VIABILITY EVALUATION REPORT

ICTC Adams Avenue Bus Operations Facility Evaluation Project – Phase 1

Prepared for

Imperial County Transportation Commission

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Executive Summary

The following is a summary of the Viability Evaluation Report. Please refer to the full report for additional details including the referenced tables and figures.

The Project

The expansion of the Imperial Valley Transit vehicle fleet has created a need for additional capacity and facility needs. The Imperial County Transportation Commission (ICTC) is pursuing the opportunity to acquire the existing California Department of Transportation (Caltrans) Maintenance Yard located at 1605 Adams Avenue in the city of El Centro, California. The objective of this project is to complete a comprehensive evaluation of the Caltrans facility assessing ICTC's ability to convert and improve the facility to meet ICTC's existing and future transit needs.

Phase 1 in the evaluation of the Adams Avenue site is the preparation of this viability evaluation study to determine if the site is usable from an overall operational perspective before proceeding with a detailed evaluation of building and facility systems. The report also provides rough order of magnitude (ROM) cost estimates to assist in decision making.

Approach and Methodology

A consultant team visit was conducted on July 19 through July 21, 2017, in El Centro. Based on discussions with ICTC during the initial visit, two site development alternatives were developed for evaluation against the program requirements. Detailed discussions of each are found in the body of the report. They are as follows:

- Move-In-Ready (MIR) Alternative – the objective of this alternative is to develop a facility to accommodate the existing fleet using as many of the existing buildings as feasible. The alternative is presented in Attachment MIR-1.
- Ultimate Facility Alternative – the objective of the ultimate facility is to develop an alternative beginning from a clean, empty site which would be unconstrained by existing buildings. The goal is to get as much of the space program onto the site. The alternative is presented in Attachment UL-1.

The following work elements were prepared as part of the report work.

- A staffing profile was developed based on First Transit's current operation information. The staffing information is shown in Table 1.
- Fleet profile information was provided by ICTC including vehicles numbers, types, and dimensions. The Fleet Profile is summarized in Table 2. The Current Fleet was used to develop the move-in-ready alternative while the Design Fleet, which represents future expansion, was used for the ultimate alternative.
- A listing of the typical dimensions of selected facility elements used in the development of the space program is provided in Table 3. The dimensions are typically found in modern bus operations and maintenance facilities.

Facility Functional Requirements and Space Programming

Based on discussions with ICTC and user interviews with First Transit, the following functions have been included in the facility programming. These functions are typical of a modern bus facility.

- Fleet and Non-Fleet Parking

- Administration/Operations (admin/ops)
- Revenue Center (Money Counting and Storage)
- Fleet Maintenance
- Vehicle Fueling
- Vehicle Washing

A space program was developed to reflect the facility functional requirements above and criteria presented in the staffing, fleet, and dimensions tables. A summary of the program is presented in Table 4 in the body of the report. All of the program elements such as the admin/ops and maintenance buildings are significantly larger than those found in the existing facility. The total program, at 4.7 acres, is larger than the Adams Avenue site which is 3.7 acres.

Summary of Zoning Issue

The Adams Avenue site is currently zoned as General Commercial. Based on that zoning, its current use as a Caltrans maintenance facility is a legally non-conforming use which limits available options for modifications and improvement. City officials determined that it is their preference to rezone the parcel from General Commercial to Heavy Commercial if the project is to move forward. This would be in the best interest of ICTC, the city, and other stakeholders like surrounding residents.

Based on discussions with ICTC, the determination was made that the viability analysis would assume that the site would be rezoned to Heavy Commercial prior to purchase from Caltrans. Rezoning will eliminate the restrictions associated with a non-conforming use.

Order of Magnitude Cost Estimate

Rough Order of Magnitude (ROM) project cost estimates of both the MIR alternative and the ultimate alternative have been prepared and are shown in Attachments CE-1 and CE-2, respectively. The approximate construction cost for the MIR alternative is between $4.5 to $5 million. The approximate construction cost for the ultimate alternative is between $14 to $15 million. Both ROM cost estimates include $960,000 to remove hazardous building materials and perform soil remediation due to a potential underground storage tank and vehicle lift oil leaks based on the information from available Caltrans environmental reports. The project planning, design and construction management cost estimates are included in the attachments as well.

Alternative Viability and Recommendations

<u>Viability of the MIR Alternative</u>

Based on the study findings, the MIR alternative does not appear to be a viable option for ICTC's full fleet. While all of the findings contributed to the decision, the following are considered critical:

- Most of the existing buildings would have to be demolished to get acceptable vehicle circulation. As a result, the value of those buildings is lost
- The MIR alternative can accommodate the entire current fleet but cannot accommodate the expanded future fleet. In other words, the MIR alternative can accommodate a portion of the future fleet
- Employee and public parking is significantly under program
- The maintenance building is significantly undersized

- There is not adequate room for a drive-through fueling operation which is typical for most modern bus facilities
- Site circulation is complex because there are multiple turns and alternate bus movements for buses to navigate the site. Radius turns are very tight around existing buildings

The approximate construction cost for the MIR alternative, is between $4.5 and $5 million. The acceptability of the construction cost which includes about $960,000 in environmental cleanup, will have to be determined by ICTC.

However, if ICTC determines that it wishes to split the fleet and associated operation between more than one facility, the Adams Avenue site may be viable for a portion of the fleet. That possibility is addressed in the "Next Step Recommendations" section below.

Viability of the Ultimate Alternative

Based on the study findings, the ultimate alternative appears to be an option for ICTC's full current and future fleet. While all of the factors discussed contributed to the decision, the following are considered to be the most significant:

- Except for a total of 91 required employee parking spaces, the alternative can accommodate the current as well as future fleets
- The admin/ops, maintenance, and fuel and wash buildings meet program. Also, the new maintenance building provides repair bay for 40-foot buses
- There is adequate room for a drive-through fueling operation
- Site circulation is simple with predominately left turns; however, turns are still tight and stacked fleet parking will still be required

The approximate construction cost for the ultimate alternative is between $14 and $15 million. The acceptability of the construction cost, which includes about $960,000 in environmental cleanup, will have to be determined by ICTC.

Next Step Recommendations

The following are recommendations for the next steps in the evaluation process:

- Evaluate other potential sites in the 4.5- to 5-acre size range within the city of El Centro that might be suitable for the proposed program. Candidate sites could include existing buildings and pavements. The evaluation will indicate the availability of potential sites as well as comparative development costs on a "clean" and open site.
- Perform additional evaluation of the Adams Avenue site to determine if the site is viable for a portion of the fleet. ICTC would have to determine if the fleet should be split on a contract basis or a fleet basis. The objective would be to retain more of the existing facilities like Building M and the fuel tank and to have more functions onsite like vehicle fueling.

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Acronyms and Abbreviations

admin/ops	Administration/Operations
Caltrans	California Department of Transportation
ICTC	Imperial County Transportation Commission
IVT	Imperial Valley Transit
MIR	Move-In-Ready
ROM	Rough Order of Magnitude

SECTION 1

Project Description

The expansion of the Imperial Valley Transit (IVT) vehicle fleet has impacted the available space for storage and operations, and has created a need for additional capacity and facility needs. The Imperial County Transportation Commission (ICTC), owner of the entire IVT vehicle fleet, is pursuing the opportunity to acquire the existing California Department of Transportation (Caltrans) Maintenance Yard located at 1605 Adams Avenue in the city of El Centro, California (Figure 1-1). The objective of this project is to complete a comprehensive evaluation of the Caltrans facility assessing ICTC's ability to convert and improve the facility to meet ICTC's existing and future transit needs.

The first step in the evaluation of the Adams Avenue site is the preparation of a viability study to determine if the site is usable on an overall operational and cost basis before proceeding with a detailed evaluation of building and site systems. The viability study is Phase 1 of the process which is summarized in this report.

Figure 1-1. Project Location

SECTION 2

Project Overview and Initial Visit

A consultant team visit was conducted on July 19 through July 21, 2017, in El Centro. The associated work activities included:

- A project kick-off meeting with ICTC, the city of El Centro, Caltrans, First Transit (the ICTC service provider), and the consultant team.
- Walkthroughs and user interviews with First Transit at their Industry Way and Ross Road sites (Figure 2-1).
- A tour and detailed inspection of the Caltrans Adams Avenue site. The consultant team observed and photographed the site and buildings and measured facility features as needed.
- A follow up meeting with the city, in which zoning and other development issues were discussed.

The ICTC project manager was in attendance at all meetings and activities except when the team photographed and measured the Adams Avenue site. Kick-off meeting minutes and three meeting notes were prepared and distributed to attendees and other project stakeholders. The information included in the notes form the basis of the evaluation of the Adams Avenue site.

Figure 2-1. Existing IVT Facility at Ross Road

SECTION 3

Summary of Work Plan

Based on discussions with ICTC during the initial visit, it was agreed that the viability of two alternatives would be evaluated. The alternatives are:

- Move-In-Ready (MIR) Alternative – this alternative is a facility that would accommodate the existing fleet and retain as many of the existing buildings already on the site as feasible.
- Ultimate Facility Alternative – this alternative begins with a clean, empty site and is, therefore, not constrained by existing buildings or utilities.

The work of developing and evaluating the alternatives includes:

- Determination of current and projected staffing for current and future operations. For this item, we used staffing information provided by First Transit.
- Determination of the current and projected future fleet or design fleet with the input of ICTC.
- Preparation of a space program and facility requirements based on user interviews and previous similar projects performed by the consultant team.
- Preparation of alternative layouts for the MIR and Ultimate Facilities.
- The evaluation of these alternatives to determine the extent to which they meet the facility requirements. For example, are there sufficient parking spaces for the fleet, employees and the public?
- The analysis included the use of turning templates to test the circulation of a 40-foot bus around the site. That vehicle was used because it is the largest with the largest turning radius.
- Preparation of a rough order of magnitude (ROM) cost estimate for the MIR and ultimate facilities.
- The preparation of this technical report.

SECTION 4

Existing and Future Staffing

A staffing profile was developed based on information provided by First Transit based on their current operation. The information provided by First Transit is shown in Table 4-1 in columns A and B. Those numbers were used to estimate the information in columns C, D, and E.

Table 4-1. Current and Future Estimated Staffing

Staff Position	Current All Staff (A)	Current "Onsite" Staff (B)	Estimated Future Staff to Add (C)	Estimated Future Staff "Onsite" (D)	Total "Onsite" Including Future (E)
General Manager	1	1	0	0	1
IVT Manager	1	1	0	0	1
IVT Access Manager	1	1	0	1	1
IVT Ride Manager	1	1	0	0	1
MedTrans Manager	1	1	0	0	1
Safety Manager	1	1	0	0	1
Maintenance Manager	1	1	0	0	1
Road Supervisors	5	5	0	0	5
Office Clerk	1	1	0	0	1
Dispatch Manager	1	1	0	0	1
Dispatchers	18	14	1	1	15
Mechanics	6	6	1	1	7
Utility	4	4	1	1	5
IVT Drivers	29	20	7	5	25
IVT Access	12	9	0	0	9
IVT Ride	16	14	0	0	14
IVT MedTrans	3	2	0	0	2
Totals	**102**	**83**	**10**	**8**	**91**

Notes:

1. Columns C and D were estimated by CH2M and confirmed by ICTC.
2. Column E is the sum of columns B and D and represents the estimated number of staff that would be onsite at the same time assuming the expanded fleet. The total in this column is the minimum number of staff parking spaces found in the space program.
3. The total number of future staff will be 112 by summing the totals in Columns A and C.

SECTION 5

Existing and Future Fleet Profile

Fleet information was provided by ICTC including vehicles numbers, types, and dimensions. The information was used to develop a Fleet Profile which was used directly to develop the space program and the follow-on alternative layouts. The Fleet Profile is summarized in Table 5-1. The Current Fleet (Figure 5-1) was used to develop the move-in-ready alternative while the Design Fleet was used for the ultimate alternative.

Table 5-1. Fleet Profile

Contract	Vehicle Description	Nominal Vehicle Length (feet)	Current Fleet	Future Expansion	Design Fleet
IVT	Ford E-450 SUPER DUTY STARCRAFT	26	6	0	6
	Gillig LOW FLOOR	40	16	4	20
IVT RIDE	Ford E-450 LF Transport Champion	28	14	0	14
Blue/Green/Gold Lines	Ford E-450 STARCRAFT ALL STAR	26	5	5	10
IVT Access	Ford E-450 STARCRAFT	22	11	0	11
Med Trans	Ford E-450 STARCRAFT	22	4	0	4
MV1	First Transit Administration	17	1	0	1
	First Transit Maintenance	17	1	0	1
	IVT MV1	17	1	0	1
	IVT Access MV1	17	1	0	1
	IVT Ride MV1	17	1	0	1
	MedTrans MV1	17	1	0	1
IVT	Commuter Bus (Future Service)	40	0	2	2
	Totals		**62**	**11**	**73**

Figure 5-1. Representative Fleet Vehicles

SECTION 6

Facility Functional Requirements

Based on discussions with ICTC and user interviews with First Transit, the following functions have been included in the proposed facility as reflected in the space program. The objective is to create a modern, efficient operations and maintenance facility and not necessarily to replicate the existing operation at the new site.

6.1 Parking

Parking will be provided for the following vehicle types; the sizes of the spaces to be provided will be per the dimensions given in Section 7:

- Revenue fleet including full sized buses and cutaways; parking for the revenue fleet is considered a priority
- Support vehicles including six MV1 Vehicles
- Employee parking
- Public parking
- Handicapped parking
- Bicycles

6.2 Administration/Operations

The administration/operations (admin/ops) function includes:

- Offices for the General Manager as well as the operations managers for IVT, IVT Access, IVT Ride, MedTrans, and safety. An office for the Dispatch Manager is located with the dispatch function and an office for the Maintenance Manager is located in the maintenance building.
- Cubicles for the road supervisors in a dedicated space.
- A dispatching center including a dispatch manager's office, a dispatch office with window to be used for driver assignments, and a dedicated space for the dispatcher cubicles.
- Driver facilities including a ready room with lockers, quiet room, and restrooms.
- Common areas with conference and training rooms, mail rooms, and file/storage rooms.
- Support spaces including electrical, telecom/information technology, and janitors' rooms.

6.3 Revenue Center

The revenue center is programmed as part of the admin function but is programmed as a stand-along facility because it could be located separately on the site. It includes:

- A money counting room which would contain counting tables and the bill and coin counting machines. The room would be a secure room with multiple security cameras and secure walls to prevent break ins.
- An empty fare box room which would be outside the money counting room and is where the empty fare boxes which would replace the full boxes would be stored.

- An armored car pad which is actually a site feature. It would have access to the money counting room.

Note that these spaces and the location of the revenue center in any layout assumes manual fare boxes as are currently in use.

6.4 Maintenance

The maintenance function includes office, employee facilities, shop and bay, and storage spaces as well as the following support spaces:

- Office areas include a maintenance manager's office, a file/copy room, and a manual library. The proposed file/copy room is not for archived files which can be stored separately.
- Employee facilities include a breakroom, lockers, and restrooms. Also, included in the program are showers and a uniform drop off area.
- Repair bays included in the program are large bays for the 40-and 28-foot vehicles and small bays for the 26-, 22-, and 17-foot vehicles. An inspection bay with vertical rise parallelogram lift has been programmed. However, due to space constraints, one of the large bays may have to do double duty to provide the inspection function. Also, the assumption is that portable lifts would be used in all other bays.
- Repair shops programmed include a brake and tire shop. This represents additional capability currently not part of the maintenance function. Also programmed is a generic "clean shop" because of the large amount of electronics currently included on modern vehicles.
- A parts storage area is programmed and includes a space for a parts clerk, secured parts storage, and a secure tool storage area for company-owned specialty tools.
- Shop floor storage is programmed and includes spaces to store portable lifts, mounted tires, and mechanics tools boxes.
- Also included is space for archived record storage. This space, however, could be moved to the admin building depending on layout and space availability.
- Support spaces including electrical, telecom/information technology, and janitors' rooms.

6.5 Vehicle Fueling

Vehicle fueling of diesel vehicles is currently provided by a contracted vendor who fuels in the early hours of the morning. The gasoline vehicles are fueled by their respective drivers. The program provides for onsite, service provider fueling of all vehicle types. Facilities associated with this function include:

- Service area support spaces include a service supervisor's office, a break area with restroom, and a lube/compressor room.
- Two fueling lanes are provided because the diesel and gasoline vehicles fuel on opposite sides. The lanes are separated by an island which will contain product reels, if provided, and the fuel dispensers.

Depending on specific layouts, the revenue center may be part of the service area support spaces. Other spaces may be contingent on the proximity to other site facilities. For example, if a restroom is already within reasonable distance, the restroom may not be provided. However, because the service function is often at a remote part of the site, one is included in the program.

6.6 Vehicle Washing

Currently, exterior cleaning of the vehicles is done manually by the utility workers identified in the staffing matrix. The program provides for both automated vehicle washing and, as an alternative, a manual wash pad. Typically, a facility would have one or the other. The programmed spaces include:

- Space for an automated vehicle washer and the associated equipment room has been programmed. Due to shape and size differences, the proposed washer would be programmable to accommodate both regular 40-foot buses as well as the cutaway buses. A roll over washer may be considered as a less expensive option.
- Also, included as an alternative, is a wash pad and canopy which would accommodate manual exterior cleaning if that is the preferred method. The programmed pad is larger than the existing pad.

SECTION 7

Recommended Dimensional Requirements

Table 7-1 provides a listing of the dimensions of critical facility elements used in the development of the space program. Where applicable, preferred and minimum dimensions are provided. The preferred dimensions are used in the space program computations. Depending on site limitations, minimum dimensions may be used in the preparation of actual layouts.

Table 7-1. Facility Dimensional Criteria

Space Name	Vehicle or Function	Preferred Dimensions (feet)	Minimum Where Applicable (feet)
Repair Bays with Lifting	40- and 28-foot Vehicles	20 x 60	20 x 55
	26-, 22-, and 17-foot Vehicles	20 x 45	20 x 41
	Vertical Clearance	20	--
Flat Bays with No Lifting	40- and 28-foot Vehicles	20 x 60	--
	26-, 22-, and 17-foot Vehicles	20 x 45	--
	Vertical Clearance	15	--
Service (Fueling) Lanes	Service Lanes for 40-foot Bus	12 x 55	--
	Service Lanes for Cutaways	12 x 45	--
	Service Islands	8 x 40	--
Automated Bus Washer	Wash Bay, All Vehicles	25 x 65	--
	Wash Equipment	15 x 40	12 x 30
Manual Wash Facility	Wash Bay	20 x 55	--
Vehicle Parking	40-foot Vehicles	12 x 45	11 x 43
	28-foot Vehicles	12 x 33	11 x 31
	26-foot Vehicles	11 x 30	--
	22-foot Vehicles	11 x 25	--
	17-foot Vehicles	10 x 20	--
	Passenger Cars	9 x 19	--

SECTION 8

Summary of Space Program

A space program was developed to reflect the requirements and criteria presented in fleet, dimensions, and facility functional requirements sections above. A summary of the program is presented in Table 8-1.

Below are observations regarding the space program.

- The space program represents a modern operations and maintenance facility and is not intended to replicate the existing operation.
- If ICTC were to look for a new site, the approximate size recommended would be the 4.7 acres indicated in the program.
- The program reflects the expanded fleet which includes 73 vehicles and is the "Design Fleet" in Table 2. A separate program was not prepared for the MIR alternative.
- The program does not provide for separate service provider contracts for the service modes (IVT, Access, Ride, MedTrans). Separation would result in a significantly larger program due to duplication of spaces not required for a single service provider.
- The program is subject to review and discussion by ICTC and First Transit, if requested. That review is typically done before moving to layouts but was not possible due to the aggressive schedule for Phase 1.
- At 4.7 acres, the program is larger than the Adams Avenue site, which is about 3.7 acres. However, the program was tested with actual layouts. These layouts are discussed in detail in subsequent sections. The use of stacked parking will be critical in fitting the program on the site. Utilizing the stacked parking will limit future growth and also result in difficult bus maneuvering and tight circulation.
- The program is the standard used to evaluate the alternatives. However, the evaluation is not an "all or nothing" situation. An alternative that does not meet all of the program requirements should be automatically rejected. For example, neither of the alternatives provides the program requirements for employee parking. ICTC will have to determine if the parking provided is acceptable or if another solution can be provided (e.g., renting a nearby lot, or finding shared overflow parking in the adjacent areas).
- The admin/ops program is significantly larger than the existing program. The existing admin space is about 1,900 square feet based on the floor plan provided by First Transit vs. the programmed space of about 4,500 square feet. The differences may be explained as follows:
  - Six manager offices in lieu of the four on the existing floor plan
  - Additional conference room and meeting spaces
  - A larger dispatcher area
  - A dedicated space for road supervisors
  - Larger, dedicated support spaces
- The maintenance building program is also significantly larger than the existing program. The existing space is about 3,240 square feet, versus a proposed program of about 12,300 square feet. The differences may be explained as follows:

  - The program includes 4.5 repair bays versus two bays at the existing Ross Road facility. However, based on observation, the service provider appears to be "double loading" each bay. We saw the front of a cutaway and the back of a 40-foot bus being worked on in the same bay at the same time. That would yield an "equivalent" four bays.
  - An undercarriage inspection bay, not included in the existing program, is included. That bay is part of the 4.5 bays mentioned above.
  - Additional shops are included in the proposed program including a brake, tire, and clean shop. These functions are currently being done in the maintenance bays themselves (brake work) or by an outside vendor (tires). The clean shop is a new shop provided in response to the amount of electronics included in new vehicles.
  - The proposed parts storage space is larger.
  - The existing facility has a mezzanine which increases the total area by about 980 square feet. The proposed program shows the space on the ground floor.
- The program site requirements reflect a "future" fleet containing six more 40-foot buses and five more 26-foot cutaways.
- Table 8-1 provides of summary of the proposed space program.

Table 8-1. Summary of Space Program

Function	Area	
	Square Feet	**Acres**
Site Requirements		
Hardscape Patio (admin area)	1,250	0.03
Total	**1,250**	**0.03**
Parking		
Fleet Vehicle Parking	59,298	1.36
Employee Parking	31,122	0.71
Public, Handicapped, and Other Parking	3,570	0.08
Total	**93,990**	**2.16**
Admin/Ops Offices		
Administration	1,248	0.03
Road Supervisions (All Modes)	216	0.00
Dispatching (All Modes)	744	0.02
Driver Facilities (All Modes)	936	0.02
Common Areas	1,013	0.02
Support Spaces	307	0.01
Total	**4,464**	**0.10**
Revenue Center		
Revenue Center Building	859	0.02

Table 8-1. Summary of Space Program

Function		Area	
		Square Feet	Acres
Total		**859**	**0.02**
Maintenance Building			
Office Areas		468	0.01
Employee Facilities		437	0.01
Repair/Inspection Bays		5,957	0.14
Repair Shops		1,830	0.04
Shop Floor Storage Areas		1,726	0.04
Parts Storage		917	0.02
Support Areas		958	0.02
Total		**12,292**	**0.28**
Service			
Fuel Building Offices		643	0.01
Fuel Building Bays		1,824	0.04
Total		**2,467**	**0.06**
Wash			
Bays and Equipment Rooms		2,670	0.06
Wash Pad with Canopy (Alternative to Automated Bus Washer)		1,378	0.03
Total		**4,048**	**0.09**
Subtotal		**119,400**	**2.74**
Gross Site Circulation	Assume to add 50%	59,700	1.37
Subtotal		**179,099**	**4.11**
Landscaping	Assume to add 15%	26,865	0.62
Total Program		**205,964**	**4.73**
		ACTUAL ADAMS SITE AREA	**3.74**

SECTION 9

Summary of Zoning Issue

The Adams Avenue site is currently zoned as General Commercial. Based on that zoning, its current use as a Caltrans maintenance facility is a legally non-conforming use. As a result, the options for modifications to the existing facilities are limited. For example, buildings can be demolished and replaced with the same sized footprint. Intensifying or changing the use is not permitted.

City officials determined that it was their preference to rezone the parcel from General Commercial to Heavy Commercial if the project is to move forward. It is believed that this would be in the best interest of ICTC, the city, and other stakeholders such as surrounding residents. Rezoning process includes:

- The cost is approximately $6,500 for application and processing. That cost does not include required studies and reports.
- The process takes about 6 to 9 months and there is no guarantee of approval.
- General Plan would be amended.
- Environmental impacts would have to be mitigated including noise. Other environmental impacts identified as part of the process would also have to be mitigated.
- A soils study may be required.
- Landscaping requirements for new development of Heavy Commercial is 15 percent based on city requirements. However, the city will work with ICTC to try to meet the spirit of the requirements without creating a fatal flaw situation.

“Pre-zoning” is also available. With pre-zoning, the change would be contingent on the project proceeding. The rezoning is assured assuming approval, however, if the project does not proceed, the zoning would not change. The process for pre-zoning is the same as actual rezoning.

Based on discussions with ICTC, the determination was made that the viability analysis would be made assuming that the site would be rezoned to Heavy Commercial prior to purchase from Caltrans and subsequent development. Rezoning will eliminate the restrictions associated with a non-conforming use.

SECTION 10

Site Development Alternatives

Two site development alternative layouts were developed for evaluation against the program requirements. As mentioned previously, the two alternatives are:

- MIR Alternative
- Ultimate Facility Alternative

The following are descriptions of the features of each of the alternatives.

10.1 MIR Alternative

The objective of this alternative is to develop a facility to accommodate the existing fleet using as many of the existing buildings as feasible. MIR includes renovations required prior to move-in.

The alternative is presented in Attachment MIR-1.

- The main bus entrance/exit has been relocated to the northwest corner of the site as requested by ICTC. The existing entrance will be used for passenger cars and for emergency bus access. The gate shown adjacent to the admin building will be normally closed.
- The following features (Figure 10-1) will be demolished or otherwise removed including underground, at grade, and above grade components. Please reference the Existing Site Plan, for the locations of existing features associated with the letter designations indicated below in parenthesis.
  - The fuel dispensers and outdoor lift and wash facilities (D)
  - The 10,000-gallon fuel tank (H)
  - The raised storage building in the middle of the site (I)
  - The sign shop in the southeast corner of the site (M)
  - Guard building along Adams Avenue (A)

Figure 10-1. Existing Features To Be Demolished at Adams Avenue Site

- The existing pavement (Figure 10-2) is distressed and has a lot of cracks. The pavement will be removed and replaced.

Figure 10-2. Existing Pavement Condition at Adams Avenue Site

- Building B (Admin/Office Building), Building C (Maintenance Staff Building), and Building J/K (Maintenance Building) will be retained and renovated (Figure 10-3). The proposed renovations are presented in Attachments MIR-3, MIR-4, and MIR-5, respectively. Each layout presents pros and cons associated with the upgrades. The renovation does not fully meet the requirements of the program.

Figure 10-3. Existing Features To Be Kept at Adams Avenue Site

- A sound wall will be constructed around the east, west, and south sides of the site to mitigate noise. It is assumed that the wall will have to be constructed approximately 5 feet inside the property line to avoid construction on and undermining of features on adjacent properties.

10.1.1 Comparison of the Move-In-Ready Alternative to the Program

The following is a comparison, by functional areas, of the spaces that were realized in the MIR alternative vs. the space program.

10.1.1.1 Site Requirements

Attachment MIR-6 presents a comparison of the space program versus the MIR alternative. The following is a summary.

- The alternative meets program in terms of fleet parking. Parking is provided for the current fleet of 62 total vehicles. However, 40-foot bus parking is stacked parking, where vehicles are parked nose to tail. The current facility provides for individual parking which allows immediate access to individual vehicles.
- While the alternative accommodates the current fleet of 62 vehicles, it does not accommodate the expanded fleet of 73 vehicles.
- Non-fleet parking is deficient. Only 53 nonfleet parking spaces have been provided in the layout. This is against a program requirement of 83 spaces for current staffing including public and handicapped spaces.

10.1.1.2 Administration/Operations

Attachment MIR-7 presents a comparison of the space program versus the MIR alternative. The following is a summary:

- The alternative provides offices for the general manager as well as all operations managers and the maintenance manager. The sizes of the offices vary as can be seen in the attachment.
- The dispatching space is smaller than called for in the program. The program calls for 620 square feet versus 450 square feet provided in the layout.
- The driver facilities are smaller than program and the layout was not able to provide for a quiet room.
- Separate conference and meeting rooms were not able to be provided. The is a single space which could be used for both. The space is about 338 square feet.
- Support spaces are smaller than the proposed program but are present.
- The Revenue center is located in Building C and is smaller than the proposed program. The adjacent existing concrete pad could be used for armored car transfers.

10.1.1.3 Maintenance

Attachment MIR-8 presents a comparison of the space program vs. the alternative. The following is a summary:

- The layout provides for a maintenance manager's office in existing building J. Because of the large size, the space could also be used for files.
- A bay suitable for 40-foot buses is provided but as new construction. In lieu of new construction, 40-foot buses would have to be maintained in existing bays by partially entering the bay as depicted in MIR-5.
- All three of the existing repair bays would accommodate the cutaway fleet as depicted in MIR-5.
- The existing parts storage area would continue as parts storage. Shelving would have to be provided.
- The following items included in the program were not able to be fit in the existing maintenance building:
  - Repair shops including tire, brake, and clean shop
  - Shop floor storage areas
  - Supply clerk office
  - Mechanics showers and uniform drop off areas

10.1.1.4 Fuel and Wash

Attachment MIR-9 presents a comparison of the space program vs. the alternative. The following is a summary:

- An onsite fueling function could not be accommodated in this alternative. Fueling would have to be performed as it currently is with diesel fleet fueled by a separate vendor and the cutaways fueled by their individual drivers.
- Given the current operation, an automated drive through washer would not be appropriate. A roll over washer may be considered due to its smaller footprint and lower cost.
- Space has been provided in the alternative for new wash pad with canopy.

10.1.1.5 Site Circulation

Attachment MIR-2 shows site circulation associated with the MIR alternative. Items of note include:

- While circulation works in terms of turning radius clearances, circulation is very tight. That includes pull outs and pull ins and turning into the maintenance bays.
- Flow around the site is tedious. That is, a lot of turns are required to navigate around the site.
- It will be difficult for one bus to enter the site if another is exiting. The entrance could be widened but at the expense of employee/visitor parking spaces.
- The MV1 vehicles, which should be close to the admin/ops building, are parked at the far south end of the site.
- Only right turns are possible when exiting the site although that is a characteristic of all alternatives.

10.2 Ultimate Facility Alternative

The objective of the ultimate facility is to develop an alternative beginning from a clean, empty site unconstrained by existing buildings and other features. The goal is to get as much of the space program onto the site. The term “ultimate” means that the use of the site will be maximized and that no additional fleet or buildings can be fit on the site. ICTC could outgrow the “ultimate” alternative. At that time, they will have to acquire a larger or a second site.

The alternative is presented in Attachment UL-1. A discussion of the alternative is presented below.

- The alternative is based on an open site with all of the currently existing buildings and pavements removed. As a result, the layout is unconstrained by existing feature limitations.
- The main bus entrance/exit has been relocated to the northwest corner of the site as requested by ICTC. The existing entrance will be used for passenger cars. This alternative does not provide for an emergency fleet egress.
- All of the existing site features would have to be removed including new or improved features associated with the MIR alternative.
- Some pavements may be saved if moving from the MIR alternative to the ultimate alternative. A more detailed phasing plan would have to be completed to determine how much.
- All buildings shown on the layout are new. None of the buildings or building improvements associated with the MIR alternative are saved.
- All underground utilities are assumed to be new. Current existing utilities are not in the correct locations for the new layout.
- A sound wall will be constructed around the east, west, and south sides of the site to mitigate noise. It is assumed that the wall will have to be constructed approximately 5 feet inside the property line to avoid construction on and undermining of features on adjacent properties.

10.2.1 Comparison of the Ultimate Alternative to the Program

The following is a comparison of the ultimate alternative against the space program for each of the functional areas.

10.2.1.1 Site Requirements

The following is a summary of how the alternative meets the programmatic site requirements.

- Seventy-six employee parking spaces are provided against a program requirement of 91. The fleet parking requirement of 73 spaces is provided and meets program.
- The MV1 vehicles are parked adjacent to the admin/ops building resulting in much better access.
- A significant number of fleet parking spaces, including all of the 40-foot bus parking, is stacked parking.
- Approximately 15 percent landscaping can be provided, contingent on the city's acceptance of 5-foot setbacks around the east, west, and south sides as landscaping areas.

10.2.1.2 Administration/Operations

The alternative layout provides for an admin/ops building with a 5,000-square foot footprint. That meets the program requirement of about 4,500 square feet. The building envisioned would be one story with a public entrance opening onto the automobile parking lot.

10.2.1.3 Maintenance

The alternative layout provides for a maintenance building with a 12,000-square foot footprint. That meets the program requirement of about 12,000 square feet. A pre-engineered building would be used to minimize construction costs.

10.2.1.4 Fuel and Wash

The layout provides for a fueling area and wash building that meet program requirements. An adequate weave distance (distance between the fuel area and the wash building) of about 75 feet has been provided.

10.2.1.5 Site Circulation

Attachment UL-2 shows the site circulation for the alternative. Items of note include:

- The circulation around the site is tight but acceptable. Circulation is generally one-way in a counter clockwise direction which is preferred.
- Circulation is also much more direct than the MIR alternative where getting across the site required multiple turns.

SECTION 11

Order of Magnitude Cost Estimate

11.1 MIR and Ultimate Alternative Cost Estimates

ROM construction cost estimates of both the MIR alternative and the ultimate alternative were added into the Phase 1 scope per ICTC's request. They have been prepared based on each alternative and are shown in Attachments CE-1 and CE-2, respectively. The attachments provide detailed breakdowns for cost items that are specific to each alternative.

- The estimates reflect a project that is at a very preliminary level of development. Scope and quantities will undoubtedly change.
- Both ROM cost estimates include $960,000 to remove hazardous building materials and perform soil remediation due to potential underground storage tank and vehicle lift oil leaks based on the information from available Caltrans environmental report. If the ultimate alternative was the second phase of a two-phase project, this cost could be eliminated.
- Other costs include building and facility work that were discussed in previous sections for each alternative, onsite pavement replacement, fence and sound walls, and offsite sidewalk and driveway improvements.

The approximate construction cost for the MIR alternative is between $4.5 and $5 million and between $14 and $15 million for the ultimate alternative.

The costs for project planning, rezoning, general plan amendment, final design, and construction management are estimated and shown in the attachment. However, they do not include ICTC administration or land costs.

11.2 Transitioning from the MIR to the Ultimate Alternative

If the ultimate alternative is to be Step 2 in a two-step phased site development plan with the MIR as Step 1, the transition from one to the other will be costly and will have a significant impact on the operations during construction. Although the locations of the new buildings shown in the ultimate alternative do not overlap with the existing buildings retained as part of the MIR alternative, so much of the site would be involved in construction that the prudent action would probably be to completely vacate the site during construction. Consequently, transition would tantamount to a completely new project rather than the second step of a two-step plan. Except for the environmental cleanup and, perhaps, some paving and the sound wall, investment associated with the MIR alternative would be lost.

SECTION 12

Alternative Viability and Recommendations

This section of the report presents an evaluation and analysis of the alternatives including critical advantages and disadvantages of each as well as opinions regarding viability and recommendations for next steps.

12.1 Move-in-Ready Alternative

The following is a summary of the pros and cons of the MIR alternative compiled from prior sections of this report. Some of the points apply to both alternatives but are repeated for completeness.

- Rezoning of the site would be prudent if the project was to move to construction.
- Actual land use on the east and south sides of the site is residential. On the west side, the northern two-thirds is commercial and the remaining one-third is residential. There is an existing automotive shop (approximate 0.7 to 0.8 acre in area) to the northwest side of the property.
- There are significant environmental issues that have to be mitigated prior to move-in. These include underground hazardous materials such as underground storage tanks and lift oil leaks.
- Most of the existing buildings will have to be demolished to get acceptable site circulation. As a result, the value of those buildings is lost and the remaining buildings do not contain enough square footage to meet program. This is especially true in the maintenance building.
- The pavement is in poor condition and significant rehabilitation is required. Also, tenant improvement type renovations are required so the alternative as currently configured is not truly move-in-ready.
- The alternative can accommodate the current fleet under a compacted scenario due to tight bus circulation. However, it cannot accommodate the expanded fleet. The existing buildings are in the wrong places for circulation of buses and duplicate paths are required to accommodate circulation.
- Stacked parking is required for the 40-foot buses which complicates fleet movement.
- Employee and public parking is significantly less than indicated in the space program. However, other parking options could be explored such as renting a nearby lot, or finding shared overflow parking in the adjacent areas. Employee carpooling, riding bicycles, or taking public transit will reduce the required number of parking as well.
- The maintenance building is significantly undersized. The tire, brake, and clean shops included in the program cannot be accommodated.
- There is not adequate room for a drive-through fueling operation which is common with most modern operations. It is assumed that contract fueling will continue.
- Only right turns are available when entering and exiting the site. Buses must be traveling eastbound to turn into the site.
- The alternative provides more building space than currently being leased for offices and maintenance. However, there is still no full-sized repair bay for a 40-foot bus unless through new construction.
- Drivers area, dispatch, and some offices are split from the rest of the administration functions which is not ideal. Spaces available do not match program requirements especially if fleet or operations expands in the future.

- Site circulation is complex because there are multiple turns and alternate bus movements for buses to navigate the site. Radius turns are very tight around existing buildings. Bus drivers operational space is surrounded by drive lanes making it less safe.
- There is insufficient area for future expansion of employee or bus parking on this site under this layout. This reduces ICTC future flexibility for budgeting and phasing improvements.
- Current wash bay has some structural issues. Also, it is not long enough to accommodate 40-feet bus wash down under cover. This element should be replaced.
- The existing site and location of the building coupled with space program demands will limit landscaping required by the city.
- The alternative is expensive on this existing site to make it fit ICTC current needs and parking. It adds move-in cost that would not exist if the ultimate layout was constructed initially or the proposed facility was moved to another site. This extra expense includes remediation, new curb cuts, and renovation of buildings that will need to be replaced to make maximum use of the site. For the MIR alternative, the approximate construction cost is between $4.5 to $5 million.

12.1.1 Viability of the MIR Alternative

Based on the findings discussed about, the MIR alternative is not considered a viable option for ICTC's full current and future fleet. While all of the findings factor into the decision, the following are the most significant and are considered the "deal breakers":

- Most of the existing buildings will have to be demolished to get workable site circulation. As a result, the value of those buildings is lost.
- The alternative can accommodate the current fleet. However, it cannot accommodate the future fleet.
- Employee and public parking is significantly less than program requirements.
- The maintenance building is significantly undersized.
- There is not adequate room for a drive-through fueling operation which is typical for most modern bus facilities.
- A repair bay for a 40-foot bus would have to be provided through new construction.
- Site circulation is complex because there are multiple turns and alternate bus movements for buses to navigate the site. Radius turns are very tight around existing buildings and around the vehicle parking areas.

The approximate construction cost for the MIR alternative is between $4.5 and $5 million. The acceptability of the construction cost amount, which includes about $960,000 in environmental cleanup, will have to be determined by ICTC.

However, if ICTC determines that it wishes to split the fleet and operation between more than one facility, the Adams Avenue site may be able to accommodate a portion of the fleet with compromises. That possibility is included in Section 13.

12.2 Ultimate Alternative

The following is a summary of the pros and cons of the ultimate alternative compiled from prior sections of this memorandum. Some of the points apply to both alternatives but are repeated for completeness.

- Rezoning of the site would be prudent if the project was to move to implementation.

- Actual land uses on the east and south sides of the site are residential. On the west side, the northern two-thirds is commercial and the remaining one-third is residential. There is an existing mechanical shop (approximately 0.7 to 0.8 acre in area) to the northwest side of the property.
- There are significant environmental issues that have to be mitigated prior to move-in. These include underground hazardous materials such as underground storage tanks and lift oil leaks.
- All of the existing buildings will have to be demolished to get reasonable site circulation. As a result, the value of those buildings is lost.
- The pavement is in poor condition and significant rehabilitation is required.
- The alternative can accommodate the future fleet. However, it is very constrained for future growth.
- Stacked parking is required for a large portion of fleet and all of the 40-foot buses which complicates fleet movement
- The layout greatly simplifies vehicle circulation and provides counter-clockwise circulation which is preferable.
- This alternative will require a complete utility and site upgrade when it is built over the MIR plan. There is no simple phasing plan to get to this layout from MIR plan. It will likely require temporary relocation of operations.
- The circulation and building consolidation leaves more room for employee and bus parking, increases City required landscaping, and provides room for fueling and wash facilities.
- Except for a total of 91 required employee parking spaces, this layout can meet proposed space program. Narrow parking stall widths (8.5 feet versus 9 feet) could be considered to add more parking. However, it is unlikely that the total number of required employee parking can be met.
- The approximate construction cost for the ultimate alternative is between $14 and $15 million.

12.2.1 Viability of the Ultimate Alternative

Based on the findings discussed about, the ultimate alternative is considered to be a viable option for ICTC's full current and future fleet. While all of the factors discussed contribute to the decision, the following are considered to be the most significant:

- The alternative can accommodate the current as well as future fleets but the site will be compact.
- Except for a total of 91 required employee parking spaces, this layout can meet proposed space program.
- The admin/ops, maintenance, and fuel and wash buildings meet program. Also, the new maintenance building provides repair bay for 40-foot buses.
- There is adequate room for a drive-through fueling operation.
- Site circulation is simple with predominately left turns. However, turns are still tight and stacked fleet parking will still be required.

The approximate construction cost for the ultimate alternative is between $14 and $15 million. The acceptability of the construction cost amount, which includes about $960,000 in environmental cleanup, will have to be determined by ICTC.

12.3 Next Step Recommendations

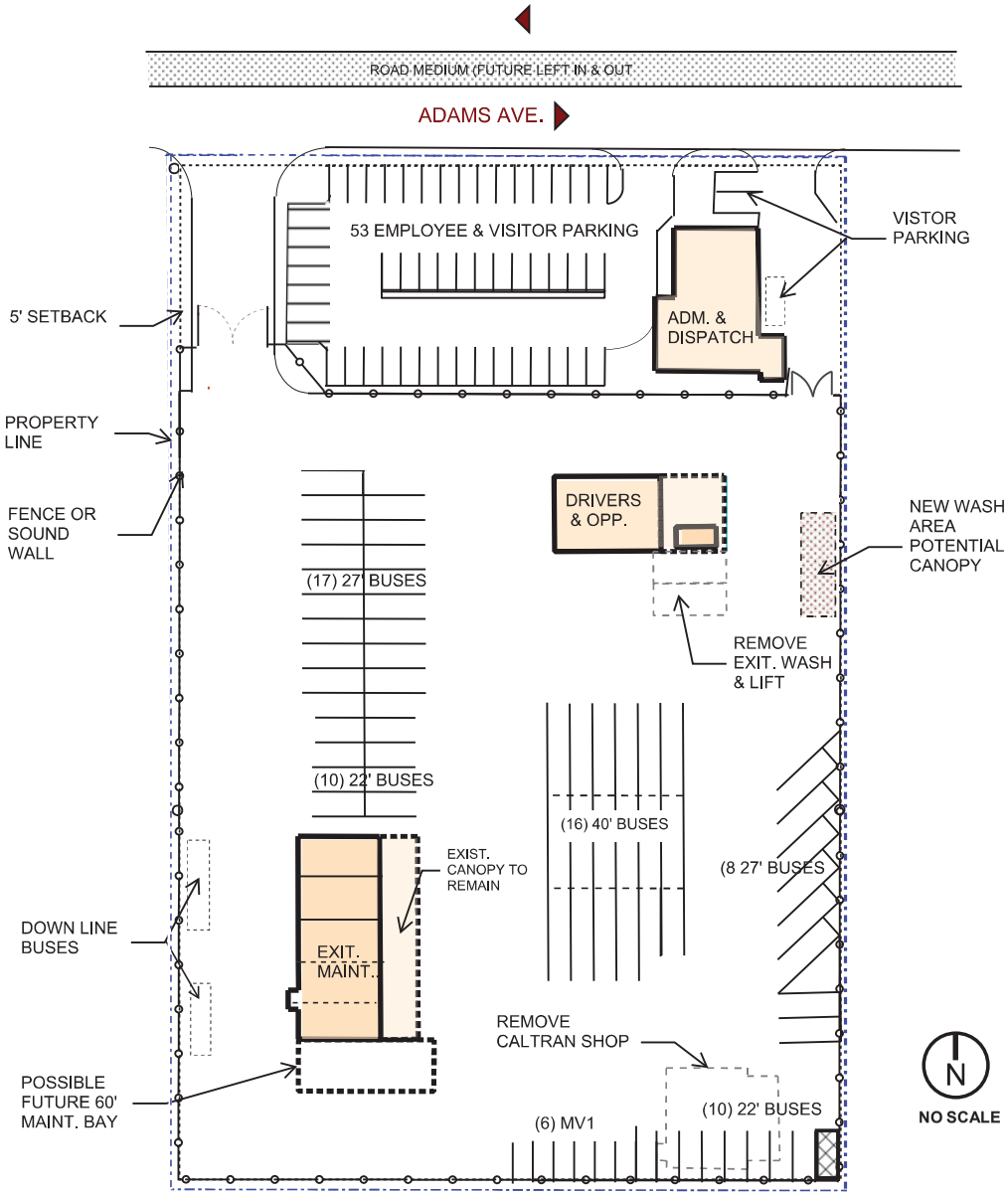
The following are recommendations for the next steps in the evaluation process:

- Evaluate other potential sites in the 4.5- to 5-acre size range within the city of El Centro that might be suitable for the proposed program. Candidate sites could include existing buildings and pavements. The evaluation will indicate the availability of potential sites as well as comparative development costs on a “clean” site.
- If ICTC determines that it wishes to split the fleet and operation between more than one facility, perform additional evaluation of the Adams Avenue site to determine if the site is viable for a portion of the fleet. ICTC would have to determine if the fleet should be split on a contract basis, a fleet basis, or either. The objective would be to determine a fleet configuration that would allow the retention more of the existing facilities like Building M and the fuel tank and allow more functions onsite like vehicle fueling.

ATTACHMENTS

EXISTING SITE MAP

ATTACHMENTS FOR MOVE-IN-READY ALTERNATIVE



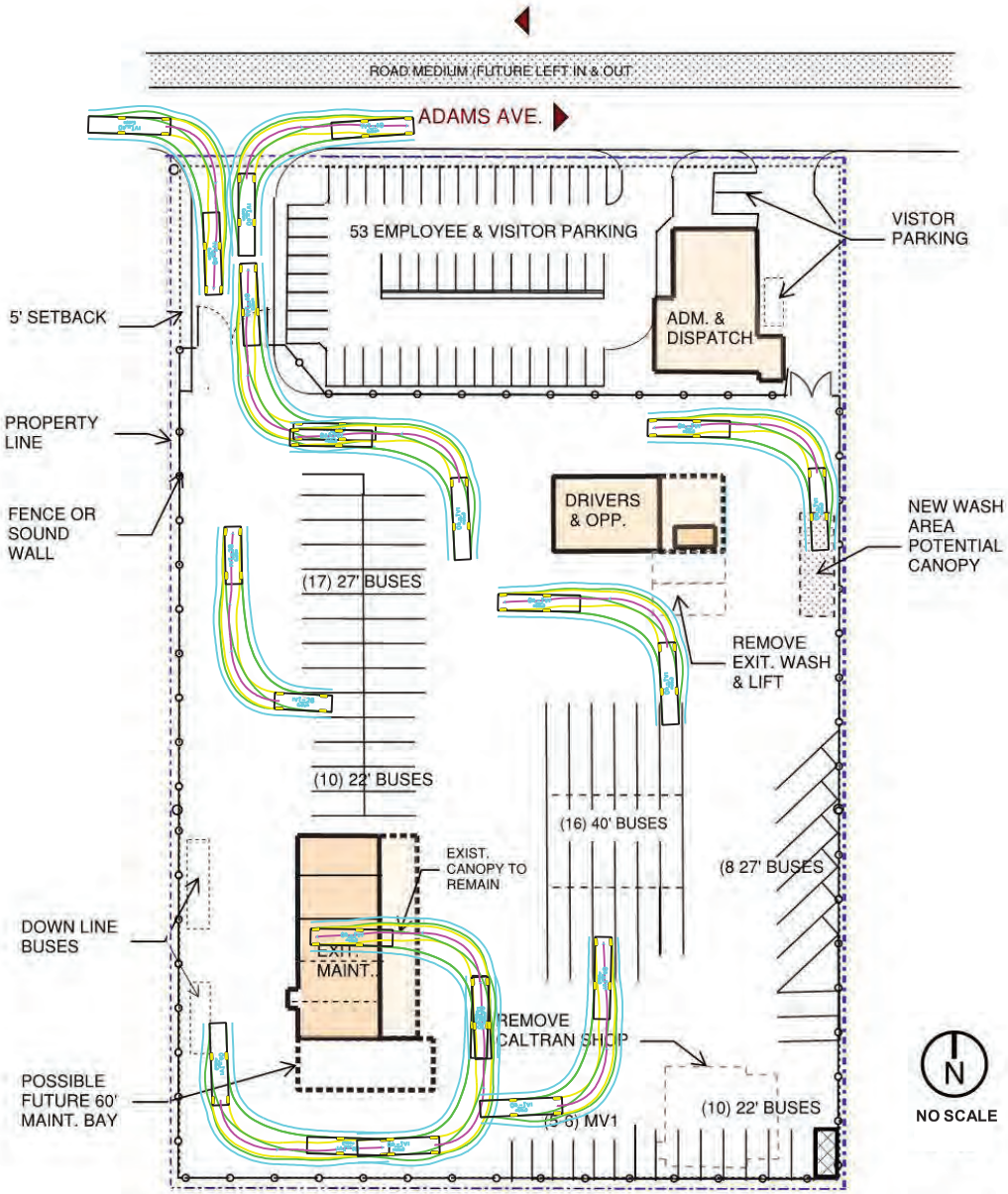
MOVE IN READY LAYOUT

1. Fits some current fleet no room for future expansion
2. No parking for non revenue vehicle or decommissioned buses.
3. Limited employee/visitor parking 53 spaces
4. Tight minimum turning radius.
5. Relocation of wash-bay. Existing canopy not suitable for repair or reuse.
6. No new additional maintenance bays or bay for 40' bus.
7. Five foot buffer around site for sound wall/screening.
8. Need additional road access for employee parking.
9. Landscaping limited +/-10%
10. Fueling by contract with mobile fuel truck NO FUEL ISLAND.
11. Uses existing buildings with three existing structures demolished.
12. Building do not meet current space program but is more then existing space see building diagrams.

PARKING CHECK- BUS

1. 11x45 spaces -- for 40' buses, meets program at 16.
2. 11x30 spaces -- 25 needed for current fleet, meets program
3. 11x25 spaces -- 20 provided, exceeds program
4. 10x20 spaces (for MV1's) -- 6 provided, meets program

ATTACHMENT MIR-1



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PARKING CHECK- BUS

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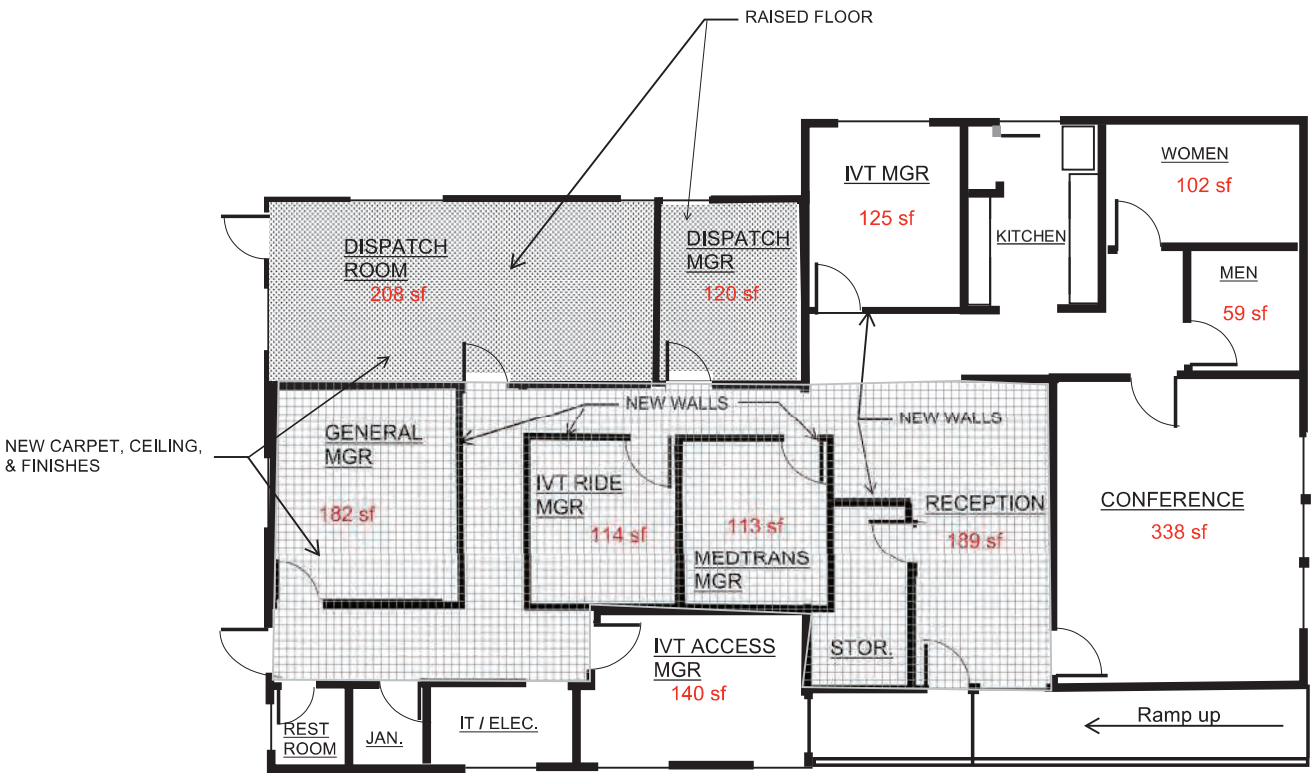
ATTACHMENT MIR-2



2,800 SQUARE FEET (Without Canopies)

TEST PLAN - BLDG B ADMINISTRATION & DISPATCH

NO SCALE

GENERAL NOTES:

1. Rewire data phones & add power outlets to new areas.
2. Repaint all walls
3. Re-carpet all office and hallways.
4. Replace existing lighting.
5. Leave existing parking canopies.

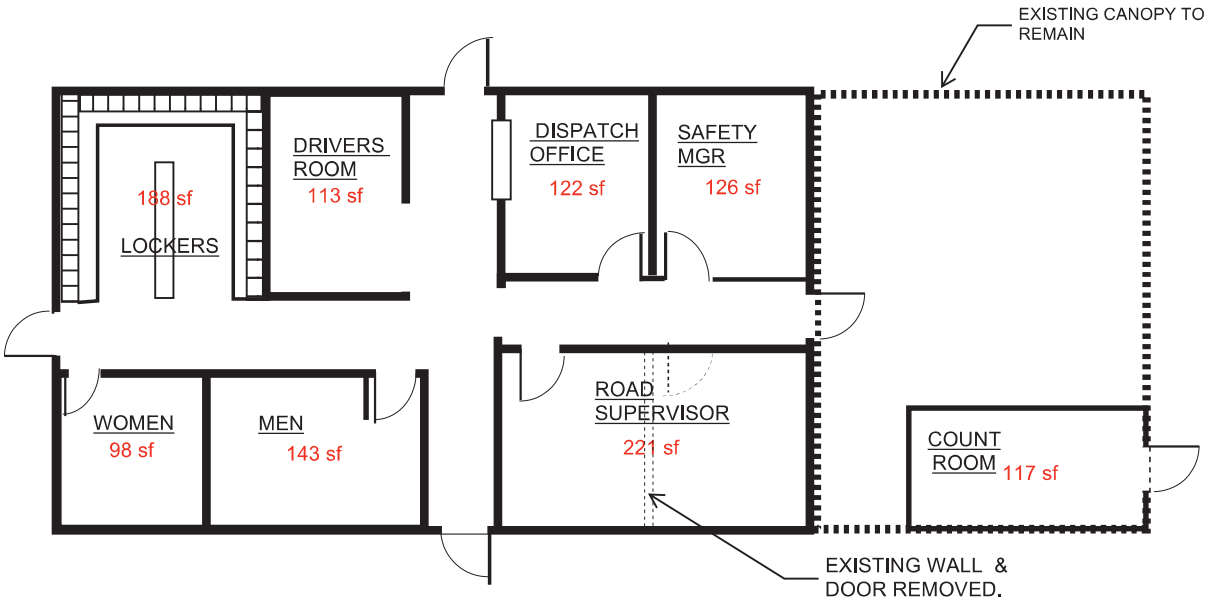
PRO

1. Uses existing building B
2. No roof or exterior wall modifications.
3. No major modifications to restrooms, kitchen, or conference room.

CON

1. Does not meet program
2. Does not consolidate administration and dispatch functions
3. Requires new walls to meet program office spaces.
4. Will require exterior siding replacement
5. Will require elimination of covered parking to provide listed site plan parking spaces.
6. Dispatch room and dispatch managers office will have low headroom (7'-0").
7. Some offices do not have exterior windows.

ATTACHMENT MIR-3



1,500 SQUARE FEET (Without Canopies)

N

TEST PLAN - BLDG C DRIVERS & DISPATCH

NO SCALE

GENERAL NOTES:

1. Rewire data phones & add power outlets to new areas.
2. Repaint all walls.
3. New flooring & base all office and hallways.
4. Replace existing lighting.
5. Leave existing canopies.
6. Complete demolition and renovation of bathrooms.
7. Restrooms likely to become larger in final design
8. All new lockers 1/2 height total 60.

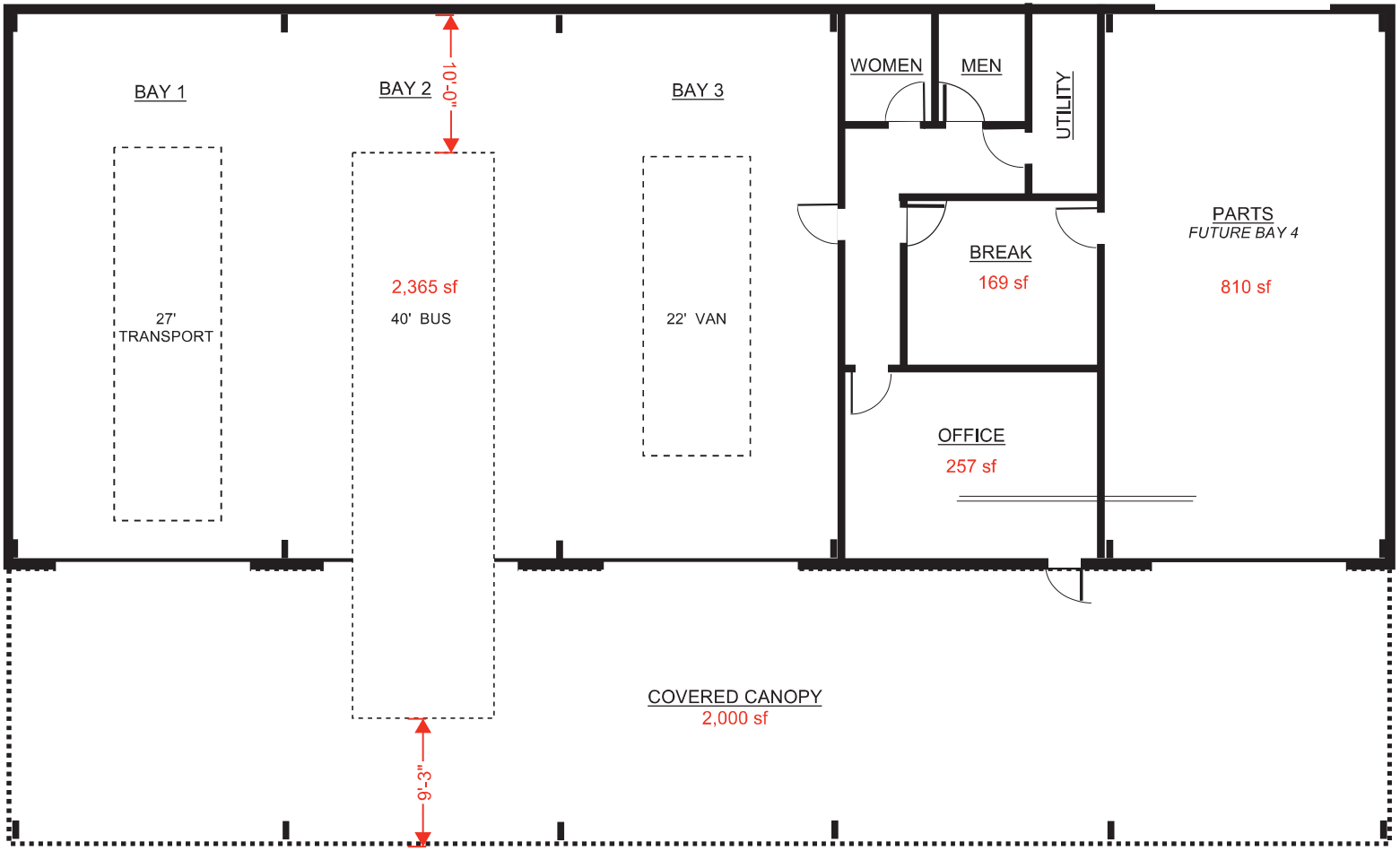
PRO

1. Uses existing building C
2. No exterior wall or roof modifications.

CON

1. Does not meet program
2. Does not consolidate administration and dispatch functions
3. Final Design will need to enlarge restrooms and reduce size of drivers room and locker area.
4. Will require drivers and staff to cross major bus driver area to access site from employee parking.

ATTACHMENT MIR-4



GENERAL NOTES:
1. Rewire data phones.
2. Repaint walls structural. steel.
3. Replace existing lighting.
4. No structural modifications
5. Will require some mechanical upgrades.

PRO
1. Additional bay over existing
2. Isolated from Driver area & Dispatch
3. Existing swamp coolers.
4. Overhead crane available
5. Separate restrooms
6. No major renovation needed

CON
1. Does not meet program
2. Does not fit 40' bus.
3. Clearances at overhead doors tight for transit vehicles

4,133 SQUARE FEET (Without Canopies)

N

TEST PLAN - BLDG K & J MAINTENANCE

NO SCALE

ATTACHMENT MIR-5

Attachment MIR-6

MIR Alternative – Program vs. Layout Comparison for Site Requirements

Space Name	Program		Move-in Ready Alternative	
	Number Each	Area (SF)	Number Each	Area (SF)
Hardscaping				
Hardscape Patio	1	625	1	600
Fleet Vehicle Parking				
Buses -- 40' x 8.5'	16	8,640	16	
Cutaways -- 26' x 8'	11	3,630	26	
Cutaways -- 28' x 8.5'	14	5,544		
Cutaways -- 22' x 8'	11	3,025	15	
Cutaways -- 22' x 8'	4	1,100		
MV1 -- 17' x 6.6'	6	1,200	6	
Tow Truck	0	0	0	
Company Cars	7	1,400	0	
Pickup Truck	1	220	0	
Employee Parking				
Admin/Ops	6	1026	53	
Road Supervisors	5	855		
Dispatching	16	2736		
Drivers	50	8550		
Maintenance	13	2223		
Public, Handicapped, and Other Parking				
Visitor and Public	4	684	Incl. in 53 above	
Handicapped	3	1026		
Bicycle	1	75		

Attachment MIR-7:

MIR Alternative – Program vs. Layout Comparison for Admin/Operations

Space Name	Program		Move-in Ready Alternative	
	Number Each	Area (SF)	Number Each	Area (SF)
Administration				
Reception/Waiting Area	1	200	1	189
General Manager	1	180	1	182
IVT Manager	1	120	1	125
IVT Access Manager	1	120	1	140
IVT Ride Manager	1	120	1	114
MedTrans Manager	1	120	1	113
Safety Manager	1	180	1	126
Maintenance Manager				
Road Supervisions (All Modes)				
Road Supervisors Office	1	180	1	221
Dispatching (All Modes)				
Dispatch Manager	1	120	1	120
Dispatch Office	1	150	1	122
Dispatchers Room	1	350	1	208
Driver Facilities (All Modes)				
Driver Ready Room w/ Lockers	1	450	1	113
Quiet Room	1	180	0	0
Men's Restrooms	1	75	1	143
Women's Restrooms	1	75	1	98
Common Areas				
Multi-purpose Meeting Room/ Training Room	1	450	1	338
Conference Room	1	144	0	0
Mail/Copy	1	100	0	0
File/Storage Room	1	150	1	74
Support Spaces				

ATTACHMENT MIR-7-A

Space Name	Program		Move-in Ready Alternative	
	Number Each	Area (SF)	Number Each	Area (SF)
Electrical Room	1	80	1	56
I.T./Telecom Room	1	80		
Custodial Room	1	48	1	29
Fire Riser Room	1	48	0	0
Revenue Center Building				
Money Counting Room	1	150	1	117
Empty Fare Box Storage	1	80		
Mech/Elect Room	1	36		
Armored Truck Pad	1	450	1	312

ATTACHMENT MIR-7-B

Attachment MIR-8

MIR Alternative – Program vs. Layout Comparison for Maintenance

Space Name	Program		Move-in Ready Alternative	
	Number Each	Area (SF)	Number Each	Area (SF)
Office Areas				
Maintenance Manager	1	120	1	257
Copy/Fax/Supplies/Active Files	1	150		
Manual Library/Computer	1	80	0	0
Janitor's Room	1	40	o	o
Employee Facilities				
Break Room/Kitchenette	1	150	1	169
Lockers, Mechanics	1	150	0	0
Restrooms, Mechanics, Unisex	1	64	2	117
Separate Unisex Shower with Changing Area	2	140	0	0
Uniform Drop Off and Storage	1	120	0	0
Janitor's Room	1	40	0	0
Repair/Inspection Bays				
Large Bay (40' Vehicles)	1.5	1,760	1.0	1,300
Large Bay (28' Vehicles)	0.6	672		
Small Bay (26' and 22' Vehicles)	1.5	1,332	3.0	2,365
Undercarriage Inspection	1	1,200	0	0
Repair Shops				
Brake Shop	1	300	0	0
Tire Shop	1	400	0	0
Common Work Area	2	600	0	0
"Clean" Repair Shop (Electronics, etc.)	1	225	0	0
Shop Floor Storage Areas				
Portable Equip./Lift Storage	1	200	0	0
Tire Storage (Mounted Tires)	1	150	0	0

ATTACHMENT MIR-8-A

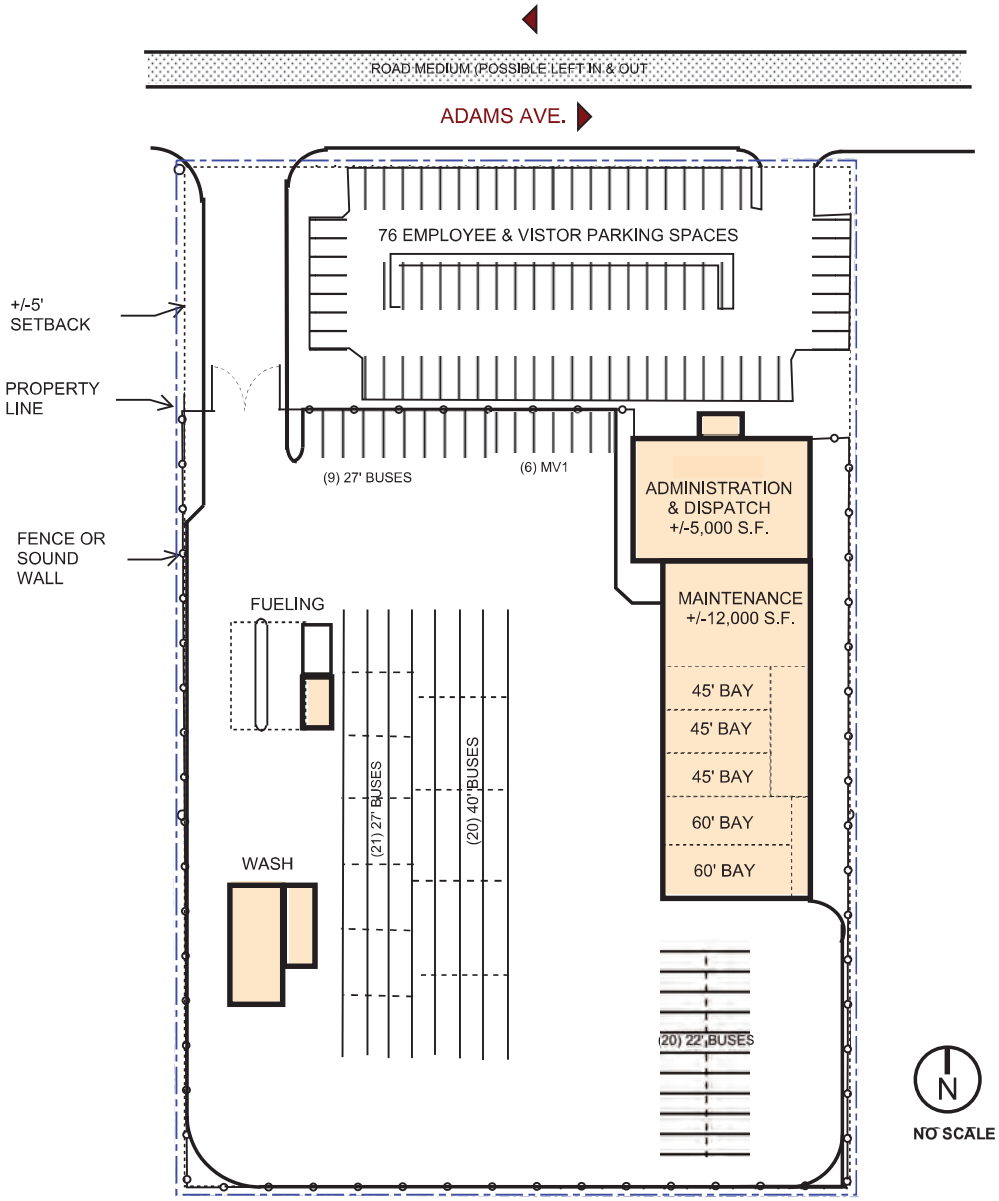
Space Name	Program		Move-in Ready Alternative	
	Number Each	Area (SF)	Number Each	Area (SF)
Mechanics Tool Box Storage	1	288	0	0
Records Storage	1	800	0	0
Parts Storage				
Supply/Clerical Clerk	1	64	0	0
Parts Storage	1	600	1	810
Secure Tool Storage	1	100	0	0
Support Areas				
Lubrication/Compressor Rm	1	400	1	50
Shop Floor Rest Room	1	48	0	0
I.T./Telecom Room	1	120	1	67
Electrical Room	1	150		
Fire Riser Room	1	80	0	0

Attachment MIR-9

MIR Alternative – Program vs. Layout Comparison for Fuel and Wash

Space Name	Program		Move-in Ready Alternative	
	Number Each	Area (SF)	Number Each	Area (SF)
Fuel Building Offices				
Service Office	1	100	0	0
Service Worker Break Area	1	120	0	0
Supply Storage Area	1	100	0	0
Lube/Compressor Room	1	100	0	0
Unisex Restroom	1	36	0	0
Electrical/Server Room	1	80	0	0
Fuel Building Bays				
Diesel Fueling Bay (Right Side Fill)	1	660	0	0
Gasoline Fueling Bay (Left Side Fill)	1	540	0	0
Dispenser Island	1	320	0	0
Bays and Equipment Rooms				
Automated Washer Bay	1	1,625	0	0
Chassis Wash Bay	0	0	0	0
Wash Equipment Room, Common	1	600	0	0
Wash Pad with Canopy (Alternative to Automated Bus Washer)				
Wash Pad with Canopy	1	1,100	1	1,100
Clarifier	1	48	1	48

ATTACHMENTS FOR ULTIMATE ALTERNATIVE



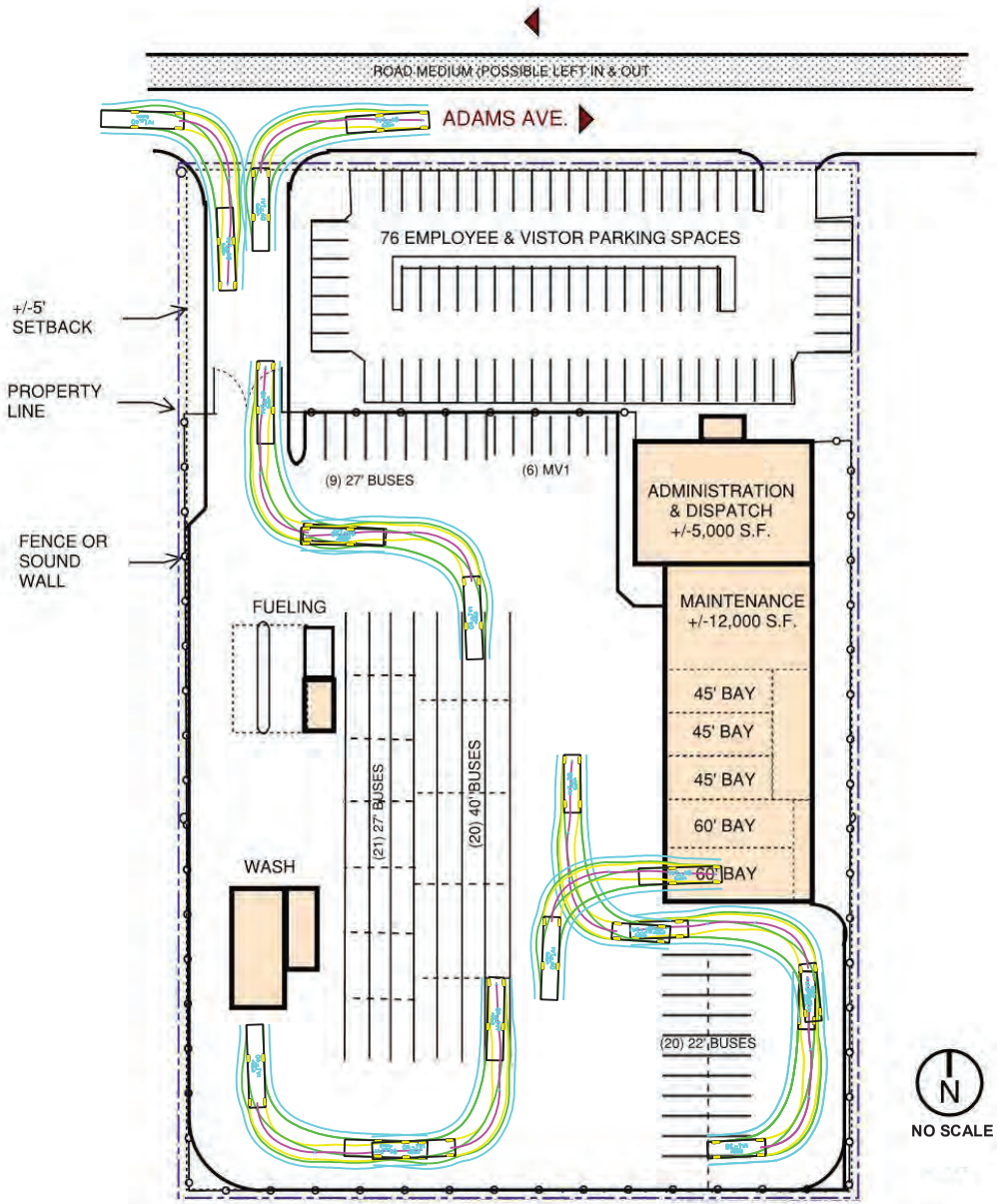
ULTIMATE LAYOUT

1. Fits fleet expansion if repair bays included (75 buses)
2. 76 Employee and visor spaces and does not fit all employees.
3. 5 bays for maintenance plus office and storage
4. Reasonable turning radius.
5. Wash bay and fueling island.
6. Five foot buffer around site for sound wall/screening.
9. Landscaping limited +/-15%
10. Requires complete utility and pavement changes from MIR
11. Meets current and space program building square footage and leaves some room for flexibility or expansion.

PARKING PROGRAM - BUS

1. 11x45 spaces -- for 40' buses, meets program at 20
2. 11x30 spaces -- for 27' buses 30 spaces, meets program
3. 11x25 spaces -- 20 provided, 15 required, exceeds program
4. 10x20 spaces (for MV1's) -- 6 spaces

ATTACHMENT UL-1



ULTIMATE LAYOUT

1. Fits fleet expansion if repair bays included (78 buses)
2. 74 Employee and visor spaces.
3. 5 bays for maintenance plus office and storage
4. Reasonable turning radius.
5. Wash bay and fueling island.
6. Five foot buffer around site for sound wall/screening.
9. Landscaping limited +/-15%
10. Requires complete utility and pavement changes from MIR
11. Meets current and space program building square footage and leaves some room for flexibility or expansion.

PARKING PROGRAM - BUS

1. 11x45 spaces -- for 40' buses, meets program at 20
2. 11x30 spaces -- for 27' buses 30 spaces, meets program
3. 11x25 spaces -- 20 provided, 15 required, exceeds program
4. 10x20 spaces (for MV1's) -- 6 spaces

ATTACHMENT UL-2

ATTACHMENTS FOR ROM COST ESTIMATES

Rough Order of Magnitude Cost Estimates - Move-in Ready

ENVIRONMENTAL CLEANUP (Allowances)

Name	Unit	Quantity (LS)	Description	Potential Upgrade	Unit Price	Cost Estimate
Soil Remediation	LS	1.00	USTs, LIFT, etc.	Yes	900,000.00	900,000.00
Hazardous Building Material Removal	LS	1.00	Removal and disposal of ACM, LBP, and other hazardous	Yes	60,000.00	60,000.00
Total						**$960,000**

BUILDING (Upgrade Allowances)

Building Name	Unit	Quantity	Description	Potential Upgrade	Unit Price/ft2 or LS	Cost Estimate
A - Guard Building	SQFT	364.00	Building A at NW corner to be removed	364.00	20	7,280.00
B - Office/Conference Bldg	SQFT	2,800.00	Administration and Dispatch upgrade	2,800.00	75.00	210,000.00
B- Parking canopies	SQFT	1,000.00	Minor modifications painting structural stability	1,000.00	15.00	15,000.00
C - Maintenance Staff Bldg	SQFT	1,500.00	Drivers, safety and road supervisors	1,500.00	95.00	142,500.00
C - Parking canopy	SQFT	650.00	Parking canopy Minor repair and painting	650.00	15.00	9,750.00
D - Fuel Tank	LS		Fuel station			0.00
E - Lift Station	LS		LIFT Station (Needs Structural Improvement covered with Wash station)	1	10,000.00	10,000.00
F - Wash Station	LS		Wash station (Needs Structural Improvement) need to extend slab drainage area for 40' buses	1.00	175,000.00	175,000.00
H - Diesel Tank	SQFT		Diesel Tank			0.00
I - Storage Bldg	SQFT	2,814.00	Storage (Caltrans Parts). Building I to be removed	2,814.00	25	70,350.00
J & K - Maintenance Bldg	SQFT	2,067.00	Mechanic Canopy. Extend Building J	2,067.00	15	31,005.00
L - Mobile Office	SQFT		Mobile home to be removed by Caltrans			0.00
M - Sign Storage Room	SQFT	2,853.00	Sign Storage room	2,853.00	15	42,795.00
N - Storage area	SQFT		Canopy covered storage to be removed by Caltrans			0.00

ATTACHMENT CE-1-A

O - Haz. Waste Storage Area	SQFT		Haz. waste storage to be removed by Caltrans			0.00
P - Storage Pod	SQFT		Storage pod, to be removed by Caltrans			0.00
Other			4 Trash bins to be removed by Caltrans			0.00
Total		14,048.00				**$714,000**
ON-SITE (Improvement Allowances)						
Name	**Unit**	**Quantity**	**Description**	**Potential Upgrade**	**Unit Price**	**Cost Estimate**
AC Pavement (A=3.0 acres, >10,000sf, Need grading permit)	SQFT	135,640.00	AC PAVING (4" SURFACE)	Yes	5.00	678,200.00
Concrete Pavement along Bus Wheel Path	SQFT	15,840.00	PCC Pavement (0.5' PCC, 1.0' AB)	Yes	15.00	237,600.00
Sound Wall	SQFT	9,040.00	8 feet sound wall	Yes	50.00	452,000.00
Remove Exist Fence	LF	1,130.00	Remove Exist Fence		10.00	11,300.00
Roadway Excavation	CY	2,537.82	Remove Exist Pavement		25.00	63,445.56
Fence	LF	100.00	Fence along Adams Avenue	Yes	100.00	10,000.00
Gate	EA	2.00	Assume Two Gates	Yes	5,000.00	10,000.00
CCTV (Security Cams)	LS	1	Add New CCTV	Yes	50,000.00	50,000.00
Soil Testing	LS	1			10,000.00	10,000.00
Striping and Signs	LS	1	New Pavement Striping, Signs, etc.	Yes	10,000.00	10,000.00
Landscape	LS	1	Landscape/Hardscape	Yes	100,000.00	100,000.00
Total						**$1,633,000**
OFF-SITE (Improvement Allowances)						
Name	**Unit**	**Quantity**	**Description**	**Potential Upgrade**	**Unit Price**	**Cost Estimate**
Demo/Disposal Curb & Driveway	LS	1		Yes	1500	1,500.00
Minor Concrete (Driveway & Sidewalk)	YD^3	3.00	Westside of the site	Yes	6000	18,000.00
Curb and Gutter	YD^3	2.00	Westside of the site	Yes	6000	12,000.00

ATTACHMENT CE-1-B

SWPPP	LS	1.00			6000	6,000.00
Traffic Control	LS	1.00			5000	5,000.00
Total						**$43,000**
Cleanup and Improvement Subtotal:						**$3,350,000**
Mobilization	LS	1	10% of Construction Cost			**$335,000**
Total (cleanup & improvement):						**$3,685,000**
Total Construction Cost with 30% contingency:						**$4,791,000**

Planning and Study	LS	1	Assume 7% of construction cost: Rezoning, GP Amendment, noise study, traffic, air quality, etc.			$335,370.00
Final PS&E	LS	1	Assume 12% of construciton cost: Final Design including GDR, etc.			$574,920.0
Construction Management	LS	1	Assume 15% of construction cost			$718,650.00
			Subtotal:			$1,628,940.00
Total Project Cost						**$6,419,940**

ATTACHMENT CE-1-C

Rough Order of Magnitude Cost Estimates - Ultimate Alternative

ENVIRONMENTAL CLEANUP (Allowances)

Name	Unit	Quantity (LS)	Description	Potential Upgrade	Unit Price	Cost Estimate
Soil Remediation	LS	1.00	USTs, LIFT, etc.	Yes	900,000.00	900,000.00
Hazardous Building Material Removal	LS	1.00	Removal and disposal of ACM, LBP, and other hazardous	Yes	60,000.00	60,000.00
Total						**$960,000**

BUILDING DEMO & NEW STRUCTURE

Name	Unit	Quantity	Description	Potential Upgrade	Unit Price/ft2 or LS	Cost Estimate
A - Guard Building	SQFT	364.00	Building A Demolition	364.00	20	7,280.00
B - Office/Conference Bldg	SQFT	3,264.00	Office B Demolition	3,264.00	20	65,280.00
C - Maintenance Staff Bldg	SQFT	2,977.00	Maintenance shop/office Demolition	2,977.00	20	59,540.00
D - Fuel Tank	LS	1.00	Fuel Station Removal	1	2000	2,000.00
E - Lift Station	LS	1.00	LIFT Station Removal	1	5,000.00	5,000.00
F - Wash Station	LS	1.00	Wash Station Demolition	1	5,000.00	5,000.00
H - Diesel Tank	LS	1.00	Diesel Tank Removal	1	10,000.00	10,000.00
I - Storage Bldg	SQFT	2,814.00	Storage (chemical) Demolition	2,814.00	20	56,280.00
J & K - Maintenance Bldg	SQFT	5,702.00	Mechanic Room. Building J Demolition	5,702.00	20	114,040.00
L - Mobile Office	SQFT		Mobile home to be removed by Caltrans			0.00
M - Sign Storage Room	SQFT	2,853.00	Sign Storage Room Demolition	2,853.00	20	57,060.00
N - Storage area	SQFT		Canopy covered storage to be removed by Caltrans			0.00
O - Haz. Waste Storage Area	SQFT		Haz. waste storage to be removed by Caltrans			0.00
P - Storage Pod	SQFT		Storage pod, to be removed by Caltrans			0.00
Other			4 Trash bins to be removed by Caltrans			0.00
New Admin Building	SQFT		Proposed Admin Building	5,000.00	250	1,250,000.00
New Maintenance Building	SQFT		Proposed Maintenance Building	12,000.00	250	3,000,000.00
New Wash Station	SQFT		Proposed Wash Station	3,000.00	150	450,000.00

ATTACHMENT CE-2-A

New Fuel Station	SQFT		Proposed Fuel Station	2,000.00	200	400,000.00
Total						**$5,482,000**
ON-SITE (Improvement Allowances)						
Name	**Unit**	**Quantity**	**Description**	**Potential Upgrade**	**Unit Price**	**Cost Estimate**
Concrete Pavement	SQFT	143,528.00	PCC Pavement (0.5' PCC, 1.0' AB)	Yes	15.00	2,152,920.00
Sound Wall	SQFT	9,040.00	8 feet sound wall	Yes	50.00	452,000.00
Remove Exist Fence	LF	1,130.00	Remove Exist Fence		10.00	11,300.00
Roadway Excavation	CY	7,973.78	Remove Exist Pavement		25.00	199,344.44
Fence	LF	100.00	Fence along Adams Avenue	Yes	100.00	10,000.00
Gate	EA	2	Assume Two Gates	Yes	5,000.00	10,000.00
CCTV (Security Cams)	LS	1	Add New CCTV	Yes	50,000.00	50,000.00
Soil Testing	LS	1			10,000.00	10,000.00
Storm Drain System	LS	1	New Drainage Systems with New Grading	Yes	50,000.00	50,000.00
Sewer System	LS	1	New Sewer for Buildings	Yes	50,000.00	50,000.00
Water Lines	LS	1	New Water Lines for Buildings	Yes	100,000.00	100,000.00
Striping and Signs	LS	1	New Pavement Striping, Signs, etc.	Yes	10,000.00	10,000.00
Electrical	LS	1	Power, Comms, etc.	Yes	100,000.00	100,000.00
Landscape	LS	1	Landscape/Hardscape	Yes	100,000.00	100,000.00
Total						**$3,306,000**
OFF-SITE (Improvement Allowances)						
Name	**Unit**	**Quantity**	**Description**	**Potential Upgrade**	**Unit Price**	**Cost Estimate**
Demo/Disposal Curb & Driveway	LS	1			1,500.00	1,500.00
Minor Concrete (Driveway & Sidewalk)	YD^3	3.00	Westside of the site	Yes	6,000.00	18,000.00
Curb and Gutter	YD^3	2.00	Westside of the site	Yes	6,000.00	12,000.00
SWPPP	LS	1			10,000.00	10,000.00
Traffic Control	LS	1			5,000.00	5,000.00

ATTACHMENT CE-2-B

Total						**$47,000**
Cleanup and Improvement Subtotal:						**$9,795,000**
Mobilization	LS	1	10% of Construction Cost			**$980,000**

Total (cleanup & improvement):	**$10,775,000**
Total Construction Cost with 30% contingency:	**$14,008,000**

Planning and Study	LS	1	Assume 3% of construction cost: Rezoning, GP Amendment, noise study, traffic, air quality, etc.			$420,240.00
Final PS&E	LS	1	Assume 12% of construciton cost: Final Design including GDR, etc.			$1,400,800.0
Construction Management	LS	1	Assume 15% of construction cost			$2,101,200.00
Subtotal:						$3,922,240.00
Total Project Cost						**$17,930,240**

ATTACHMENT CE-2-C