, or by a component of a phase.

The main structures included in this estimate are as follows:

- New Transit Center Parking Structure
- New Administration/Transportation Building
- New Fare Recovery Buildings
- New Fuel/Wash Building
- New CNG Fuel and Equipment area
- New Transit Center
- New Maintenance Building
- New Daycare Center
- Existing Transit Center Remodel



The Construction Cost Estimate prepared by Yuang Tai is based on the Division 9 Master Plan developed during the design charrette and refined based on subsequent comments from project Stakeholders.

The construction costs are based upon facility costs for similar administration, operations, maintenance and fueling facilities planned and constructed in southern California. These cost figures have been adjusted for geographic location, inflation, type of construction, site constraints such as topography, and utilities.

This estimate has been developed based on the conceptual level of information available. The Study Team recommends a detailed cost analysis during each phase of final design.

For detailed data of the costs estimate, please refer to *Appendix G Construction Cost Estimate*. It should be noted that the cost information has been based on the following assumptions.

- The project will be constructed utilizing prevailing wage rates.
- Pricing is based on receiving at least four or five competitive responsive and responsible bids.
- A Design Contingency of 20% has been included due to the conceptual nature of the documentation prepared as part of the master planning effort.
- The cost of CNG Fueling System equipment is not included as it is provided by a design/build/operate/maintain contractor.

Not included in the hard construction cost estimates are:

- Costs associated with removal and disposal of any hazardous materials from the existing site.
- Utility relocation costs.
- Site overexcavation.
- Furniture, fixtures and equipment, other than maintenance equipment.
- Project soft costs (not typically included in bid price).

Exhibit 7.1 is a summary of the estimated construction costs for the Division 9 Master Plan. The estimate for is based on square footages from the Space Needs Program and take-offs from the Master Plan drawings.



Exhibit 7.1 - Summary of Hard (Construction) Costs

Item No.	Hard Cost Description	Estimate of Probable Cost
Phase 1A		
1	Construct 3 Story Administration/Transportation Building	\$ 7,673,016
2	Construct Fare Recovery Buildings	\$ 277,100
3	Restripe Existing Parking Structure	\$ 15,295
4	Relocate Division 9 Employee Parking	By MTA
5	Relocate Administration and Transportation Functions	By MTA
6	Relocate Fare Recovery	By MTA
Phase 1B		
7	Demolish Administration, Transportation, Fare Buildings	\$ 183,479
8	Construct 5 Level Parking Structure (1,650 Spaces)	\$ 17,637,880
9	Construct Fuel and Wash Buildings	\$ 4,637,618
10	Relocate Transit Center Parking	By MTA
11	Reconfigure Fuel/Wash Cycle	By MTA
12	Reconfigure Old Fuel Building/Demolish Old Wash Building	By MTA
13	Repave/Restripe Bus Parking	\$ 1,106,969
14	Relocate Bus Parking	By MTA
15	Relocate CNG Equipment	By MTA
Phase 2		
16	Construct New Transit Center	\$ 10,869,223
17	Construct New Maintenance Building	\$ 18,341,417
18	Construct New Daycare Center	\$ 2,871,148
19	Relocate Maintenance Functions	By MTA
20	Demolish Old Fuel Building	\$ 60,723
21	Demolish Old Maintenance Building	\$ 185,018
22	Remove Existing Underground Tanks	By MTA
23/24	Repave/Restripe Bus Parking	\$ 2,130,960
Phase 3		
25	Remodel Existing Transit Center	\$ 2,655,314
26	Construct Connection Between Existing and New Transit Center	\$ 146,250
Total Estimate of Probable Hard Costs for Division 9 Master Plan		\$ 68,791,410

Additional Separate Costs		
	Upper Level Transit Center	\$ 8,326,027
	Bridge Link	\$ 2,038,622



Soft Costs

In addition to construction, or hard costs, MTA will have other administrative, or soft costs, related to the project. The combination of these two will provide the MTA with a Project Budget. Exhibit 7.2 identifies soft costs anticipated for the project. It should be noted that this estimate may not be all inclusive of the total costs the MTA may expend on behalf of the project, but is reasonable for budgeting purposes.

Exhibit 7.2 - Summary of Soft (Administrative) Costs

Soft Cost Description	Percent of Hard Cost	Estimate of Soft Cost
Architectural/Engineering Fees	10%	\$ 6,879,141
Construction Management Fees	5%	\$ 3,439,571
MTA Administrative Fees	5%	\$ 3,439,571
Survey/Material Testing/Monitoring/Traffic Study	1%	\$ 687,914
Permits/Fees	1%	\$ 687,914
Environmental Reports	Lump Sum	\$ 100,000
Communication/Security System	Lump Sum	\$ 250,000
Construction Contingency	5%	\$ 3,439,571
Total Estimate of Probable Soft Costs for Division 9 Master Plan		\$ 18,923,681
Furniture and Fixtures ¹	Lump Sum	\$ 1,075,000
Total Construction (Hard) Costs		\$ 68,791,410
Total Project Budget		\$ 88,790,091

¹ The estimated cost for Furniture and Fixtures is based on \$25.00 per square foot for a total of 43,000 square feet of office space in the Administration and Transportation building.

**Total Project Costs
By Line Item**

Exhibit 7.3 shows the soft costs prorated over their percent of the hard costs to provide a total cost by item number for the project. The Furniture and Fixtures line item has been applied only to Item Number 2-Construction of 3-Story Administration/Transportation Building. This presentation format allows the MTA to see the total project cost for each line item within each phase. No-cost line items have been excluded from the summary.



Exhibit 7.3 - Total Project Budget by Item Number

Item No.	Item Description	Hard Cost	Soft Cost	Total Cost
Phase 1A				
1	3 Story Administration/Transportation Building ¹	\$ 7,673,016	\$ 3,185,753	\$10,858,769
2	Fare Recovery Buildings	\$ 277,100	\$ 76,227	\$ 353,327
3	Existing Parking Structure	\$ 15,295	\$ 4,207	\$ 19,502
Phase 1B				
7	Administration, Transportation, Fare Buildings	\$ 183,479	\$ 50,473	\$ 233,952
8	5 Level Parking Structure (1,650 Spaces)	\$17,637,880	\$ 4,851,966	\$22,489,846
9	Fuel and Wash Buildings	\$ 4,637,618	\$ 1,275,752	\$ 5,913,370
13	Bus Parking	\$ 1,106,969	\$ 304,514	\$ 1,411,483
Phase 2				
16	New Transit Center	\$10,869,223	\$ 2,989,991	\$13,859,214
17	New Maintenance Building	\$18,341,417	\$ 5,045,501	\$23,386,918
18	New Daycare Center	\$ 2,871,148	\$ 789,818	\$ 3,660,966
20	Old Fuel Building	\$ 60,723	\$ 16,704	\$ 77,427
21	Old Maintenance Building	\$ 185,018	\$ 50,896	\$ 235,914
23/24	Repave/Restripe Bus Parking	\$ 2,130,960	\$ 586,201	\$ 2,717,161
Phase 3				
25	Remodel Existing Transit Center	\$ 2,655,314	\$ 730,445	\$ 3,385,759
26	Connect Existing and New Transit Center	\$ 146,250	\$ 40,232	\$ 186,482
Total Project Budget by Item Number		\$68,791,410	\$19,998,681	\$88,790,091

¹Includes prorated share of soft costs plus furniture and fixture costs

Land Acquisition

No additional property will need to be acquired in order to implement the Division 9 Master Plan. All of the property shown within the Division 9 Master Plan is either owned by the MTA, CalTrans, or the City of El Monte. Some agreements will need to be negotiated regarding ownership and use of the various parcels including the following.

- The City of El Monte Corporation Yard will need to be relocated and the southern most ball field will have to be modified in order to accommodate the new parking structure. The City, however, gets over 1,000 feet on street frontage for commercial development on the west side of Santa Anita Avenue.
- Expansion of the Division 9 and El Monte Transit Center facilities requires use of CalTrans property currently used for Transit Center patron parking. However, CalTrans Transit Center parking spaces are replaced on a one for one basis and a Daycare Center



is provided for children of MTA employees and Transit Center patrons.

- The MTA Sector Administration Building will have to be relocated. However, puts the Administration group closer to the Transportation and Maintenance operations and frees up valuable street frontage property along the west side of Santa Anita Avenue.



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Quick Reference Index System



**Appendix A
Program Detail**



Area Description	Division 9			Remarks	Space Standard	Space Program			Remarks	Master Plan			Remarks
	198 Buses					200 Buses				300 Buses			
	Staff	Space	Area			Staff	Space	Area		Staff	Space	Area	
SAN GABRIEL VALLEY													
Sector Office													
General Management													
General Manager	1		incl.		400	1		400	private office	1		400	
Administrative Assistant	1		incl.		80	1		80	workstation	1		80	
Conference Room								300				300	
Fax/File/Workroom								150				150	
Subtotal - General Management			490					930				930	
Planning and Scheduling													
Schedule Development Manager	1		incl.		250	1		250	private office	1		250	
Transportation Planning Manager	1		incl.		250	2		500	private office	2		500	
Schedule Supervisor	1		incl.		150	1		150	private office	1		150	
Stops and Zones Representative			incl.		150	1		150	private office	1		150	
Schedule Maker	3		incl.		80	4		320	shared office	4		320	
Spare Workstation					80			80	workstation			80	
Conference Room			incl.					300				300	
Fax/File/Workroom								150				150	
Subtotal - Planning and Scheduling			1,800					1,900				1,900	
Administration and Finance													
Manager	1		incl.		250	1		250	private office	1		250	
Chief Analyst	1		incl.		80	1		80	workstation	1		80	
Analyst	2		incl.		80	2		160	workstation	4		320	
Conference Room								250				250	
Fax/File/Workroom			incl.					150				150	
Subtotal - Administration and Finance			750					890				1,050	
Human Resources													
HR Manager					250	1		250	private office	1		250	
HR Analyst	1		incl.		80	1		80	workstation	1		80	
Assistant HR Analyst					80	1		80	workstation	1		80	
Senior Safety Specialist	1		incl.		80	1		80	workstation	1		80	
Workers Comp Analyst	1		incl.		80	1		80	workstation	1		80	
Employee Relations Representative					150	1		150	private office	1		150	
Employee File Room								250	secure			250	secure
Conference Room								300				300	
Fax/File/Workroom								150				150	
Subtotal - Human Resources			400					1,420				1,420	
Communications													
Communications Manager	1		incl.		250	1		250	private office	1		250	
Communications Officer	1		incl.		80	3		240	workstation	3		240	
Conference Room								250				250	
Fax/File/Workroom								150				150	
Subtotal - Communications			250					890				890	
Sector Facility Maintenance													
Facilities Maintenance Supervisor	20		incl.		150				see Maintenance				see Maintenance
Shop			incl.						ac/elec/other				ac/elec/other
General Storage			incl.										
Portable Equipment Storage													
Electronics Storage													
Conference Room													
Subtotal - Facility Maintenance			1,285					0				0	



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Area Description	Division 9			Remarks	Space Standard	Space Program			Remarks	Master Plan			Remarks
	198 Buses					200 Buses				300 Buses			
	Staff	Space	Area			Staff	Space	Area		Staff	Space	Area	
Los Angeles County Sheriff													
Sergeant	1		incl.		250	1		250	private office	1		250	
Lieutenant	1		incl.		150	1		150	private office	1		150	
Analyst/Utility	2		incl.		80	2		160	shared office	2		160	
Team Leaders	4		incl.		80	4		320	workstation	4		320	
Briefing/Meeting Room			incl.					500				500	
File Room								200				200	
General Storage Room								250				250	
Kitchen/Break	6		incl.			17		250		17		250	
Men's Restroom/Locker/Shower								400				400	
Women's Restroom/Locker/Shower								300				300	
Custodial Closet								80				80	
Subtotal - Los Angeles County Sheriff			1,830					2,860				2,860	
Common Areas													
Large Conference/Community Room			1,700					1,200				1,200	
Reception/Job Postings								200				200	
Copy Area								150				150	
Lunch/Break Room			incl.					500				500	
Fitness Room			incl.					1000				1000	
Data/Communication Room			incl.					100				100	
Mechanical Room			incl.					100				100	
Men's Restroom			incl.					300				300	
Women's Restroom			incl.					300				300	
Custodial Closet			incl.					100				100	
Subtotal - Common Areas			3,860					3,950				3,950	
Subtotal - Sector Office	51		10,665			50		12,840		52		13,000	
Circ/Mech/Elec/Struc			4,835		35%			4,494				4,550	
TOTAL - Sector Office			15,500					17,334				17,550	

DIVISION 9

TRANSPORTATION													
Administration													
Superintendent	1		incl.		250	1		250	Private office	1		250	Private office
Assistant Superintendent	2		incl.		180	3		540	Private office	3		540	Private office
Stenographer	1		incl.		80	1		80	Workstation	1		80	Workstation
Clerk	2				80	2		160	Workstation	6		480	Workstation
Copy/File/Work Room								200	Copier, fax, printer			250	Copier, fax, printer
Lobby								150				250	
Conference Room			incl.					300	8-10 people			500	12-15 people
Subtotal - Administration			1265					1680				2350	
Training													
Training Instructor	1				150	1		150	Private office	2		300	Private office
Training Room			incl.					1200				2000	
Training/AV Storage								150				250	
Table/Chair Storage								150				250	
Uniform Storage								200				300	
Subtotal - Training			500					1850				3100	



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Division 9 Master Plan Report

Area Description	Division 9			Remarks	Space Standard	Space Program			Remarks	Master Plan			Remarks
	198 Buses					200 Buses				300 Buses			
	Staff	Space	Area			Staff	Space	Area		Staff	Space	Area	
Dispatch													
Transit Operations Supervisors	10		incl.		120	10		1200	Private offices	15		1800	Private offices
Clerk	3				80	3		240		4		320	
Dispatch			incl.					300				500	
Vestibule			incl.	outside				400				500	
Transfer Storage								250				300	
Communication Closet			incl.					150				250	
Lost & Found Storage								200				250	
Mailboxes			incl.					300				500	
Subtotal - Dispatch								3040				4420	
Driver Areas													
Driver's Room	360		incl.	large, 3200 sq. ft.		360		1500	1.8 Operators/bus	540		2100	1.8 Operators/bus
TV Alcove			incl.					200				250	
Vending/Kitchenette			incl.	incl. 500 sq. ft. kitchen tv alcove				300				300	
Quiet Room/Dormitory								450				500	
Exercise Room								800				1200	
Locker Area (1/2 height)			incl.		4	360		1440		540		2160	
Men's Restroom/Shower			incl.	1 shared shower				600				800	
Women's Restroom/Shower			inc.	share above shower				600				700	
Custodial Closet			incl.					100				150	
Subtotal - Drivers Areas								5990				8160	
Subtotal - Transportation	380			2,965		381		12,560		572		18,030	
Circ/Mech/Elec/Struc				7,235	35%			4,396				6,311	
TOTAL - TRANSPORTATION				10,200				16,956				24,341	
MAINTENANCE													
Office Areas													
Maintenance Manager	1		incl.		180	1		180	Private office	1		180	Private office
Assistant Manager	0				180	0		0	Private office	2		360	Private office
Senior Maintenance Supervisor	2		incl.		120	2		240	Shared office	2		240	Shared office
Maintenance Supervisor	5				120	5		600	Shared office	7		840	Shared office
Maintenance Clerk	3				80	3		240	Workstation	5		400	Workstation
Copy/File Area			incl.					120				250	
Maintenance Counter/Library								300				400	
Shop Offices (on-floor)					100		1	100		3		300	
Training Room								650				1000	
Audio/Visual Storage								180				250	
Chair/Table Storage			incl.					200				250	
Subtotal - Office Areas								2810				4470	
Support Areas													
Lunch/Break Room	110		incl.			117		600		170		1000	
Men's Restroom/Locker/Shower			incl.					1300				1800	
Women's Restroom/Locker/Shower								500				700	
Men's Restroom			incl.										
Women's Restroom			incl.										
Data/Communication Room			incl.					150				250	
Custodial Closet								80				150	
Subtotal - Support Areas								2630				3900	



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Area Description	Division 9			Remarks	Space Standard	Space Program			Remarks	Master Plan			Remarks
	198 Buses					200 Buses				300 Buses			
	Staff	Space	Area			Staff	Space	Area		Staff	Space	Area	
Repair Bays													
Articulated Lift Bay					20 x 75		1	1500			2	3000	
Articulated Flat Bay					20 x 75		1	1500			2	3000	
Lift Bay		2		brake bays	20 x 58		8	9280			12	13920	
Flat Bay					20 x 58		3	3480			5	5800	
A/C Bay - Body Bay				incl. in wash bldg	20 x 75		1	1500			1	1500	
Paint Booth Bay					25 x 80		1	2000			1	2000	
Chassis Wash (Artic)					20 x 75		1	1500			1	1500	
Chassis Wash				incl.	20 x 60		1	1200			1	1200	
Steam Rack				incl.									
Chassis Wash Equipment Room				incl.				200				200	
PM/Inspection Bays		12		6 running repair, 6 pm	20 x 58		3	3480			5	5800	
PM/Inspection Bays (Artic)					20 x 75		1	1500			1	1500	
Subtotal - Repair Bays			25610	incl tire shop and strrm				27140				39420	
Tire Shop/Bay													
Tire Shop				incl.				500				700	
Tire Storage				incl.				1200	200 tires			2000	300 tires
Tire Bay				incl.	20 x 58		1	1160			1	1160	
Tire Bay (Artic)					20 x 75		1	1500			1	1500	
Subtotal - Tire Shop/Bay				incl. included In Repair Bays				4360				5360	
Shop/Storage Areas													
Electronics Shop								400				800	
Brake Shop				incl.				400				800	
Common Work Area				incl.				800				800	
Facility Maintenance Shop								500				1000	
Battery Room				incl.				200				300	
Portable Equipment Storage								500				1500	
Toolbox Storage				incl.				800				1500	
Subtotal - Shop/Storage Areas				incl. included In Repair Bays				3600				6700	
Storeroom													
Parts Office		4		incl.	120	4		480	Private office		7	600	Private office
Work/copy/file								200				250	
Parts Counter				incl.				200				200	
Parts Storeroom				incl.				6500	32.5 sq.ft./bus			9750	32.5 sq.ft./bus
Mezzanine								2200	parts			3300	parts
Tool Crib				incl. in bay				150				300	
Lube/Compressor Room				incl.				600				1000	
Subtotal - Storeroom			1900					10330				15400	
Sector Facility Maintenance													
Facilities Maintenance Supervisor					150	0		0			1	150	
Shop								1,500	ac/elec/other		19	1,500	ac/elec/other
General Storage								500				500	
Portable Equipment Storage								500				500	
Electronics Storage								250				250	
Conference Room								300				300	
Subtotal - Facility Maintenance			0					3,050				3,200	
Subtotal - Maintenance	125		31,190	incl.	25%	132		52,820	Mezz. sf @ 50%	194		76,800	Mezz. sf @ 50%
Circ/Mech/Elec/Struc				incl.				13,205				19,200	
TOTAL - MAINTENANCE			32,110					66,025				96,000	



**Los Angeles County
Metropolitan Transportation
Authority**

Division 9 Master Plan Report

Area Description	Division 9			Remarks	Space Standard	Space Program			Remarks	Master Plan			Remarks	
	198 Buses					200 Buses				300 Buses				
	Staff	Space	Area			Staff	Space	Area		Staff	Space	Area		
FUEL/WASH														
Fuel Building														
Office					120	1		120	Private office	1		120	Private office	
Fare Retrieval Position			incl.		20 x 30		3	1800			4	2400		
Fueling Positions (Standard & Artics)			incl.		20 x 85		3	5100			4	6800		
Fuel Management Equipment Room			incl.					200				200		
Bus Cleaning Supply Storage Room			incl.					400				600		
Restrooms			incl.					160				400		
Lube/Compressor Room								400				600		
Trash House			incl.					1000				1000		
Subtotal - Fuel Lane								9180				12120		
Wash Building														
Drive Through Bus Wash			incl.		20 x 85		2	3400			2	3400		
Brake Inspection Lane			incl.		20 x 85		1	1700			1	1700		
Reclaim/Support Equipment			incl.					500				1500		
Subtotal - Wash Lane								5600				6600		
Subtotal - Fuel and Wash										1		18,720		
Circ/Mech/Elec/Struc			incl.		20%			2,956				3,744		
TOTAL - FUEL/WASH					22,400			17,736				22,464		
PARKING & EXTERIOR														
Parking Areas														
Standard Bus (40')		198	106920		12 x 45		163	88020			240	129600		
Articulated Bus (60')			0		12 x 65		25	19500			40	31200		
Sector Office Non-Revenue Vehicles		24	9600	includes circulation	10 x 20		28	11200	includes circulation		33	13200	includes circulation	
Transportation Non-Revenue Vehicles		4	1600	includes circulation	10 x 20		4	1600	includes circulation		4	1600	includes circulation	
Maintenance Non-Revenue Vehicles		3	1200	includes circulation	10 x 20		7	2800	includes circulation		8	3200	includes circulation	
Stacked Bus Parking Circulation			96228		90%			96768				144720		
Tandem Bus Parking Circulation			106920		100%			107520				160800		
Stacked Bus Parking Subtotal			215,548					219,888				323,520		
Tandem Bus Parking Subtotal			0					230,640				339,600		
Employee/Visitor Parking Areas														
Employee		558	88000	includes circulation	9 x 18		578	370	119854	includes circulation	772	494	160082	includes circulation
Visitor			incl.		9 x 18			6	1944	includes circulation		10	3240	includes circulation
Disability Parking			incl.		13 x 18			5	2340	includes circulation		7	3276	includes circulation
Subtotal			88,000						124,138				166,598	
Exterior Storage Areas														
Caged Storage (bulk parts)			3000							to storeroom				to storeroom
Emergency Generator								500				500		500
Alternative Fuel Equipment Farm			5000					5000				5000		5000
Tire Storage (used)								1200	Canopy covered			1200	Canopy covered	1200
Trash/Recycling Dumpsters								1200				1200		1200
Hazmat Storage								300				400		400
Transfer Storage			150	outside, relocate										
Storage Trailers			1050	(3) 10 x 35, to relocate					relocated					
Employee Areas														
Golf Practice Area			600	adjacent to trans. bldg				600				600		600
Patio			250	adjacent to trans. bldg				1250				1750		1750
Subtotal			10,050					10,050				10,650		10,650
TOTAL - PARKING & EXTERIOR			313,598					364,828				516,848		516,848



Area Description	Division 9			Remarks	Space Standard	Space Program			Remarks	Master Plan			Remarks
	198 Buses					200 Buses				300 Buses			
	Staff	Space	Area			Staff	Space	Area		Staff	Space	Area	
EL MONTE TRANSIT CENTER													
EL MONTE TRANSIT CENTER													
Bus Berth (standard)		10	incl.		12 x 60		13	18720			18	25920	
Bus Berth (articulated)					12 x 85		2	4080			2	4080	
Greyhound Berths		1	incl.	first level	12 x 70		3	5040			4	6720	
Layover Spaces		8			12 x 60		8	11520			12	17280	
Pedestrian Island								21760				62000	
Ticket Sales					incl.			250				500	
Office					incl.			150				300	
Dispatch					incl.			120				200	
Transit Police					incl.			220				400	
Men's Restroom					incl.	on both levels		500				800	
Women's Restroom					incl.	on both levels		500				800	
Subtotal - El Monte Transit Center								62,860				119,000	
Site Circulation						includes common/waiting 50%		31,430				59,500	
TOTAL - EL MONTE TRANSIT CENTER								94,290				178,500	

CALTRANS

CALTRANS Parking													
Surface Parking													
Standard Parking		1,300	incl.		9 x 18		1,300	421200			522	102708	see note #1
Disability Parking		20	incl.		13 x 18		20	9360			20	9360	
Subtotal - Surface Parking								430560				112068	
Parking Structure													
Patron Parking		700		57000	3 levels, all compact	8 x 15	700	56000	see note #2		1,650	106920	see note #3
Subtotal - Parking Structure				57000				56000			2,192	106920	
Circulation					incl.								incl.
TOTAL - CALTRANS Parking				569,832				486,560				218,988	

Note #1: 205 of these 522 spaces are located below the Transit Center expansion, therefore, this figure of 102,708 square feet represents 317 standard size spaces (9' x 18') at grade.

Note #2: This figure of 56,000 square feet represents the footprint of the parking structure, based on 700 compact size spaces (8' x 15') over 3 levels.

Note #3: This figure of 106,920 square feet represents the footprint of the parking structure, based on 1,650 standard size spaces (9' x 18') over 5 levels.



Area Description	Division 9			Remarks	Space Standard	Space Program			Remarks	Master Plan			Remarks
	198 Buses					200 Buses				300 Buses			
	Staff	Space	Area			Staff	Space	Area		Staff	Space	Area	

SPACE NEEDS PROGRAM SUMMARY

SAN GABRIEL VALLEY												
Building Areas												
Sector Office												
El Monte Transit Center			15,500						17,334			17,550
Daycare Center			50,000						94,290			178,500
			0						0			12,500
Subtotal San Gabriel Valley			65,500						111,624			208,550

CALTRANS												
Site Areas												
Parking Areas			569,832						486,560			218,988
Subtotal CALTRANS			569,832						486,560			218,988

DIVISION 9												
Building Areas												
Transportation			10,200						16,956			24,341
Maintenance			32,110						66,025			96,000
Fuel/Wash			22,400						17,736			22,464
Subtotal Building Areas			64,710						100,717			142,805
Site Areas												
Stacked Bus Parking Areas (Urban Site)			215,548						219,888			323,520
Tandem Bus Parking Areas (Suburban Site)			0						230,640			339,600
Employee/Visitor Parking Areas			88,000						124,138			166,598
Exterior Storage Areas			10,050						10,050			10,650
Daycare Center Playground			0						0			6,800
Subtotal Urban Site			378,308						454,793			650,372
Circulation/Landscape/Setbacks/Stormwater			240,244			20%			90,959			130,074
Subtotal Suburban Site						100%			465,545			666,452
Circulation/Landscape/Setbacks									465,545			666,452
DIVISION 9 URBAN SITE REQUIREMENTS									545,752	square feet		780,447
									12.5	acres		17.9
DIVISION 9 SUBURBAN SITE REQUIREMENTS			618,552	square feet					931,090	square feet		1,332,905
			14.2	acres					21.4	acres		30.6

TOTAL SITE REQUIREMENTS

URBAN									1,143,935.7	square feet		1,207,984.9	square feet
									26.3	acres		27.7	acres
SUBURBAN			1,271,952	square feet					1,529,274.2	square feet		1,760,442.8	square feet
			29.2	acres					35.1	acres		40.4	acres

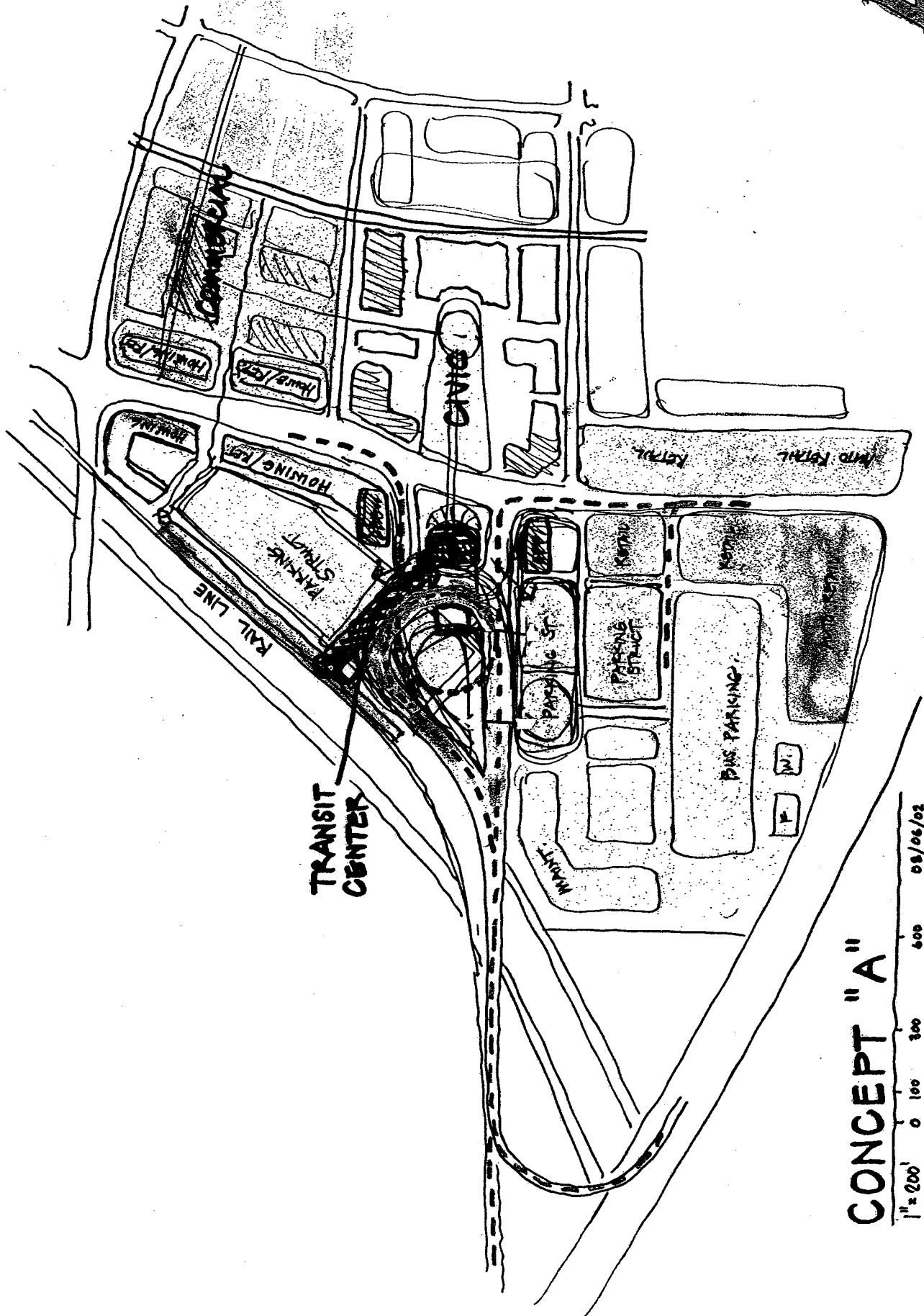


Los Angeles County
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Authority

Division 9 Master Plan Report

Appendix B Charrette Concepts

A

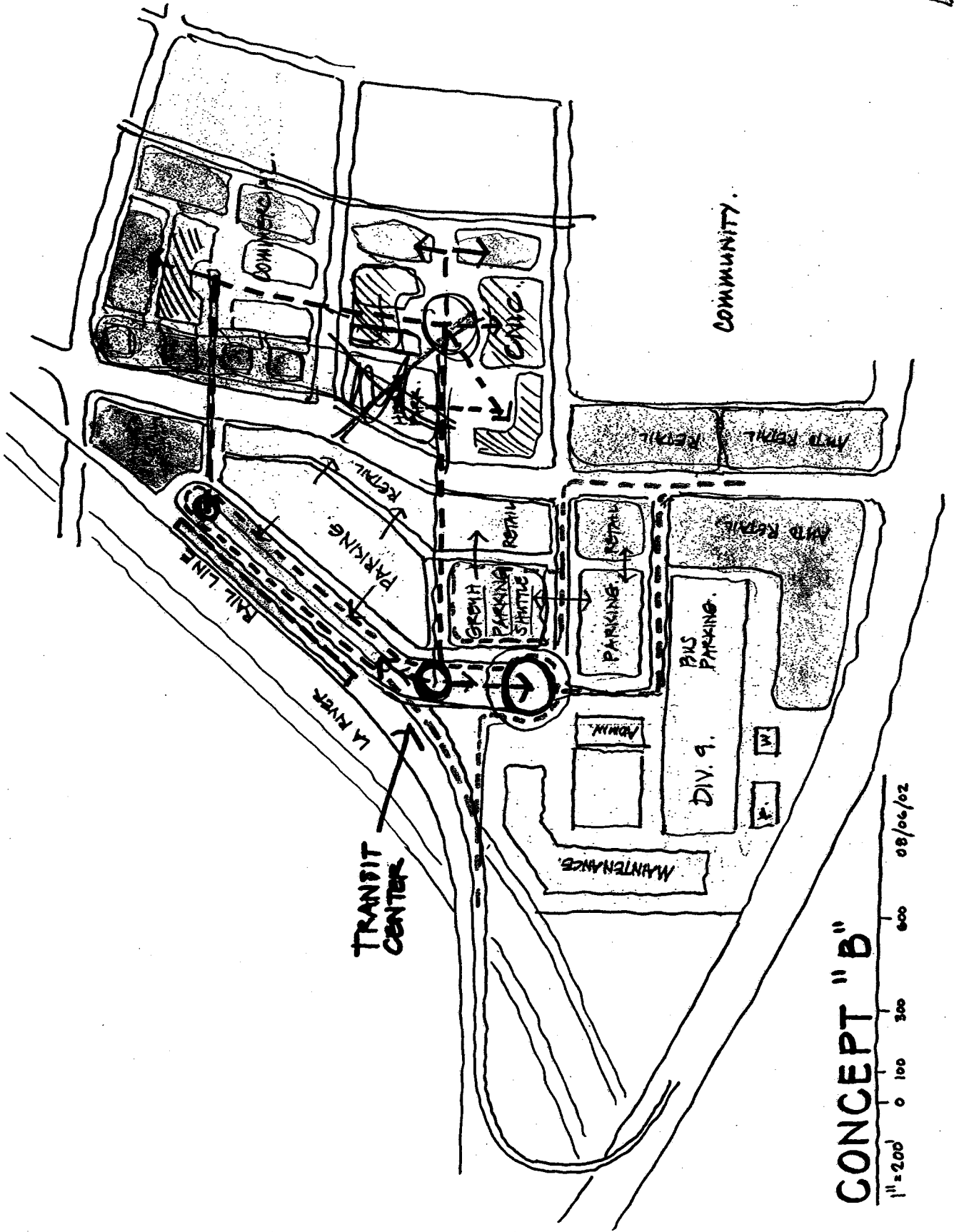


TRANSIT CENTER

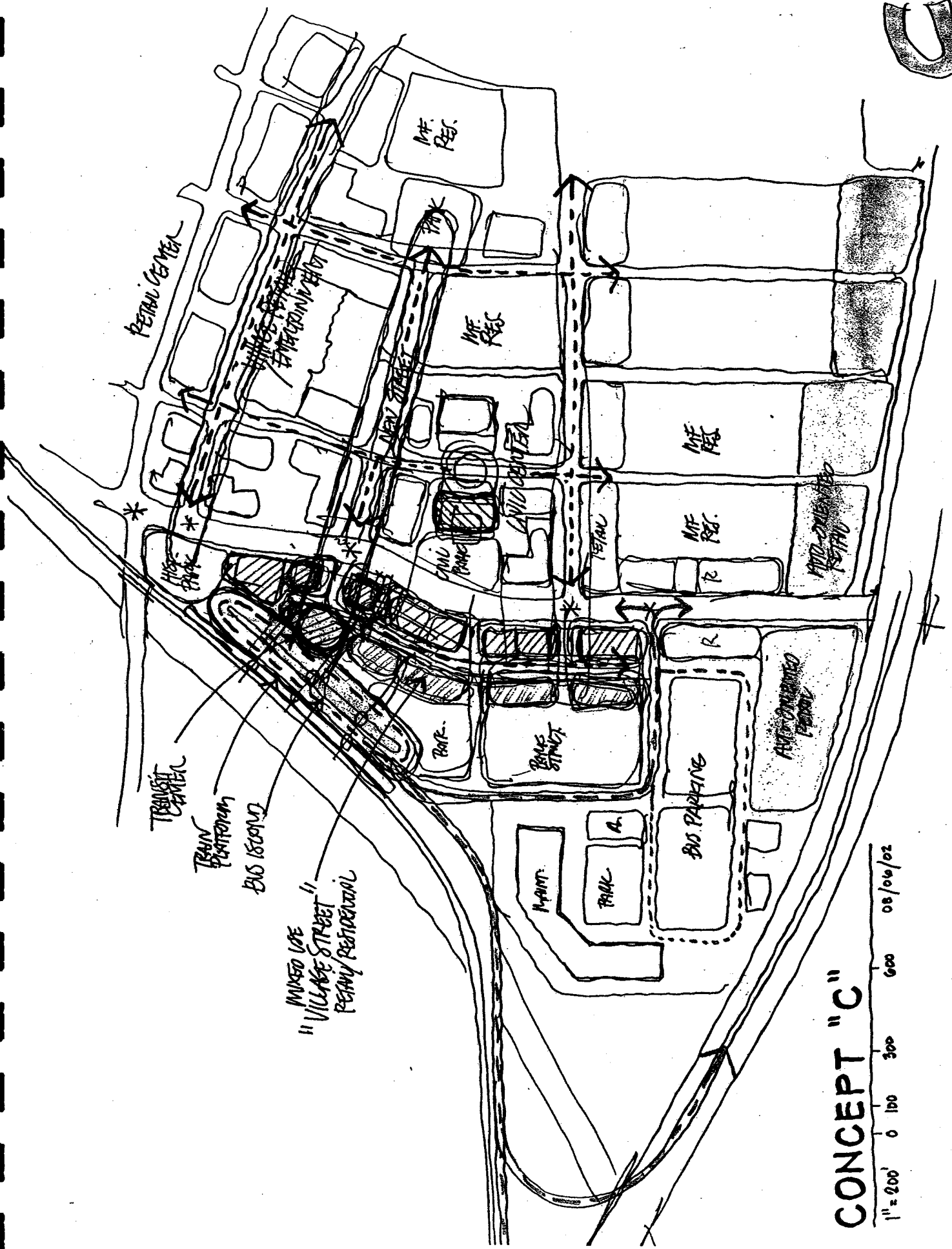
CONCEPT "A"

1" = 200'
0 100 300 600 08/06/02

B

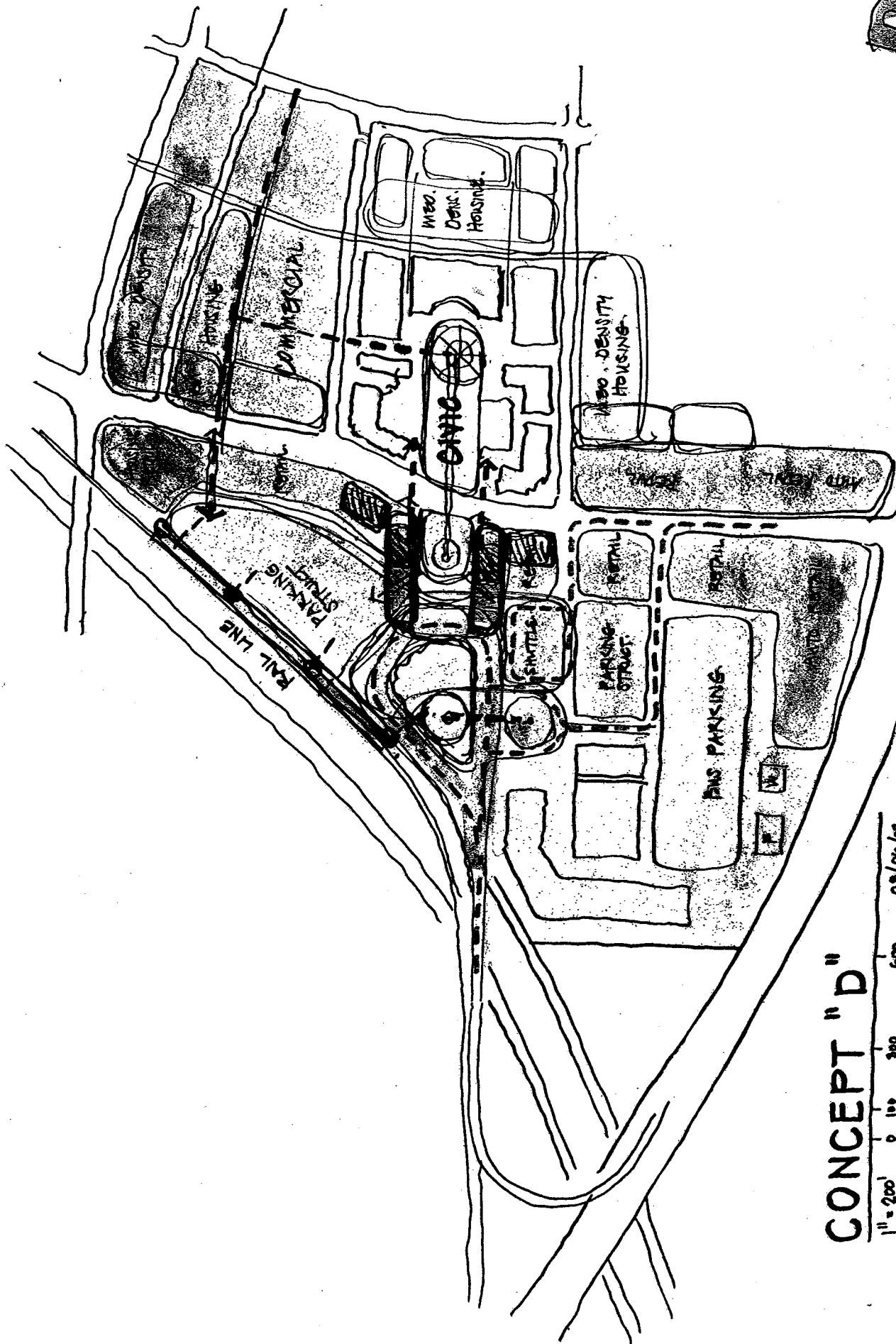


C



CONCEPT "C"

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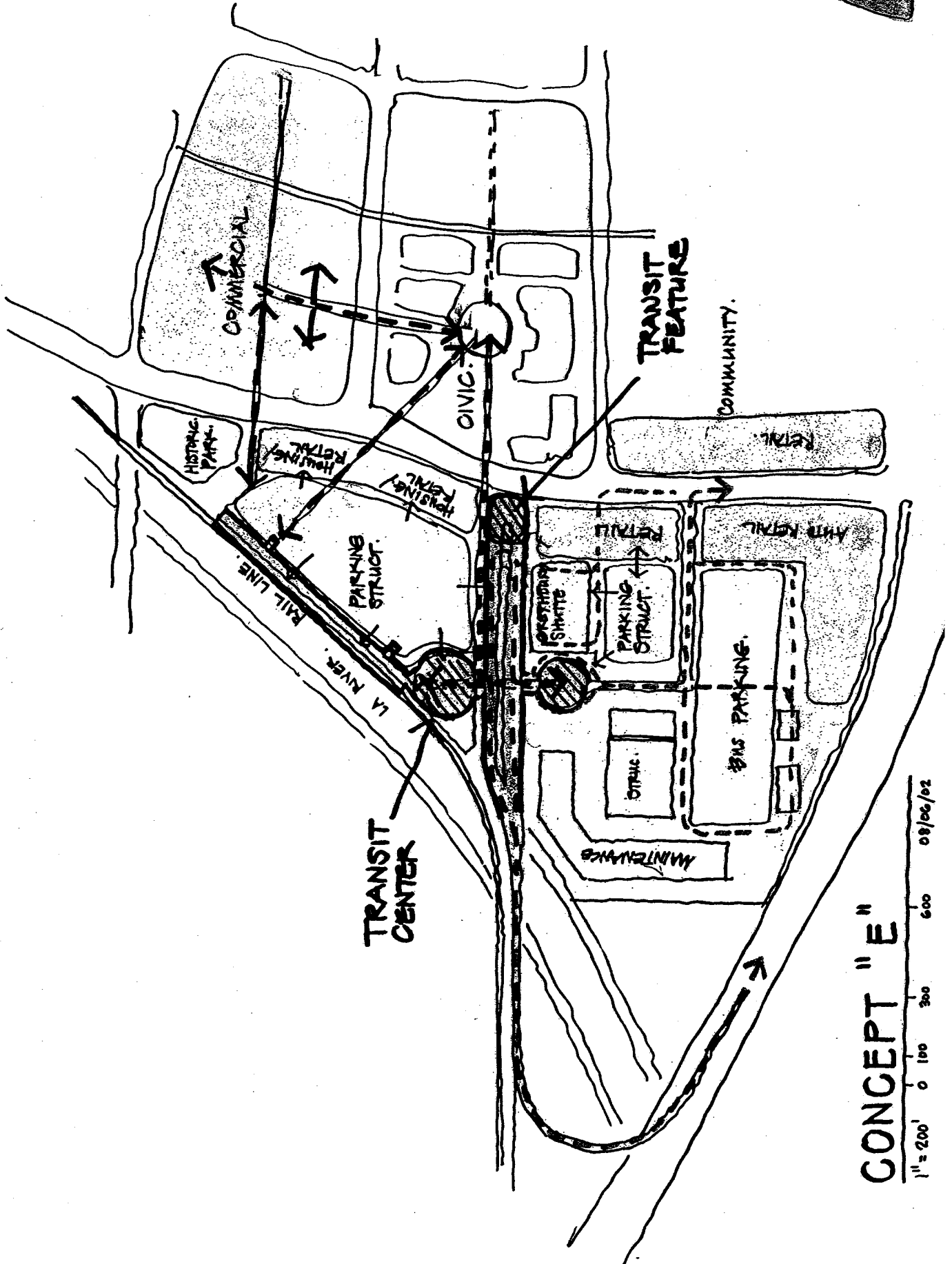


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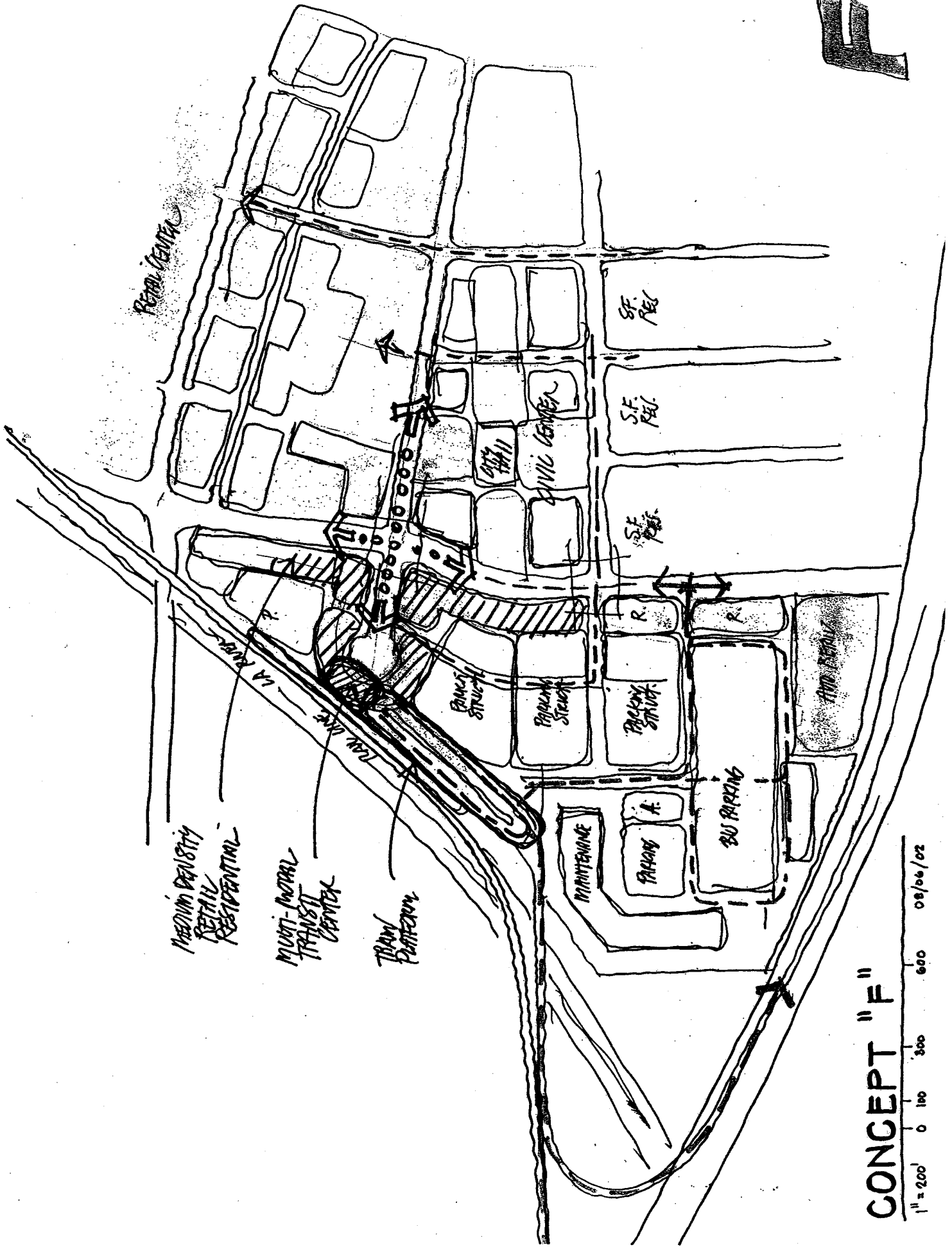
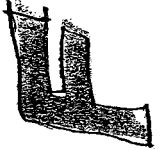
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 0 150 300 600 08/06/02

D

E



CONCEPT "E"
1" = 200'
0 100 300 600
08/06/02



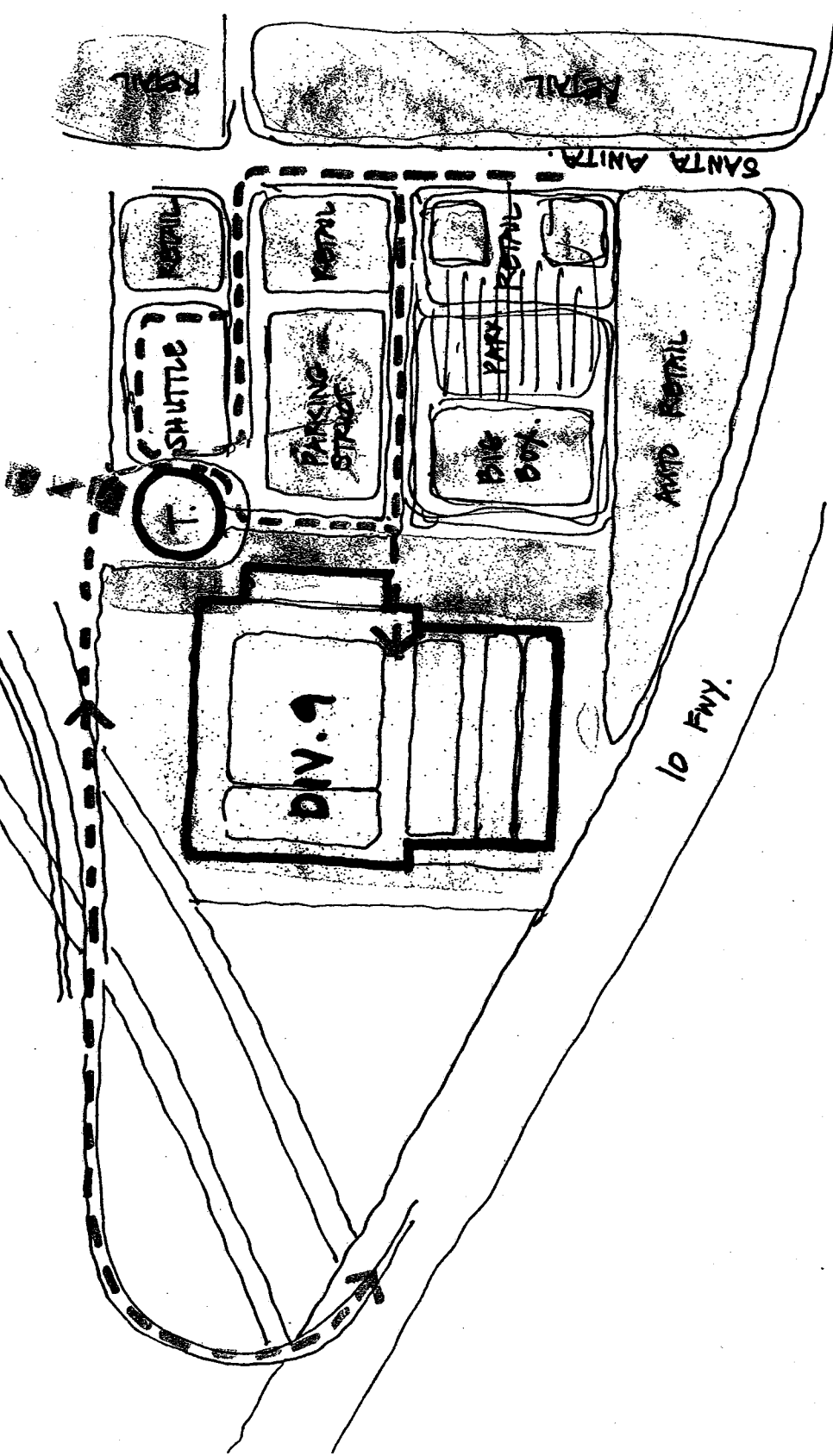
MEDIUM DENSITY
RETAIL
RESIDENTIAL

MULTI-MODAL
TRANSIT
CENTER

TRAM
PLATFORM

CONCEPT "F"

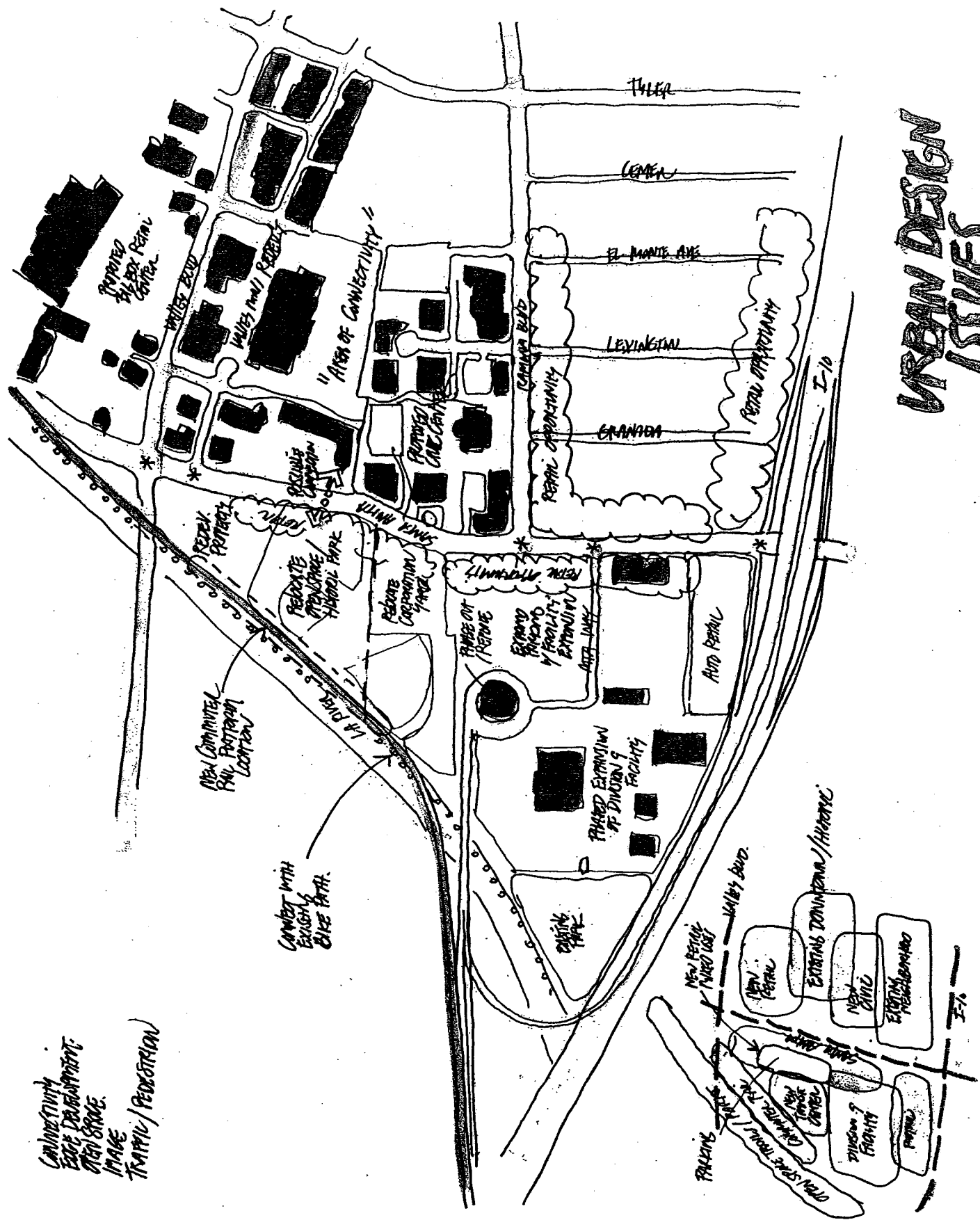
1" = 200'
0 100 300 600 08/06/02



URBAN PLANNING CONCEPT

1" = 200' 0 100 300 600 08/06/02

URBAN DESIGN ISSUES



CONNECTIONS
EDGE DEVELOPMENT
STREET SCENE
MAKE
TRAFFIC/PEDESTRIAN

TRANSIT CENTER

SHADE CANOPY

DROP OFF

PUBLIC DRIVE

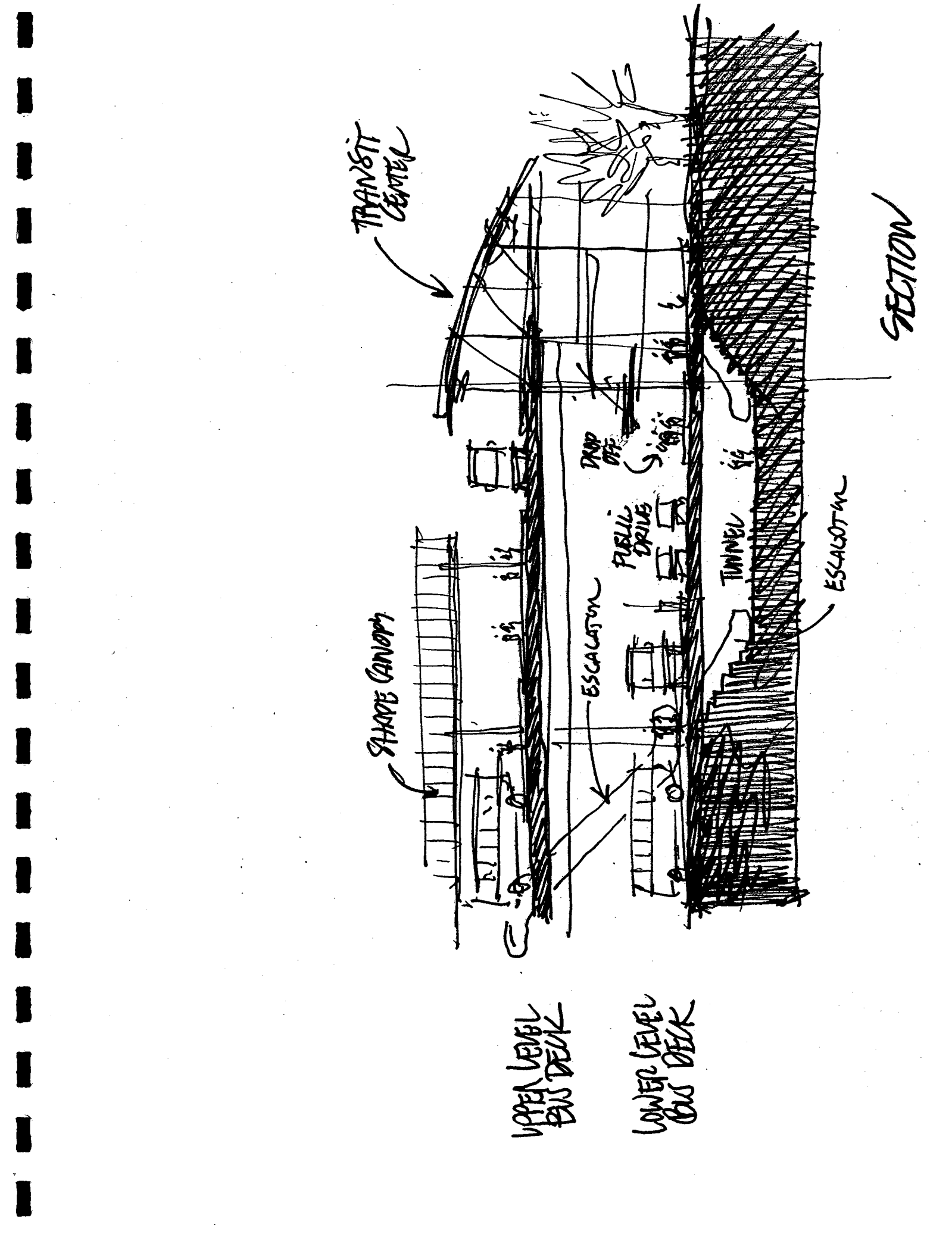
TUNNEL

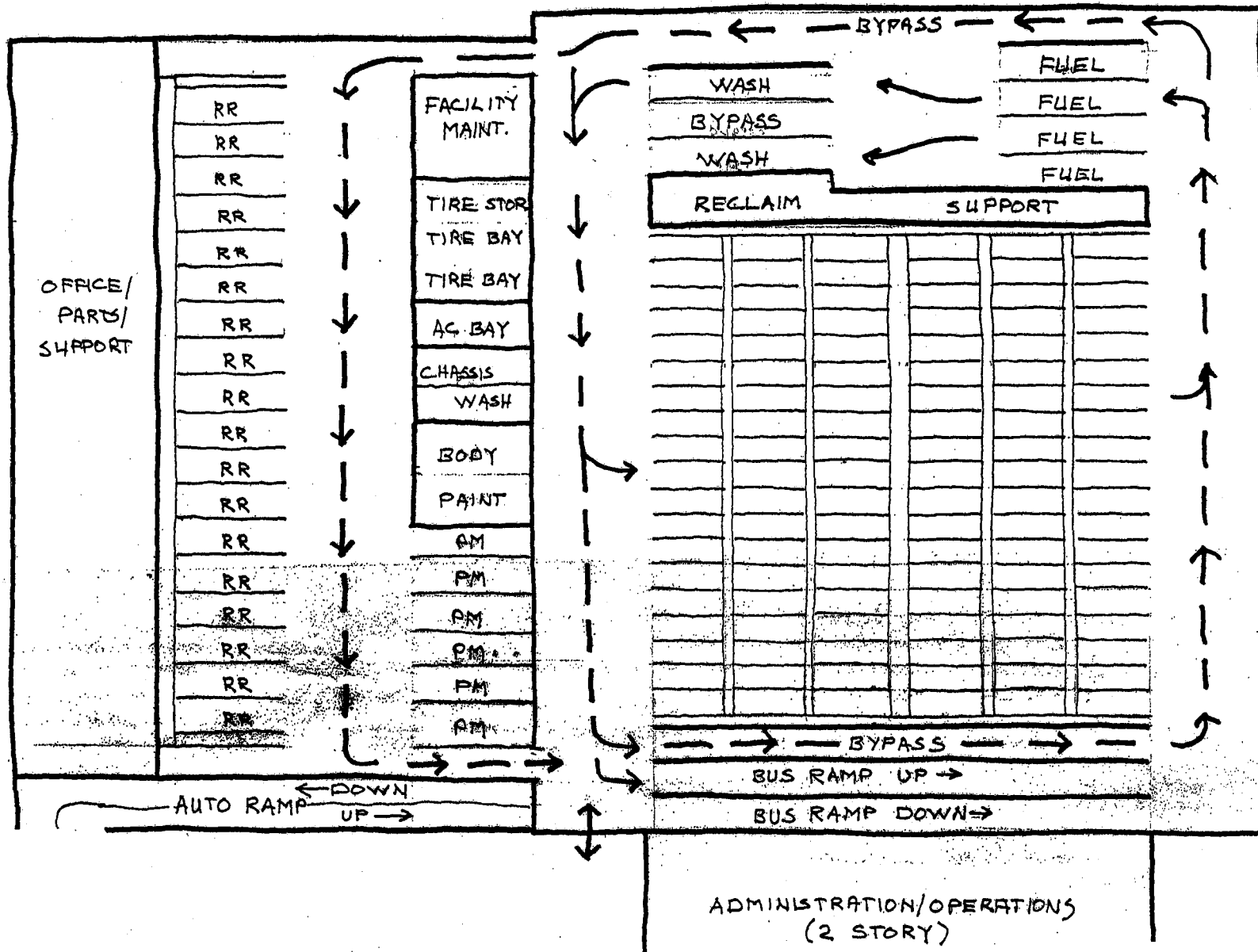
ESCALATOR

UPPER LEVEL BUS DECK

LOWER LEVEL BUS DECK

SECTION

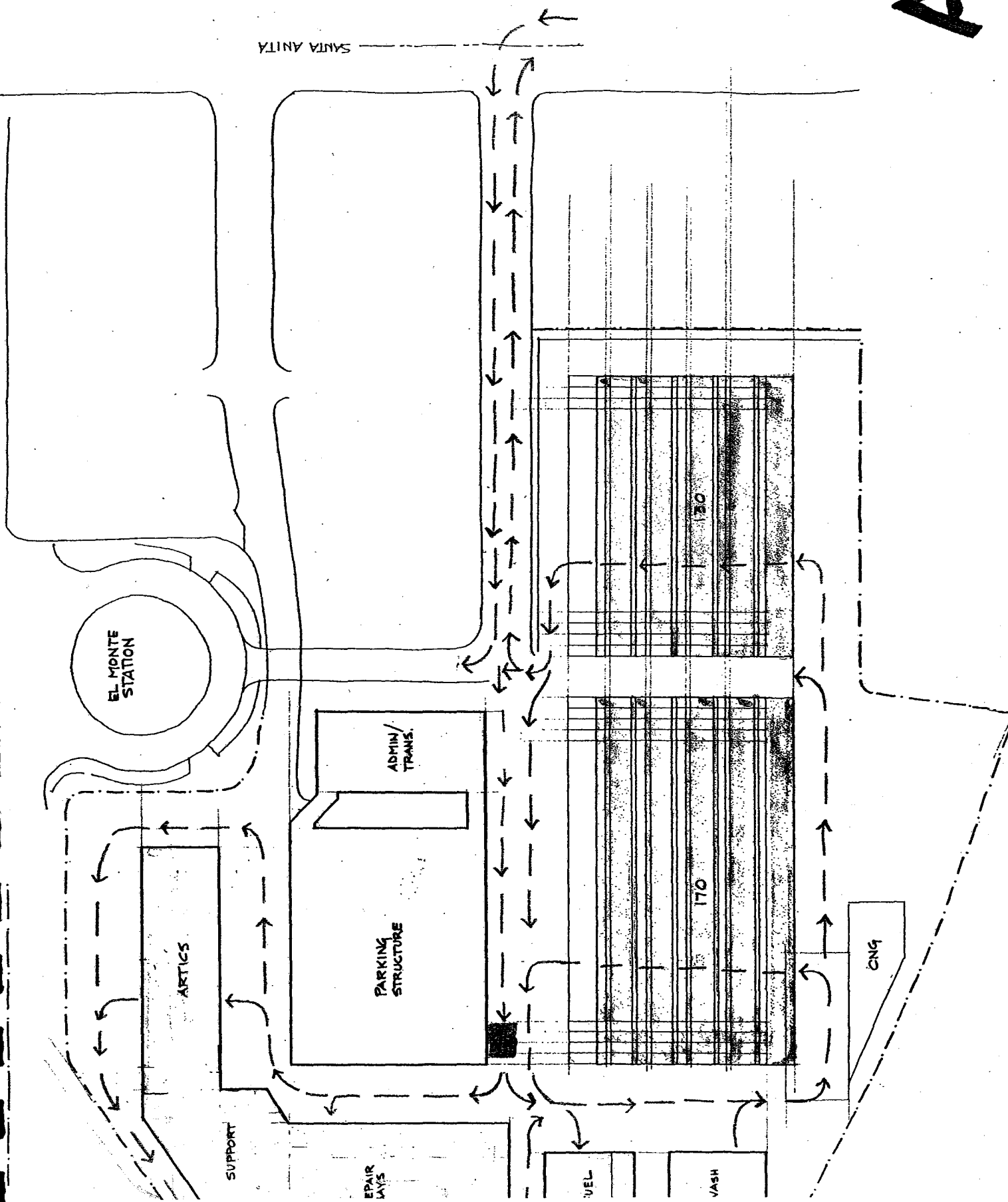




8/07/02

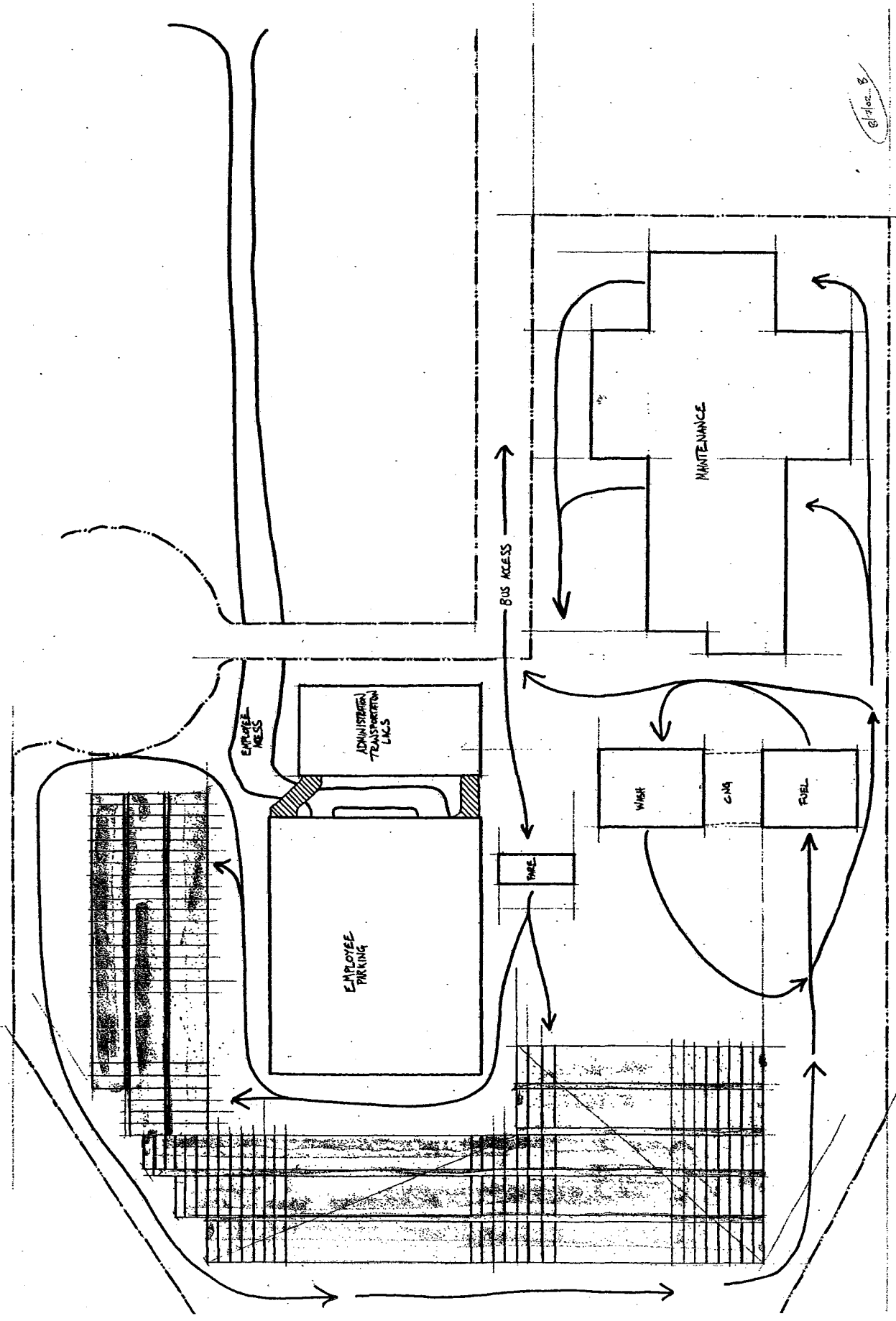
A

SANTA ANITA



B 8/07/02

8-100-3



EXISTING
PUBUL PARK

EXISTING
CORPORATE
YARD.

NEW PARKING
STRUCTURE
(FOOT-SPACE)

EXISTING
BUS TERMINAL

FUTURE
DEVELOPMENT

RANDOM BLDG

FUTURE
DEVELOPMENT

BI

NW LANE

BUS PARKING

BUS PARKING

SH
MTR

SH
MTR

SH
MTR

SH
MTR

SH
MTR

SH
MTR

SH
MTR

SH
MTR

SH
MTR

SH
MTR

SH
MTR

SH
MTR

SH
MTR

SH
MTR

SH
MTR

SH
MTR

EXISTING
PUBUL
PARK

SOUTH WALK

FUTURE
RETAIL

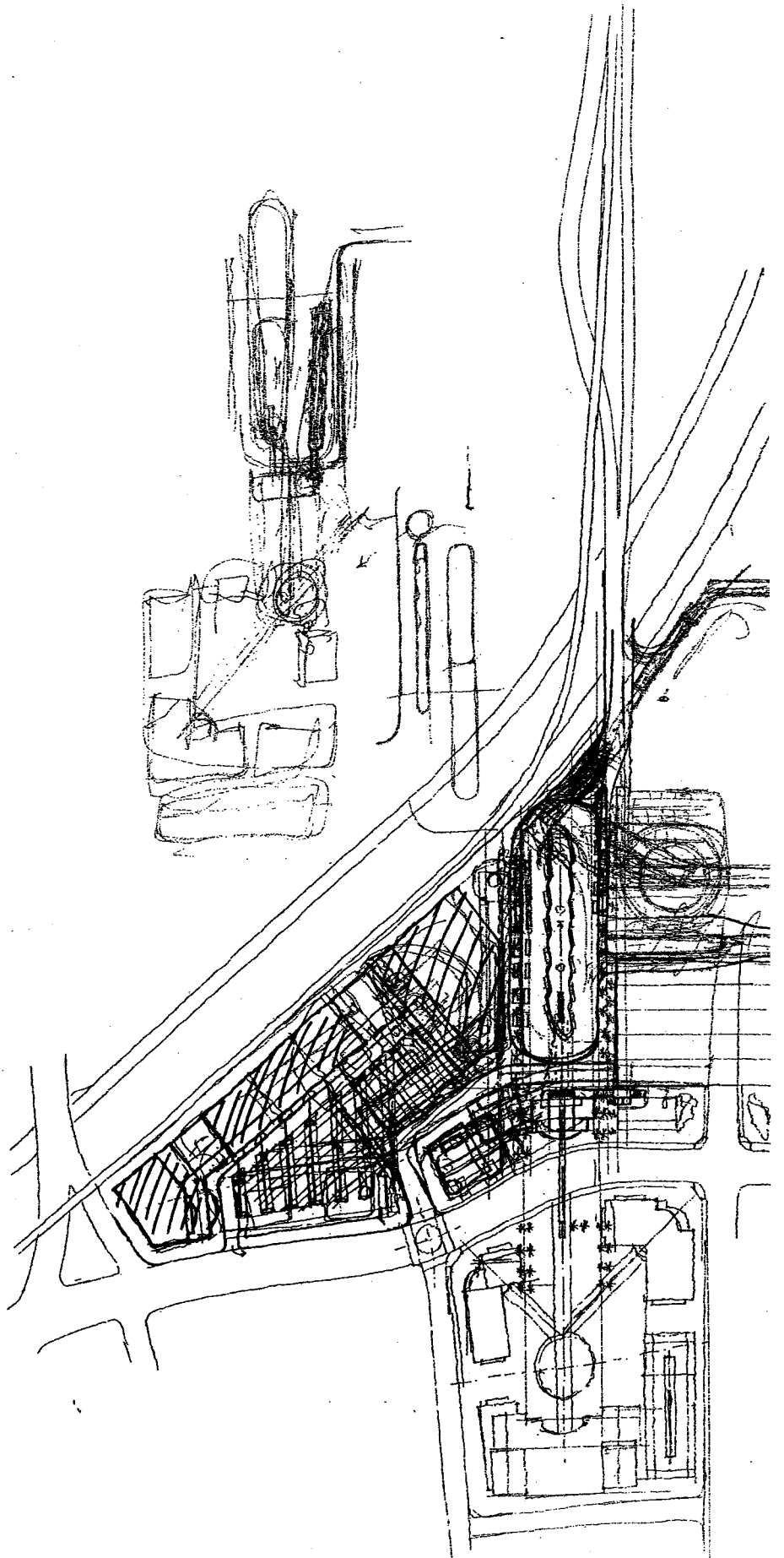
MAINTENANCE

EXISTING
RETAIL

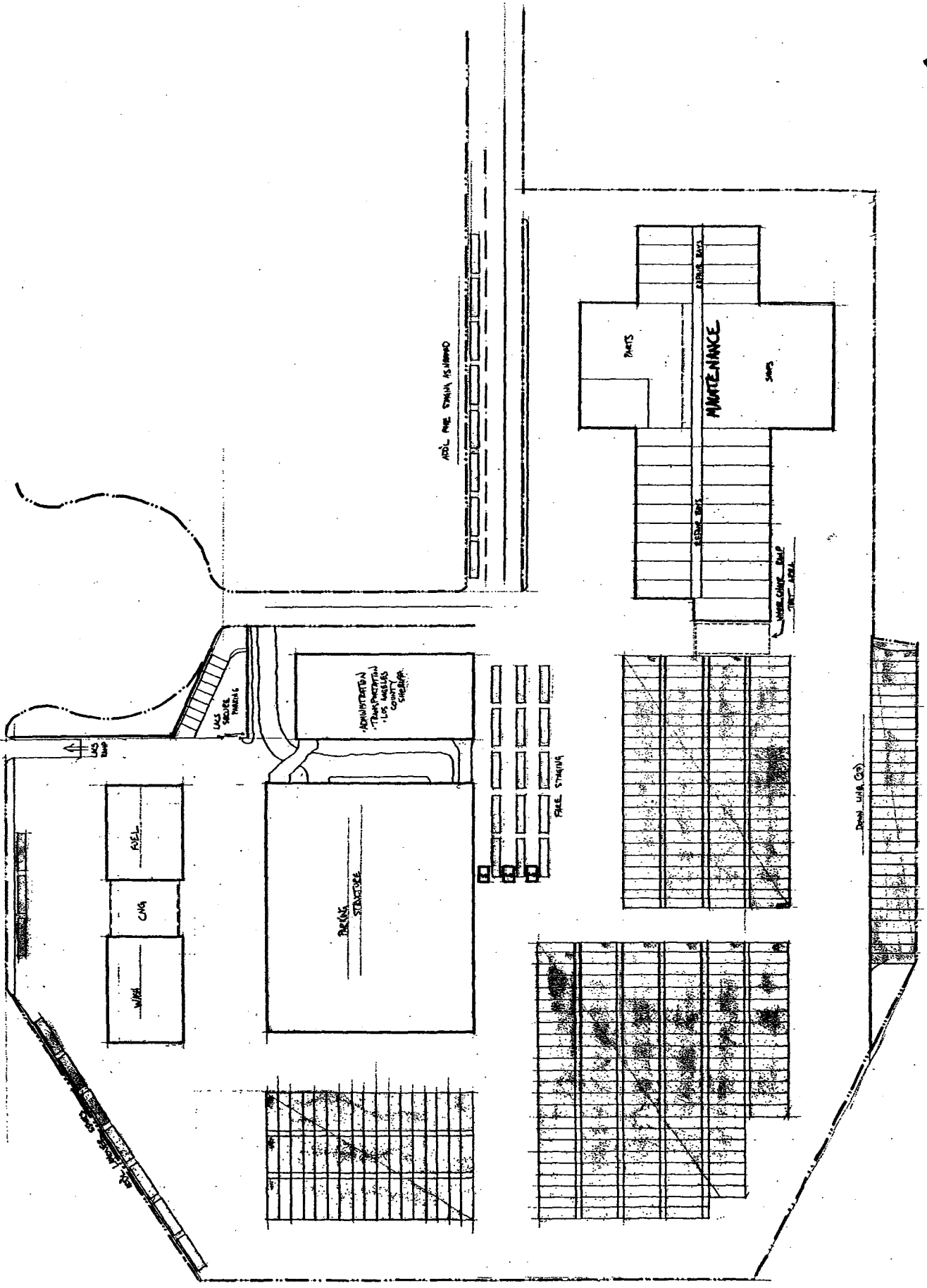
I-10

CONCEPT "BI"

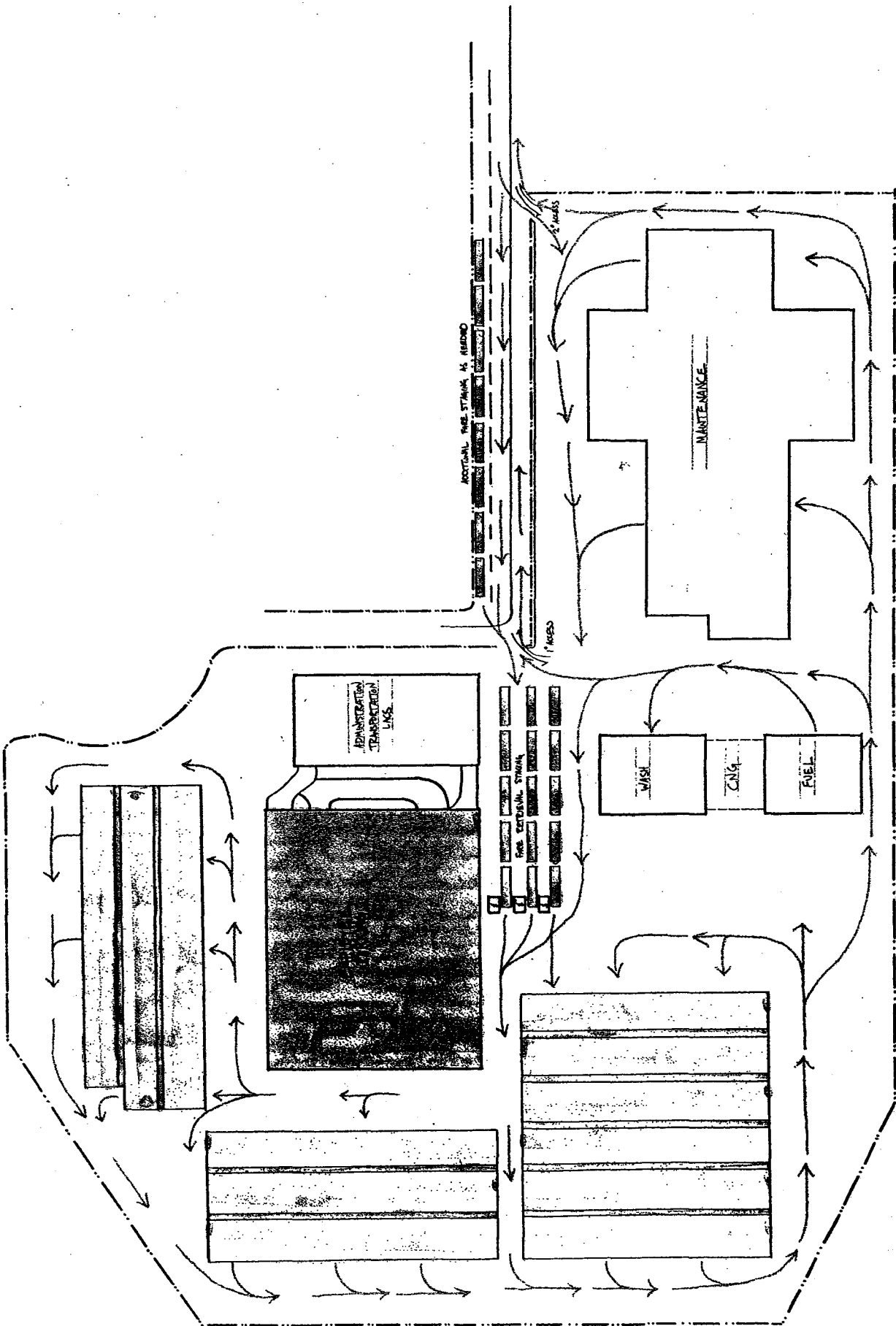
1" = 100'-0" 0 50 150 300 08/08/02



Architectural
Drawing
1960

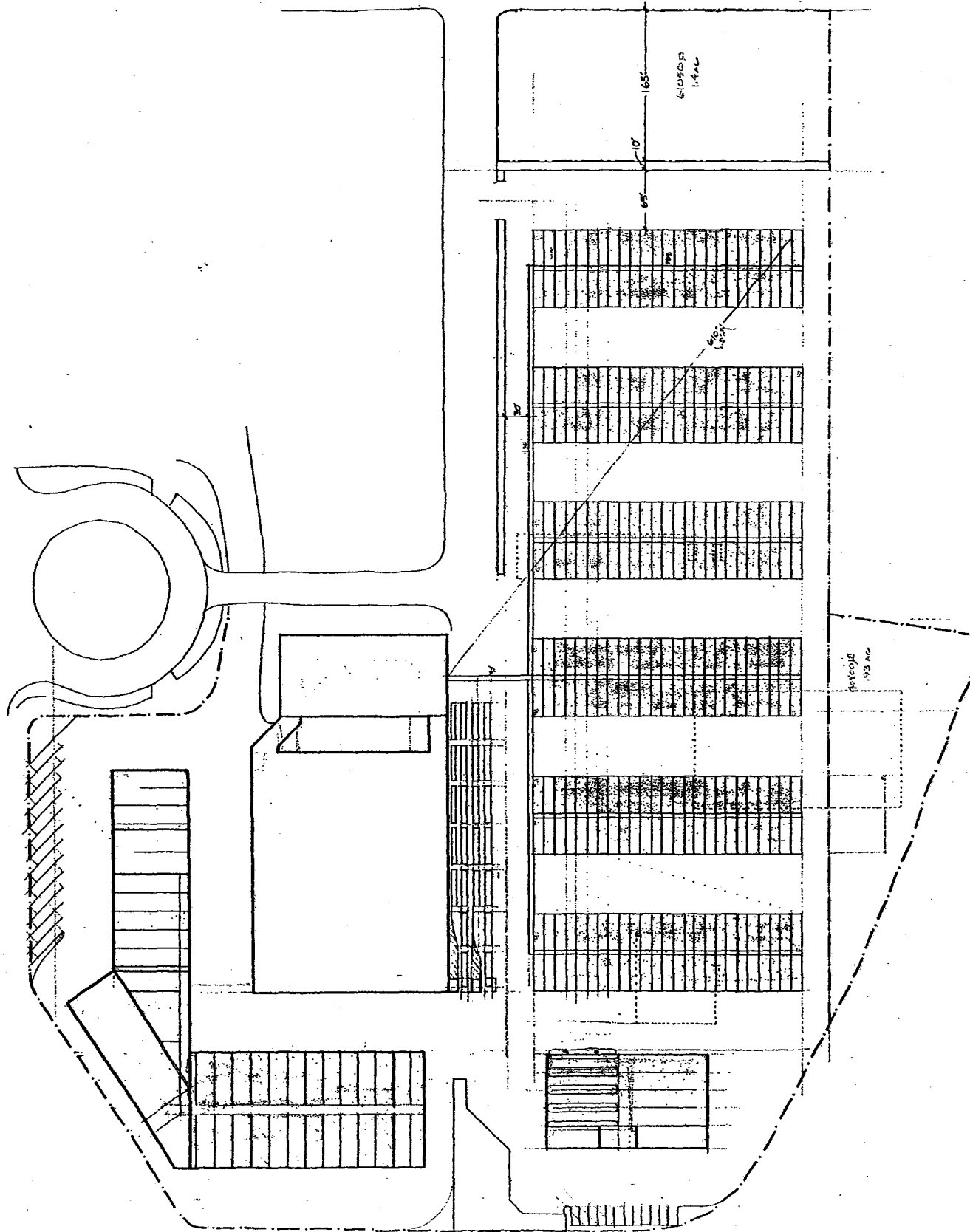


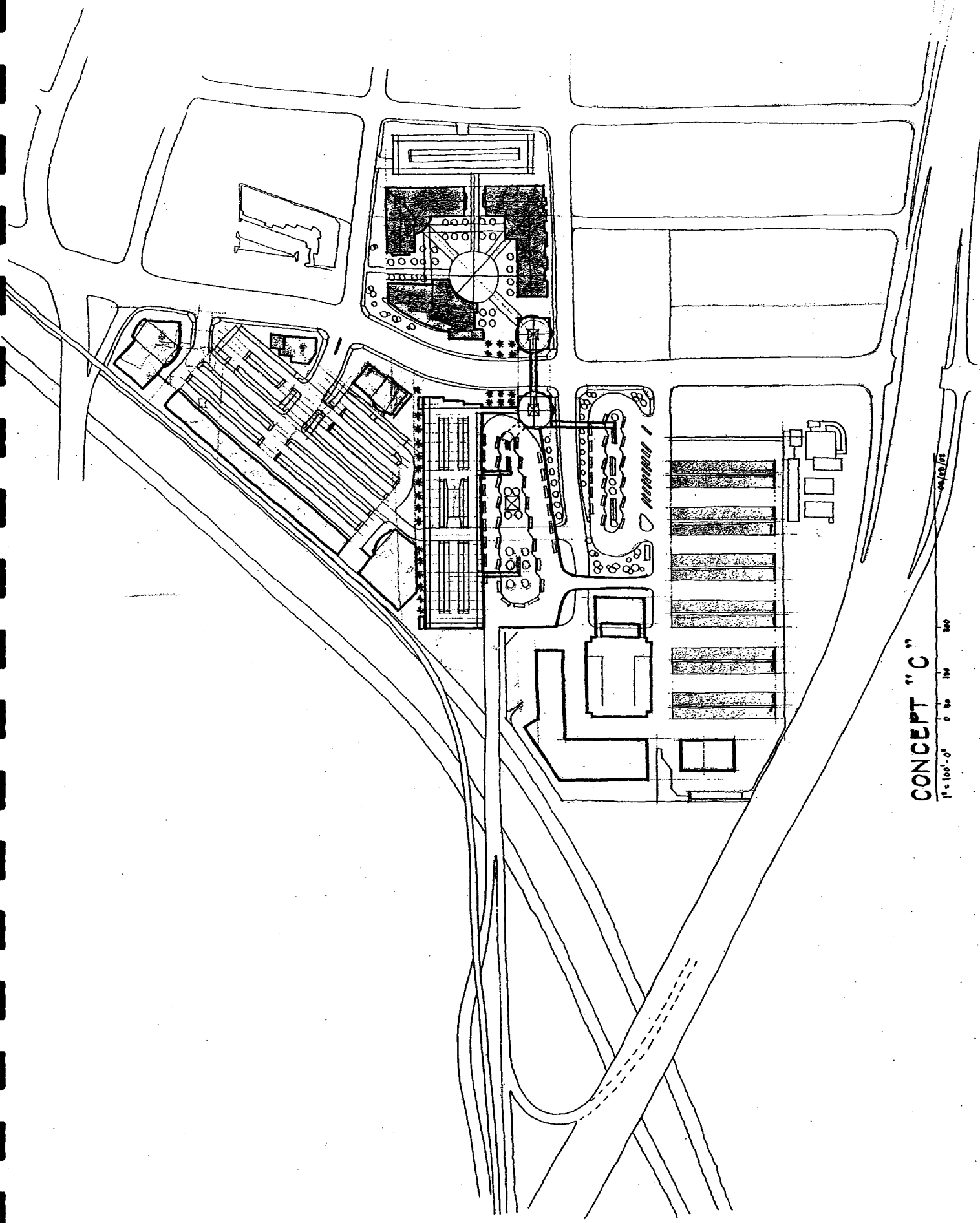
B 1
 01/28/82



B2

A1

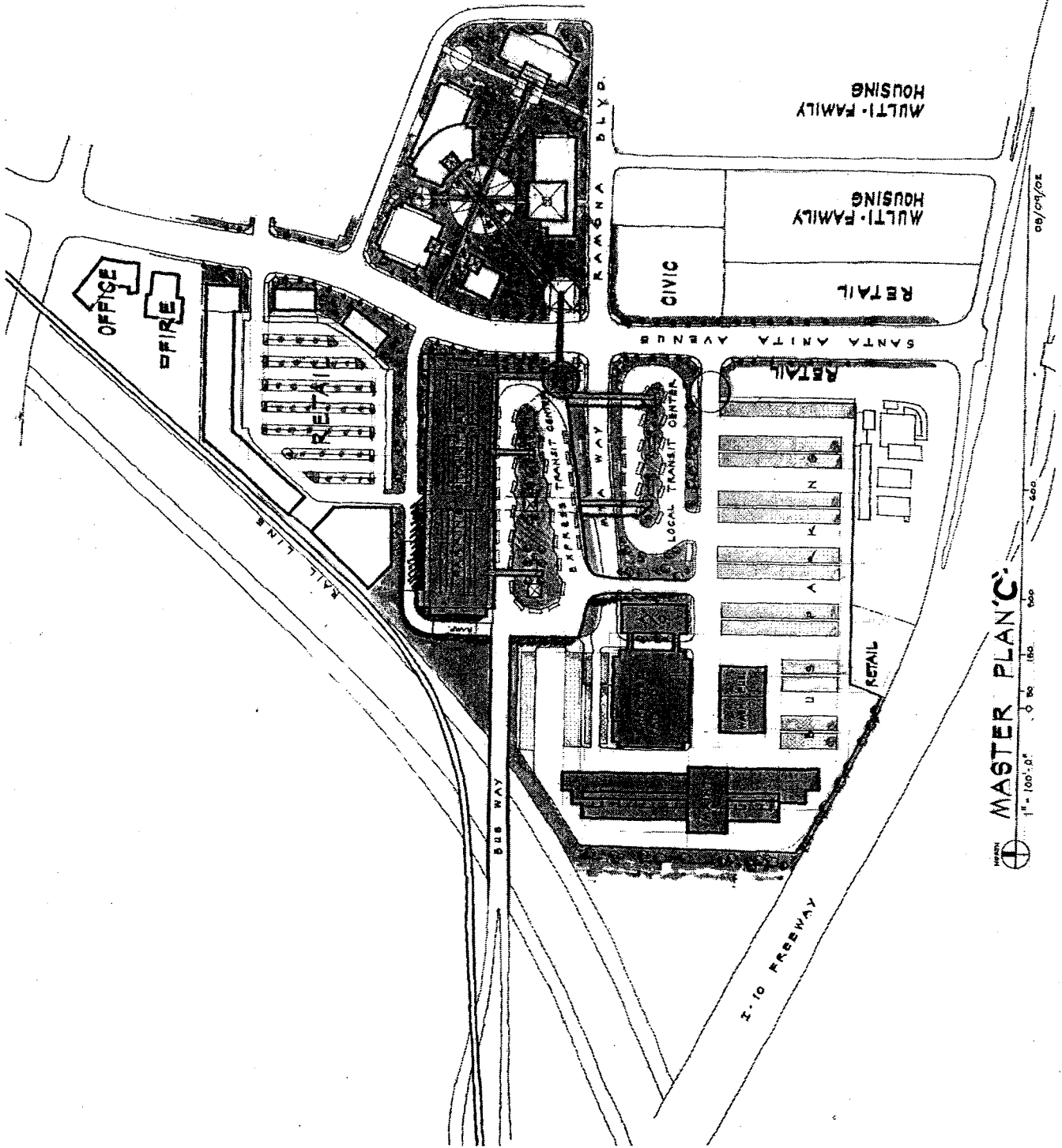




CONCEPT "C"

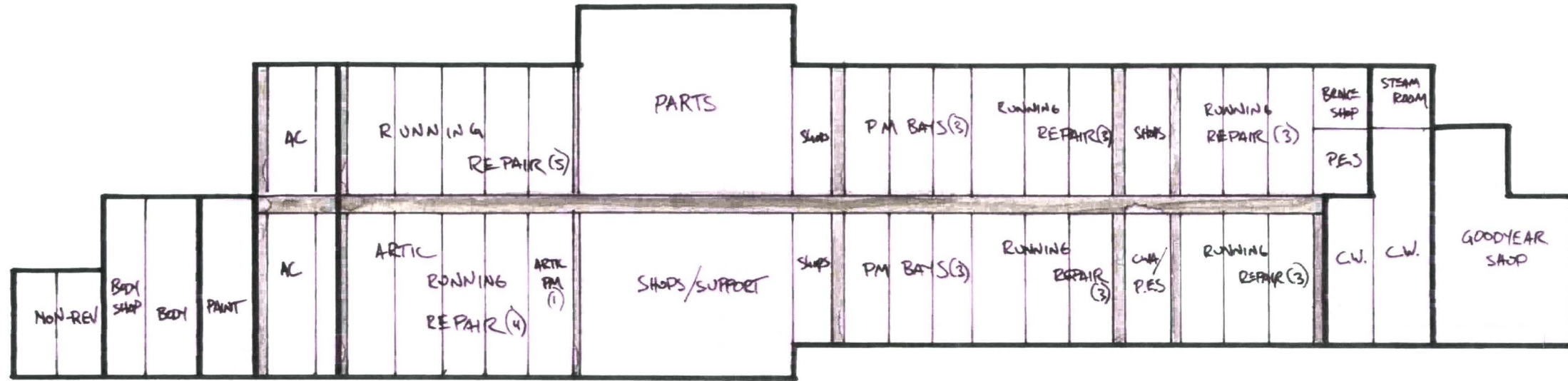
1" = 100'-0" 0 50 100 150 200

04/02/03



MASTER PLANNING
 1" = 100'-0"
 0 50 100 150 200

08/02/03



Maintenance Facility



Maintenance Facility Stats

Standard Running Repair Bays	18
Standard PM/Inspection Bays	6
Artic Running Repair Bays	4
Artic PM/Inspection Bays	1
Tire Bays	
Standard	1
Artic	1
A/C Repair Bays (Artic)	1
Paint Booth Bay (Artic)	1
Body Repair Bay (Artic)	1
Chassis Wash Bays	
Standard	1
Artic	1
Non Revenue Repair	1

Transportation Building

First Floor

Transportation Support

Dispatch

Second Floor

Transportation Administration

Transportation Support

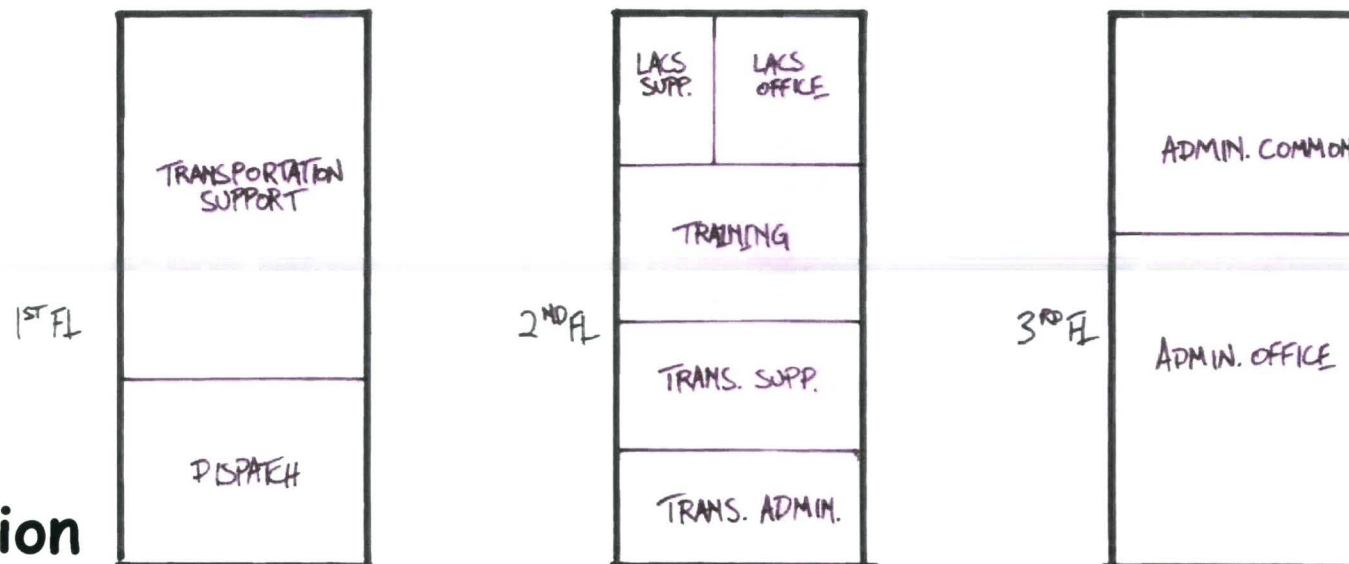
Training

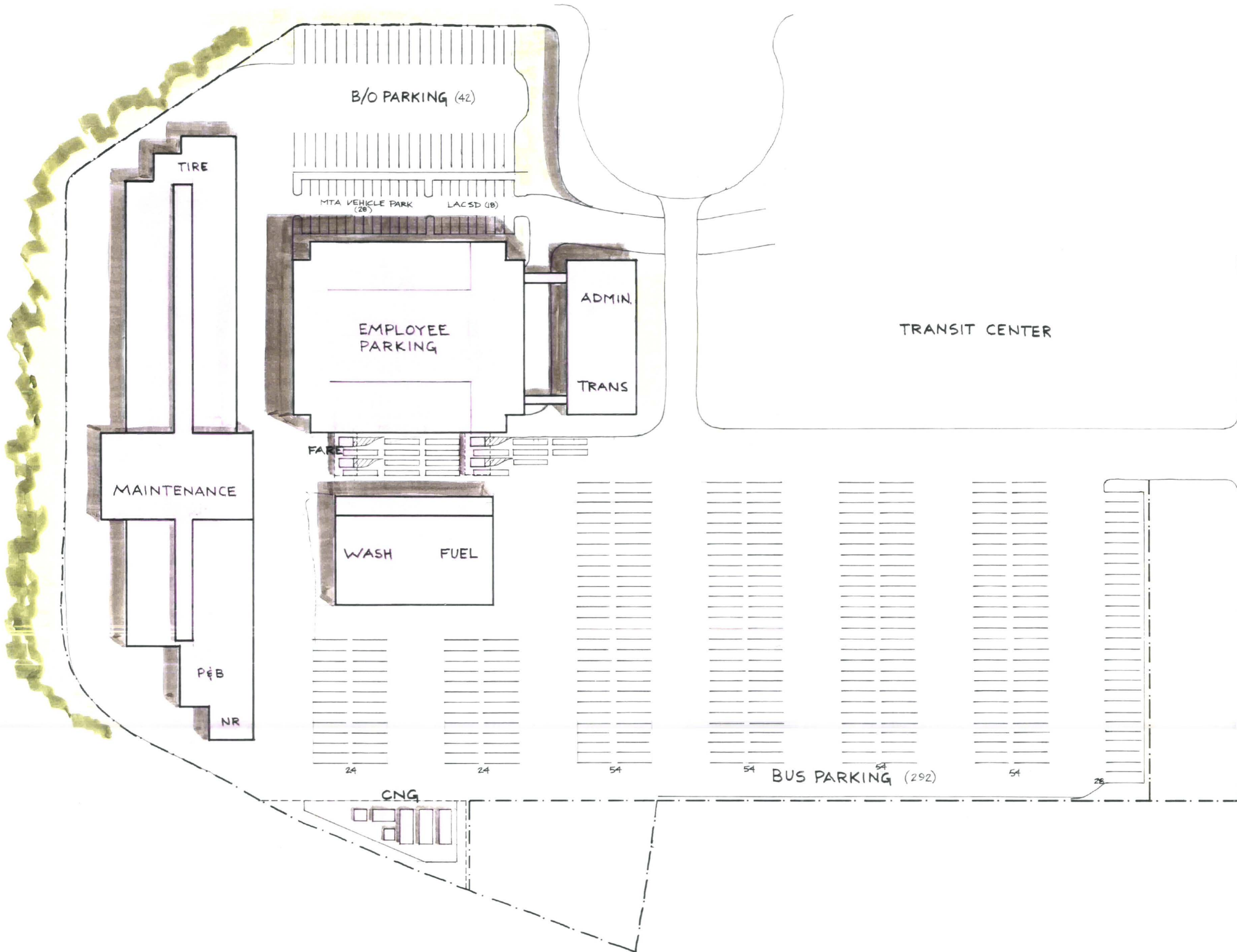
LA County Sheriff

Third Floor

Sector Administration

Transportation Building





Parking

Assigned Bus Parking	292
Bad Order Bus Parking	42
Employee Parking (Structure)	495
MTA Non-Rev Vehicle	28
LACSD Parking (Secure)	18

Maintenance Facility Stats

Standard Running Repair Bays	18
Standard PM/Inspection Bays	6
Artic Running Repair Bays	4
Artic PM/Inspection Bays	1
Tire Bays	
Standard	1
Artic	1
A/C Repair Bays (Artic)	1
Paint Booth Bay (Artic)	1
Body Repair Bay (Artic)	1
Chassis Wash Bays	
Standard	1
Artic	1
Non Revenue Repair	1

Fuel & Wash

Fuel Lanes (Sized for Artics)	5
Wash Lanes (Sized for Artics)	5
Brake Inspections Pits	0

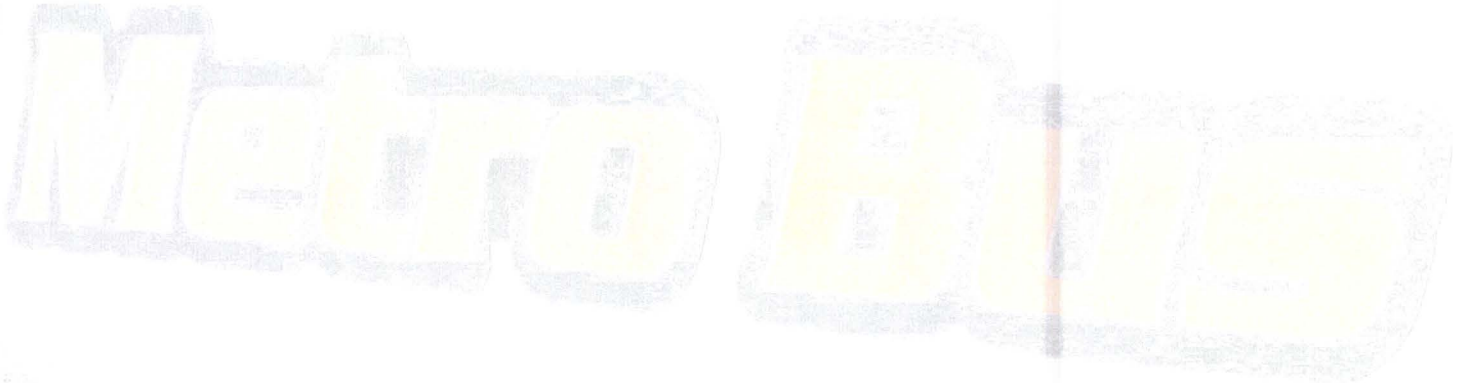




Los Angeles County
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Division 9 Master Plan Report

Appendix C Division 9 Post-Charrette Development



ALT 'A'

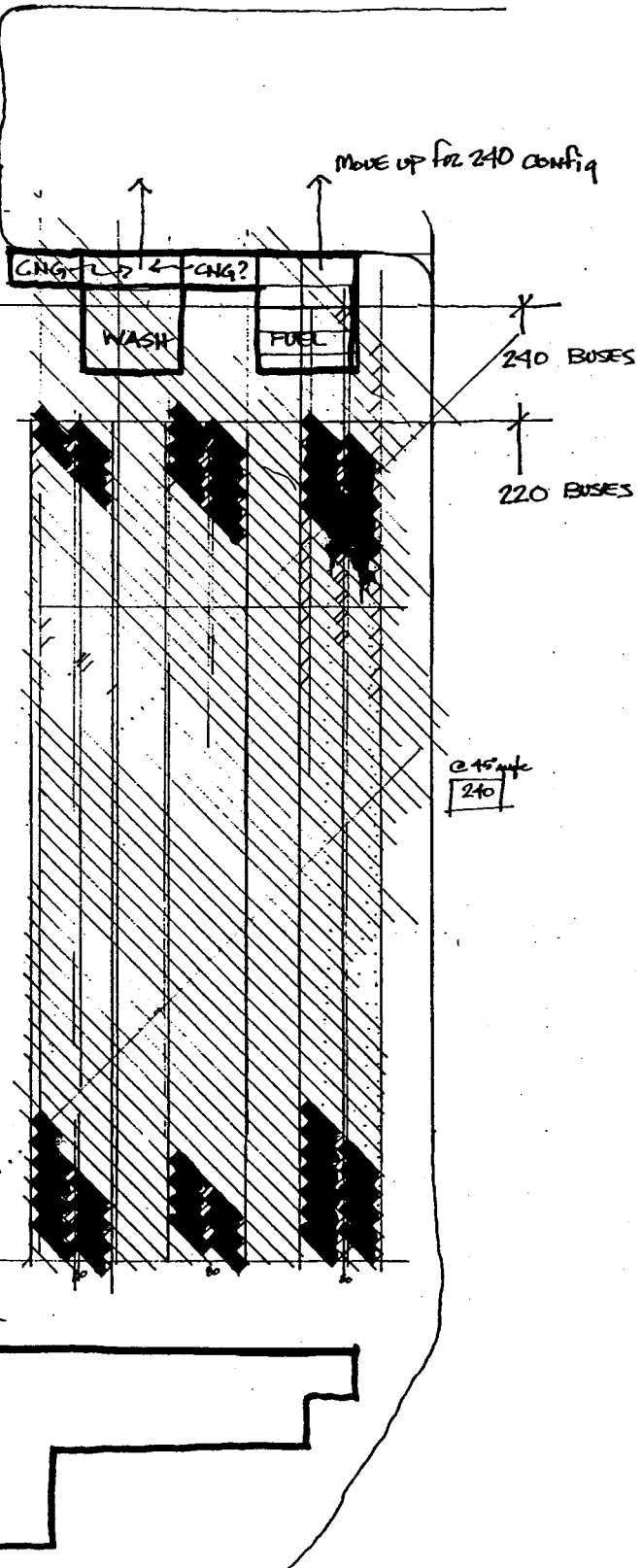
GAS

ADMIN/OPS

PARKING

SAME

MAINTENANCE



ALT 'B'

155'

FUEL

CNG?

WASH & BRAKE PITS

GAS

252

252

ADMIN/OPS

Employee

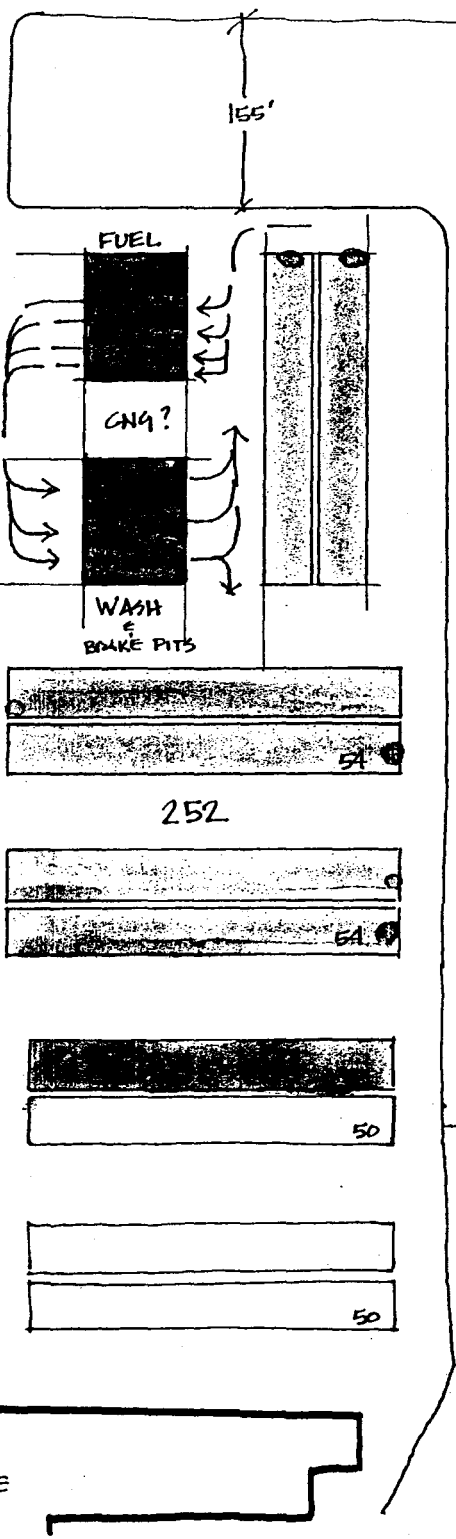
PARKING

MTA

B.O.
20

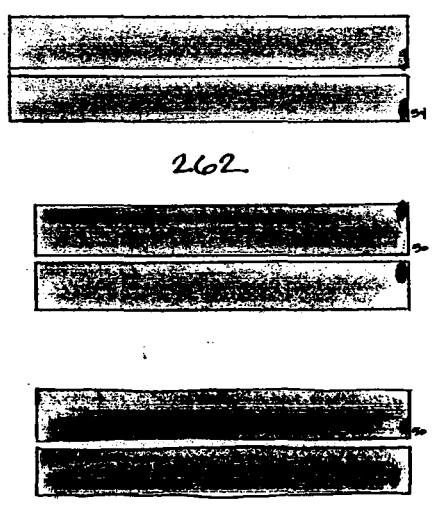
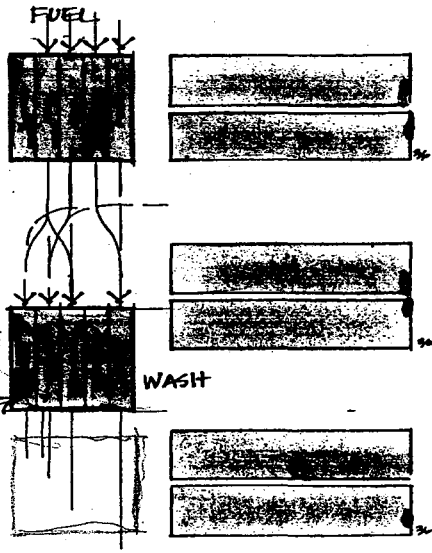
CNG

MAINTENANCE



ALT 'C'

GAS



SAME

PARKING

MAINTENANCE

262

ALT. 'D'

155'

WASH

EGN?

FUEL

262

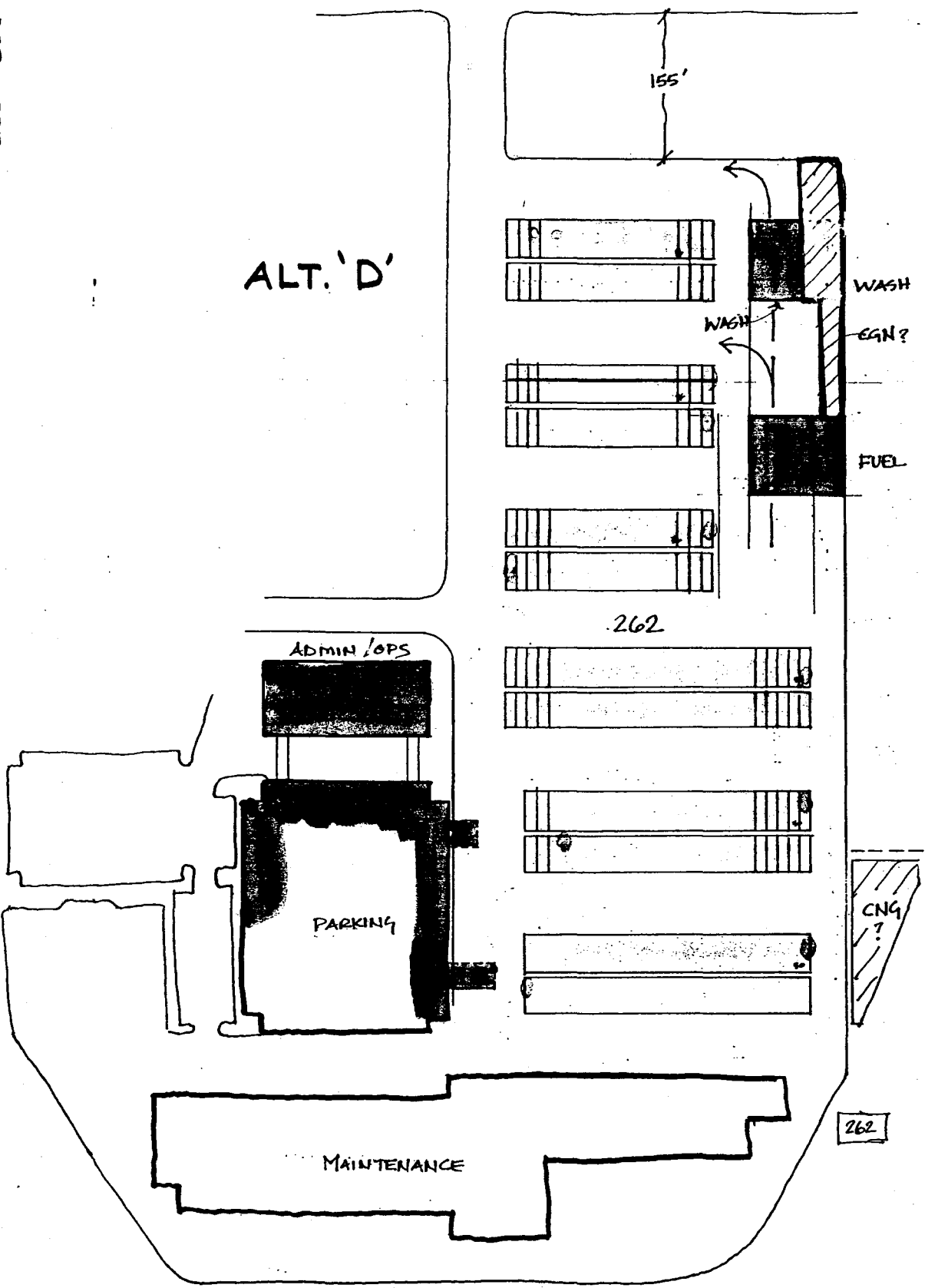
ADMIN / OPS

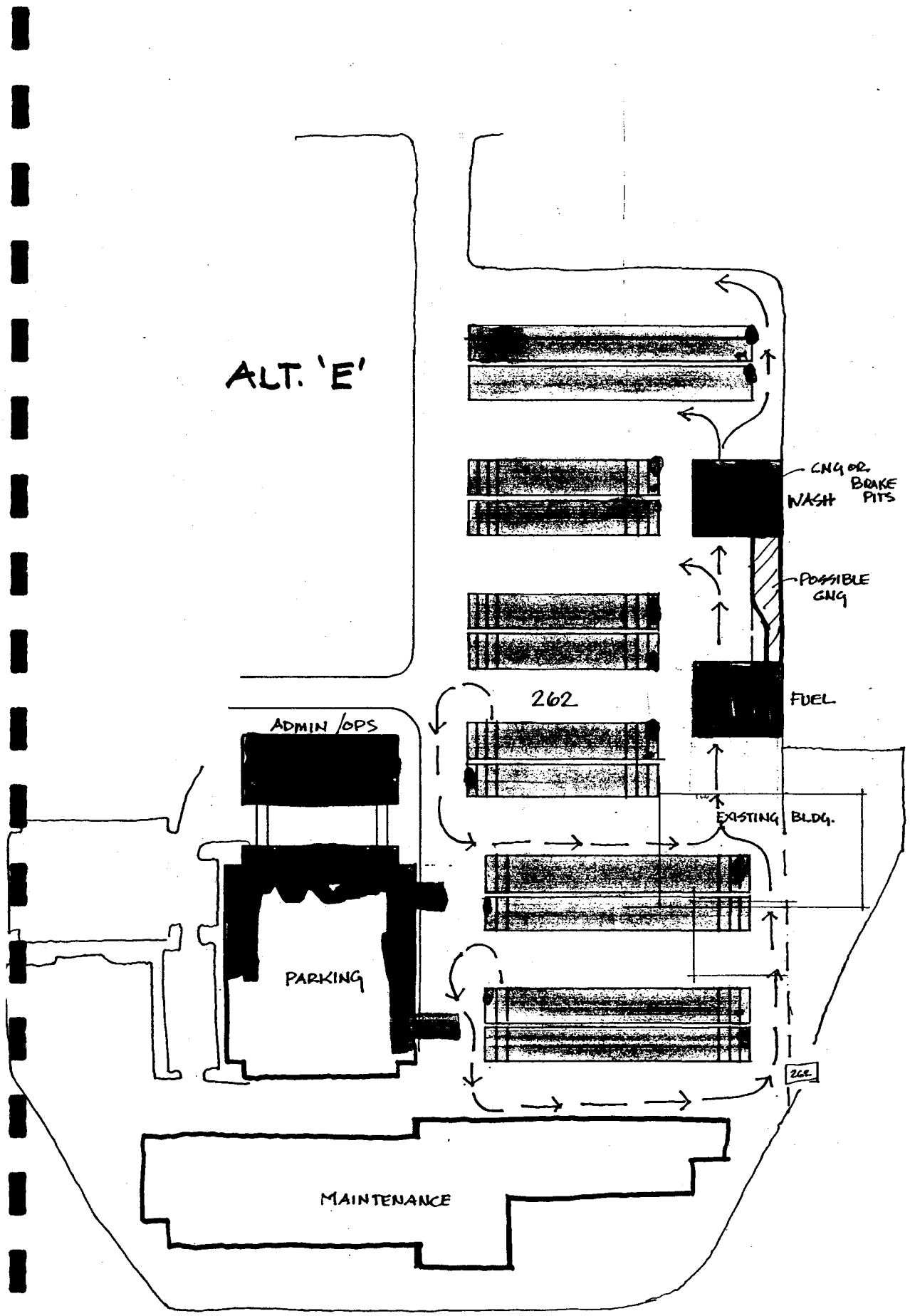
PARKING

CNG ?

MAINTENANCE

262

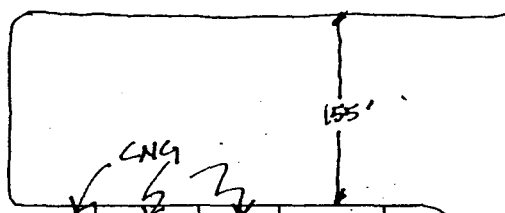




ALT 'F'

USES
MTA ROAD
FOR pull-out
OF WASHER

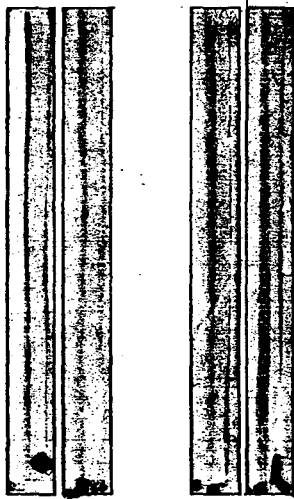
GAS



WASH BY-PASS



240



240

ADMIN/OPS



Employee

(95)

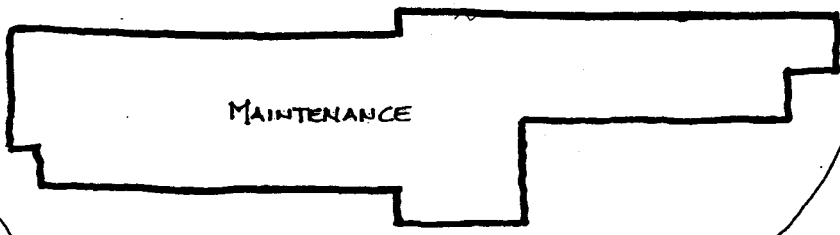
PARKING



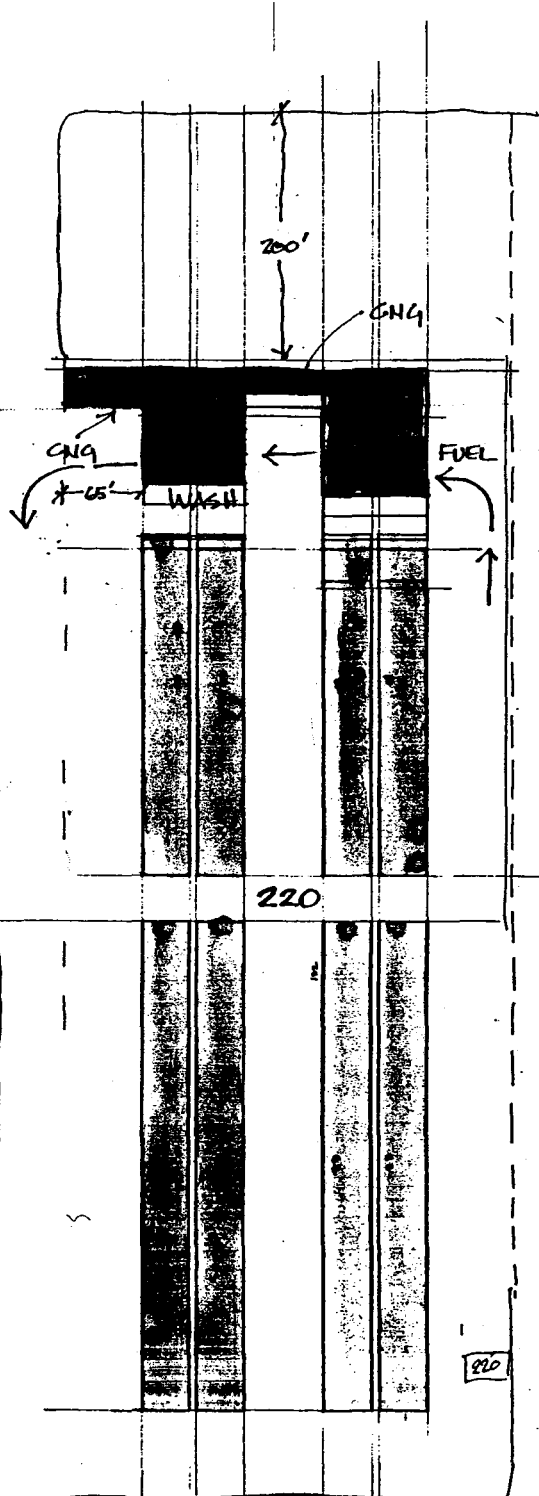
BO
20

MTA
(28)

MAINTENANCE



ALT 'G'



SAME

ADMIN/OPS

PARKING

MAINTENANCE

220

220

200'

GN4

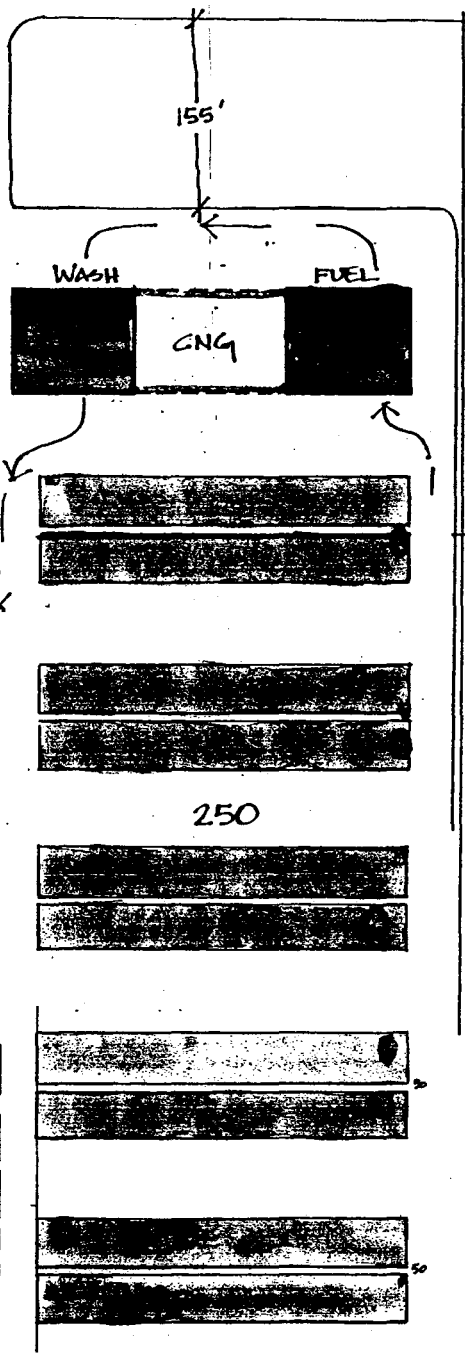
GN4

45'

WASH

FUEL

ALT 'H'

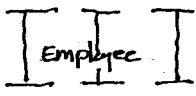


445

ADMIN/OPS



Employee

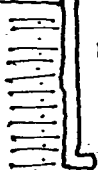


PARKING

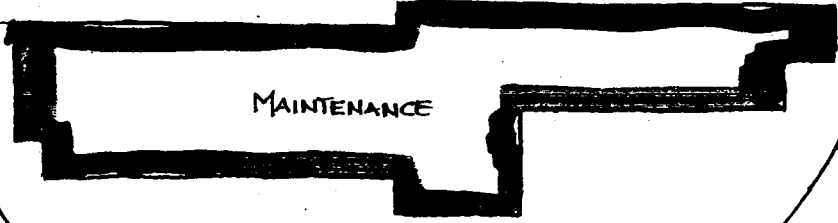


MTA

B.O.
(26)



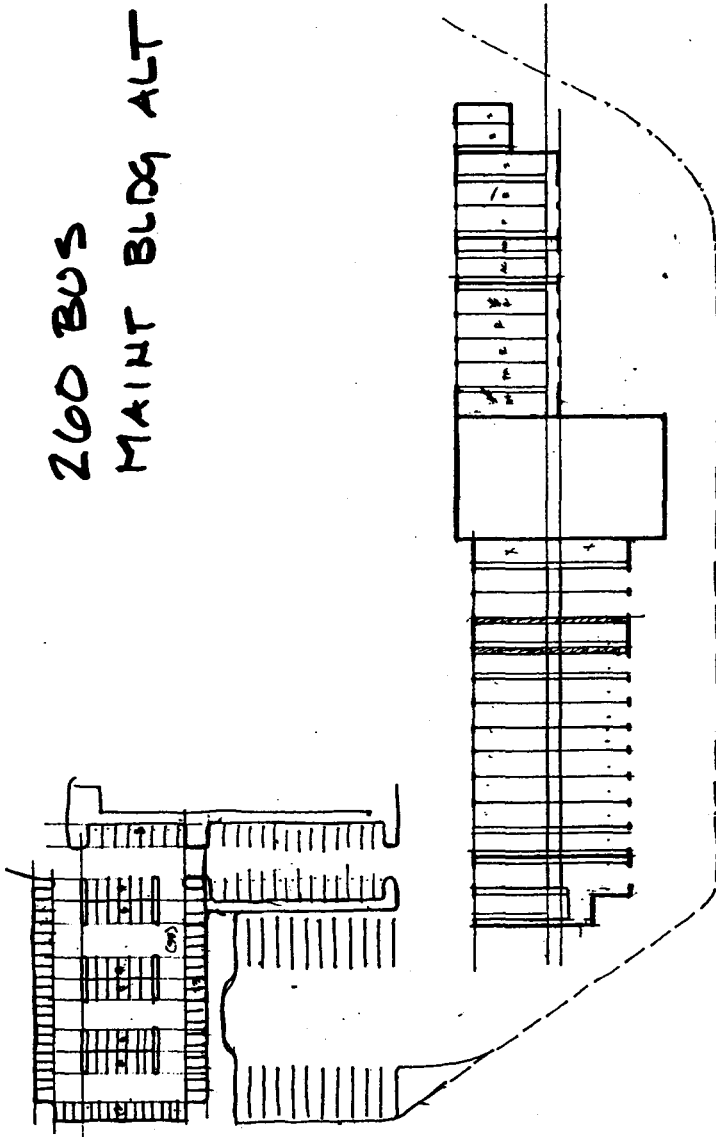
MAINTENANCE



250

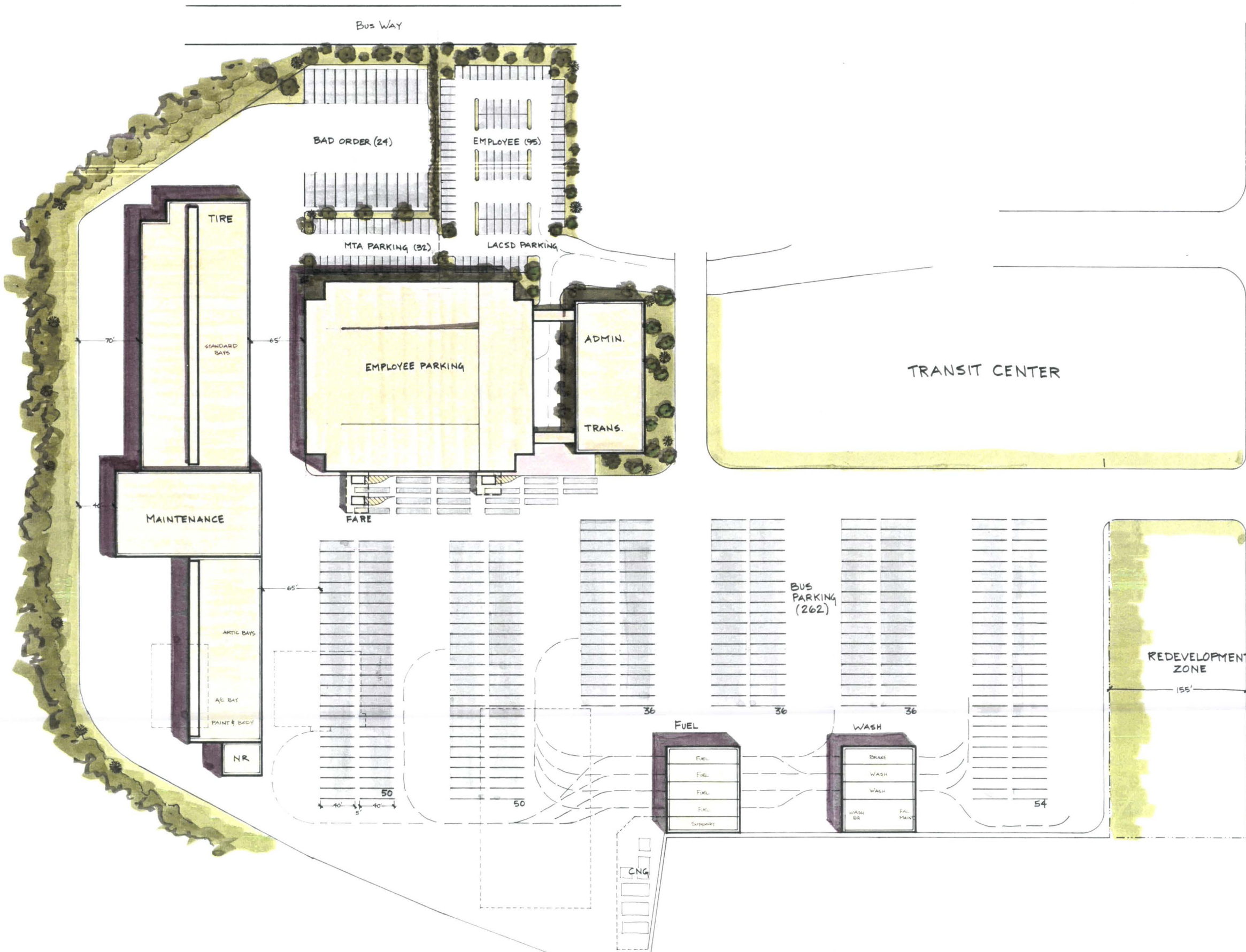
U-TURN
Fuel & wash

260 BUS
MAINT BLDG ALT



260
92
C30

5



Parking

Assigned Bus Parking	262
Bad Order Bus Parking	24
Employee Parking (Structure)	562
MTA Non-Rev Vehicle	32
LACSD Parking (Secure)	18

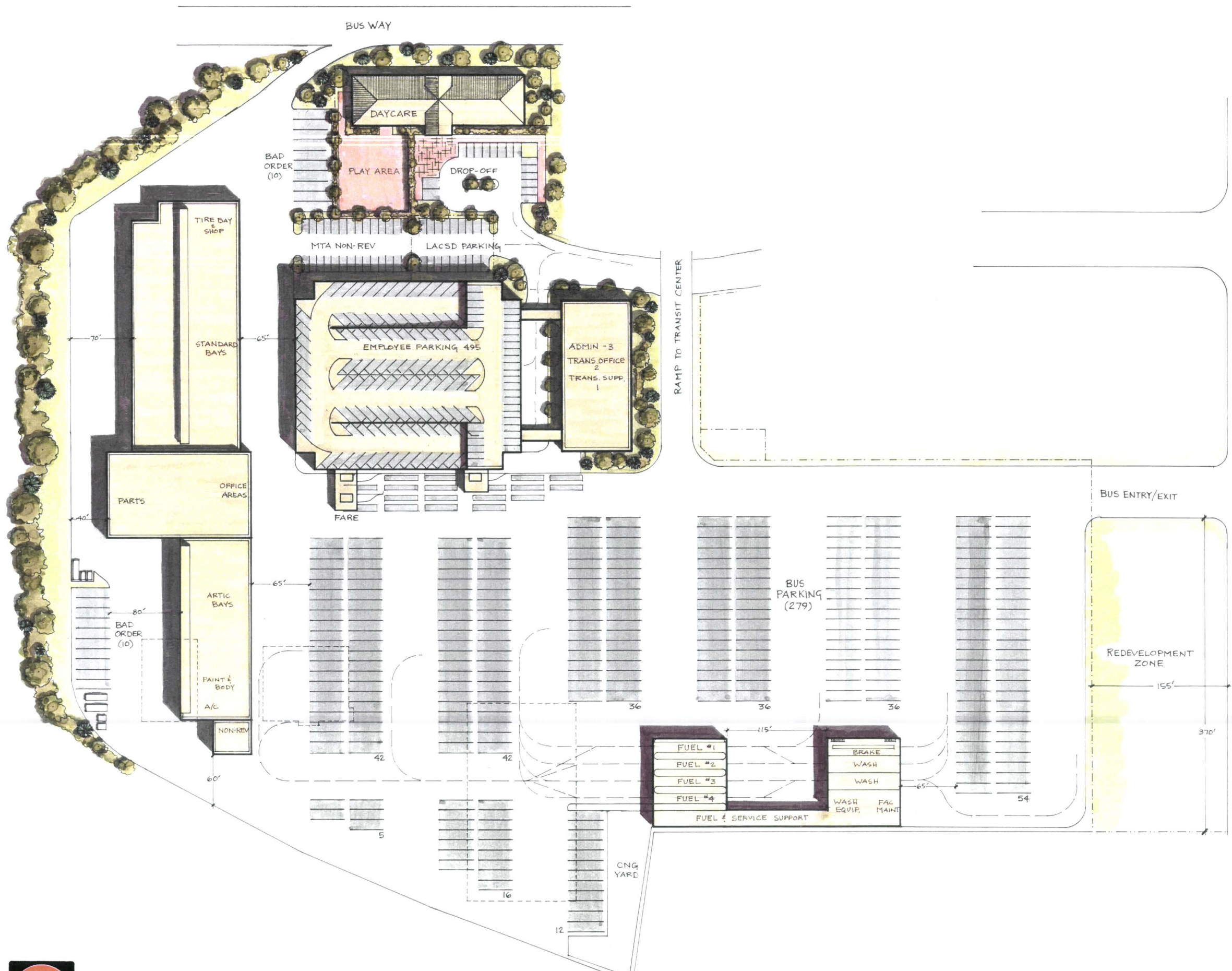
Maintenance Facility Stats

Standard Running Repair Bays	14
Standard PM/Inspection Bays	4
Artic Running Repair Bays	4
Artic PM/Inspection Bays	1
Tire Bays	
Standard	1
Artic	1
A/C Repair Bays (Artic)	1
Paint Booth Bay (Artic)	1
Body Repair Bay (Artic)	1
Chassis Wash Bays	
Standard	1
Artic	1
Non Revenue Repair	1

Fuel & Wash

Fuel Lanes (Sized for Artics)	4
Wash Lanes (Sized for Artics)	2
Brake Inspections Pits	1





Parking

Assigned Bus Parking	279
Bad Order Bus Parking	20
Employee Parking (Structure)	495
MTA Non-Rev Vehicle	28
LACSD Parking (Secure)	18
Day Care Parking	16

Maintenance Facility Stats

Standard Running Repair Bays	14
Standard PM/Inspection Bays	4
Artic Running Repair Bays	4
Artic PM/Inspection Bays	1
Tire Bays	
Standard	1
Artic	1
A/C Repair Bays (Artic)	1
Paint Booth Bay (Artic)	1
Body Repair Bay (Artic)	1
Chassis Wash Bays	
Standard	1
Artic	1
Non Revenue Repair	1

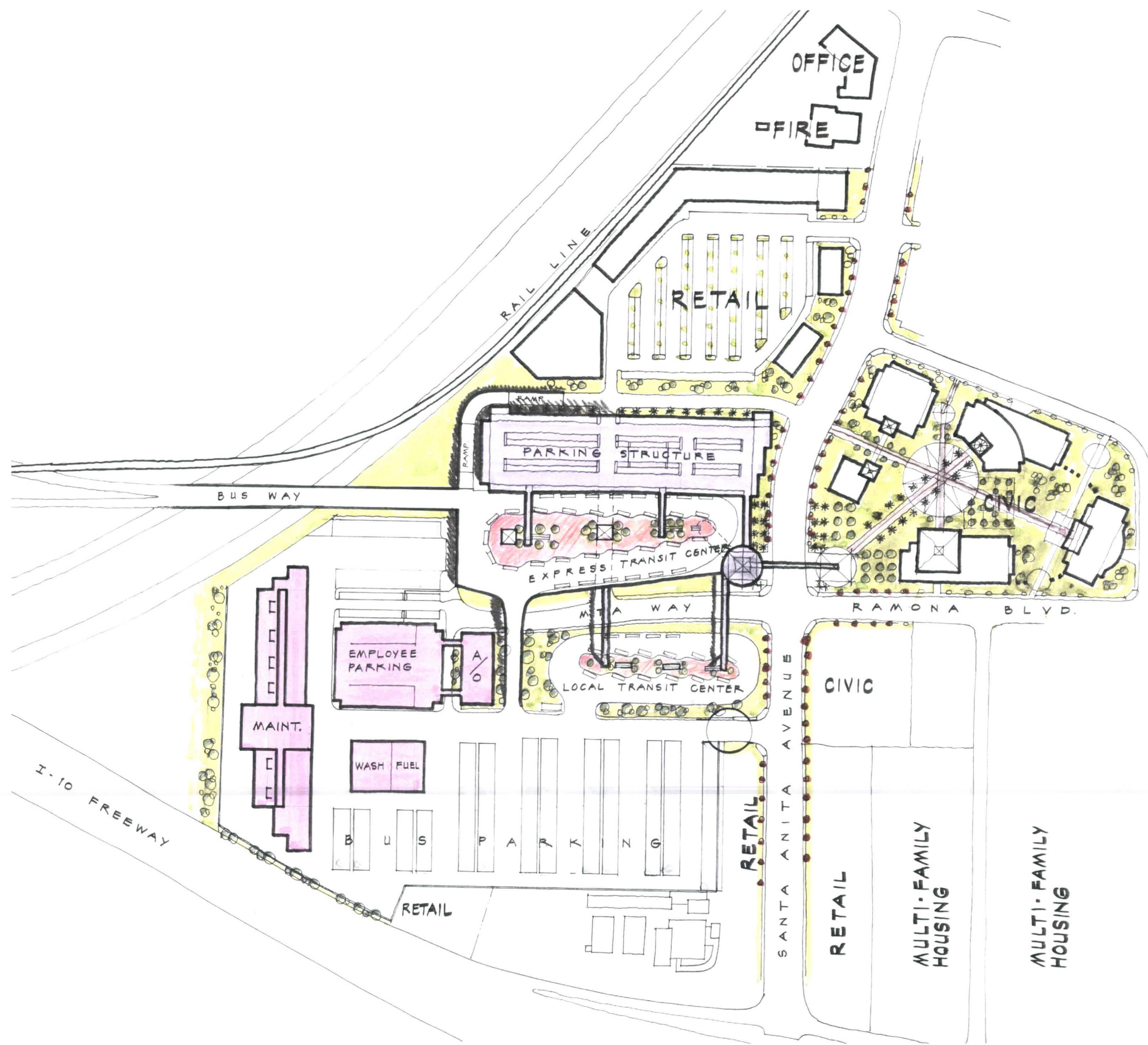
Fuel & Wash

Fuel Lanes (Sized for Artics)	4
Wash Lanes (Sized for Artics)	2
Brake Inspections Pits	1





Appendix D
Site Master Plan Post-Charrette

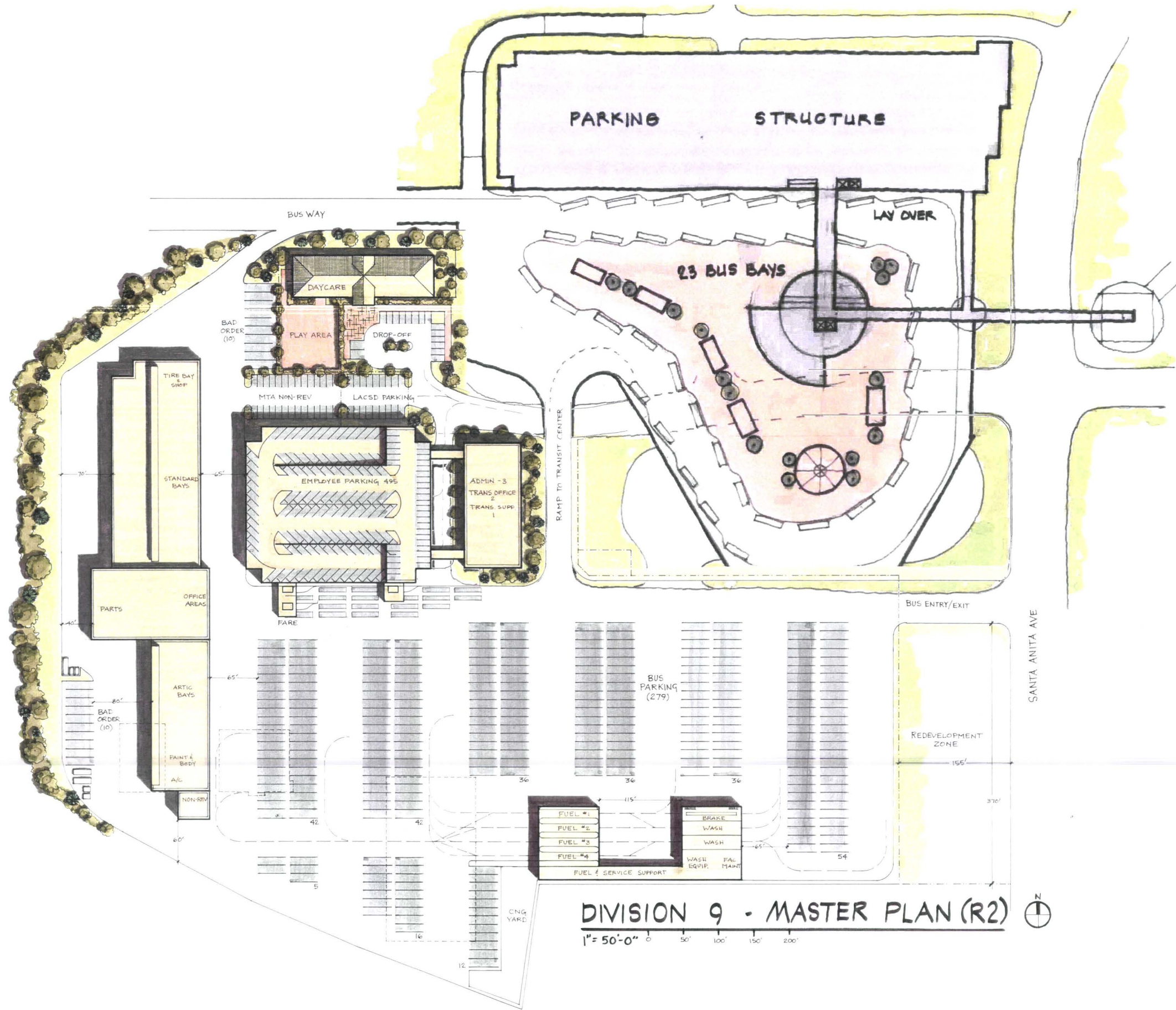


<u>Parking</u>	
Patron Parking (Approx)	2,100
Layover Bus Parking	18
<u>Bus Berths</u>	
Standard	30
Artic	2
Total	32



Scheme "C" Composite Site Master Plan





Parking

Patron Parking (Approx)	2,100
Layover Bus Parking	13

Bus Berths

Standard	21
Artic	<u>2</u>
Total	23

DIVISION 9 - MASTER PLAN (R2) 
 1" = 50'-0" 0 50' 100' 150' 200'



Scheme "D" Composite Site Master Plan

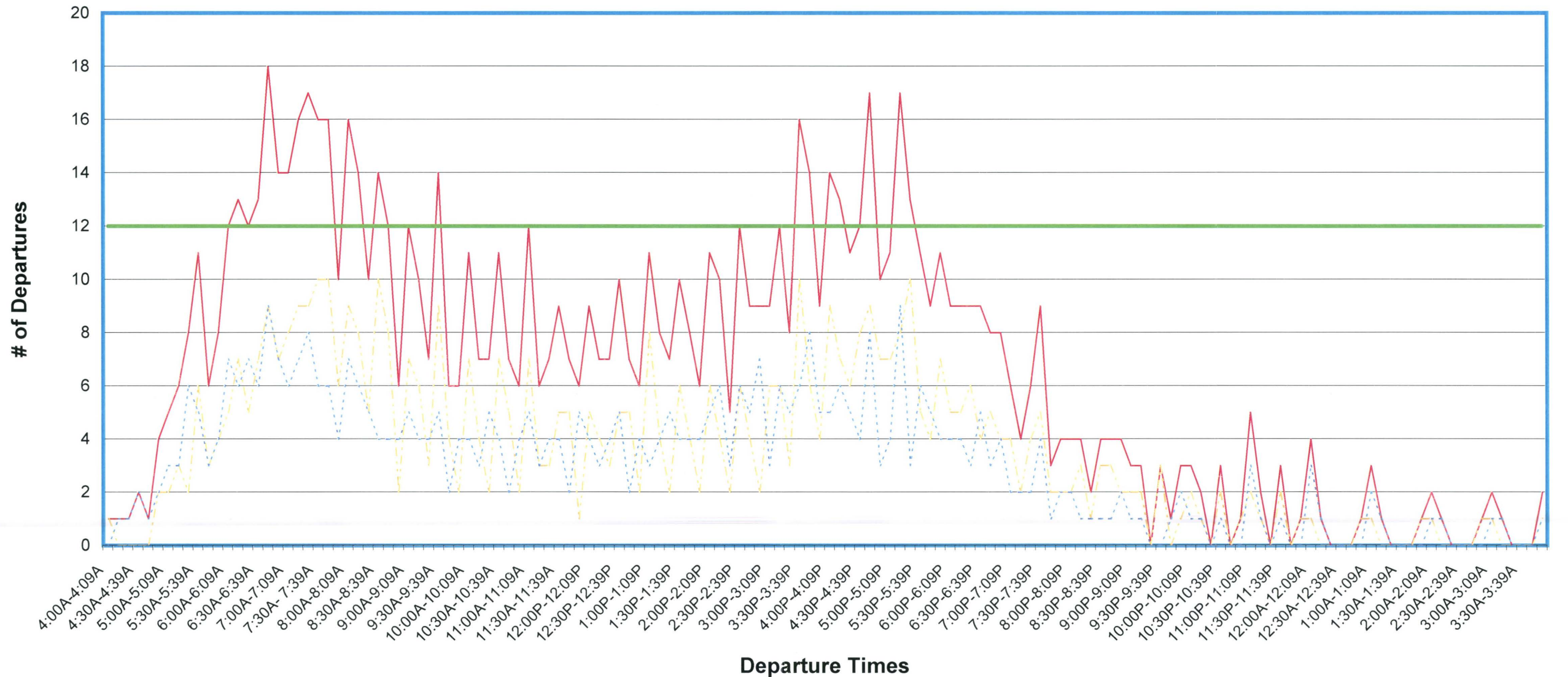




**Appendix E
El Monte Bus Departure Data**



El Monte Station Departure Data





El Monte Station, Peak Period Analysis

Time	6:29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Departure*		3	2	1	2	1	1	2	0	1	0	4	0	1	0	3	4	1	3	1	1	1	1	1
Net	5	3	5	5	4	5	4	3	3	6	6	3	3	5	9	7	6	6	4	4	4	4		
Buses In		1	2	1	1	2	0	1	0	4	0	1	0	3	4	1	3	1	1	1	1	1		

↑
Greatest Berth Occupancy

*Departure Information taken directly from El Monte Station Departure List, dated June 30, 2002

**Arrivals in this model based on average layover time of 2 minutes. For example, buses shown as arriving at 6:30 are those which will depart at 6:32.



**Los Angeles County
Metropolitan Transportation
Authority**

Division 9 Master Plan Report

El Monte Station Departure Data*

	4:00A- 4:09A	4:10A- 4:19A	4:20A- 4:29A	4:30A- 4:39A	4:40A- 4:49A	4:50A- 4:59A	5:00A- 5:09A	5:10A- 5:19A	5:20A- 5:29A	5:30A- 5:39A	5:40A- 5:49A	5:50A- 5:59A	6:00A- 6:09A	6:10A- 6:19A	6:20A- 6:29A	6:30A- 6:39A	6:40A- 6:49A	6:50A- 6:59A	7:00A- 7:09A
Number of Departures	1	1	1	2	1	4	5	6	8	11	6	8	12	13	12	13	18	14	14
	7:10A- 7:19A	7:20A- 7:29A	7:30A- 7:39A	7:40A- 7:49A	7:50A- 7:59A	8:00A- 8:09A	8:10A- 8:19A	8:20A- 8:29A	8:30A- 8:39A	8:40A- 8:49A	8:50A- 8:59A	9:00A- 9:09A	9:10A- 9:19A	9:20A- 9:29A	9:30A- 9:39A	9:40A- 9:49A	9:50A- 9:59A	10:00A- 10:09A	10:10A- 10:19A
Number of Departures	16	17	16	16	10	16	14	10	14	12	6	12	10	7	14	6	6	11	7
	10:20A- 10:29A	10:30A- 10:39A	10:40A- 10:49A	10:50A- 10:59A	11:00A- 11:09A	11:10A- 11:19A	11:20A- 11:29A	11:30A- 11:39A	11:40A- 11:49A	11:50A- 11:59A	12:00P- 12:09P	12:10P- 12:19P	12:20P- 12:29P	12:30P- 12:39P	12:40P- 12:49P	12:50P- 12:59P	1:00P- 1:09P	1:10P- 1:19P	1:20P- 1:29P
Number of Departures	7	11	7	6	12	6	7	9	7	6	9	7	7	10	7	6	11	8	7
	1:30P- 1:39P	1:40P- 1:49P	1:50P- 1:59P	2:00P- 2:09P	2:10P- 2:19P	2:20P- 2:29P	2:30P- 2:39P	2:40P- 2:49P	2:50P- 2:59P	3:00P- 3:09P	3:10P- 3:19P	3:20P- 3:29P	3:30P- 3:39P	3:40P- 3:49P	3:50P- 3:59P	4:00P- 4:09P	4:10P- 4:19P	4:20P- 4:29P	4:30P- 4:39P
Number of Departures	10	8	6	11	10	5	12	9	9	9	12	8	16	14	9	14	13	11	12
	4:40P- 4:49P	4:50P- 4:59P	5:00P- 5:09P	5:10P- 5:19P	5:20P- 5:29P	5:30P- 5:39P	5:40P- 5:49P	5:50P- 5:59P	6:00P- 6:09P	6:10P- 6:19P	6:20P- 6:29P	6:30P- 6:39P	6:40P- 6:49P	6:50P- 6:59P	7:00P- 7:09P	7:10P- 7:19P	7:20P- 7:29P	7:30P- 7:39P	7:40P- 7:49P
Number of Departures	17	10	11	17	13	11	9	11	9	9	9	9	8	8	6	4	6	9	3
	7:50P- 7:59P	8:00P- 8:09P	8:10P- 8:19P	8:20P- 8:29P	8:30P- 8:39P	8:40P- 8:49P	8:50P- 8:59P	9:00P- 9:09P	9:10P- 9:19P	9:20P- 9:29P	9:30P- 9:39P	9:40P- 9:49P	9:50P- 9:59P	10:00P- 10:09P	10:10P- 10:19P	10:20P- 10:29P	10:30P- 10:39P	10:40P- 10:49P	10:50P- 10:59P
Number of Departures	4	4	4	2	4	4	4	3	3	0	3	1	3	3	2	0	3	0	1
	11:00P- 11:09P	11:10P- 11:19P	11:20P- 11:29P	11:30P- 11:39P	11:40P- 11:49P	11:50P- 11:59P	12:00A- 12:09A	12:10A- 12:19A	12:20A- 12:29A	12:30A- 12:39A	12:40A- 12:49A	12:50A- 12:59A	1:00A- 1:09A	1:10A- 1:19A	1:20A- 1:29A	1:30A- 1:39A	1:40A- 1:49A	1:50A- 1:59A	2:00A- 2:09A
Number of Departures	5	2	0	3	0	1	4	1	0	0	0	1	3	1	0	0	0	1	2
	2:10A- 2:19A	2:20A- 2:29A	2:30A- 2:39A	2:40A- 2:49A	2:50A- 2:59A	3:00A- 3:09A	3:10A- 3:19A	3:20A- 3:29A	3:30A- 3:39A	3:40A- 3:49A	3:50A- 3:59A								
Number of Departures	1	0	0	0	1	2	1	0	0	0	2								

*Data derived from Departure List dated 6-30-02



El Monte Station MTA Departure Data*

	4:00A- 4:09A	4:10A- 4:19A	4:20A- 4:29A	4:30A- 4:39A	4:40A- 4:49A	4:50A- 4:59A	5:00A- 5:09A	5:10A- 5:19A	5:20A- 5:29A	5:30A- 5:39A	5:40A- 5:49A	5:50A- 5:59A	6:00A- 6:09A	6:10A- 6:19A	6:20A- 6:29A	6:30A- 6:39A	6:40A- 6:49A	6:50A- 6:59A	7:00A- 7:09A
Number of Departures	0	1	1	2	1	2	3	3	6	5	3	4	7	6	7	6	9	7	6
	7:10A- 7:19A	7:20A- 7:29A	7:30A- 7:39A	7:40A- 7:49A	7:50A- 7:59A	8:00A- 8:09A	8:10A- 8:19A	8:20A- 8:29A	8:30A- 8:39A	8:40A- 8:49A	8:50A- 8:59A	9:00A- 9:09A	9:10A- 9:19A	9:20A- 9:29A	9:30A- 9:39A	9:40A- 9:49A	9:50A- 9:59A	10:00A- 10:09A	10:10A- 10:19A
Number of Departures	7	8	6	6	4	7	6	5	4	4	4	5	4	4	5	2	4	4	3
	10:20A- 10:29A	10:30A- 10:39A	10:40A- 10:49A	10:50A- 10:59A	11:00A- 11:09A	11:10A- 11:19A	11:20A- 11:29A	11:30A- 11:39A	11:40A- 11:49A	11:50A- 11:59A	12:00P- 12:09P	12:10P- 12:19P	12:20P- 12:29P	12:30P- 12:39P	12:40P- 12:49P	12:50P- 12:59P	1:00P- 1:09P	1:10P- 1:19P	1:20P- 1:29P
Number of Departures	5	4	2	4	5	3	4	4	2	5	4	3	4	5	2	4	3	4	5
	1:30P- 1:39P	1:40P- 1:49P	1:50P- 1:59P	2:00P- 2:09P	2:10P- 2:19P	2:20P- 2:29P	2:30P- 2:39P	2:40P- 2:49P	2:50P- 2:59P	3:00P- 3:09P	3:10P- 3:19P	3:20P- 3:29P	3:30P- 3:39P	3:40P- 3:49P	3:50P- 3:59P	4:00P- 4:09P	4:10P- 4:19P	4:20P- 4:29P	4:30P- 4:39P
Number of Departures	4	4	4	5	6	3	6	5	7	3	6	5	6	8	5	5	6	5	4
	4:40P- 4:49P	4:50P- 4:59P	5:00P- 5:09P	5:10P- 5:19P	5:20P- 5:29P	5:30P- 5:39P	5:40P- 5:49P	5:50P- 5:59P	6:00P- 6:09P	6:10P- 6:19P	6:20P- 6:29P	6:30P- 6:39P	6:40P- 6:49P	6:50P- 6:59P	7:00P- 7:09P	7:10P- 7:19P	7:20P- 7:29P	7:30P- 7:39P	7:40P- 7:49P
Number of Departures	8	3	4	9	3	6	5	4	4	4	3	5	3	4	2	2	2	4	1
	7:50P- 7:59P	8:00P- 8:09P	8:10P- 8:19P	8:20P- 8:29P	8:30P- 8:39P	8:40P- 8:49P	8:50P- 8:59P	9:00P- 9:09P	9:10P- 9:19P	9:20P- 9:29P	9:30P- 9:39P	9:40P- 9:49P	9:50P- 9:59P	10:00P- 10:09P	10:10P- 10:19P	10:20P- 10:29P	10:30P- 10:39P	10:40P- 10:49P	10:50P- 10:59P
Number of Departures	2	2	1	1	1	1	2	1	1	0	0	1	2	1	1	0	1	0	0
	11:00P- 11:09P	11:10P- 11:19P	11:20P- 11:29P	11:30P- 11:39P	11:40P- 11:49P	11:50P- 11:59P	12:00A- 12:09A	12:10A- 12:19A	12:20A- 12:29A	12:30A- 12:39A	12:40A- 12:49A	12:50A- 12:59A	1:00A- 1:09A	1:10A- 1:19A	1:20A- 1:29A	1:30A- 1:39A	1:40A- 1:49A	1:50A- 1:59A	2:00A- 2:09A
Number of Departures	3	1	0	1	0	0	3	1	0	0	0	0	2	1	0	0	0	0	1
	2:10A- 2:19A	2:20A- 2:29A	2:30A- 2:39A	2:40A- 2:49A	2:50A- 2:59A	3:00A- 3:09A	3:10A- 3:19A	3:20A- 3:29A	3:30A- 3:39A	3:40A- 3:49A	3:50A- 3:59A								
Number of Departures	1	0	0	0	0	1	1	0	0	0	1								

*Data derived from Departure List dated 6-30-02



El Monte Station Foothill Departure Data*

	4:00A- 4:09A	4:10A- 4:19A	4:20A- 4:29A	4:30A- 4:39A	4:40A- 4:49A	4:50A- 4:59A	5:00A- 5:09A	5:10A- 5:19A	5:20A- 5:29A	5:30A- 5:39A	5:40A- 5:49A	5:50A- 5:59A	6:00A- 6:09A	6:10A- 6:19A	6:20A- 6:29A	6:30A- 6:39A	6:40A- 6:49A	6:50A- 6:59A	7:00A- 7:09A
Number of Departures	1	0	0	0	0	2	2	3	2	6	3	4	5	7	5	7	9	7	8
	7:10A- 7:19A	7:20A- 7:29A	7:30A- 7:39A	7:40A- 7:49A	7:50A- 7:59A	8:00A- 8:09A	8:10A- 8:19A	8:20A- 8:29A	8:30A- 8:39A	8:40A- 8:49A	8:50A- 8:59A	9:00A- 9:09A	9:10A- 9:19A	9:20A- 9:29A	9:30A- 9:39A	9:40A- 9:49A	9:50A- 9:59A	10:00A- 10:09A	10:10A- 10:19A
Number of Departures	9	9	10	10	6	9	8	5	10	8	2	7	6	3	9	4	2	7	4
	10:20A- 10:29A	10:30A- 10:39A	10:40A- 10:49A	10:50A- 10:59A	11:00A- 11:09A	11:10A- 11:19A	11:20A- 11:29A	11:30A- 11:39A	11:40A- 11:49A	11:50A- 11:59A	12:00P- 12:09P	12:10P- 12:19P	12:20P- 12:29P	12:30P- 12:39P	12:40P- 12:49P	12:50P- 12:59P	1:00P- 1:09P	1:10P- 1:19P	1:20P- 1:29P
Number of Departures	2	7	5	2	7	3	3	5	5	1	5	4	3	5	5	2	8	4	2
	1:30P- 1:39P	1:40P- 1:49P	1:50P- 1:59P	2:00P- 2:09P	2:10P- 2:19P	2:20P- 2:29P	2:30P- 2:39P	2:40P- 2:49P	2:50P- 2:59P	3:00P- 3:09P	3:10P- 3:19P	3:20P- 3:29P	3:30P- 3:39P	3:40P- 3:49P	3:50P- 3:59P	4:00P- 4:09P	4:10P- 4:19P	4:20P- 4:29P	4:30P- 4:39P
Number of Departures	6	4	2	6	4	2	6	4	2	6	6	3	10	6	4	9	7	6	8
	4:40P- 4:49P	4:50P- 4:59P	5:00P- 5:09P	5:10P- 5:19P	5:20P- 5:29P	5:30P- 5:39P	5:40P- 5:49P	5:50P- 5:59P	6:00P- 6:09P	6:10P- 6:19P	6:20P- 6:29P	6:30P- 6:39P	6:40P- 6:49P	6:50P- 6:59P	7:00P- 7:09P	7:10P- 7:19P	7:20P- 7:29P	7:30P- 7:39P	7:40P- 7:49P
Number of Departures	9	7	7	8	10	5	4	7	5	5	6	4	5	4	4	2	4	5	2
	7:50P- 7:59P	8:00P- 8:09P	8:10P- 8:19P	8:20P- 8:29P	8:30P- 8:39P	8:40P- 8:49P	8:50P- 8:59P	9:00P- 9:09P	9:10P- 9:19P	9:20P- 9:29P	9:30P- 9:39P	9:40P- 9:49P	9:50P- 9:59P	10:00P- 10:09P	10:10P- 10:19P	10:20P- 10:29P	10:30P- 10:39P	10:40P- 10:49P	10:50P- 10:59P
Number of Departures	2	2	3	1	3	3	2	2	2	0	3	0	1	2	1	0	2	0	1
	11:00P- 11:09P	11:10P- 11:19P	11:20P- 11:29P	11:30P- 11:39P	11:40P- 11:49P	11:50P- 11:59P	12:00A- 12:09A	12:10A- 12:19A	12:20A- 12:29A	12:30A- 12:39A	12:40A- 12:49A	12:50A- 12:59A	1:00A- 1:09A	1:10A- 1:19A	1:20A- 1:29A	1:30A- 1:39A	1:40A- 1:49A	1:50A- 1:59A	2:00A- 2:09A
Number of Departures	2	1	0	2	0	1	1	0	0	0	0	0	1	1	0	0	0	0	1
	2:10A- 2:19A	2:20A- 2:29A	2:30A- 2:39A	2:40A- 2:49A	2:50A- 2:59A	3:00A- 3:09A	3:10A- 3:19A	3:20A- 3:29A	3:30A- 3:39A	3:40A- 3:49A	3:50A- 3:59A								
Number of Departures	0	0	0	0	1	1	0	0	0	0	1								

*Data derived from Departure List dated 6-30-02



El Monte Station Express Departure Data*

	4:00A- 4:09A	4:10A- 4:19A	4:20A- 4:29A	4:30A- 4:39A	4:40A- 4:49A	4:50A- 4:59A	5:00A- 5:09A	5:10A- 5:19A	5:20A- 5:29A	5:30A- 5:39A	5:40A- 5:49A	5:50A- 5:59A	6:00A- 6:09A	6:10A- 6:19A	6:20A- 6:29A	6:30A- 6:39A	6:40A- 6:49A	6:50A- 6:59A	7:00A- 7:09A
Number of Departures	1	0	1	1	0	3	4	4	5	8	2	7	7	8	8	9	12	11	10
	7:10A- 7:19A	7:20A- 7:29A	7:30A- 7:39A	7:40A- 7:49A	7:50A- 7:59A	8:00A- 8:09A	8:10A- 8:19A	8:20A- 8:29A	8:30A- 8:39A	8:40A- 8:49A	8:50A- 8:59A	9:00A- 9:09A	9:10A- 9:19A	9:20A- 9:29A	9:30A- 9:39A	9:40A- 9:49A	9:50A- 9:59A	10:00A- 10:09A	10:10A- 10:19A
Number of Departures	11	12	12	12	8	11	10	7	11	9	3	9	7	5	8	4	4	7	5
	10:20A- 10:29A	10:30A- 10:39A	10:40A- 10:49A	10:50A- 10:59A	11:00A- 11:09A	11:10A- 11:19A	11:20A- 11:29A	11:30A- 11:39A	11:40A- 11:49A	11:50A- 11:59A	12:00P- 12:09P	12:10P- 12:19P	12:20P- 12:29P	12:30P- 12:39P	12:40P- 12:49P	12:50P- 12:59P	1:00P- 1:09P	1:10P- 1:19P	1:20P- 1:29P
Number of Departures	4	6	5	4	7	4	4	5	5	3	5	5	4	5	5	4	8	5	3
	1:30P- 1:39P	1:40P- 1:49P	1:50P- 1:59P	2:00P- 2:09P	2:10P- 2:19P	2:20P- 2:29P	2:30P- 2:39P	2:40P- 2:49P	2:50P- 2:59P	3:00P- 3:09P	3:10P- 3:19P	3:20P- 3:29P	3:30P- 3:39P	3:40P- 3:49P	3:50P- 3:59P	4:00P- 4:09P	4:10P- 4:19P	4:20P- 4:29P	4:30P- 4:39P
Number of Departures	6	5	4	7	6	2	8	5	5	6	8	5	11	8	7	10	10	7	8
	4:40P- 4:49P	4:50P- 4:59P	5:00P- 5:09P	5:10P- 5:19P	5:20P- 5:29P	5:30P- 5:39P	5:40P- 5:49P	5:50P- 5:59P	6:00P- 6:09P	6:10P- 6:19P	6:20P- 6:29P	6:30P- 6:39P	6:40P- 6:49P	6:50P- 6:59P	7:00P- 7:09P	7:10P- 7:19P	7:20P- 7:29P	7:30P- 7:39P	7:40P- 7:49P
Number of Departures	13	8	8	11	11	7	6	8	7	6	7	5	6	6	4	3	5	3	2
	7:50P- 7:59P	8:00P- 8:09P	8:10P- 8:19P	8:20P- 8:29P	8:30P- 8:39P	8:40P- 8:49P	8:50P- 8:59P	9:00P- 9:09P	9:10P- 9:19P	9:20P- 9:29P	9:30P- 9:39P	9:40P- 9:49P	9:50P- 9:59P	10:00P- 10:09P	10:10P- 10:19P	10:20P- 10:29P	10:30P- 10:39P	10:40P- 10:49P	10:50P- 10:59P
Number of Departures	4	3	4	1	2	3	4	2	2	0	2	1	3	2	1	0	2	0	1
	11:00P- 11:09P	11:10P- 11:19P	11:20P- 11:29P	11:30P- 11:39P	11:40P- 11:49P	11:50P- 11:59P	12:00A- 12:09A	12:10A- 12:19A	12:20A- 12:29A	12:30A- 12:39A	12:40A- 12:49A	12:50A- 12:59A	1:00A- 1:09A	1:10A- 1:19A	1:20A- 1:29A	1:30A- 1:39A	1:40A- 1:49A	1:50A- 1:59A	2:00A- 2:09A
Number of Departures	4	1	0	2	0	1	3	0	0	0	0	1	2	0	0	0	0	1	1
	2:10A- 2:19A	2:20A- 2:29A	2:30A- 2:39A	2:40A- 2:49A	2:50A- 2:59A	3:00A- 3:09A	3:10A- 3:19A	3:20A- 3:29A	3:30A- 3:39A	3:40A- 3:49A	3:50A- 3:59A								
Number of Departures	0	0	0	0	1	1	0	0	0	0	1								

*Data derived from Departure List dated 6-30-02



Los Angeles County
Metropolitan Transportation
Authority

Division 9 Master Plan Report

Appendix F Construction Cost Estimate

MTA DIVISION 9 MASTER PLAN
PRELIMINARY ESTIMATE OF PROBABLE
COSTS

JYI# L0850A

OCTOBER 2, 2002

PREPARED FOR:

MAINTENANCE DESIGN GROUP

BY:

YUANG TAI, INC.

PROJECT : LACMTA DIVISION 9 MASTERPLAN	JOB #: L0850A
LOCATION: EL MONTE, CA	DATE: 08-Oct-02
CLIENT: MAINTENANCE DESIGN GROUP	
SUBJECT: GRAND SUMMARY - DIV. 9 MASTERPLAN	

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
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SUMMARY OF ESTIMATE	\$	\$
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NOTES:

- 1) F, F & E ARE EXCLUDED EXCEPT FOR MAINTENANCE EQUIPMENT
- 2) THE FOLLOWING COSTS ARE EXCLUDED: HAZARDOUS MATERIAL ABATEMENT; UTILITY RELOCATION COSTS; PROJECT SOFT COSTS, OFF SITE ROAD WIDENING/TRAFFIC SIGNALING ADJUSTMENT, OCCUPANT RELOCATION COSTS, PREPARATION OF (E) SPACE TO ACCOMMODATE TEMPORARY SWING SPACE, CNG EQUIPMENT & INSTALLATION, COST ESCALATION TO MIDPOINT OF CONSTRUCTION (COSTS ARE IN CURRENT DAY \$'s)
- 3) PRICES BASED ON MIN. 4-5 COMPETITIVE RESPONSIVE BIDS RECEIVED FROM GENERAL CONTRACTORS
- 4) ESTIMATE IS DERIVED FROM CONCEPTUAL DRAWINGS PREPARED BY MDG, DATED 9/12/02
- 5) SITE OVEREXCAVATION IS N.I.C.
- 6) UTILITIES ALLOWANCE INCLUDES P.O.C. COSTS, WATER, FIRE WATER, HYDRANTS, GAS, STORM DRAINS SEWER, TELEPHONE, SECURITY CAMERAS, EMERGENCY POWER & SITE LIGHTING
- 7) PLEASE SEE SUMMARY LEVEL BREAKDOWN OF COSTS FOR ITEMS MARKED (*)
- 8) THE FOLLOWING PRORATES ARE INCLUDED IN THE UNIT PRICING BELOW:

GENERAL CONDITIONS	7.50%
CONTINGENCY	20.00%
ESCALATION (TO MIDPOINT)	
GEOGRAPHICAL ESCALATION	
MARKET FACTOR	
PHASING COST IMPACT	
BONDS & INSURANCE	1.75%
CONTRACTOR'S FEE	7.00%
CUMMULATIVE TOTAL	<u>40.4%</u>

PROJECT : LACMTA DIVISION 9 MASTERPLAN	JOB #: L0850A
LOCATION: EL MONTE, CA	DATE: 08-Oct-02
CLIENT: MAINTENANCE DESIGN GROUP	
SUBJECT: GRAND SUMMARY - DIV. 9 MASTERPLAN	

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
PHASE I					
8	5-LEVEL PARKING STRUCTURE (1650 SPACES)				
	SOFTSCAPE ADJACENT TO PARKING STR.	65,280	SF	7.37	481,114
	ACCESS ROADWAYS	35,720	SF	9.83	351,128
	EXTRA FOR RAMPS AT LEVEL CHANGES	8,000	SF	11.24	89,920
	CUT & HAUL TO CREATE LEVEL PAD	11,000	CY	19.66	216,260
	CONCRETE RETAINING WALL + FOOTING TO PERIMETER ON 3 SIDES, 12' H	985	LF	786.49	774,693
	CONCRETE RETAINING WALL + FOOTING TO UNEXCAVATED SIDES NEAR (E) TRANSIT CENTER	400	LF	786.49	314,596
	PARKING STRUCTURE (4 SUSPENDED LEVELS + 1 AT GRADE LEVEL)	520,000	SF	29.49	15,334,800
	UTILITIES ALLOWANCE	35,720	SF	2.11	75,369
	TOTAL PARKING STRUCTURE	416,000	SF	42.40	17,637,880
1	3-STORY ADMINISTRATION/TRANSPORTATION BUILDING				
*	ADMINISTRATION/TRANSPORTATION BUILDING + LINK BRIDGES	42,840	SF	176.12	7,545,140
	AC PAVING TO DRIVE AT ADMIN. (3" OVER 6" AB)	6,000	SF	2.67	16,020
	MISC. SITE WALLS, 8' H	75	LF	212.80	15,960
	LANDSCAPING + IRRIGATION	12,800	SF	6.32	80,896
	UTILITIES ALLOWANCE	6,000	SF	2.50	15,000
	TOTAL ADMINISTRATION BUILDING	42,840	SF	179.11	7,673,016
2 *	FARE RECOVERY BUILDINGS	1,950	SF	142.10	277,100
9	FUEL SERVICES + WASH BUILDINGS				
*	FUEL & SERVICE SUPPORT BUILDING + FUEL CANOPY + FUEL LANES	11,485	SF	102.50	1,177,190
*	BUS WASH FACILITY	8,910	SF	110.74	986,673
	CNG AREA PAVING	7,630	SF	5.62	42,881
	EXTRA FOR CNG EQUIPMENT PADS	3,815	SF	7.72	29,452
	HIGH PRESSURE GAS MAIN FROM (E) CNG PUMP + VALVES & SPECIALTIES	600	LF	70.22	42,132
	CNG EQUIPMENT IS N.I.C.				
	DEMO PAVING, PHASED	108,850	SF	0.60	65,397
	CLEAR SITE/ROUGH GRADING	123,700	SF	0.14	17,373
	CONCRETE PAVING (9" UNREINFORCED)	72,950	SF	5.44	396,848
	CURBS	700	LF	13.34	9,338
	PERIMETER SPLIT FACE WALL & FOOTING, 8' H	925	LF	258.98	239,557
	10' HIGH CHAIN LINK FENCE, PYLONS	420	LF	50.56	21,235
	UTILITIES ALLOWANCE	72,950	SF	2.50	182,375
	EQUIPMENT - Per MDG costs received 9/20/02				
	- Bus/Wash Equipment Supply	1	LS	1,000,000	1,000,000
	- Bus/Wash Equipment Install	10%		1,000,000	100,000
	- Markups applicable to Equipment	40.4%		808,911	327,168
	TOTAL FUEL/WASH BUILDINGS	20,395	SF	227.39	4,637,618
10	RELOCATE TRANSIT CENTER PARKING				BY LACMTA

PROJECT : LACMTA DIVISION 9 MASTERPLAN	JOB #: L0850A
LOCATION: EL MONTE, CA	DATE: 08-Oct-02
CLIENT: MAINTENANCE DESIGN GROUP	
SUBJECT: GRAND SUMMARY - DIV. 9 MASTERPLAN	

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
2	RESTRIPE (E) PARKING STRUCTURE BAYS	495	EA	30.90	15,295
5	RELOCATE ADMIN. & TRANSPORTATION FUNCTIONS TO (N) BLDG.				BY LACMTA
4	RELOCATE DIV. 9 EMPLOYEE PARKING TO PARKING STRUCTURE				BY LACMTA
6	RELOCATE FARE RECOVERY TO NEW FARE RECOVERY				BY LACMTA
11	RECONFIGURE BUS CYCLE TO USE NEW FUEL & WASH				BY LACMTA
12	RECONFIGURE "OLD" FUEL BLDG. FOR TEMPORARY MAINTENANCE BLDG.				BY LACMTA
7	<u>DEMOLISH ADMIN., TRANSPORTATION, WASH & FARE RECOVERY BLDGS.</u>				
	DEMOLISH ADMINISTRATION BUILDING	15,393	SF	5.62	86,509
	DEMOLISH WASH BUILDING	6,300	SF	7.02	44,226
	DEMO. TRANSPORTATION & FARE RECOVERIES BLDGS.	9,385	SF	5.62	52,744
	TOTAL DEMOLITION AS ABOVE	31,078	SF	5.90	183,479
13	<u>REPAVE & STRIPE PREVIOUSLY OCCUPIED BY TRANSPORTATION & EMPLOYEE PARKING FOR BUSES</u>				
	DEMO PAVING, PHASED	178,810	SF	0.60	107,428
	CLEAR SITE/ROUGH GRADING	203,135	SF	0.14	28,529
	CONCRETE PAVING (9" UNREINFORCED)	119,800	SF	5.44	651,712
	CURBS	1,200	LF	13.34	16,008
	PARKING STRIPING, BUS	108	EA	35.11	3,792
	UTILITIES ALLOWANCE	119,800	SF	2.50	299,500
	TOTAL REPAVE & RESTRIPE AS ABOVE	119,800	SF	9.24	1,106,969
14	RELOCATE BUS PARKING TO VACATED EMPLOYEE PARKING				BY LACMTA
15	REMOVE OLD CNG FUEL EQUIPMENT & RELOCATE TO ANOTHER MTA PROPERTY				BY LACMTA

PROJECT : LACMTA DIVISION 9 MASTERPLAN	JOB #:	L0850A
LOCATION: EL MONTE, CA	DATE:	08-Oct-02
CLIENT: MAINTENANCE DESIGN GROUP		
SUBJECT: GRAND SUMMARY - DIV. 9 MASTERPLAN		

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
PHASE II					
16	<u>CONSTRUCT LOWER & UPPER LEVEL OF TRANSIT CENTER</u>				
	LOWER				
	CUT & HAUL TO CREATE LEVEL PAD	23,000	CY	19.66	452,180
	CONCRETE RETAINING WALL + FOOTING TO EAST SIDE, 12' H	415	LF	786.49	326,393
	SOFTSCAPE AROUND LOWER LEVEL PARKING	33,500	SF	7.37	246,895
	REFURBISH MTA WAY	35,250	SF	9.83	346,508
	CURBS TO MTA WAY	1,400	LF	16.85	23,590
	SURFACE PARKING AT LOWER LEVEL, COMPLETE W/ ISLANDS, BAY MARKINGS & PAVING	91,250	SF	7.02	640,575
	UTILITIES ALLOWANCE	1	LS	70,000.00	70,000
	UPPER				
	DRIVEWAY RAMPS	8,000	SF	84.27	674,160
	ELEVATED TRANSIT DECK STRUCTURE	88,100	SF	63.20	5,567,920
	DRIVEWAY TOPPING	55,140	SF	4.92	271,289
	TRANSIT ISLAND	29,800	SF	21.07	627,886
	CURBS	2,500	LF	16.85	42,125
	TOILET ROOMS	1,250	SF	386.23	482,788
	STAIRS + ENCLOSURE	1	FLT	35,111.38	35,111
	ELEVATOR + SHAFT	2	STP	70,222.76	140,446
	ESCALATOR	1	FLT	175,556.91	175,557
	FIRE PROTECTION TO U/S OF SUSPENDED DECK	80,000	SF	3.09	247,200
	LIGHTING TO DITTO	80,000	SF	4.92	393,600
	UTILITIES ALLOWANCE	1	LS	105,000.00	105,000
	TOTAL LOWER & UPPER LEVEL TRANSIT CENTER	179,350	SF	60.60	10,869,223
17	<u>NEW MAINTENANCE BUILDING & ADJACENT SITEWORK</u>				
	* VEHICLE MAINTENANCE BUILDING	94,500	SF	133.06	12,574,530
	DEMO PAVING, PHASED	158,155	SF	0.60	95,019
	CLEAR SITE/ROUGH GRADING	180,795	SF	0.14	25,392
	CONCRETE PAVING (9" UNREINFORCED)	103,610	SF	5.44	563,638
	PARKING STRIPING, BUS	108	EA	35.11	3,792
	CURBS	1,100	LF	13.34	14,674
	CURB CUTS	50	LF	28.09	1,405
	TRASH ENCLOSURE	1	EA	7,022.28	7,022
	10' HIGH CHAIN LINK FENCE, PYLONS	1,580	LF	50.56	79,885
	PARKING STRIPING, BUS	20	EA	35.11	702
	LANDSCAPING + IRRIGATION	107,900	SF	6.32	681,928
	UTILITIES ALLOWANCE	110,955	SF	2.68	297,359
	EQUIPMENT - Per MDG costs received 9/20/02				
	- Maintenance Equipment Supply	1	LS	2,800,000	2,800,000
	- Maintenance Equipment Install	10%		2,800,000	280,000
	- Markups applicable to Equipment	40.4%		2,264,949	916,071
	TOTAL MAINTENANCE BUILDING + ADJACENT SITEWORK	94,501	SF	194.09	18,341,417
18	<u>CONSTRUCT NEW DAYCARE CENTER + ADJACENT SITEWORK</u>				

PROJECT : LACMTA DIVISION 9 MASTERPLAN	JOB #: L0850A
LOCATION: EL MONTE, CA	DATE: 08-Oct-02
CLIENT: MAINTENANCE DESIGN GROUP	
SUBJECT: GRAND SUMMARY - DIV. 9 MASTERPLAN	

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
*	DAYCARE CENTER	12,500	SF	187.23	2,340,349
	AC PAVING TO PARKING STALLS (3" OVER 6" AB), LASD + MTA PARKING + DRIVE	34,640	SF	2.67	92,489
	SAND PLAY AREA (60%) + RUBBERIZED AREA (40%)	7,530	SF	7.61	57,303
	CONCRETE WALKWAYS, SIDEWALK	5,400	SF	5.27	28,458
	H/C CURB RAMP	4	EA	526.67	2,107
	8' HIGH ORNAMENTAL METAL FENCE, PLAY AREA	350	LF	123.59	43,257
	MISC. SITE WALLS, 8' H	140	LF	212.80	29,792
	PARKING STRIPING, REG	60	EA	25.28	1,517
	H/CAP PARKING STALLS, COMPLETE	4	EA	632.00	2,528
	PLAY EQUIPMENT ALLOWANCE	1	EA	35,111.38	35,111
	MARQUEE SIGN	1	EA	10,533.41	10,533
	LANDSCAPING + IRRIGATION	21,340	SF	6.32	134,869
	UTILITIES ALLOWANCE	34,640	SF	2.68	92,835
	TOTAL DAYCARE CENTER + ADJACENT SITEWORK	12,500	SF	229.69	2,871,148
19	RELOCATE ALL MAINTENANCE FUNCTIONS INTO NEW MAINTENANCE BLDG.				BY LACMTA
20	DEMOLISH "OLD" FUEL BUILDING	8,650	SF	7.02	60,723
21	DEMOLISH "OLD" MAINTENANCE BUILDING	29,275	SF	6.32	185,018
22	REMOVE (E) UNDEGRAOUND TANKS AT FUEL FACILITY				BY LACMTA
23 & 24	<u>REPAVE & RESTRIPE ALL REMAINING BUS PARKING</u>				
	DEMO PAVING, PHASED	313,345	SF	0.60	188,256
	CLEAR SITE/ROUGH GRADING	362,485	SF	0.14	50,909
	CONCRETE PAVING (9" UNREINFORCED) TO BALANCE OF	194,530	SF	5.44	1,058,243
	PARKING STRIPING, BUS	169	EA	35.11	5,934
	CURBS	2,400	LF	13.34	32,016
	CURB CUTS	50	LF	28.09	1,405
	PERIMETER SPLIT FACE WALL & FOOTING, 8' H	490	LF	258.98	126,900
	VEHICULAR FENCED SLIDING GATE, 60', ELECTRIC	1	EA	20,224.16	20,224
	UTILITIES ALLOWANCE	241,445	SF	2.68	647,073
	TOTAL REPAVE & RESTRIPE TO BALANCE OF SITEWORK	241,445	SF	8.83	2,130,960

PROJECT : LACMTA DIVISION 9 MASTERPLAN	JOB #:	L0850A
LOCATION: EL MONTE, CA	DATE:	08-Oct-02
CLIENT: MAINTENANCE DESIGN GROUP		
SUBJECT: GRAND SUMMARY - DIV. 9 MASTERPLAN		

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
PHASE III					
25	<u>REMODEL (E) TRANSIT CENTER</u>				
	NEW TUNNEL CONNECTION FROM TRANSIT TO LOWER LEVEL PARKING	2,700	SF	258.82	698,814
	ALLOWANCE FOR MISC. CANOPY UPGRADES & GENERAL TRANSIT CENTER REVITALIZATION	1	LS	1,756,000.00	1,756,000
	REPAVE BUS CIRCULATION ON WEST & SOUTH SIDE	40,100	SF	5.00	200,500
	TOTAL REPAVE & RESTRIPE TO BALANCE OF SITEWORK				2,655,314
26	<u>FILL IN ISLAND CONFIGURATION BETWEEN (E) TRANSIT CENTER & NEW TRANSIT CENTER</u>				
	FILL IN ISLAND CONFIGURATION BETWEEN (E) TRANSIT CENTER & NEW TRANSIT CENTER	3,375	SF	14.00	47,250
	REPAVE CIRCULATION AREA NORTH OF (E) TRANSIT CENTER	11,400	SF	5.00	57,000
	UTILITIES ALLOWANCE	1	LS	42,000.00	42,000
	TOTAL FILL IN ISLAND CONFIGURATION BETWEEN (E) TRANSIT CENTER & NEW TRANSIT CENTER				146,250
	ESTIMATED TOTAL BUILDING & SITE CONSTRUCTION COST	1,569,571	SF	43.83	68,791,410
ADDITIONAL SEPARATE COSTS					
	<u>UPPER LEVEL TRANSIT DECK</u>				
	DRIVEWAY RAMPS	10,400	SF	84.27	876,408
	ELEVATED DECK STRUCTURE	85,000	SF	72.68	6,177,800
	BUS DRIVE TOPPING	55,525	SF	4.92	273,183
	CURBS	2,000	LF	16.85	33,700
	STATION BUILDING (SHELL & CORE ONLY)	2,875	SF	175.56	504,735
	STAIRS + ENCLOSURE	1	FLT	35111.38	35,111
	ELEVATOR + SHAFT	1	STP	70222.76	70,223
	ESCALATOR	1	FLT	175556.91	175,557
	LIGHTING	85,000	SF	2.11	179,350
	TOTAL UPPER LEVEL STRUCTURE	85,000	SF	97.95	8,326,067
	<u>BRIDGE LINK</u>				
	PAVING AT GRADE	7,200	SF	21.07	151,704
	SUSPENDED BRIDGE STRUCTURE W/ ROOF WALKWAY COVER	4,800	SF	175.56	842,688
	SIGNAGE BAND TO BRIDGE	240	LF	105.33	25,279
	STAIRS + ENCLOSURE	3	FLT	35111.38	105,334
	ELEVATOR + SHAFT	5	STP	70222.76	351,114
	ESCALATOR	3	FLT	175556.91	526,671
	FIRE PROTECTION TO U/S OF SUSPENDED DECK	4,800	SF	3.09	14,832
	UTILITIES ALLOWANCE	1	LS	21,000.00	21,000
	TOTAL BRIDGE LINK STRUCTURE	4,800	SF	424.71	2,038,622

PROJECT : LACMTA DIVISION 9 MASTERPLAN	JOB #:	L0850A
LOCATION: EL MONTE, CA	DATE:	08-Oct-02
CLIENT: MAINTENANCE DESIGN GROUP		
SUBJECT: ADMINISTRATION/TRANSPORTATION + Bridge Link	GSF:	42,840

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
SUMMARY OF ESTIMATE				\$	\$
1.1	DEMOLITION				
1.2	SITE WORK				
2.1	SUBSTRUCTURE			3.60	154,222
3.0	STRUCTURE			21.95	940,338
4.1	ENCLOSURE, VERTICAL			21.53	922,320
4.2	ENCLOSURE, HORIZONTAL			1.78	76,340
4.3	SUPPORT ITEMS			1.50	64,260
5.1	INTERNALS, VERTICAL			10.00	428,400
5.2	INTERNALS, HORIZONTAL			8.05	344,690
5.3	FINISHES, SPECIAL			1.50	64,260
5.4	INTERIORS			2.50	107,100
6.0	SPECIALTIES			1.75	75,000
7.0	EQUIPMENT				
8.0	SPECIAL CONSTRUCTION (Bridge Links)			4.20	180,000
9.0	CONVEYING			5.54	237,500
10.1	PLUMBING			8.00	342,720
10.2	HVAC			15.75	674,730
11.0	ELECTRICAL			17.75	760,410
	SUBTOTAL			\$125.40	\$5,372,290
12.00	PRORATES:				
12.10	GENERAL CONDITIONS	7.50%		9.41	402,922
12.20	CONTINGENCY	20.00%		26.96	1,155,042
12.30	ESCALATION				
12.40	GEOGRAPHICAL ESCALATION				
12.50	MARKET ESCALATION				
	SUBTOTAL			\$161.77	\$6,930,254
12.60	BONDS	1.75%		2.83	121,279
12.70	CONTRACTOR'S FEE	7.00%		11.52	493,607
	TOTAL OF OPINION OF CONSTRUCTION COST			\$176.12	\$7,545,140

PROJECT : LACMTA DIVISION 9 MASTERPLAN	JOB NO.:	L0850A
LOCATION: EL MONTE, CA	DATE:	08-Oct-02
CLIENT: MAINTENANCE DESIGN GROUP		
SUBJECT: FARE RECOVERY BUILDING	GSF:	1,950

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST	
SUMMARY OF ESTIMATE					\$	\$
1.1	DEMOLITION					
1.2	SITE WORK			5.13	10,000	
2.1	SUBSTRUCTURE			10.00	19,500	
3.0	STRUCTURE			15.00	29,250	
4.1	ENCLOSURE, VERTICAL			30.77	60,000	
4.2	ENCLOSURE, HORIZONTAL			7.00	13,650	
4.3	SUPPORT ITEMS			1.75	3,413	
5.1	INTERNALS, VERTICAL			6.00	11,700	
5.2	INTERNALS, HORIZONTAL			5.00	9,750	
5.3	FINISHES, SPECIAL			0.75	1,463	
5.4	INTERIORS			1.28	2,500	
6.0	SPECIALTIES			2.00	3,900	
7.0	EQUIPMENT					
8.0	SPECIAL CONSTRUCTION					
9.0	CONVEYING					
10.1	PLUMBING			3.50	6,825	
10.2	HVAC			5.00	9,750	
11.0	ELECTRICAL			8.00	15,600	
	SUBTOTAL			\$101.18	\$197,300	
12.00	PRORATES:					
12.10	GENERAL CONDITIONS	7.50%		7.59	14,798	
12.20	CONTINGENCY	20.00%		21.75	42,420	
12.30	ESCALATION					
12.40	GEOGRAPHICAL ESCALATION					
12.50	MARKET ESCALATION					
	SUBTOTAL			\$130.52	\$254,518	
12.60	BONDS	1.75%		2.28	4,454	
12.70	CONTRACTOR'S FEE	7.00%		9.30	18,128	
	TOTAL OF OPINION OF CONSTRUCTION COST			\$142.10	\$277,100	

PROJECT : LACMTA DIVISION 9 MASTERPLAN	JOB NO.:	L0850A
LOCATION: EL MONTE, CA	DATE:	08-Oct-02
CLIENT: MAINTENANCE DESIGN GROUP		
DESCRIPTION: FUEL FACILITY + CANOPY	GSF:	11,485

ITEM NO.	DETAIL OF ESTIMATE	EST QTY	UNIT	UNIT COST	TOTAL COST
SUMMARY OF ESTIMATE				\$	\$
1.1	DEMOLITION				
1.2	SITE WORK - ISLAND & PAD			6.31	72,500
2.1	SUBSTRUCTURE			2.40	27,528
3.0	STRUCTURE			5.53	63,525
4.1	ENCLOSURE, VERTICAL			12.41	142,500
4.2	ENCLOSURE, HORIZONTAL			1.84	21,175
4.3	SUPPORT ITEMS			1.50	17,228
5.1	INTERNALS, VERTICAL			3.32	38,115
5.2	INTERNALS, HORIZONTAL			2.77	31,763
5.3	FINISHES, SPECIAL			0.37	4,235
5.4	INTERIORS			0.26	3,000
6.0	SPECIALTIES			0.13	1,500
7.0	EQUIPMENT - LOCALIZED TANK INSTALLATION			1.74	20,000
8.0	SPECIAL CONSTRUCTION - CANOPY			22.09	253,750
9.0	CONVEYING				
10.1	PLUMBING			3.94	45,198
10.2	HVAC			2.95	33,880
11.0	ELECTRICAL			5.42	62,288
	SUBTOTAL			72.98	\$838,183
12.00	PRORATES:				
12.10	GENERAL CONDITIONS	7.50%		5.47	62,864
12.20	CONTINGENCY	20.00%		15.69	180,209
12.30	ESCALATION (TO MIDPOINT)				
12.40	GEOGRAPHICAL ESCALATION				
12.50	MARKET FACTOR				
12.60	PHASING COST IMPACT				
	SUBTOTAL			94.15	\$1,081,256
12.70	BONDS & INSURANCE	1.75%		1.65	18,922
12.80	CONTRACTOR'S FEE	7.00%		6.71	77,012
	TOTAL OF OPINION OF CONSTRUCTION COST			102.50	\$1,177,190

PROJECT : LACMTA DIVISION 9 MASTERPLAN	JOB NO.:	L0850A
LOCATION: EL MONTE, CA	DATE:	08-Oct-02
CLIENT: MAINTENANCE DESIGN GROUP		
DESCRIPTION: BUS WASH BUILDING	GSF:	8,910

ITEM NO.	DETAIL OF ESTIMATE	EST QTY	UNIT	UNIT COST	TOTAL COST
SUMMARY OF ESTIMATE				\$	\$
1.1	DEMOLITION				
1.2	SITE WORK				
2.1	SUBSTRUCTURE			10.00	89,100
3.0	STRUCTURE			15.05	134,096
4.1	ENCLOSURE, VERTICAL			19.60	174,600
4.2	ENCLOSURE, HORIZONTAL			4.25	37,868
4.3	SUPPORT ITEMS			1.75	15,593
5.1	INTERNALS, VERTICAL			9.11	81,182
5.2	INTERNALS, HORIZONTAL			0.65	5,792
5.3	FINISHES, SPECIAL				
5.4	INTERIORS				
6.0	SPECIALTIES			0.35	3,119
7.0	EQUIPMENT				
8.0	SPECIAL CONSTRUCTION				
9.0	CONVEYING				
10.1	PLUMBING			5.60	49,896
10.2	HVAC			3.17	28,245
11.0	ELECTRICAL			9.32	83,041
	SUBTOTAL			78.85	\$702,530
12.00	PRORATES:				
12.10	GENERAL CONDITIONS	7.50%		5.91	52,690
12.20	CONTINGENCY	20.00%		16.95	151,044
12.30	ESCALATION (TO MIDPOINT)				
12.40	GEOGRAPHICAL ESCALATION				
12.50	MARKET FACTOR				
12.60	PHASING COST IMPACT				
	SUBTOTAL			101.71	\$906,264
12.70	BONDS & INSURANCE	1.75%		1.78	15,860
12.80	CONTRACTOR'S FEE	7.00%		7.24	64,549
	TOTAL OF OPINION OF CONSTRUCTION COST			110.74	\$986,673

PROJECT : LACMTA DIVISION 9 MASTERPLAN	JOB NO.:	L0850A
LOCATION: EL MONTE, CA	DATE:	08-Oct-02
CLIENT: MAINTENANCE DESIGN GROUP		
SUBJECT: VEHICLE MAINTENANCE FACILITY	GSF:	94,500

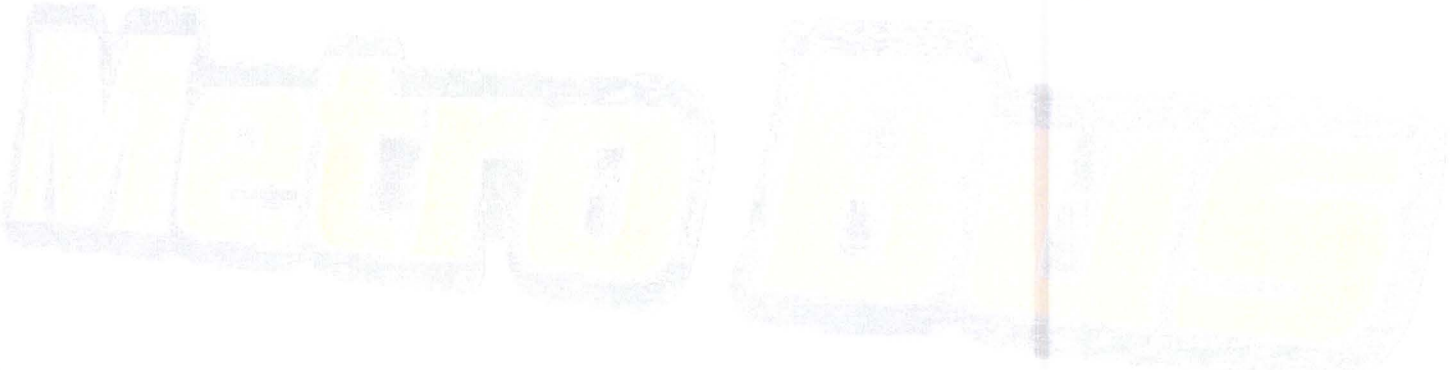
ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
SUMMARY OF ESTIMATE				\$	\$
1.1	DEMOLITION				
1.2	SITE WORK				
2.1	SUBSTRUCTURE			4.96	468,960
3.0	STRUCTURE			18.09	1,709,034
4.1	ENCLOSURE, VERTICAL			14.40	1,360,800
4.2	ENCLOSURE, HORIZONTAL			7.12	672,580
4.3	SUPPORT ITEMS			1.55	146,475
5.1	INTERNALS, VERTICAL			8.00	756,000
5.2	INTERNALS, HORIZONTAL			1.85	174,825
5.3	FINISHES, SPECIAL			0.50	47,250
5.4	INTERIORS			0.15	14,175
6.0	SPECIALTIES			0.50	47,250
7.0	EQUIPMENT				
8.0	SPECIAL CONSTRUCTION (PIT + O/H SCAFFOLD)			3.97	375,000
9.0	CONVEYING			0.29	27,500
10.1	PLUMBING			6.87	649,215
10.2	HVAC			14.00	1,323,000
11.0	ELECTRICAL			12.50	1,181,250
	SUBTOTAL			\$94.74	\$8,953,314
12.00	PRORATES:				
12.10	GENERAL CONDITIONS	7.50%		7.11	671,499
12.20	CONTINGENCY	20.00%		20.37	1,924,963
12.30	ESCALATION				
12.40	GEOGRAPHICAL ESCALATION				
12.50	MARKET ESCALATION				
	SUBTOTAL			\$122.22	\$11,549,776
12.60	BONDS	1.75%		2.14	202,121
12.70	CONTRACTOR'S FEE	7.00%		8.71	822,633
	TOTAL OF OPINION OF CONSTRUCTION COST			\$133.07	\$12,574,530

PROJECT : LACMTA DIVISION 9 MASTERPLAN	JOB #:	L0850A
LOCATION: EL MONTE, CA	DATE:	08-Oct-02
CLIENT: MAINTENANCE DESIGN GROUP		
SUBJECT: DAYCARE CENTER	GSF:	12,500

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
SUMMARY OF ESTIMATE				\$	\$
1.1	DEMOLITION				
1.2	SITE WORK				
2.1	SUBSTRUCTURE			5.69	71,125
3.0	STRUCTURE			22.00	275,000
4.1	ENCLOSURE, VERTICAL			16.20	202,500
4.2	ENCLOSURE, HORIZONTAL			8.80	110,000
4.3	SUPPORT ITEMS			1.52	19,000
5.1	INTERNALS, VERTICAL			14.06	175,750
5.2	INTERNALS, HORIZONTAL			10.16	127,000
5.3	FINISHES, SPECIAL			1.94	24,250
5.4	INTERIORS			7.25	90,625
6.0	SPECIALTIES			1.26	15,750
7.0	EQUIPMENT				
8.0	SPECIAL CONSTRUCTION				
9.0	CONVEYING				
10.1	PLUMBING			13.57	169,625
10.2	HVAC			17.96	224,500
11.0	ELECTRICAL			12.90	161,250
	SUBTOTAL			\$133.31	\$1,666,375
12.00	PRORATES:				
12.10	GENERAL CONDITIONS	7.50%		10.00	124,978
12.20	CONTINGENCY	20.00%		28.66	358,271
12.30	ESCALATION				
12.40	GEOGRAPHICAL ESCALATION				
12.50	MARKET ESCALATION				
	SUBTOTAL			\$171.97	\$2,149,624
12.60	BONDS	1.75%		3.01	37,618
12.70	CONTRACTOR'S FEE	7.00%		12.25	153,107
	TOTAL OF OPINION OF CONSTRUCTION COST			\$187.23	\$2,340,349



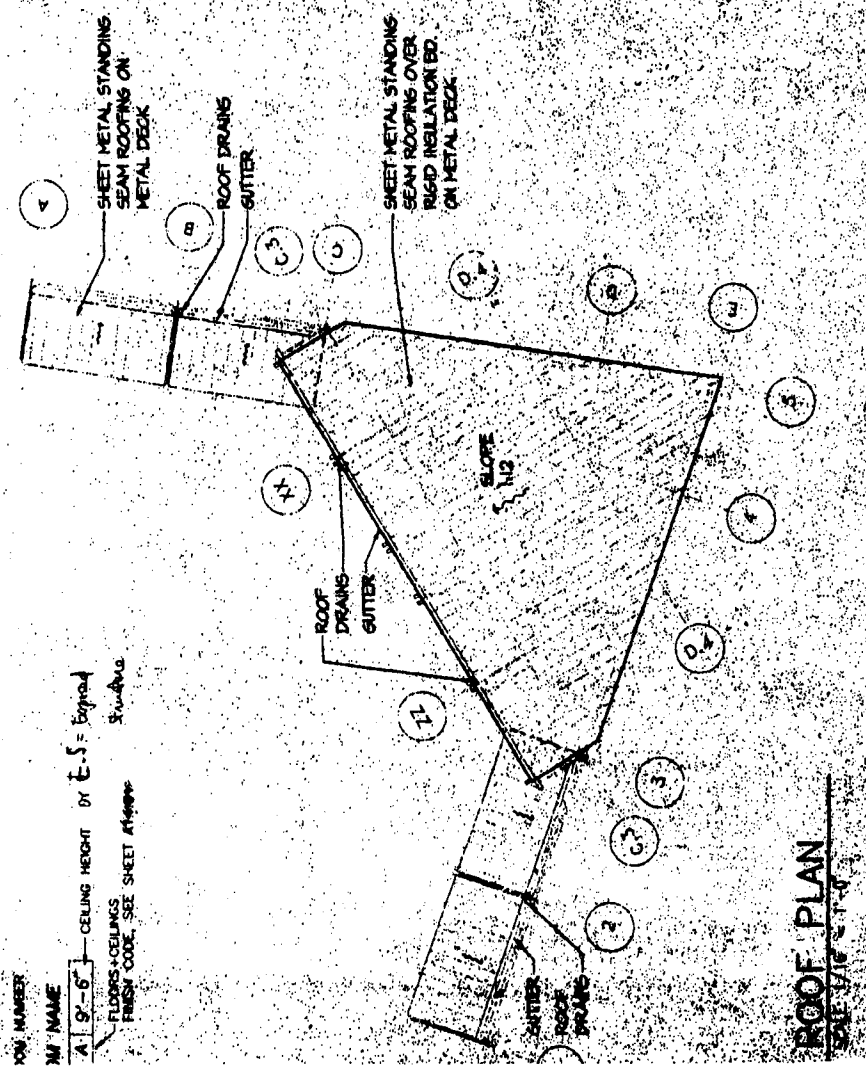
Appendix G Previous Design Drawings



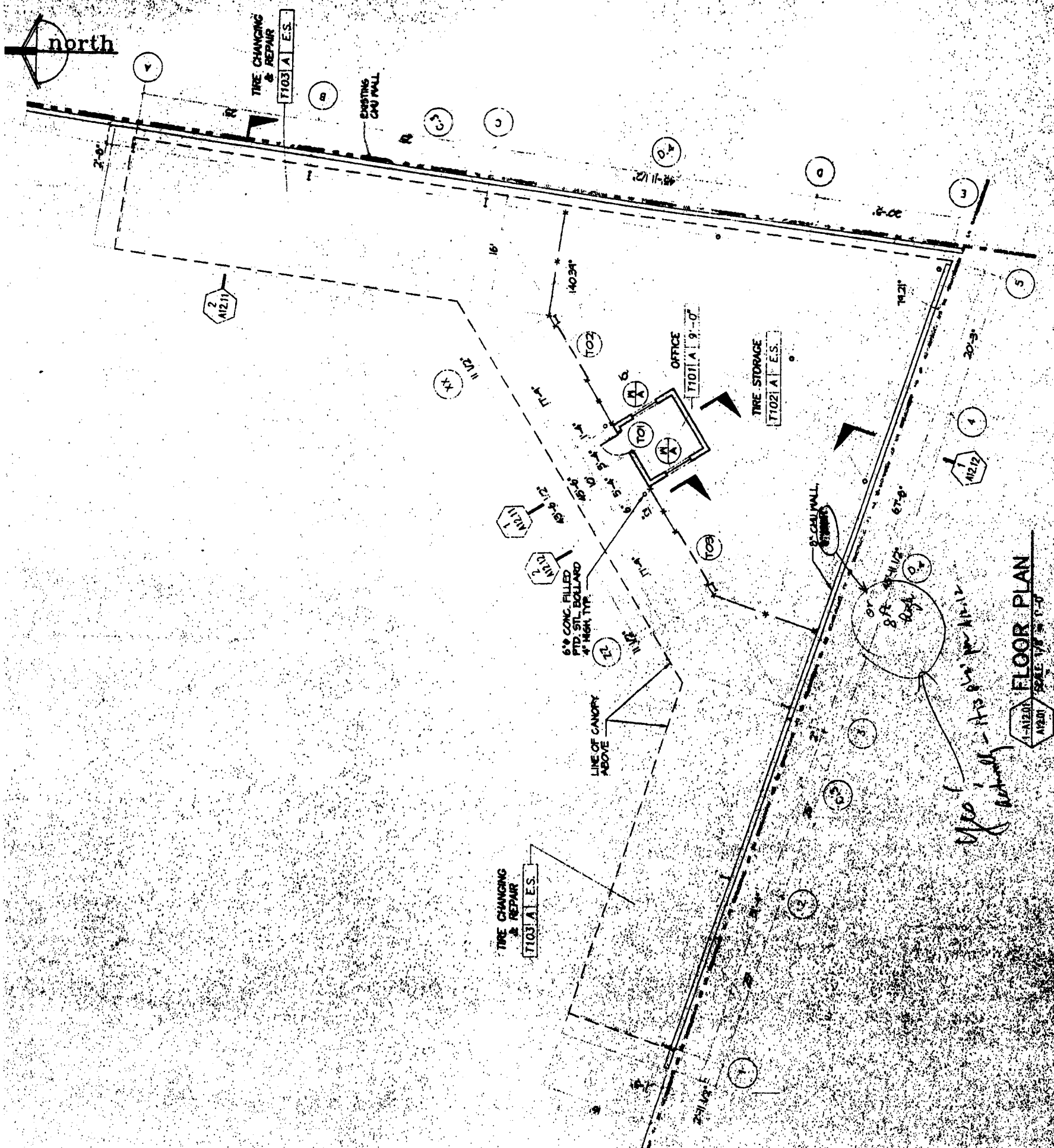
END

- ROOM NAME AND NUMBER
- DOOR NUMBER
- LOUVER NUMBER
- FIBERON TYPE
- PARTITION TYPE
- SHOWS DIRECTION OF WATER FLOW ON ROOFS, WALKING SURFACES
- CAST-IN-PLACE CONCRETE
- CONCRETE MASONRY UNITS (CMU)
- STUD PARTITION
- R/L LEVEL 0'-0"
- 3/8" AREA MAINTENANCE BUILDING (3/8" (NON TIRE SHOP) 3/8" (EXISTING MAINTENANCE BUILDING))
- PARTITIONS SHALL BE TYPE 2
- 255 NOTED OTHERWISE
- E SHEET ALSO USE FOR PARTITION TYPES
- 255 NOTED OTHERWISE, DOORS AND WINDOWS SHALL BE CENTERED ON THEIR VLS OR LOCATED 4" FROM FINISH WALL EDGE OF BUCK
- MASONRY UNIT INTERIOR WALLS
- U SHALL EXTEND TO PERISIDE OF STRUCTURE
- YOU NUMBER
- RM NAME
- A 9'-6" - CEILING HEIGHT OF E-S = 8'-5" 8'-5" 8'-5"
- FLOORS - CEILINGS FRESH CODE, SEE SHEET #1000

212.34
10.00
212.34



ROOF PLAN
SCALE 1/8" = 1'-0"



FLOOR PLAN
SCALE 1/8" = 1'-0"

Use 1/2" - this per April 12

	SIV Incorporated 1000 Wilshire Blvd., Suite 1105 Los Angeles, CA 90017 213-460-1111 FAX: 213-460-0878	LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY FACILITIES ENGINEERING DEPARTMENT	DIVISION 9 RENOVATION TIRE SHOP BUILDING FLOOR AND ROOF PLANS	8205 AS NOTED A12.01
	DATE: _____ DRAWN BY: _____ CHECKED BY: _____ PROJECT NUMBER: _____	DATE: _____ DRAWN BY: _____ CHECKED BY: _____ PROJECT NUMBER: _____	DATE: _____ DRAWN BY: _____ CHECKED BY: _____ PROJECT NUMBER: _____	DATE: _____ DRAWN BY: _____ CHECKED BY: _____ PROJECT NUMBER: _____



TOILET ACCESSORIES LEGEND:

- PTM PAPER TOWEL DISPENSER AND WASTE RECEPTACLE
- SD SOAP DISPENSER
- TRM TOILET-SEAT-COVER DISPENSER AND TOILET TISSUE DISPENSER
- TPM TOILET-SEAT-COVER DISPENSER, SANITARY NAPKIN DISPOSAL AND TOILET TISSUE DISPENSER
- TRD TOILET-SEAT-COVER DISPENSER, SANITARY NAPKIN DISPOSAL AND TOILET TISSUE DISPENSER (TWO SIZES)
- GB GRAB BAR
- SNM SANITARY NAPKIN/TAMPON VENDOR
- M MIRROR (24" X 36") WITH SHELF
- TH TOWEL HOOK

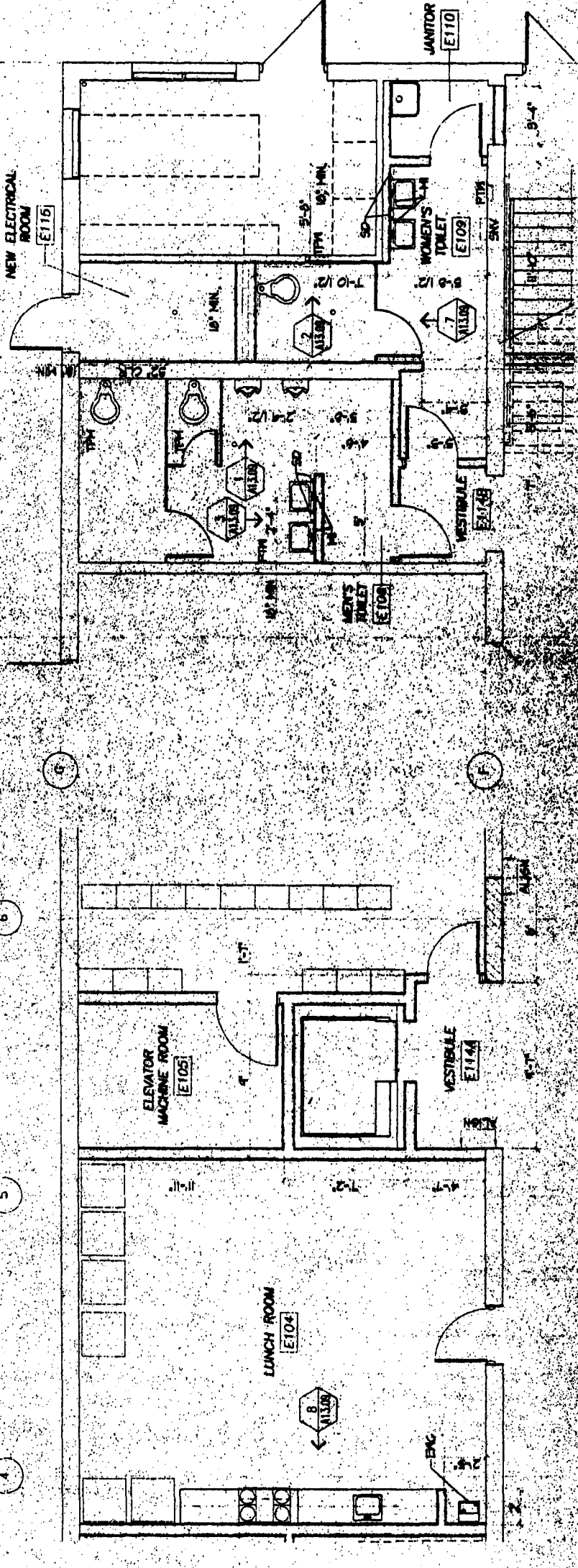
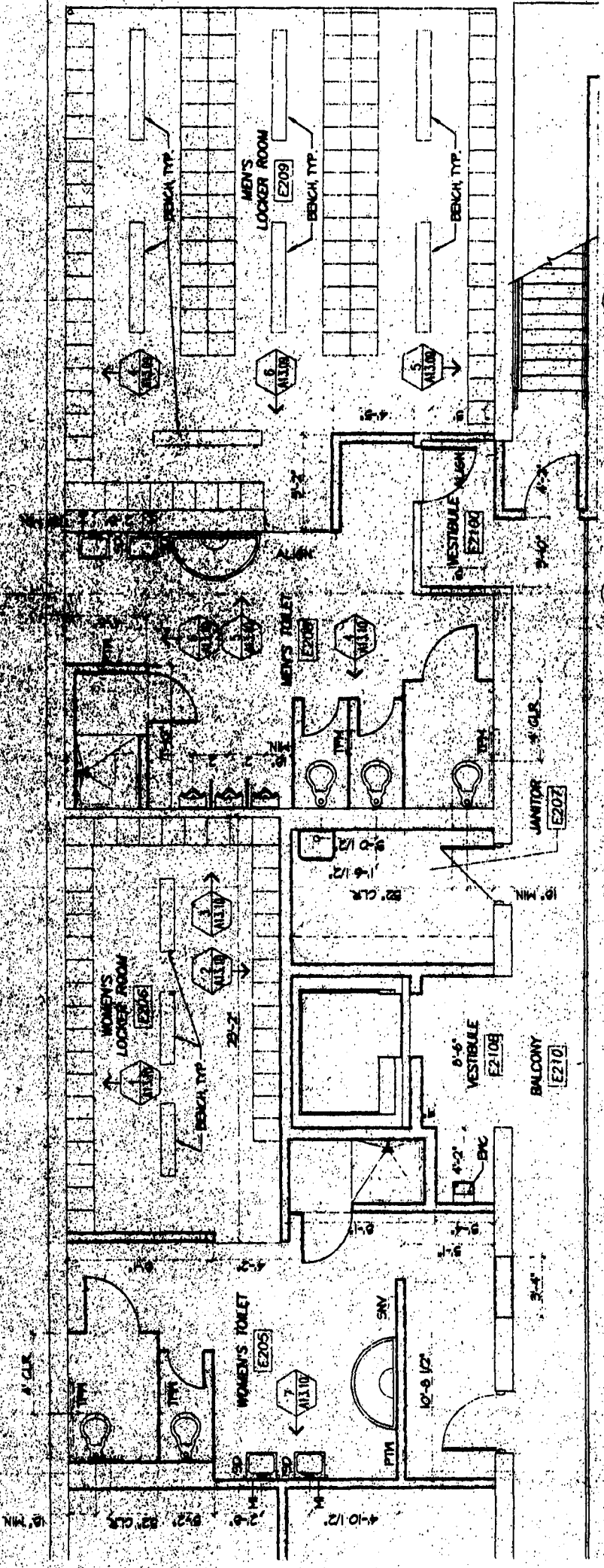
NOTE:

1. SEE SHEETS A10.03 AND A10.04 FOR ADDITIONAL INFORMATION.

ENLARGED MEZZANINE TOILET AND LOCKER RMS

1/4" = 1'-0"

A10.03
A10.04



ENLARGED TOILET PLAN

ENLARGED ELEV. PLAN

	FOR ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY FACILITIES ENGINEERING DEPARTMENT	DIVISION 9 RENOVATION EXISTING MAINTENANCE BUILDING ENLARGED PLANS
1/4" = 1'-0"	1/4" = 1'-0"	A10.08

SIV Incorporated
 1000 West 10th Street, Suite 1000
 Los Angeles, CA 90015
 Tel: (213) 475-1100



DEMOLITION NOTES

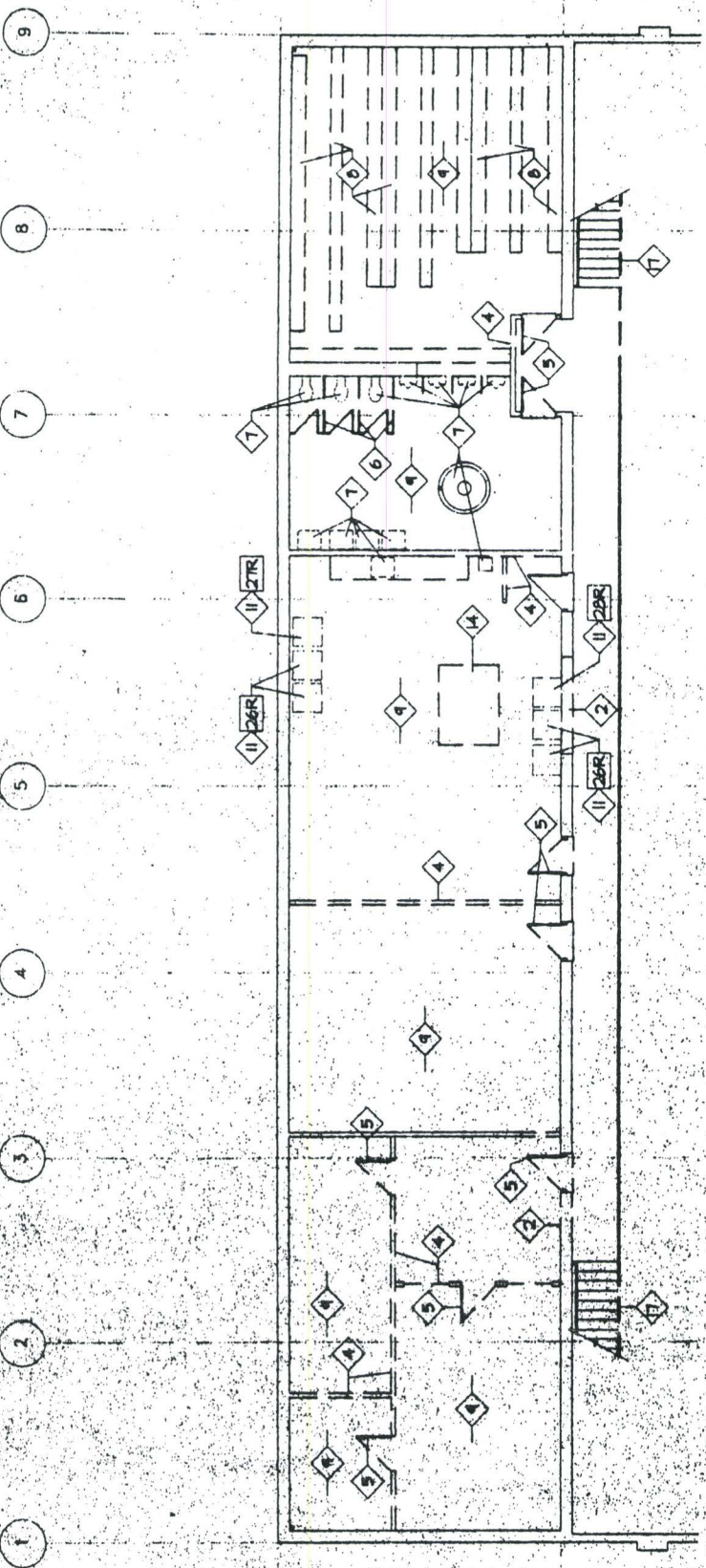
- 1 DEMOLISH EXISTING CONCRETE SLAB, PROVIDE NEW 6" CONCRETE SLAB OVER 6" BASE, SLOPED TO DRAIN PER DWGS.
- 2 DEMOLISH PORTION OF EXISTING CMU WALL FOR NEW OPENINGS, SEE STRUCTURAL DWGS. FOR DETAILS.
- 3 DEMOLISH THIS PORTION OF THE EXISTING SLAB OR PITS NECESSARY FOR INSTALLATION AND CONSTRUCTION OF NEW LIFTS AND PITS. SEE STRUCTURAL DWGS. FOR DETAILS.
- 4 DEMOLISH EXISTING STUD WALLS FROM FLOOR TO UNDERSIDE OF STRUCTURE. PATCH FLOOR AND CEILING TO MATCH EXISTING.
- 5 DEMOLISH DOOR AND FRAME. PATCH HOLES AND FINISH PAINT ALL SURFACES.
- 6 DEMOLISH TOILET PARTITIONS.
- 7 DEMOLISH PLUMBING FIXTURES, SEE PLUMBING DWGS.
- 8 REMOVE AND SALVAGE LOCKERS PER MTA DIRECTION.
- 9 REMOVE ALL FLOOR FINISHES DOWN TO CONCRETE SLAB.
- 10 DEMOLISH EXISTING CHAINLINK FENCE, PATCH FLOOR HOLES TO MATCH EXISTING.
- 11 RELOCATE EXISTING EQUIPMENT AND OTHER MISCELLANEOUS FURNISHINGS TO NEW LOCATIONS SHOWN ON EQUIPMENT DWGS. AS DIRECTED BY MTA. REFER TO EQUIPMENT DWGS. FOR EQUIPMENT LEGEND.
- 12 DEMOLISH EXISTING ROLL-UP DOOR.
- 13 DEMOLISH EXISTING CASEWORK.
- 14 DEMOLISH PORTION OF CONCRETE SLAB AT MAIN FLOOR LEVEL, MEZZANINE FLOOR, AND ROOF FOR NEW ELEVATOR.
- 15 COVER THIS PORTION OF THE EXISTING PIT W/ CONCRETE SLAB. FLUSH WITH EXISTING FLOOR SLAB. PIT TO BE ABANDONED IN PLACE. SEE STRUCTURAL DETAIL.
- 16 DEMOLISH COUNTER AND OVERHEAD COUNTER DOOR.
- 17 DEMOLISH EXISTING STAIR HANDRAIL.

- NOTE:
1. SEE CIVIL, STRUCTURAL, ELECTRICAL, MECHANICAL, PLUMBING, AND FIRE & PROTECTION DRAWINGS FOR ADDITIONAL DEMOLITION.
 2. CONTRACTOR TO FIELD VERIFY AND PROTECT ALL UNDERGROUND AND ABOVE GROUND UTILITIES DURING DEMOLITION AND NEW CONSTRUCTION.
 3. CONTRACTOR TO COORDINATE DEMOLITION AND RELOCATION WORK WITH MTA AND RESPECTIVE CONSTRUCTION PHASE.
 4. ALL UTILITIES ARE TO BE KEPT FULLY OPERATIONAL DURING CONSTRUCTION PHASES AS THEY AFFECT AREAS NOT WITH THAT SPECIFIC PHASE.

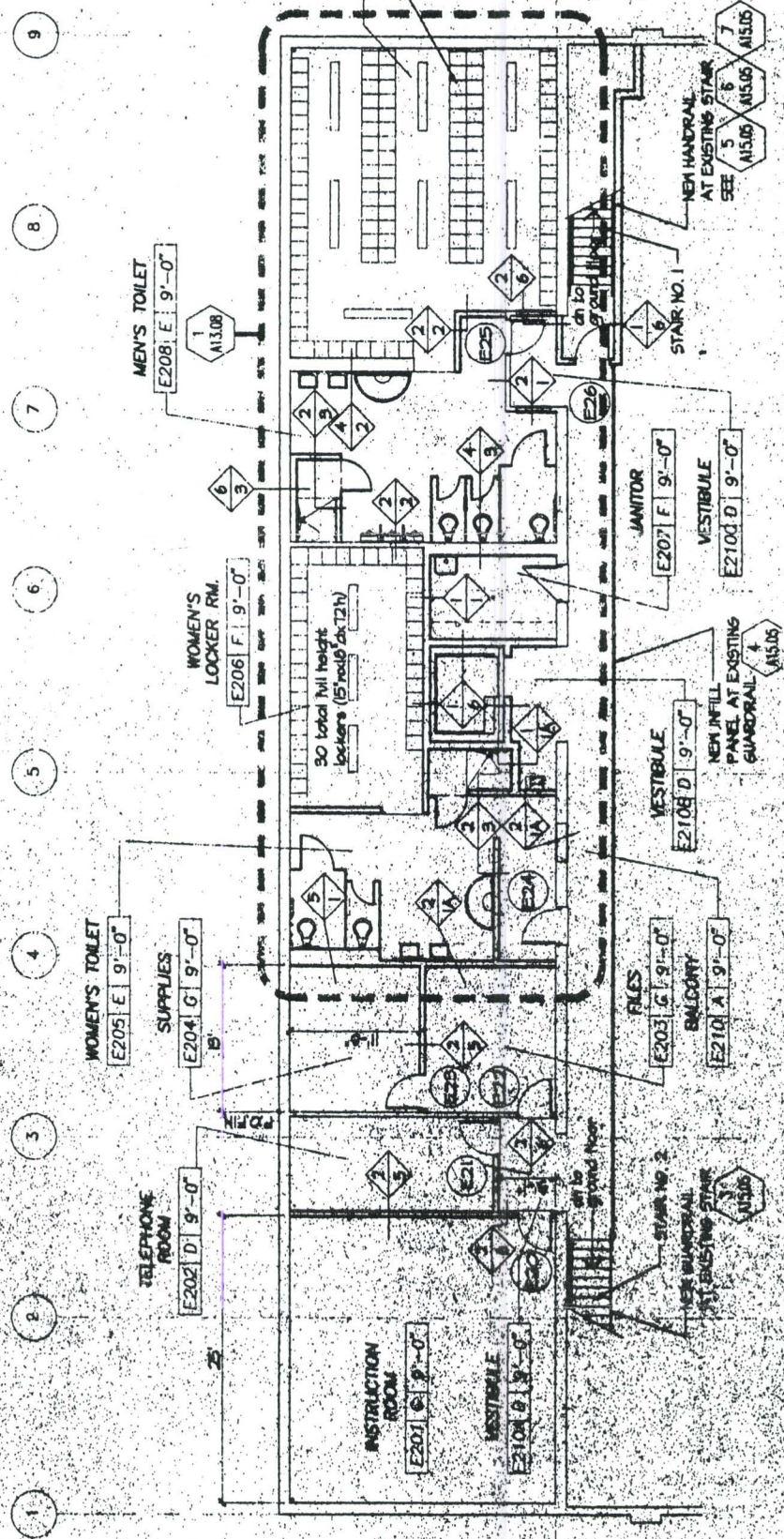
GEND

- ROOM NAME AND NUMBER
- DOOR NUMBER
- LOUVER NUMBER
- WINDOW TYPE
- PARTITION TYPE
- SHOWS DIRECTION OF WATER FLOW ON ROOFS, WALKING SURFACES
- CAST-IN-PLACE CONCRETE
- CONCRETE MASONRY UNITS (CMU)
- STUD PARTITION
- DOOR LEVEL 0'-0"
- 278.35 (NEW MAINTENANCE BUILDING)
- 278.54 (NEW TIRE SHOP)
- 278.50 (EXISTING MAINTENANCE BUILDING)
- CL PARTITIONS SHALL BE TYPE 2 UNLESS NOTED OTHERWISE (SEE SHEET A10.05 FOR PARTITION TYPES)
- UNLESS NOTED OTHERWISE, DOORS AND WINDOWS SHALL BE CENTERED ON THEIR WALLS OR LOCATED 4" FROM FINISH WALL TO EDGE OF BUCK.
- ALL MASONRY UNIT INTERIOR WALLS (CMU) SHALL EXTEND TO UNDERSIDE OF STRUCTURE.

ROOM NUMBER
ROOM NAME
1 | A | 9'-6" | CEILING HEIGHT
FLOORS-CEILINGS FINISH CODE. SEE SHEET A14.01



MEZZANINE DEMOLITION PLAN
SCALE: 1/8" = 1'-0"
1-A13.07
A13.07



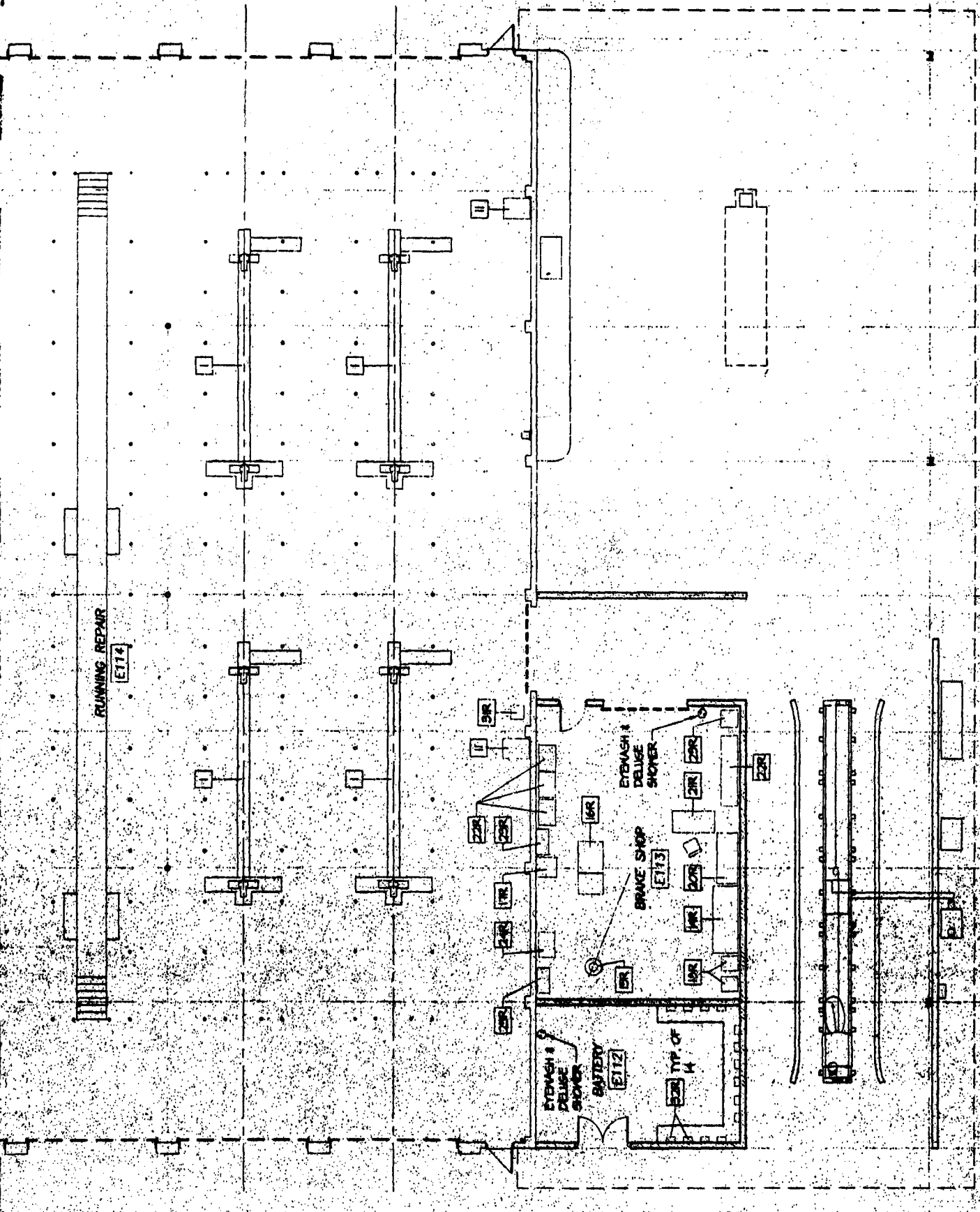
MEZZANINE FLOOR PLAN
SCALE: 1/8" = 1'-0"
2-A13.07
A13.07

	<p>Los Angeles County METROPOLITAN TRANSPORTATION AUTHORITY FACILITIES ENGINEERING DEPARTMENT</p>	<p>DIVISION 9 RENOVATION EXISTING MAINTENANCE BLDG. - MEZZ DEMO & NEW CONST. PLANS</p>	<p>DATE: 1/8" = 1'-0" SHEET: 1/8" = 1'-0" PROJECT: A13.0</p>
	<p>City Incorporated 1055 Wilshire Blvd., Suite 1450 Los Angeles, CA 90017 213/482-9444 FAX 213/482-6878</p>		



1 2 3 4 5 6 7 8 9

MATCHLINE SEE SHEET A509



- TERMINAL EQUIPMENT IS TYPICAL FOR NEW EXISTING MAINTENANCE BUILDINGS AND NEW SHOPS
- LIFT, AXLE ADJ. 2-POST
- LIFT, ADJ. 3-POST (PLATFORM)
- NOT USED
- PARTS CLEANING TANKS
- BUFFER/WAXERS
- HYDRAULIC PRESS
- DRILL PRESS
- WORKBENCH (36" D x 72" L x 34" H)
- ANTIFREEZE MOTOR OIL, TORQUE OIL, COMPRESSED AIR, WASTE OIL, AND 3-LIGHT REEL ASSEMBLIES (TOTAL OF 1)
- TAILPIPE EXHAUST ASSEMBLY
- LIFT CONTROL CONSOLE
- PALLET RACK (48" H x 46" L x 144" W)
- SHELVES (24" D x 72" L x 84" H)
- CANLESS GREASE AND GREASE OIL REELS
- CONNECTING PARTS RACK (RELOCATED FROM EXISTING MAINTENANCE BUILDING BY CONTRACTOR)
- RELOCATED JOB CRANE
- RELOCATED LATHE AND WASTE RECEPTACLE
- RELOCATED LATHE EXHAUST
- RELOCATED DRILL PRESS
- RELOCATED WORK BENCH W/ VISE GRIP
- RELOCATED WORK BENCH
- RELOCATED DESK AND CHAIR
- RELOCATED BRAKE PARTS SHELF
- RELOCATED STORAGE CABINET
- RELOCATED BUFFER
- RELOCATED GRINDER
- RELOCATED REFRIGERATOR
- RELOCATED VISIONS MACHINE
- RELOCATED HOT BOX
- RELOCATED UNIFORM STORAGE
- RELOCATED FUEL TANK MONITOR
- RELOCATED TIME CLOCK COMPUTER
- RELOCATED BATTERY CHARGERS

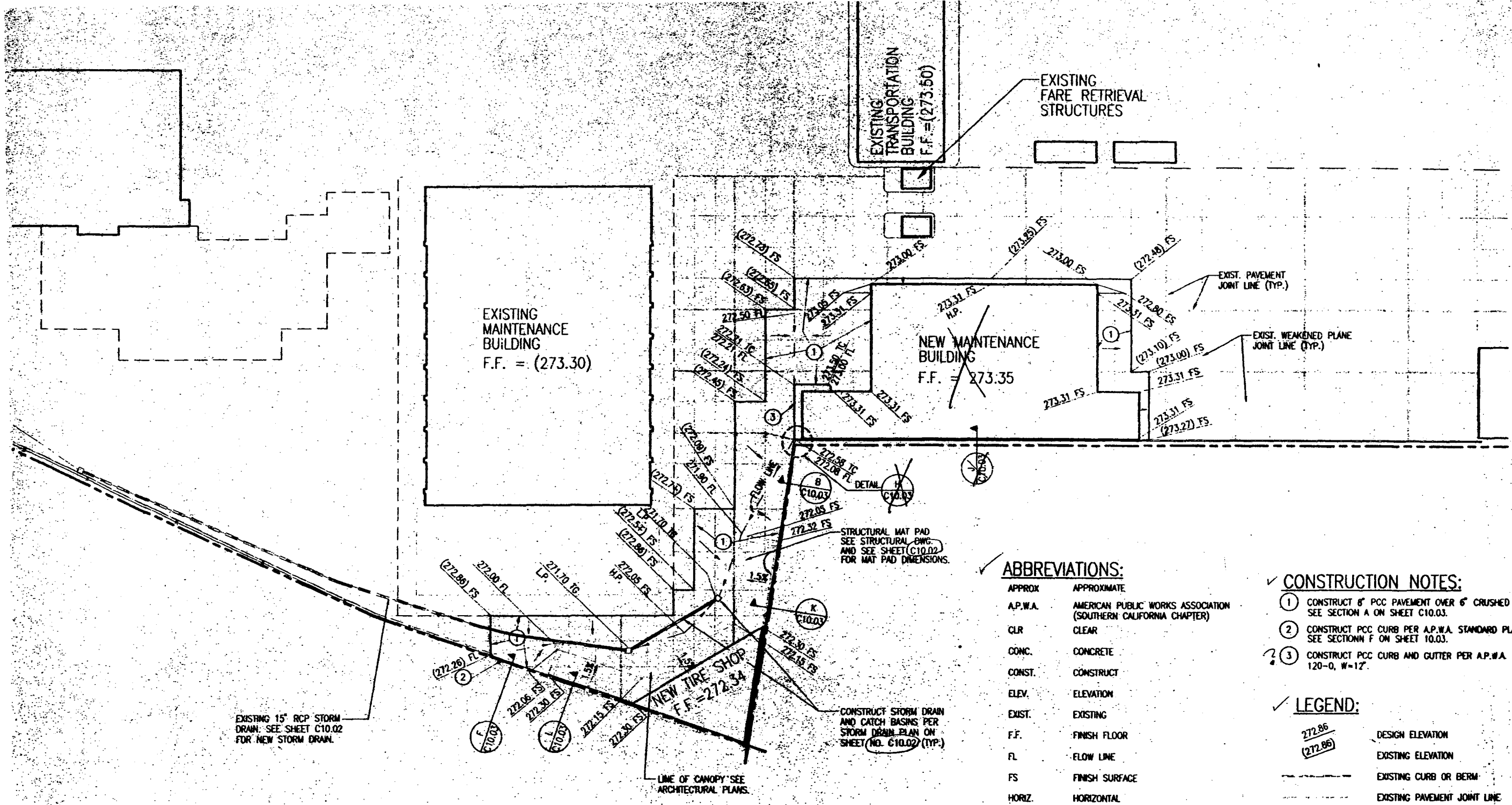
PARTIAL EQUIPMENT PLAN
SCALE: 1/8" = 1'-0"

SIV Incorporated
1053 Wilshire Blvd., Suite 1000
Los Angeles, CA 90017
310/425-0444 FAX 310/425-0578

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY
FACILITIES ENGINEERING DEPARTMENT

DIVISION 9 RENOVATION
EXISTING MAINTENANCE BLDG.
EQUIPMENT PLAN

DATE: 1/8/88
DRAWN BY: [Signature]
CHECKED BY: [Signature]
PROJECT: A14.01
SHEET: A14.01



ABBREVIATIONS:

APPROX	APPROXIMATE
A.P.W.A.	AMERICAN PUBLIC WORKS ASSOCIATION (SOUTHERN CALIFORNIA CHAPTER)
CLR	CLEAR
CONC.	CONCRETE
CONST.	CONSTRUCT
ELEV.	ELEVATION
EXIST.	EXISTING
F.F.	FINISH FLOOR
FL	FLOW LINE
FS	FINISH SURFACE
HORIZ.	HORIZONTAL
H.P.	HIGH POINT
L.P.	LOW POINT
PCC	PORTLAND CEMENT CONCRETE
RCP	REINFORCED CONCRETE PIPE
TC	TOP OF CURB
TG	TOP OF GRATE
TYP.	TYPICAL
VERT.	VERTICAL

CONSTRUCTION NOTES:

- ① CONSTRUCT 6" PCC PAVEMENT OVER 6" CRUSHED AGGREGATE BASE SEE SECTION A ON SHEET C10.03.
- ② CONSTRUCT PCC CURB PER A.P.W.A. STANDARD PLAN 120-0. SEE SECTION F ON SHEET 10.03.
- ③ CONSTRUCT PCC CURB AND GUTTER PER A.P.W.A. STANDARD PLAN 120-0, W=12".

LEGEND:

	DESIGN ELEVATION
	EXISTING ELEVATION
	EXISTING CURB OR BERM
	EXISTING PAVEMENT JOINT LINE
	EXISTING WEAKENED PLANE JOINT LINE
	EXISTING BLOCK WALL
	LIMIT OF NEW PAVEMENT
	NEW CURB & GUTTER
	PROPERTY LINE
	SLOPE OR FLOW DIRECTION

NOTES:

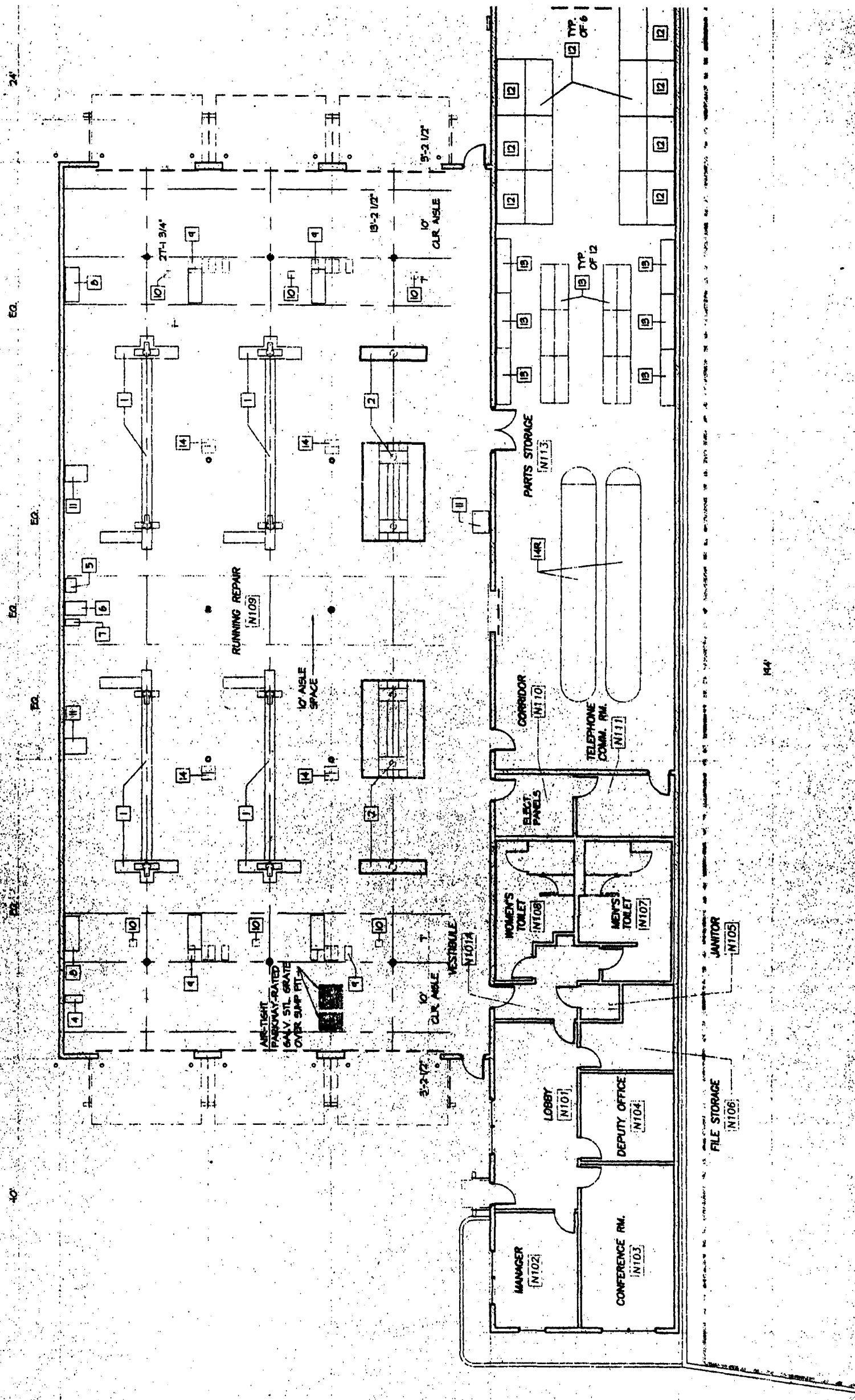
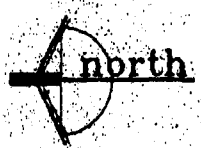
- 1. NO BOUNDARY SURVEY AND TOPOGRAPHIC SURVEY WERE PERFORMED FOR THIS PROJECT. BOUNDARY LINES, LOCATION OF EXISTING BUILDINGS, FENCES, WALLS, CURBS ETC. AND EXISTING ELEVATIONS WERE TAKEN FROM PREVIOUS IMPROVEMENT PLANS FOR THE BUS FACILITY. CONTRACTOR TO VERIFY EXISTING CONDITIONS. NEW BUILDING LOCATION HORIZ. CONTROLS ARE AS SHOWN ON DETAIL C10.03.
- 2. ALL EXISTING PAVEMENT JOINTS AND ALL EXISTING INTERMEDIATE JOINTS SHALL BE EXTENDED INTO THE NEW PAVEMENT AREA. NEW JOINTS SHALL MATCH EXISTING JOINTS AND CONSTRUCTED PER DETAILS ON SHEET C10.03.
- 3. SEE P1001 FOR UTILITY PLAN.

<p>STV Incorporated 1096 Wilshire Blvd., Suite 1455 Los Angeles, CA 90017 213/482-8444 FAX: 213/482-5278</p>		<p>DATE: 4/16/04 DRAWN BY: MKA CHECKED: RBB APPROVED: 4/16/04</p>	<p>LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY FACILITIES ENGINEERING DEPARTMENT</p>	<p>DIVISION 9 RENOVATION</p> <p>GRADING AND PAVING PLAN</p> <p style="font-size: 2em; font-weight: bold;">C10.01</p>	<p>6288 1" = 30'-0" 6288</p>
--	--	--	---	---	--

Maintenance Equipment Legend

Maintenance equipment is typical for new and existing maintenance buildings and new tire shop.

- 1 LEFT AXLE, ADJ. 2-POST
- 2 LEFT, ADJ. 5-POST (PLATFORM)
- 3 NOT USED
- 4 PARTS CLEANING TANKS
- 5 BUFFER/GRINDERS
- 6 HYDRAULIC PRESS
- 7 DRILL PRESS
- 8 WORKBENCH (56"D x 27L x 34"H)
- 9 ANTIFREEZE MOTOR OIL, TORQUE OIL, COMPRESSED AIR, WASTE OIL, AND 3-LIGHT REEL ASSEMBLIES (TOTAL OF 7)
- 10 TAILPIPE EXHAUST ASSEMBLY
- 11 LIFT CONTROL CONSOLE
- 12 PALLET RACK (48"W x 96"L x 144"H)
- 13 SHELVES (24"D x 27L x 34"H)
- 14 CHARGES GREASE AND GREASE OIL REELS
- 14R CONVEYING PARTS RACK (RELOCATED FROM EXISTING MAINTENANCE BUILDING BY CONTRACTOR)
- 15R RELOCATED JOB CRANE
- 16R RELOCATED LATHE AND WASTE RECEPTACLE
- 17R RELOCATED LATHE EXHAUST
- 18R RELOCATED DRILL PRESS
- 19R RELOCATED WORK BENCH W/ VISE GRIP
- 20R RELOCATED WORK BENCH
- 21R RELOCATED DESK AND CHAIR
- 22R RELOCATED BRAKE PARTS SHELF
- 23R RELOCATED STORAGE CABINET
- 24R RELOCATED BUFFER
- 25R RELOCATED GRINDER
- 26R RELOCATED REFRIGERATOR
- 27R RELOCATED VENDING MACHINE
- 28R RELOCATED HOT BOX
- 29R RELOCATED INFORM STORAGE
- 30R RELOCATED FUEL TANK MONITOR
- 31R RELOCATED TIME CLOCK COMPUTER
- 32R RELOCATED BATTERY CHARGERS



1-N110A
 EQUIPMENT PLAN
 SCALE 1/8" = 1'-0"

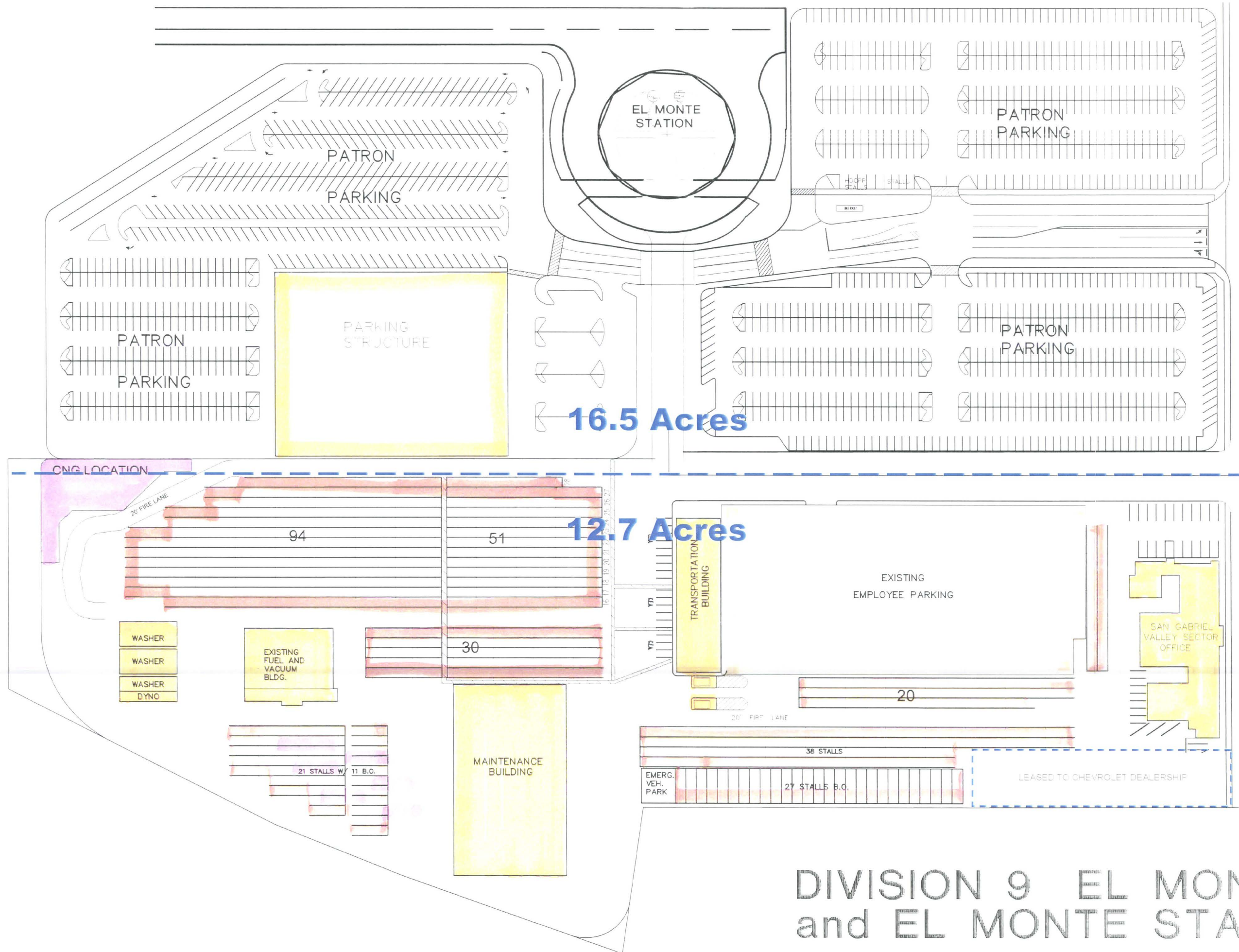
		LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY FACILITIES ENGINEERING DEPARTMENT	DIVISION 9 RENOVATION NEW MAINTENANCE BLDG. EQUIPMENT PLAN
STV Incorporated 1055 Wilshire Blvd., Suite 1145 Los Angeles, CA 90017 213/482-3444 FAX: 213/482-8278		APPROVED: _____ DATE: _____ PREPARED: _____ DATE: _____	JAN 4/10/86 JUN 5/10/86 SEP 5/10/86 NOV 5/10/86



Los Angeles County
Metropolitan Transportation
Authority

Division 9 Master Plan Report

Appendix H Division 9 and Caltrans Site Plan



16.5 Acres

12.7 Acres

**DIVISION 9 EL MONTE
and EL MONTE STATION**

C. SANTA ANITA



