LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY
1362 Rutan Court, Suite 100
Livermore, CA 94551

PROJECTS and SERVICES COMMITTEE MEETING / COMMITTEE OF THE WHOLE

COMMITTEE MEMBERS

KARLA BROWN – CHAIR **SCOTT HAGGERTY**
DAVID HAUBERT - VICE CHAIR **STEVEN SPEDOWFSKI**

DATE: Monday, January 26, 2015

PLACE: Diana Lauterbach Room LAVTA Offices
1362 Rutan Court, Suite 100, Livermore

TIME: 4:00p.m.

AGENDA

1. **Call to Order**

2. **Meeting Open to Public**

   - Members of the audience may address the Committee on any matter within the general subject matter jurisdiction of the LAVTA Board of Directors.
   - Members of the audience may address the Committee on items on the Agenda at the time the Chair calls for the particular Agenda item.
   - Public comments should not exceed three (3) minutes.
   - Agendas are published 72 hours prior to the meeting.
   - No action may be taken on matters raised that are not on the Agenda.

3. **Minutes of the November 24, 2014 Meeting of the P&S Committee.**

   Recommendation: Approval

4. **Queue Jump Repair – Update**

   Recommendation: None – Information only

5. **Clipper Implementation**

   Recommendation: None – Information only.

6. **Bus Stop Management**

Recommendation: None – Information only.

7. Atlantis O&M Facility

Recommendation: Staff recommends the Committee forward to the Board to direct staff to take the Atlantis Facility project out of abeyance so that funding can be aggressively pursued for Phases III through VI. Additionally, recommend that the Board direct staff to search for leasing opportunities to offset the costs of the Atlantis site until such time as the facility is fully constructed and utilized.

8. Preview of Upcoming P&S Committee Agenda Items

10. Next Meeting Date is Scheduled for: February 23, 2015

11. Adjourn

Please refrain from wearing scented products (perfume, cologne, after-shave, etc.) to these meetings, as there may be people in attendance susceptible to environmental illnesses.

In the event that a quorum of the entire Board is present, this Committee shall act as a Committee of the Whole. In either case, any item acted upon by the Committee or the Committee of the Whole will require consideration and action by the full Board of Directors as a prerequisite to its legal enactment.

I hereby certify that this agenda was posted 72 hours in advance of the noted meeting.

/s/ Diane Stout	*1/21/15*
LAVTA Administrative Services Department	*Date*

On request, the Livermore Amador Valley Transit Authority will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. A written request, including name of the person, mailing address, phone number and brief description of the requested materials and preferred alternative format or auxiliary aid or service should be sent at least seven (7) days before the meeting. Requests should be sent to:

Executive Director
Livermore Amador Valley Transit Authority
1362 Rutan Court, Suite 100
Livermore, CA 94551
Fax: 925.443.1375
Email : frontdesk@lavta.org

AGENDA

ITEM 3

LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY
1362 Rutan Court, Suite 100
Livermore, CA 94551

PROJECTS and SERVICES COMMITTEE MEETING / COMMITTEE OF THE WHOLE

COMMITTEE MEMBERS

KARLA BROWN – CHAIR **SCOTT HAGGERTY**
TIM SBRANTI - VICE CHAIR **BOB WOERNER**

DATE: Monday, November 24, 2014

PLACE: Diana Lauterbach Room LAVTA Offices
1362 Rutan Court, Suite 100, Livermore

TIME: 4:00p.m.

Back To Agenda

MINUTES

1. **Call to Order**
   Committee Chair Karla Brown called the meeting to order at 4:05pm.

   Members Present
   Karla Brown, Councilmember, City of Pleasanton
   Scott Haggerty, Supervisor, Alameda County (arrived at 4:30pm)
   Don Biddle, Vice Mayor, City of Dublin
   Members Absent
   Bob Woerner, Vice Mayor, City of Livermore
   Tim Sbranti, Mayor, City of Dublin

2. **Meeting Open to Public**

   None.

3. **Minutes of the October 27, 2014 Meeting of the P&S Committee.**
   Director Brown requested a change in word spelling on page 2.

   Approved: Biddle/Brown
   Aye: Biddle, Brown
   No: None
   Not present for vote: Haggerty

4. **Quarterly Report – Operations**

   Staff provided a report on Operations for the first quarter of fiscal year 2015. The

report included a summary and analysis of operational statistics. Fixed route shows a slight decrease in average daily ridership compared to last year for Monday thru Saturday service. Sunday service showed a slight increase, largely due to the improved service to the Livermore Premium Outlets on Sundays. On-Time performance remains relatively stable in the first quarter with a slight decrease over the same time period as last year. Karla Brown was disappointed to see that the on-time performance went from 81.4% down to 80.3% from last year and she briefly discussed potential modifications to the 70 line to improve its OTP Paratransit operation shows an upward trend with passengers and trips and there is a 10% increase in passengers compared to last year during the same time period. Paratransit OTP has improved significantly compared to when the new contractor first started providing service. Compared to the first quarter of last year, OTP for Paratransit is down 1% but steadily increasing each month. Customer service complaints are down compared to the same time period as last year. The Committee likes the yearly quarter to quarter comparison rather than the month to month comparison and feel staff is on the right track for charting data.

5. First Quarter 2015 Marketing and Outreach Activities

Staff provided an update on Marketing and Outreach activities implemented during the first quarter of fiscal year 2015. Staff also provided an update on activities currently planned for the remainder of fiscal year 2015. Upcoming activities and events include; Stuff A Bus food drive on December 6, 2014, February Service changes, Spring Foothill High School Free Ride Campaign, and the Wheels Bus Book. The Committee would like to see Dublin High School included in the Free Ride Campaign/student ambassador program Staff will begin discussions with Dublin High in early 2015, but may not be able to implement the program until the 2015/2016 school year.

6. Dial-A-Ride Passenger Follow-Up Survey

Staff provided information on the follow up Dial A Ride survey given to respondents this past October 2014. Of the original 30 respondents, staff was able to reach approximately 20 for the follow-up survey. The survey shows rider satisfaction has improved significantly in all categories from the previous responses received.

7. Comprehensive Operational Analysis – Scope Modification

Staff provided a recommendation to the Committee of adding an additional base task to the scope of work to the Request For Proposals for the Comprehensive Operational Analysis (COA). The base task to be added would be to ask consultants to make recommendations for the Wheels bus network within a 2040 timeframe, utilizing a phase approach for service implementation. To allow for this modification to the scope of work, the due date for submitting proposals will be extended to January 9, 2015.

8. Preview of Upcoming P&S Committee Agenda Items

10. Next Meeting Date is Scheduled for: January 26, 2015

11. Adjourn

Meeting adjourned at 4:55pm.

AGENDA

ITEM 4

LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY

STAFF REPORT

SUBJECT: Queue Jump Repair - Update

FROM: Dave Massa, IT Analyst

DATE: January 26, 2014

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Action Requested
Informational item only. No action required.

Background
This report is intended to provide the Committee with an update of the repair of the two intersection queue jumps on the Rapid line.

Discussion
There are two existing intersection queue jumps in the LAVTA service area that were introduced in January 2011 as part of the Rapid line deployment. The first is located in Livermore at the intersection of Stanley Blvd and Murrieta Blvd in the westbound direction. The second is located in Dublin at the intersection of Dublin Blvd and Dougherty Road in the westbound direction. The queue jumps allow for a Rapid bus to enter the right-turn only lane and pull up to the select intersection when the westbond lights are red. After the intersection is cleared, that bus receives a bus only signal allowing it to proceed through the intersection. The bus-only signal is active for eight seconds, and over the course of the day, can save the Rapid buses travel time and improves on-time performance.

Unfortunately, for at least a year, the two queue jumps have been out of service. Staff has been working diligently to determine the cause of the faulty queue jumps and to coordinate system repairs. Staff first assessed the functionality of the Traffic Signal Priority (TSP) on all the buses to ensure that the TSP emitters are working. The emitters are the hardware that signal the intersection to allow the bus priority. After determining that the emitters onboard the buses were functional, Staff began to work with the TSP/signal manufacturer Western Pacific (WSP), as well as the two jurisdictions, to diagnose the problems.

In Dublin, there was a faulty emitter detection card at the intersection that wasn't recognizing the buses when they approached the intersection. This problem has been addressed by the City of Dublin and the signal is now recognizing the Rapid buses when they approach the intersection, and triggering the bus-only signal. In Livermore, there were a series of issues that necessitated a repair contract with WSP in the amount of $2,200. Unfortunately, after the repair work at the intersection was complete, the queue jump signal remained broken. The

City of Livermore is continuing to work with WSP to install a firmware update. WSP is currently testing the firmware at their facility, and the estimated timeframe for completion of the repair is one month.

Next Steps
Staff is working with the service contractor to design a set of training materials to be used in the February operations safety meetings. The contractor is also going to create a video that will reflect the operating scenarios for the queue jump (when to proceed to the right turn lane, when to continue forward in the general lanes, what the queue jump looks like when activated, etc.) Once operators have been retrained and both intersections are functional, the queue jumps will be put back into use by the Rapid buses and monitored on an ongoing basis.

Recommendation
None – information only.

AGENDA

ITEM 5

LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY

STAFF REPORT

SUBJECT: Clipper Implementation

FROM: Christy Wegener, Director of Planning and Communications

DATE: January 26, 2015

Back To Agenda

Action Requested
Informational item only. No action required.

Background
This report is intended to provide the Committee with an update of the implementation of the Clipper ® card on the Wheels bus system. Final implementation is scheduled for October 2015.

Discussion

Business Rules
During summer 2014, MTC facilitated several meetings with County Connections, Tri Delta Transit, LAVTA and WestCat (East Bay Operators) to discuss the implementation of Clipper. The East Bay Operators are considered the third phase of Clipper implementation, following the early implementers (BART, Muni, AC Transit, etc.) and the second phase (Napa, Solano, etc.).

The scope of work for Clipper implementation, led by MTC and the Clipper vendor Cubic®, prescribes that the East Bay Operators be considered *one operator* under our phase of implementation. Therefore, agreement needed to be reached on several key items before Clipper could be launched, including business rules that structured fares, and defined fare categories, e-passes and transfers. The following table identifies the items that the East Bay Operators discussed, and details the decision points that have been finalized into the business rules:

Item	Decision
Transfer time window	120 minutes
Minimum eCash balance	$1.75 regular/ $0.75 senior/ADA
Passback time	5 minutes
Age categories	Youth 6-18, senior 65+
Number of free intra-operator transfers	1
ePass product	31 day pass

Discussion about Transfers: There was a significant amount of discussion regarding the transfer policy under the Clipper system. Specifically, the scope of work for Cubic® only allows programming for one transfer within the designated time window. This is not consistent with LAVTA's current paper transfer policy, where unlimited transfers are allowed within the 120-minute time window. Because each of the Operators had a different paper transfer policy, the final compromise reached was that one transfer will be allowed on Clipper within the designated time window of 120-minutes.

Since agreeing on the business rules in early fall, MTC informed the East Bay Operators that Cubic® is looking to create a *day pass accumulator* that would result in an the automatic purchase of a day pass (and unlimited rides for that day) once a pre-determined dollar threshold has been met. Currently there are day pass accumulators on Clipper on the VTA and AC Transit systems. The dollar amount for the East Bay Operators' day pass accumulator has yet to be finalized, but will also need to be agreed upon by each of the four operators. Implementing a day pass accumulator on Clipper will be more in-line with the unlimited paper transfer policy that is currently in place at LAVTA. A fare equity analysis per Title VI regulations will likely need to be conducted before a new fare media can be introduced into the LAVTA system.

Site Visits

In early fall, Cubic® had two separate crews conduct site visits at LAVTA. The first crew to visit reviewed the different bus types and configurations to determine the best possible locations for the equipment to be placed within each bus in LAVTA's fleet. The second crew's visit was to analyze network infrastructure and signal strength requirements. During the second visit, an antenna was placed throughout various locations in both the Rutan and Atlantis facility to simulate, check and ensure maximum WIFI coverage throughout both bus storage yards. MTC has sent documentation with the final schematics for the on-site network infrastructure, as well as fleet schematics, which LAVTA has reviewed and approved.

Marketing and Communications

In December, LAVTA Marketing staff coordinated a meeting with the three East Bay Operators and MTC staff to discuss the implementation, and to begin the development of a public outreach and promotion plan as part of the Clipper implementation. The group is scheduled to meet bi-monthly, with the next meeting to be held in February 2015.

Next Steps

Staff expects to hear next steps from MTC and Cubic® regarding the timeline for installation by the end of January 2015. The revenue ready date for Clipper is scheduled for October 2015.

Recommendation

None – information only.

AGENDA

ITEM 6

LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY

STAFF REPORT

SUBJECT: Bus Stop Management

FROM: Christy Wegener, Director of Planning and Communications
Bev Adamo, Director of Finance and Administration

DATE: January 26, 2015

Back To Agenda

Action Requested
Informational item only. No action required.

Background
This report is intended to provide the Committee with an update of ongoing bus stop management and improvement efforts.

Discussion
There are over 1,000 bus stops in the LAVTA service area and these bus stops serve as a gateway to the Wheels bus system. Many riders' first impressions of the service can come from the appearance, cleanliness and amenities of the bus stops and shelters. Keeping the bus stops and shelters in a state of good repair, as well as improving the stops, has become a challenge due to a lack of ongoing resources.

Inventory
There are several different types of bus stops in the LAVTA service area, including:

Curb stencils: These stops are marked on the curbs and are typically located in residential neighborhoods where school tripper service is offered. However, on some occasions, mainline service is also provided at these stops.

Poles/Flags: These stops are marked with an aluminum or metal pole and a Wheels bus stop flag that typically displays the route number serving that stop.

Shelters: These stops are marked with a shelter (enclosed or semi-enclosed), and usually also have a pole/flag located in the nearby area. There are several types of shelters in the service area, including Rapid and Hacienda styles, as well as shelters installed per the specifications from previous manufacturers such as Tolar, Ace Aluminum, and Rockwell. Pictures of the different styles of bus shelters are in Attachment 1.

Improvement Efforts

Every five years, the Agency conducts an inventory of bus stops to update geographic location, assess amenities and ADA accessibility, and catalog any new stops that have been added into the system. For the past two years, the Agency has received grant funding to make ADA improvements at selected stops, resulting in 17 new ADA accessible stops in the service area since 2013. In FY2016, the Agency will again be updating the bus stop inventory, which will be used to develop the first bus stop improvement program that will not only identify stops that need ADA improvements, but also stops that are ideal locations for amenity improvements such as shelters or street furniture.

Ongoing Maintenance Issues

As you may be aware, there have been several complaints about the appearance of shelters, especially the Rapid shelters, which have been vandalized on an ongoing basis. Currently, there are almost 50 broken panels of glass and/or worn plexiglass panels at Rapid stops. The Finance and Administration Department is managing the repair/replacement panel project and expects to have all panels repaired by April 2015.

Graffiti is another major issue that occurs at the many of the sheltered stops in the system. The current LAVTA bus shelter cleaning contract with Aim to Please includes a provision for cleaning graffiti, which is done when the shelters are cleaned (frequency of cleaning is based on a tiered system; high ridership or sheltered stops are cleaned more often.) LAVTA budgets approximately $133,000 annually for the bus shelter cleaning contract with Aim to Please. This does not include costs for major repairs, which are done by an MV staff member on an as needed basis and when time allows. A full-time bus stop maintenance technician, who could also repair real-time signs as needed, is not currently in the budget but could also be considered.

Potential Funds

One of the primary obstacles to installing new shelters isn't the capital cost of the shelters, but is the ongoing maintenance costs associated with keeping them clean and in a state of good repair. The Agency is currently looking into innovative funding mechanisms and grant opportunities to install new shelters, as well as to keep the shelters in a state of good repair.

One potential way to offset or reduce the annual maintenance costs is to consider entering into a bus shelter advertising contract, which is a public-private partnership for installing and maintaining shelters. There are several examples of successful shelter advertising programs throughout the Country. In many of these programs, existing shelters are retrofit with a single advertising panel and new advertising shelters are installed throughout the service area. In doing so, the advertising contractor assumes responsibility for cleaning the advertising shelters. In some models, the Agency would also receive a portion of the advertising sales.

Like LAVTA's bus advertising program, the type of ads on the shelters can be strictly regulated by Board policy. Additionally, not all new shelters would necessarily have advertising on them; the percent of advertising shelters could be set by Board policy and negotiated with a contractor. In any program, there would continue to be ongoing bus shelter maintenance costs associated with any shelters that are not retrofit with ad panels, but the annual cost to the Agency would be reduced.

Next Steps
Depending on Board direction, staff can bring back more information on the potential costs of hiring a full time bus stop maintenance staff member, or potential bus shelter advertising models.

Recommendation
None – information only.

Attachments
1. Examples of Bus Stop Shelters

Hacienda Shelter

Rapid Shelter

Tolar Shelter

Rockwell Shelter

ACE Shelter

AGENDA

ITEM 7

LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY

STAFF REPORT

SUBJECT: Atlantis O&M Facility

FROM: Michael Tree, Executive Director

DATE: January 26, 2015

Back To Agenda

Action Requested
Direct staff to take the Atlantis Facility project out of abeyance so that funding can be aggressively pursued for Phases III through VI. Additionally, direct staff to search for leasing opportunities to offset the costs associated with the Atlantis site until such time as the facility is fully constructed and utilized.

Background
By the late 1990's, LAVTA had outgrown its operations, maintenance and administrative facility ("Rutan Facility"), and was renting space at the Livermore Airport in an effort to store buses that could not be accommodated at the Rutan Facility.

In 2005, LAVTA contracted with Carter Burgess to generate a Facility Master Plan Document and Design Criteria to address LAVTA's current and future needs at a newly acquired 9 acre site which is located in the Oaks Business Park on Atlantis Court in Livermore ("Atlantis Facility"). The plan recommended that all LAVTA administration, operations and maintenance are best suited in a consolidated facility at the new Atlantis site. The Master Plan was finalized in 2006. In 2007, a cost-benefit analysis of a consolidated facility vs two facilities was completed. And, in 2008, Atlantis Facility Conceptual Plans were completed.

With the great recession that began in 2007, and the accompanying drop in services and ridership in 2009, the original Facility Master Plan and Conceptual Plans no longer addressed the current needs of the agency. Additionally, LAVTA was moving toward a brokerage model for paratransit services that no longer required the agency to purchase and maintain a paratransit fleet. Finally, the Central Contra Costa Transit Authority that operates County Connection had given notice that it no longer intended to utilize the Atlantis Facility to store and maintain a portion of its bus fleet.

With these facts in mind, staff requested in 2013, that Gannett Fleming review the original 2006 Facility Master Plan and the 2008 Conceptual Plans to determine the aforementioned impacts on plans and programming. Gannett Fleming's scope of work included a new space program, revised conceptual plans that would leave the overall aesthetics to the building structures intact (see Attachment #1 for conceptual of Atlantis Facility), and an order of magnitude cost estimate to meet the current (2013) and projected growth (2030) needs for

LAVTA's Atlantis Facility, with the ultimate goal being to build the facility and sell or lease the Rutan Facility.

Gannett Fleming Recommendations
The Gannett Fleming staff made major adjustments to the building footprints to address and satisfy the current and projected requirements of the agency (see Attachment #2 for the Technical Memorandum that includes floor plans, phasing plan and cost estimates). The following is a breakdown of the analysis by agency department:

LAVTA Administration Area
A second floor was incorporated into the originally programmed administration area. The second floor was populated with offices, cubicle spaces, a conference room and other amenities.

On the first floor is found a boardroom that would be easily accessible by the public. Other rooms include space for storage, utilities, and IT. Total square footage of the LAVTA administration area is programmed at 5,100.

Contractor Administrative Area
The first floor administration area for contractor was reconfigured per staff and contractor (MV Transportation) guidance. The general manager along with his/her accounting and training/safety staff is supported by a video room, large training room, and the Emergency Operations Center area that can be subdivided into two spaces.

There is direct access to the LAVTA Boardroom from inside the building, which required the extension of the building footprint by 20 feet. The footprint allocated to the contractor administrative area is 4,100 S.F.

Operations Building
This is the area required to manage and dispatch the bus operators daily. The building includes office space for the operations manager, dispatch, and road supervisors, along with space and amenities to support bus operators. Amenities include lockers, lounge area, quiet room for operators working split shifts, game room and TV area providing a comfortable environment for operators waiting for their routes to be dispatched. Other important amenities include restrooms, a kitchen area, and outdoor patio. The space allocated for Operations is 5,800 S.F.

Maintenance Building
The largest impact to the original master plan and conceptual drawings was in the maintenance building. In determining the maintenance bay requirements for the current and future LAVTA needs it became evident that the original maintenance bay requirements were excessive. The original programmed area identified 11 total bays. The new programmed area now has 8. Additionally, each of the 8 bays was designed with greater flexibility in mind to assist with scheduling.

The maintenance building includes offices for supervisory staff, a training area, and rooms for file storage, parts, lubricants, lockers, and a break room complete with kitchenette. The total area of the maintenance building is programmed at 29,500 S.F., which reduced the

footprint of the building by approximately 9,000 S.F. allowing the site to support parking for a larger fleet of 124 buses in the future.

Phasing and Cost Estimates for Atlantis Facility (2013 dollars)

Phase I
Parking lot, fencing, lighting and security provided. Completed.

Phase II
Bus fueling and washing station. Landscaping. Completed.

Phase III
Additional fencing, motorized gates and card readers. $600,000.

Phase IV
Complete site work including utilities and building pads. $1,407,000.

Phase V
Building maintenance facility. $13,979,000.

Phase VI
Build operations and administrative buildings. $7,628,000.

Total cost of phases III through VI, which have yet to be funded and built is $23,614,000.

Atlantis Facility on Hold
Other than completion of Phases I and II, and the conclusion of the abovementioned work by Gannett Fleming in 2013, per board direction the efforts to locate funding for future phases of the Atlantis Facility has been held in abeyance. In the past years the outlook for federal and state grants and earmarks for such projects has been cloudy and funding nearly nonexistent. Additionally, major bus purchases have been on the horizon in an effort to keep equipment in a state of good repair, which has demanded significant staff attention.

Currently, LAVTA is using the Atlantis site for fueling and washing of a portion of the Rapid Fleet (funding for the fueling/washing infrastructure came through Rapid funding) and as a work area/storage location for real time signs and bus shelters. The cost to maintain Atlantis in a state of good repair is approximately $85,000 per year. This is a conservative cost estimate and meets the minimum requirements for preventative maintenance as outlined by bus wash and fueling manufacturers, in addition to maintaining ambient lighting and security.

Discussion
Staff has reviewed the Gannett Fleming Technical Memorandum and agrees with the revised building footprints and floor plans. Additionally, staff notes that the upcoming COA and Short and Long Range Planning efforts will provide important information into the operational requirements for LAVTA for the foreseeable future. Staff anticipates that the latest design of the Atlantis Facility will accommodate the long range planning projections, with the site having the ability to park and maintain 124 buses.

Additionally, over the past few years staff and the board have planned successfully for the purchase of 40 new buses beginning in 2016, with future funding identified for other important near and mid-future capital purchases to maintain a state of good repair.

The LAVTA Board has several options moving forward:

1. Status quo with staff directed to keep project in abeyance until a future date when economy is more advantageous and agency's short and long range planning is complete. Additionally, staff can look for opportunities to lease out all or a portion of the Atlantis site.
2. Remove the project from abeyance and direct staff to aggressively pursue funding for remaining phases. As with Option 1, staff can be directed to look for opportunities to lease out all or a portion of Atlantis site.
3. Maintain Rutan Facility and sell Atlantis site.

Staff believes for a variety of reasons that Option 3 should not be exercised. Although there are potential buyers of the property, it is certain that short and long range planning both at LAVTA, Alameda County, and BART will demonstrate the need for LAVTA to expand its bus fleet over the next decade or two.

Because of a strengthening economy and enhanced local transportation funding, and due to adequate funding identified for a proper state of good repair for LAVTA capital equipment, staff recommends that the project be taken out of abeyance and funding aggressively pursued for Phases III through VI.

Additionally, staff recommends that it search for viable tenants for the Atlantis site to offset costs of maintaining the site until such time as construction is complete and being fully utilized. An example of such a partner is Google. The shuttle service operated by Google is currently under expansion and the company has needs in the area for fueling, washing and storage of buses.

Recommendation
Staff recommends the Committee forward to the Board to direct staff to take the Atlantis Facility project out of abeyance so that funding can be aggressively pursued for Phases III through VI. Additionally, recommend that the Board direct staff to search for leasing opportunities to offset the costs of the Atlantis site until such time as the facility is fully constructed and utilized.

Attachments:

1. Conceptual Rendering of Atlantis Facility
2. Gannett Fleming Technical Memorandum

Gannett Fleming

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TO:	Paul Matsuoka, Executive Director Livermore Amador Valley Transit Authority (LAVTA) 1362 Rutan Court, Suite 100 Livermore, CA 94551
FROM:	Kam Shadan, PE
DATE:	July 22, 2013
SUBJECT:	Livermore Amador Valley Transit Authority (LAVTA), Satellite Bus Facility Expansion, Re-Programming Technical Memorandum
COPIES:	Beverly Adamo, Sylvia Cox, Greg Cain, Antonio Berastain
GF PROJECT NO.:	48841.005

Introduction:

LAVTA requested that Gannett Fleming to review the original 2006 Facility Master Plan and the 2008 Atlantis Site Conceptual in light of changes in ridership reflected in the LAVTA's draft Short Range Transit Plan (SRTP), FY2012-2021 dated September 2012. The purpose of this effort is to determine impacts of LAVTA's service changes on the Master Plan's conceptual plans and programming. Gannett Fleming's scope of work includes a new space program, revised conceptual plans, and an Order of magnitude cost estimate to meet the current (2013) and projected growth (2030) needs for LAVTA's maintenance and operational needs communicated in the user interviews on May 30, 2013 with LAVTA and MV Transit staff and as stated in the SRTP.

The ultimate goal of LAVTA is to move all operations of the agency to the Atlantis site in phased approach and sell or lease Rutan facility. Phase I Bus Parking and Phase II Fuel were having already been completed. Based on the available funding additional should be planned. The initial recommendation of the phasing providing funding is available:

Phase III- Fence and secure the entire 9 acres site.
Phase IV- Complete site work including utilities and building pads.
PhaseV -Build the maintenance facility
Phase VI-Build operations and administration building.
The cost estimate in the attached in Appendix C broken up by the recommend phasing Background and Reference:

In 2005, LAVTA contracted with Carter Burgess to generate a Master Plan Document and Design Criteria to address the Agency's needs plus the relocation of the transit services to a new facility at the newly acquired 9 acre Atlantis site which is located on Atlantis Court and Discovery Drive in Livermore, CA. The plan was for LAVTA to relocate their operations to the new larger site to address current and future growth. The Master Plan identified that at the time the growth

potential from current fleet to a projected growth at 2015 and 2030 and would require an additional 5.3 acres. This plan included the full relocation of the current Rutan Facility to the Atlantis site.

In 2008, the architectural team began conceptual plans for the new Atlantis site with the understanding that only the Operator would move to the site and LAVTA Administration personnel would remain in Rutan Court. Conceptual Plans were developed for the new Atlantis site that addressed future growth for the LAVTA fleet. These conceptual plans identified all the standard components for a new maintenance facility including the Administration and Operations Building, Maintenance Building, Fuel and Wash Buildings, bus parking, employee and visitor parking all within site owned by LAVTA.

With the recent downfall in the economy, many Agencies have been experiencing a drop in ridership and a regression in growth potential for the future. The original Master Plan finalized in 2006 and the 2008 Conceptual Plans no longer addressed the current needs for LAVTA. In 2012, LAVTA completed a Draft Short Range Transit Plan identifying new goals for the Agency and addressed current needs for ridership potentials.

Taking advantage of small FTA and local funds available and the limited design and construction budgets that the Agency has been working with over the last few years, the Atlantis Facility was planned as a phased construction. Phase 1, which included site grading and drainage, utilities and paving, was completed in 2008 following the Conceptual Plans generated at the time. Phase 2, which included the construction of the new Fuel and Wash Facilities was completed in May of 2013 and turned over to the Agency. The maintenance Building which originally addressed 2006 growth potentials no longer fit in LAVTA's current lower growth plans. The current re-programming study addresses the current and future needs of the Agency based on more recent projections. The following sections address the findings and recommendations for the reprogramming of the Atlantis site.

Findings:

Gannett Fleming held user interviews in a one-day session on May 30th with LAVTA and MV Transit personnel to determine current needs for the Agency. Understanding that the Agency has experienced a drop in ridership and expects lower growth revised space program is needed. Interviews were held with all the departments in the effort to acquire well rounded feedback summary of the interviews are listed below. .

LAVTA Administration: LAVTA does not see a very aggressive growth in the fleet and service for their system. Currently the service area is locked in and not expected to grow beyond the current service areas. With the Atlantis site already under phased construction and the Fuel and Wash Buildings newly commissioned, LAVTA needs to determine better use of the new facility but functionality between the two sites does not allow the new Fuel and Wash buildings to be used without transporting the fleet from the Rutan Court facility for these services.

The fleet currently consists of a mixed fleet of 40 foot, 29 foot diesel and hybrid fixed route buses with an additional number of cut-a-way Paratransit vans that are currently not utilized. The Paratransit service is provided by American Logistics Company (ALC), a contract operator

providing fleet, facility, operation and maintenance outside of the Rutan Court facility. They are under contract which is nearing expiration.

It is imperative for LAVTA to determine the most efficient use of the Rutan Court site once LAVTA moves forward to the new Atlantis site. There are possibilities for lease and sale options that can be explored to assist LAVTA with additional revenue once the maintenance operations has moved to Atlantis.

LAVTA Planning: Discussions with the Planning Director for LAVTA identified shortfalls in staff with recent loses in personnel. An immediate need includes an additional planner and additional AVL/ITS staff member to assist the current AVL/ITS Analyst. Public access is very important to satisfy the public need to attend public hearings with accessibility for the disabled. The service currently includes Route 12 as a community route for public service.

Operations: MV Transit currently operates the Fixed Route service for LAVTA. Interviews with the General Manager and the Operations Manager were conducted to understand their operations and any special needs for the Fixed Route.

Morning pull-outs currently begin around 3 am and may last until 7 am with the first pull-outs finishing their morning route around 9 am. Some of the routes are full service and stay on the route all day. Afternoon pull-ins begin approximately at 2 pm through 6 pm however LAVTA provides evening service on some routes that run until 2 am in the morning. The service cycle for fueling and washing of the bus fleet is a continuous operation mornings and evenings based on fleet accessibility. Currently the parking pattern used by MV Transit is divided into three sections; Rapid Fleet (busy service) with 14 + buses for their assigned fleet; Prime Time fleet and the Hybrid (red and white) fleet.

There is a specific number of operations personnel on site at all times which include 14 employees plus the bus drivers. There are at minimum 30 bus drivers in the lounge at any given moment during rush time with a total of 92 drivers on the payroll. Since the drivers work split shifts, a Quiet Room and a TV lounge are required to allow drivers to use during split shifts. The MV Transit Manager suggests that at minimum, the Quiet Room have accessibility for 6 drivers at one time.

Maintenance: Fleet Maintenance was discussed with the Maintenance Manager from MV Transit and LAVTA personnel. Discussions included the operation and maintenance of the LAVTA fleet including Facility Maintenance.

The primary discussion with maintenance was the functional configurations of their maintenance work. It was discussed that LAVTA has no intention of utilizing 60 foot articulated buses in their fleet so the facility should not plan on maintenance bays for articulated buses. It is recommended that each bay be multi-purpose and able to satisfy a 45 foot over-the-road coach. In addition, MV Transit and LAVTA personnel are not partial to maintenance pits in bays and they are currently considering covering their existing pit and utilizing the platform lift for preventive maintenance and inspection work. Pits will not be considered in the new program for the maintenance building. Maintenance personnel are accustomed to in-ground piston hoists but would consider new technology when the time comes to discuss preferred lifting systems.

Discussions of the Agency's active fleet: there are currently 74 fixed fleet buses of which 57 are dispatched daily giving the LAVTA fleet a very high spare ratio. From the 15 cut-a-way paratransit vehicles which are not being utilized for paratransit service, MV Transit is dispatching 3 to 6 of these vehicles for short routes based on need. These cut-a-way vehicles are serviced and stored in-house as part of the overall fleet. The current fleet list provided by LAVTA includes the following:

- Fifty six (56) 40 foot buses of which 12 are hybrid/diesel buses
- Eighteen (18) 29 foot buses of which 8 are hybrid/diesel buses
- 15 cut-a-way paratransit buses
- 12 non-revenue support vehicles

LAVTA's fleet plan includes a full replacement of all diesel buses with hybrid/diesel buses by 2017. This will include phasing out all the older buses currently in the fleet.

The maintenance staff under the Maintenance Manager includes twenty (20) employees of which six (6) are service personnel assigned to the Fuel and Wash operations and fourteen (14) are assigned to maintenance. Nine (9) of the maintenance staff are trained multi-purpose mechanics with a growth plan of adding three (3) additional mechanics in the future. These mechanics provide all specially maintenance work for the LAVTA fleet which includes Fare Box Repair, electrical repair, tire shop, A/C repair and full service mechanical work.

Lubrication storage and distribution includes:

- Motor Oil: 15W- 40
- Automatic Transmission Fluid (Standard and synthetic)
- Gear Lube
- Coolant (50/50) mix
- Urea (DEF) to service the Fuel Island

Other fluids not serviced by reel distribution include:

- Chassis Grease
- Hydraulic Fluid
- Waste Oil and Coolant are stored in bulk tanks and used oil picked up regularly. The current process is not efficient since it is not a closed system and spillage is possible. The new facility should provide a closed system for all waste fluid extraction.

The new facility should provide sufficient area in the Lube/Compressor Room for AST bulk storage and the compressed air system equipment.

The maintenance staff does not perform any component rebuilt work on site since all components are sent out for rebuild or purchased new. The facility only provides the ability to do exchanges of smaller components, with all power train work being outsourced. In-house work also includes all tire work including mounting and tire change out and alignment work for the bus fleet. Currently no brake work is performed on-site as brake work is outsourced but the existing facility has the capability to provide the work in-house if necessary.

During the wrap-up session with all the managerial staff for LAVTA and MV Transit, the follow-up process for Gannett Fleming was discussed. The following will be implemented:

1. Gannett Fleming develops a Draft functional space matrix identifying the functional areas discussed in the meeting sessions. LAVTA staff has now reviewed and commented on the identified spaces.
2. Review comments were incorporated; a space program identifying square footages was generated and compared to the existing Master Plan and Conceptual Drawings. Using Industry Standards, Gannett Fleming incorporates operational and maintenance needs to the matrix to satisfy new requirements for the Agency. See Appendix A attached.
3. The space program matrix allowed Gannett Fleming to provide order of magnitude edits to the existing site plan and floor plans on the Conceptual Documents to be able to address the current and future needs of the Agency. See Appendix B attached
4. The revised documents will serve as the guide that will identify new requirements and use to produce an order of magnitude cost estimate for the Construction of the new program spaces. Drawing revisions include:

    - New Site Plan/Parking Option
    - New Operations/Administration Building Floor Plan
    - New Maintenance Building Floor Plan

The understanding between Gannett Fleming and LAVTA staff is that only the interior spaces of the building are revised leaving the current overall aesthetics to the building structure intact.

Analysis Proposed Program Needs and Recommendations:

The programming document was assessed utilizing the current information gathered during the interviews to determine space needs using the new requirements for the facility as identified in the "Findings" section of this Memorandum. The Gannett Fleming staff revisited the Master Plan and the Conceptual drawings then made major adjustments to the building footprints to address and satisfy the current requirements for LAVTA and the Contractor staff, and to provide for current and future fleet growth. The following breaks down the analysis by Department:

<u>LAVTA Administration:</u>

The original Conceptual Drawings prepared by Carter Burgess did not address the LAVTA Administration staff on the Atlantis site premises. In following with the requirements of the Executive Director and the Director of Administration for LAVTA, Gannett Fleming incorporated a second floor to the originally programmed Administration Building to house the current and future staff for LAVTA. Using the information acquired, the second floor was populated with private offices, cubicle spaces, a conference room and amenities for the staff independent from the Contractor spaces. The main controlled entry to access the elevators and stairs would still be through the main floor. The feasibility of being able to add a second floor and required square footage will have to conducted at later time in consultation with the Oaks business park and the city of Livermore design guidelines. This work was a part of this preliminary study.

Private Offices were provided for the Directors and Managers while the support staff was provided with private cubicle spaces. A kitchenette and break room area along with restrooms for the LAVTA staff. The second floor area's visitors are greeted by a Receptionist/Administrator that would direct any visitors to the proper area. The private conference room adjacent to the Director's offices would accommodate the LAVTA staff for on-going meetings.

One of the major requirements for LAVTA is a large Boardroom that would be easily accessible by the public during board meetings. These meetings could hold up to 9 staff members and up to 30 people in the audience. The room is equipped with adjacent public restrooms to be used during public meetings without entering the secured areas of the facility. The Boardroom is easily accessible from the visitor/employee parking area and has direct access to the Contractor's administrative area if needed.

The square footage required for the staff allows the inclusion of a second story to the Administration Building. The total square footage for LAVTA Administration is programmed at approximately 5,100 S.F. which includes all circulation spaces and the Boardroom on the first floor. This area has been added from the original plans to relocate the LAVTA staff to the new Atlantis site.

Contractor Administrative Area:

The first floor administration area assigned for MV Transit personnel was reviewed and based on data acquired during the interviews with MV Transit staff, the area was reconfigured to address the requirements. Introducing an elevator/machine room and stairs to the area required a reconfiguration to the assigned spaces. In addition, to satisfy LAVTA requirements for a Boardroom, the building footprint on the first story was increased encroaching into area that the original plans had allocated for landscape. Still leaving sufficient walkways and landscape, the addition provides sufficient working areas for the staff. The main entry is through a common lobby with secured doors accessing the work area. The General Manager along with his accounting and training/safety staff is supported by a video room, large training and the Emergency Operations Center (EOC) area which may be subdivided into two spaces with amenities such as a kitchen, break room, copy room, storage and IT/data area.

There is direct access to the LAVTA Boardroom from the inside for LAVTA and Contractor staff to attend special meetings and hearings without having to exit the building. The inclusion of this area required the extension of the building footprint by 20 feet adding to the existing grid. The footprint allocated to the Contractor's administrative staff is approximately 4,100 S.F. with a total building footprint of approximately 5,100 S.F. when including the Boardroom.

Operations Building:

Operations address the area required to operate and dispatch the drivers daily. It houses the Operations Manager, dispatch office, personnel and road supervisors along with the amenities required to house and support the drivers. The amenities for the drivers include lockers, lounge area, quiet room for the drivers working split shifts, game room and TV area providing a comfortable environment for the drivers who need to wait for their routes to be dispatched. Other

amenities are restrooms, a kitchen area, and support areas for the building and a patio for the drivers and other staff.
The Operations area is accessed through a secured entrance from the main lobby/reception and greeted by the Dispatch staff at the counter. The Dispatch office and the Operations Manager's office will have full window access for direct view of the bus storage area and front gate. This allows Dispatch to direct drivers entering and leaving the site via a controlled gate.

The space allocated for Operations is approximately 5,800 S.F in a single story with high ceilings in the center area to provide an open environment for the drivers and staff.

Maintenance Building:

The largest impact to the original master plan and conceptual drawings was in the Maintenance Building. In determining the maintenance bay requirement for the current and proposed fleet for LAVTA it became evident that the original requirements were an overkill for maintenance bays. In utilizing an industry standard ratio of 15:1 (that is 15 buses per bay), the original programmed area which identified 11 total bays plus a chassis wash bay was reduced to 8 repair bays plus the chassis wash. In addition, in conversations with the maintenance staff it became evident that flexibility was a necessity to the operations so the inspection pits were phased out of the concept and all 8 bus bays were programmed to serve as multi-functional bays giving the maintenance staff full flexibility when scheduling maintenance. A non-revenue work bay was added adjacent to the bus bays to maintain the non-revenue support fleet of vehicles without interfering with the bus bay schedule. Bays can be designed to be lift bays or flat bays for flexibility utilizing the newest sustainable lift technology in the facility, all sized to handle a wide range of buses including over-the-road 45 foot coaches. Final design documents will determine the assignments for each of the bays. The programmed bays will allow LAVTA to have the flexibility of expanding to a 120 bus fleet.

The maintenance administration and ancillary spaces support the supervisory staff including the Maintenance Manager, Maintenance Supervisor, Parts Manager, training area along with a data room, file storage and amenities such as restrooms, lockers and break room with kitchenette. In addition, support areas such as parts storage, lube pump room, shops and mechanics storage area support the overall maintenance functions of the building.

The Chassis Wash Bay is dedicated to the undercarriage cleaning of the bus fleet prior to inspections and repairs. The bay is provided with a platform lift and pressure wash system to provide the functional requirements of the area.

The total area for the Maintenance Building was programmed at 29,500 S.F which reduced the footprint of the maintenance building by approximately 9,000 S.F thus allowing the site to support parking for a larger fleet in the future.

Site:

The concept for the site shown on the original concept plans was not disturbed. Since Phase 1 and Phase 2 of the overall project were already complete, it became evident that leaving location for the structures and parking would be most beneficial. One major concern with the original bus parking layout was the inability to expand to a larger fleet. The original 85 bus count did not

include the future growth capacity. In addition some of the turning radii did not allow for proper movement of the buses. In the effort to maximize the bus parking area, a tandem parking scenario was introduced thus increasing the storage capacity to 124 to satisfy 45 foot and 30 foot buses, exceeding the 110 bus projection shared by LAVTA. The reduction of the maintenance building footprint allowed the layout to support parking along the east end of the building that can be utilized for buses scheduled for maintenance while the main parking area can be allocated for buses dispatched daily.

The rotation for night operations through the fuel and wash buildings allow buses entering the site to park facing east to be ready for night service operation. Once buses are fueled and washed, they can park facing west thus making pull-outs in the morning easier with less circulation requirements.

Employee and visitor parking provides parking stalls for approximately 121 employees, 10 visitor stalls, 6 ADA stalls, motorcycle and bicycle parking. During the design phase of the project it will be required to verify parking counts with the City requirements. The site also allows for separate parking stalls to support the City staff and non-revenue vehicles.

Order of Magnitude Cost Estimate:

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Summary of Costs by Phase

Phase III:	Fence and Secure the Site	$600,000
Phase IV:	Complete Site Work	$1,407,000
Phase V:	Build Maintenance Facility	$13,979,000
Phase VI:	Build Operations and Administration Facility	$7,628,000
	TOTAL PROJECT COST	**$23,614,000**

COSTS ARE IN CURRENT AS OF JULY 2013 AND INCLUDE NO ESCALATION

Livermore Amador Valley Transit Authority, Satellite Bus Facility Expansion
Re-Programming Technical Memorandum

Appendices

Appendix A:

- Re-Programming Matrix

Appendix B:

- Site Plan Tandem Bus Parking
- Operations and Administration Building Floor Plans
- Maintenance Building Floor Plan
- Maintenance Building Mezzanine Level Mechanical Platform

Appendix C:

- Order of Magnitude Cost Estimate

Appendix A:

- Re-Programming Matrix

Date Created: June 7, 2013 **Date Revised:** 18-Jun-13 **Revised By:** LJL **Reviewed By:**

Bus Operations, Maintenance and Administration Facility - Space Programming Matrix

Number of Vehicles Assigned to Facility (Full Build-Out):		40' - 0" = 84	29' -0" = 26	Paratransit = 15	Support Vehicles = 10	
Area		**Number of Areas**	**Area in Sq. Ft.**	**Type of Equipment**	**Bay Height Requirement**	**Total Sq. Ft.**
Maintenance Building Bays						**Calculated S.F.**
Chassis Wash Bay		1	1,560	Platform Lift (wet surface). Some with Fal Protection and Roof Access		1,560
RR/ PM /Inspection Bays - Lift bays		4	1,560	In-ground lift bay		6,240
RR/ PM /Inspection Bays - Flat bays		4	1,320	Possible portable lifts		5,280
Subtotal Bus Bays		9				
Non-Revenue Bay		1	792			792
SUBTOTAL BAYS						13,872
Interior Circulation Space					20.00%	2,774
TOTAL BAYS		10			**TOTAL BAY S.F.**	**16,646**

Area	# of Personnel	Number of Areas	Area in Sq. Ft.	Features	Bay Height Requirement	Required S.F.
Maintenance Building Shops						**Calculated S.F.**
Battery Charging Shop		1	208	Charger, bat bench, ventil. Eye/wash for Hybrid Buses	18'-0"	208
Chassis Wash Bay Equipment Room		1	68	pressure washer, storage	18'-0"	68
Common Work Area		2	792	Misc equipment, hydraulic hose shop, welding, etc.	18'-0"	1,584
Electrical Shop (GFI)		1	289	Fare box repair	10'-0"	288
Electrical Room		1	100	Building distributon panels	Open	100
Electronic Repair area (AVL)		1	289	Testing, radio, signs, AVL, etc	10'-0"	288
Facilities Maintenance Shop	1	1	275	Shops and equipment	18'-0"	275
Facilities Maintenance Storage		1	288	Supplies and storage of shelters	18'-0"	288
Hand Wash Fountain Areas		1	40	half circle fountain sink		40
Janitor Closet		1	80	Mop sink, supply storage	18'-0"	80
Training Room		1	234	Shelving for manuals	9'-0"	234
Lube Pump /Compressor Room		1	640	Pumps, Fluid AST and drum storage, Compressors	18'-0"	640
Mechanic's Lunch Room and Kitchennette	12	1	750	Break area with vending, tables and kitchen	9'-0"	750
Mechanical Room/Chiller Room (West End)		1	1,352	Mezzanine mechanical space for shop areas	**MEZZANINE = 1,352**	0
Mechanic's Computer Station/Library		1	60	Computer stations - Possible wireless to avoid cabling throughout bays for mechanic record access.	Open	60
Parts Storage Area & Ammenities		1	2,050	Parts counter, Inventory storage, Shipping and receiveing, cabinets,shelving	18'-0"	2,050
Restroom & Locker Room (M)		1	420	With showers	9'-0"	
Restroom & Locker Room (W)		1	420	With showers	9'-0"	
Tire Shop/Storage	1	1	1,080	Tire equipment/Storage for new and old stock	18'-0"	1,080
Tool Box Storage Room		1	352	Secured storage area for tool boxes	18'-0"	352
Tool Room Storage		1	132	Secured small tools storage	Open	132
Uniform Storage		1	96	Racks for clean and soiled	9'-0"	
						0
SUBTOTAL MAINTENANCE SHOP						**8,517**
Circulation Space					30.00%	2,555
TOTAL MAINTENANCE SHOP						**11,072**

Area	# of Personnel	Number of Areas	Area in Aq. Ft.	Features	Height Requirement	Total Sq. Ft.
Maintenance Administration	**Second Story**					**Calculated S.F.**
Computer/Telephone Room		1	135	IT Room	9'-0"	135
Facilities Maintenance Manager	1	1	100	Hard Office	9'-0"	100
File/Copy Room		1	176	Files, Copier	9'-0"	176
Maintenance Manager	1	1	276	Hard Office Space - View of bays	9'-0"	276
Maintenance Supervisor	1	1	180		9'-0"	180
Manager of Parts and Inventory	1	1	165	Hard Office Space	9'-0"	165
Maintenance File Storage Area		1	100	Maintenance records	9'-0"	100
Patio		1	350	Tables and Chairs, Smoking Area	Open	350
SUBTOTAL ADMINISTRATION						**1,482**
Circulation space					30.00%	445
TOTAL MAINTENANCE ADMINISTRATION						**1,927**

Area	# of Personnel	Number of Areas	Area in S. F.	Features	Height Requirement	Total Sq. Ft.
LAVTA Administration Area						**Calculated S.F.**
Acounting Assistant	1	1	64	Cubicle	9'-0"	64
Administrative Assistant/Receptionist	1	1	96	Support administrative staff (Counter)	9'-0"	96
AVL & ATS Analysts	2	2	64	Cubicle	9'-0"	128
Board Room (Downstairs)		1	972	With Restroom and outside access	**FLOOR LEVEL**	972
Computer/ IT Room - Telephone Rom		1	90	Central Server/IT Equipment	9'-0"	90
Conference Room - LAVTA		1	230	Audio/Visual, screen, projector, white board and table / chairs	9'-0"	230
Director of Administrative Services	1	1	206	Hard Office	9'-0"	206
Director of Planning and Communications	1	1	170	Hard Office	9'-0"	170
Executive Director	1	1	320	Hard Office with Meeting Table	9'-0"	320
Elevator Shaft		1	64	ADA Compatible	Shaft	64
Electrical Room		1	66	Sub -Panels	Open Ceiling	66
Future Space		1	64	Cube - Unassigned	9'-0"	64
File/Copy/Work Area		1	160	copier, fax, layout, files	9'-0"	160
Grants and Finance Manager	1	1	140	Hard Office	9'-0"	140
Grants and Finance Analyst	1	1	64	Cubicle	9'-0"	64
Janitor Closet		1	50	floor sink	9'-0"	50
Kitchenette		1	140	Vending and appliances	9'-0"	140
Marketing and Communication Specialist	1	1	64	Cubicle	9'-0"	64
Paratransit Planner	1	1	64	Cubicle	9'-0"	64
Rest Room (F)		1	80	ADA	9'-0"	80
Rest Room (M)		1	80	ADA	9'-0"	80
Stair wells		2	128	Dual set of stairs	Open ceiling	256
Transit Planners	2	2	64	Cubicle	9'-0"	128
SUBTOTAL Administration Area						**3,632**
Circulation space includes all corridors and vestibules					25.00%	908
TOTAL LAVTA Administration Area						**4,540**

Area	# of Personnel	Number of Areas	Minimum Sq. Ft.	Features	Height Requirement	Total Sq. Ft.
MV Transit Administration						
Accounting Manager	1	1	192	Standard Office Furniture	9'-0"	192
Copy/File Room		1	153	Copier, work area	9'-0"	153
Data/IT Room	1	1	144	Server/Telephone Equipment	9'-0"	144
Electrical Room		1	160	Panels	9'-0"	160
Elevator and Machine room		1	128	ADA Elevator - 8x8 each	12' above second floor	128
Entry/Lobby/Receptionist Area	1	1	256	Front Counter/Public Access	9'-0"	256
General Manager	1	1	220	Small Conference Table	9'-0"	220
General Reference and Video Storage		1	144	Storage of Video files for review	9'-0"	144
Janitor Closet		1	36	Supplies		36
Kitchenette Area		1	100	Coffee Station, Microwave, sink	9'-0"	100
Rest Room (M)		1	72		9'-0"	72
Rest Room (W)		1	72		9'-0"	72
Storage Room		1	112	Miscellaneous storage	9'-0"	112
Stairwells		2	128	Dual set of stairs		256
Training Manager	1	1	108	Standard Office Furniture	9'-0"	108
Training Superintendant	1	1	90	Standard Office Furniture	9'-0"	90
Training Room/Video Room		1	620	Split dividing wall/Video Equipment. Training and Meetings	9'-0"	620
Training Storage Room		1	160	Storage of chairs, Tables and Equipment	9'-0"	160
SUBTOTAL Administration Area						**3,023**
Circulation space Includes corridors					40.00%	**1,209**
TOTAL MV Transit Administration Area						**4,232**

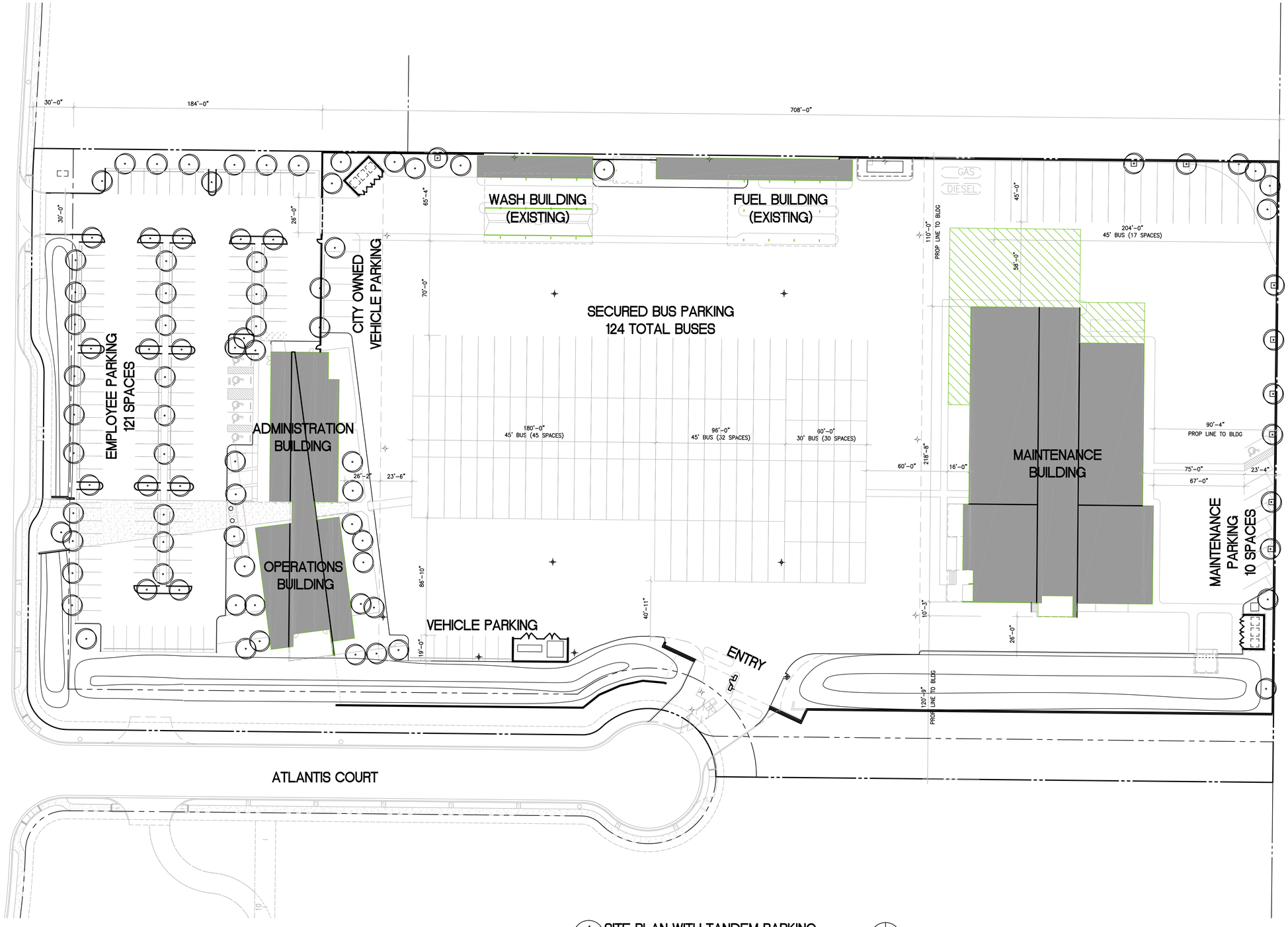
Area	# of Personnel	Number of Areas	Minimum Sq. Ft.	Features	Height Requirement	Total Sq. Ft.
Operations Area						**Calculated S.F.**
Bidding Room		1	128	Wall Space to hang boards	9'-0"	128
Copy/File Room and work area		1	81	with work area	9'-0"	
Dispatch Office	5	1	448	Radio and Computer Space, Accessible to Drivers area	9'-0"	448
Drivers Lounge	92	1	590	Lunch room, tables & chairs, vending area, recreational gear. Near Dispatch area, Accesible to patio area. Capable of addressing entire staff	9'-0"	590
Data/Electrical Room		1	90	electrical feed panels		90
Driver's Activity Room		1	256	Games, Ping Pong Table, etc.	9'-0"	256
Driver's Lobby/Computer area		1	120	driver's mail boxes, computer stations, driver's informational material. Near Dispatch	9'-0"	120
Employee's Quiet Room (4 people)		1	160	Reclyners, possible cots	9'-0"	160
Employee's TV Alcove		1	96	Sofa, TV	9'-0"	96
Employee Locker Area		1	500	Lockers (assigned and common)	9'-0"	500
Fire Riser rom		1	40	Stand pipe		40
Janitor's Closet		1	120	Mop Sink		120
Kitchen Area		1	216	Counter, Sink, Kitchennette ammenities'	9'-0"	216
Operations Manager	1	1	192	Standard Office Furniture	9'-0"	192
Patio Area		1	522	Patio tables and chairs for Operations		522
Rest Room (F)		1	400	ADA, adjacent to locker room	9'-0"	400
Rest Room (M)		1	380	ADA, adjacent to locker room	9'-0"	380
Restroom Vestibule		1	68	Entry to Restrooms		68
Road Supervisors	5	1	144	Shared Space	9'-0"	144
Storage Room/Dispatch		1	54	shelving for transfers and drivers supplies. Near Dispatch	9'-0"	54
Uniform Storage		1	80	Racks and bins	9'-0"	80
SUBTOTAL Operations Area						**4,604**
Circulation Space					25.00%	1,151
TOTAL Operations Area						**5,755**

Area	# of Personnel	Number of Areas	Minimum Sq. Ft.	Features	Height Requirement	Total Sq. Ft.
Exterior Areas and Storage						**Calculated S.F.**
Emergency Generator		1	64	100% Power		64
Haz Mat Storage		1	100	Filters, brake pads, etc.		100
Transformer/Electrical Switchgear		1	64	Fenced secured area		64
SUBTOTAL EXTERIOR STORAGE						**228**
Circulation Space					20.00%	46
TOTAL EXTERIOR STORAGE						**274**
Area		**Number of Vehicle Spots Available**	**Minimum Sq. Ft.**	**Features**		**Total Sq. Ft.**
Bus Parking Area						**Calculated S.F.**
45' Transit Bus parking bay		94	540			50,760
Paratransit 28' Van parking bay		30	360			10,800
SUBTOTAL BUS PARKING		124				61,560
Circulation Area					75.00%	46,170
TOTAL BUS PARKING						**107,730**
Area		**Number of Vehicles**	**Minimum Sq. Ft.**	**Features**		**Total Sq. Ft.**
Support Vehicle Parking						
Support Vehicle Parking (12' x 25')		15	300			4,500
Circulation Space					50.00%	2,250
TOTAL SUPPORT VEHICLE PARKING						**6,750**
Area		**Number of Vehicles**	**Minimum Sq. Ft.**	**Features**		**Total Sq. Ft.**
Employee/Visitor Parking						**Calculated S.F.**
Standard stalls 10 x 20		121	200	Stall		24,200
Visitor stalls 10 x 20		10	200	Stall		2,000
Motorcycle Parking		6	50	Stall near building entrance		300
Bicycle parking		15	50	Bicycle storage with access to Park and Ride and bike path		750
ADA Stalls 14 x 20		5	280	Stalls near building entrance		1,400
SUBTOTAL		157				28,650
Circulation Area					50.00%	14,325
TOTAL EMPLOYEE/VISITOR PARKING						**42,975**
TOTAL ALL VEHICLE PARKING AREA						**157,455**

SUMMARY OF SITE S. F. (Includes Exterior Vehicle Circulation Around Building - Does not include mezzanine spaces)						TOTAL S. F. SUMMARY
Maintenance Bays						**16,646**
Maintenance Shops				**HVAC in Mezzanine**		**11,072**
Maintenance Administration						**1,927**
Exterior Storage Areas						**274**
LAVTA Administration Area (Second Floor)				**Second Floor**	**4,540**	**Second Floor**
Operator Administration Area						**4,232**
Operations Area						**5,755**
Site Parking						
- Bus Parking						**107,730**
- Support Vehicle Parking						**6,750**
- Employee/Visitor Parking						**42,975**
SUBTOTAL						**197,361**
Site Circulation includes (circulation, aprons, approach roadways only)					40.00%	78,944
SUBTOTAL SITE						**276,305**
Total Site Landscaping					10.00%	**27,631**
TOTAL BUS FACILITY SITE REQUIREMENTS IN SQUARE FEET						**303,936**
				FIXED ROUTE FACILITY REQUIREMENTS - S. F. TO ACRES =		**7.0**

Appendix B:

- Site Plan Tandem Bus Parking
- Operations and Administration Building Floor Plans
- Maintenance Building Floor Plan
- Maintenance Building Mezzanine Level Mechanical Platform



1 SITE PLAN WITH TANDEM PARKING
SCALE: 1"=30'-0"

NORTH

LEGEND:

REDUCED MAINTENANCE AREA

LIVERMORE AMADOR VALLEY
TRANSIT AUTHORITY

STAMP

CONCEPTUAL
FOR REVIEW ONLY
These documents are for Conceptual Review and not Intended for Construction Bidding or Permit Purposes.

ISSUES/REVISIONS

NO.	DATE	DESCRIPTION

KEY PLAN

LAVTA
SATELLITE BUS
FACILITY
RE-PROGRAMMING
OAKS BUSINESS PARK
DISCOVERY DR.
LIVERMORE, CA

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
TPK	LJL		

PROJECT NUMBER: 160148.032
SCALE: 1"=30'-0"

SITE PLAN
TANDEM PARKING

Q-100

FILE INFO: K:\48841-005 - LAVTA Programming\Working Files\Programming\CADD\48841-QSP-4.dwg XREFS:148032-GTB-F; 48841-QOFP-101; 148032-GTB-F-PROG PLOTTED: Jul 22, 2013 11:19am BY:tleone

2 – ADMINISTRATION BLDG. SECOND FLOOR PLAN
SCALE: 1/8"=1'-0"

NORTH

1 – ADMINISTRATION/OPERATIONS BLDG. FIRST FLOOR PLAN
SCALE: 1/8"=1'-0"

NORTH

FILE INFO: K:\48841-005 – LAVTA Programming\Working Files\Programming\CADD\48841-QOFP-102.dwg XREFS:148032-GTB-F-PROG PLOTTED: Jul 15, 2013 2:10pm BY:tkeane

LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY

STAMP

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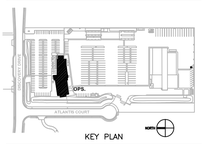
ISSUES/REVISIONS

NO.	DATE	DESCRIPTION



LAVTA SATELLITE BUS FACILITY RE-PROGRAMMING

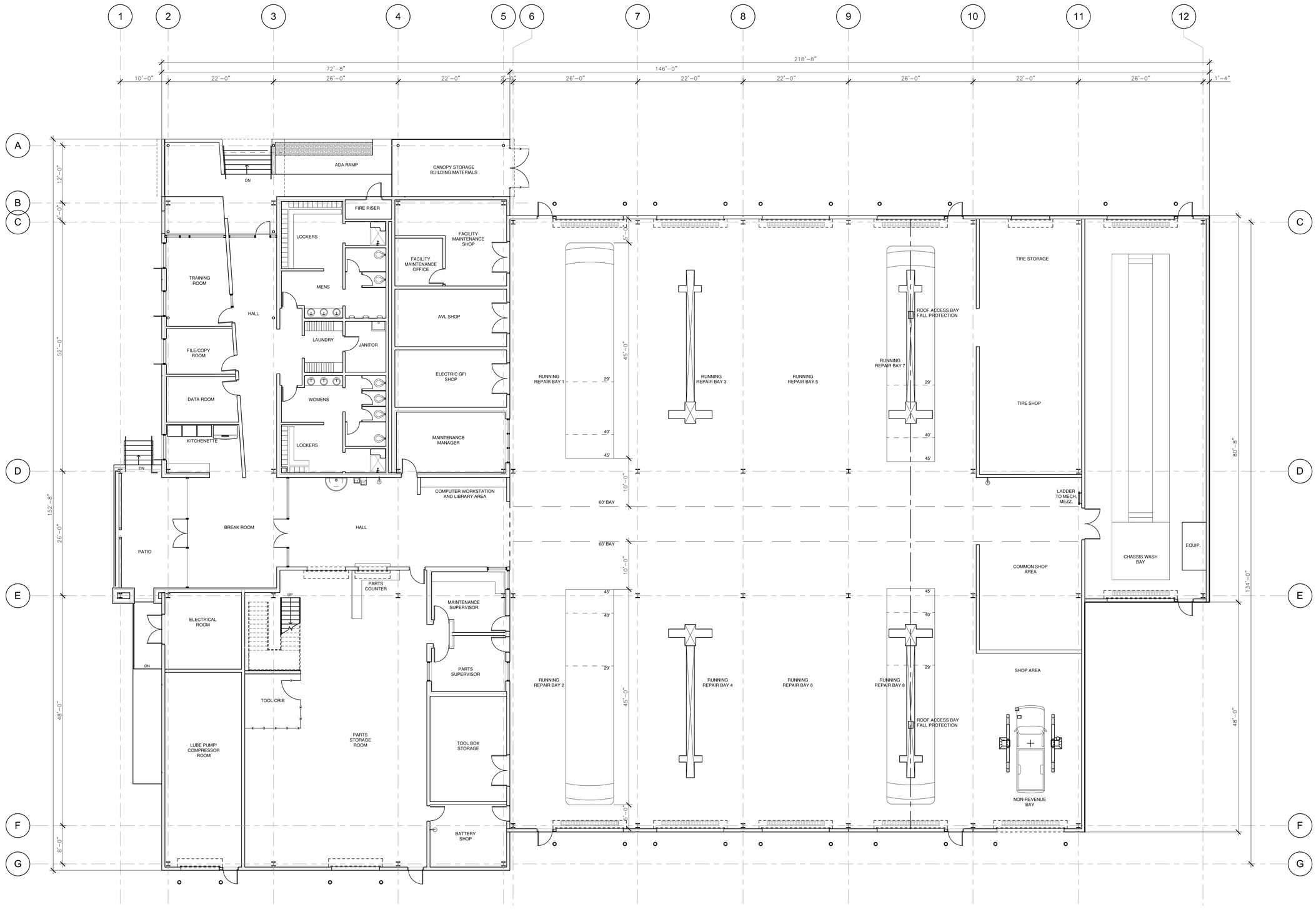
OAKS BUSINESS PARK DISCOVERY DR. LIVERMORE, CA

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
TPK	LJL		

PROJECT NUMBER: 160148.032
SCALE: 1/8"=1'-0"

OPERATIONS AND ADMINISTRATION BLDG. FLOOR PLANS

QO-102



1 FLOOR PLAN - MAINTENANCE BLDG. ALTERNATIVE

SCALE: 1/8"=1'-0"

NORTH

LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY

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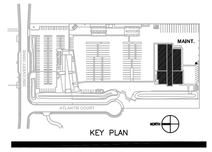
NO.	DATE	DESCRIPTION



LAVTA SATELLITE BUS FACILITY RE-PROGRAMMING

OAKS BUSINESS PARK DISCOVERY DR. LIVERMORE, CA

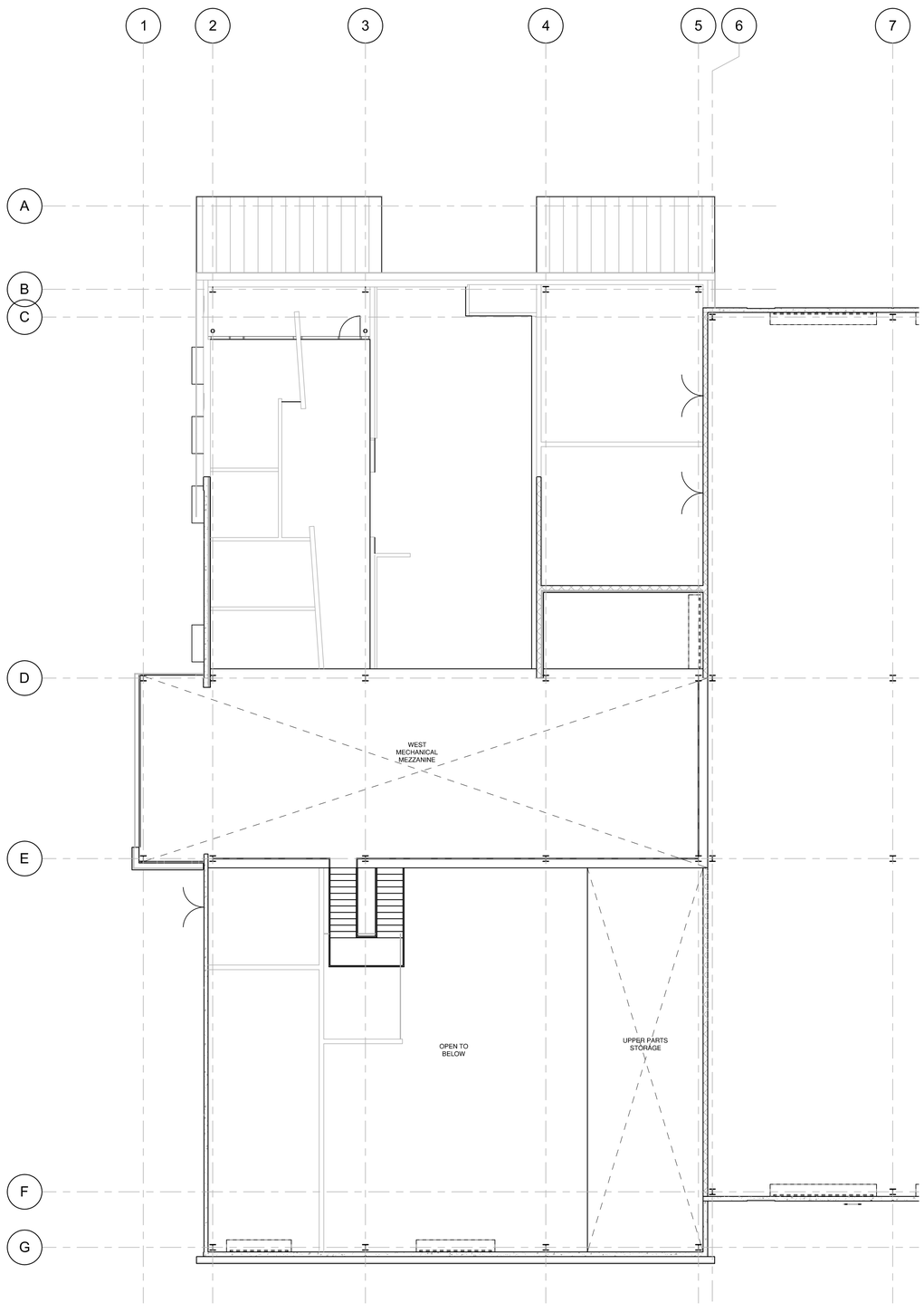
DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
TPK	LJL		

PROJECT NUMBER: 160148.032
SCALE: 1/8"=1'-0"

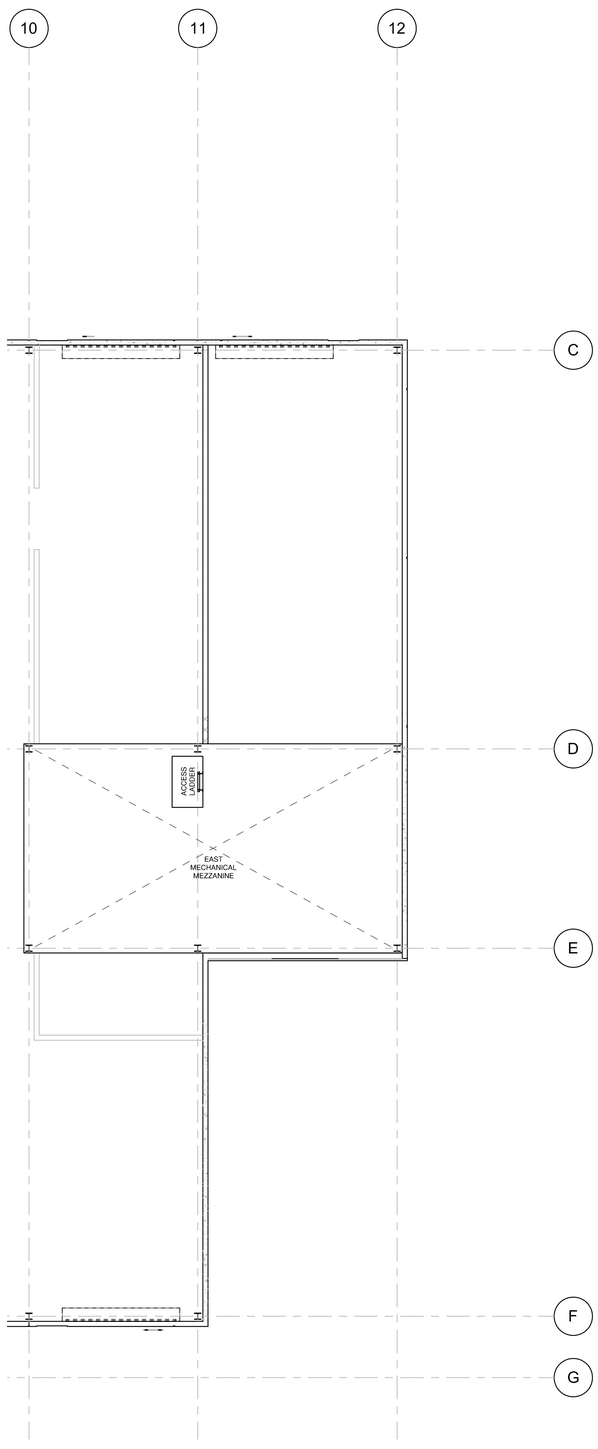
MAINTENANCE BLDG. FLOOR PLAN

QM-101-A

FILE INFO: K:\48841-005 - LAVTA Programming\Working Files\Programming\CADD\48841-QMFP-A.dwg XREFS:148032-GTB-F-PROG PLOTTED: Jun 21, 2013 8:58am BY:tkeone



1 EQUIPMENT - WEST MECHANICAL PLATFORM
SCALE: 1/8"=1'-0"



2 EQUIPMENT - EAST MECHANICAL PLATFORM
SCALE: 1/8"=1'-0"

NORTH

LIVERMORE AMADOR VALLEY
TRANSIT AUTHORITY

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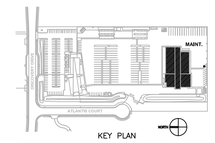
ISSUES/REVISIONS

NO.	DATE	DESCRIPTION



KEY PLAN

LAVTA
SATELLITE BUS FACILITY
RE-PROGRAMMING
OAKS BUSINESS PARK
DISCOVERY DR.
LIVERMORE, CA

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
TPK	LJL		

PROJECT NUMBER: 160148.032
SCALE: 1/8"=1'-0"

FLOOR PLAN
MECHANICAL
PLATFORMS

QM-103

FILE INFO: K:\48841-005 - LAVTA Programming\Working Files\Programming\CADD\48841-QMMZ.dwg XREFS:148032-GTB-F-PROG PLOTTED: Jun 21, 2013 9:47am BY:lkeane

Appendix C:

- Order of Magnitude Cost Estimate

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Summary of Costs by Phase

Phase III:	Fence and Secure the Site	$600,000
Phase IV:	Complete Site Work	$1,407,000
Phase V:	Build Maintenance Facility	$13,979,000
Phase VI:	Build Operations and Administration Facility	$7,628,000
	TOTAL PROJECT COST	**$23,614,000**

COSTS ARE IN CURRENT AS OF JULY 2013 AND INCLUDE NO ESCALATION

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Phase III: Fence and secure the site

Construction Costs:				
Chain link fence with 3-strand barbed wire	922	lf	$55.00	$50,710
PrecastFence to Match Existing, 3 sides	1,853	lf	$70.00	$129,710
Motorized gates at entrances	3	LVS	$25,000.00	$75,000
Card readers at bus entrance	2	ea	$2,500.00	$5,000
Allowance for electric to gates and card readers	1	ls	$15,000.00	$15,000
			Subtotal Direct Cost	$275,420
Contractor General Conditions			10%	$27,542
Contractor Overhead and Profit			12%	$36,355
General Contractor OHP on Subs (5% on 20% of Total)			5%	$3,393
Bond and Insurance			2%	$6,854
			Subtotal Construction Cost	$349,565
Design and Construction Contingency			30%	$104,869
			Total Construction Costs	$454,434
Soft Costs:				
Design Fee			10%	$45,443
Construction Management Fee - 3 months			6%	$27,266
Project Management Fee - 6 months			10%	$45,443
Design Support During Construction			3%	$13,633
Agency Staff Support			3%	$13,633
			Total Project Cost	$599,853
			SAY:	**$600,000**

PHASE III TOTAL:	**$600,000**

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Phase IV: Complete Site Work, Including Utilities and Building Pads

Construction Costs:				
Clear and grub remainder of site (minimal clearing)	7	acre	$2,500.00	$17,500
Rough grade site	31,650	sy	$0.50	$15,825
Finish Grade and Compact Building Pads	4,190	sy	$2.20	$9,218
Fire Lines (6" PVC Pressure Pipe) to Pads, Stubbed	650	lf	$15.00	$9,750
Domestic Water Lines (1.5" PVC) to Pads, Stubbed	150	lf	$5.00	$750
Sanitary Sewer Lines (6" PVC) to Pads, Stubbed	850	lf	$8.00	$6,800
Storm Drainage	7	acre	$50,000.00	$350,000
Trench and Backfill Utility Lines	470	cy	$7.00	$3,290
Electrical Ductbank from Transformer to Bldg Pads	950	lf	$75.00	$71,250
Seeding for site stabilization	6	acre	$2,500.00	$15,000
			Subtotal Direct Cost	$499,383
Contractor Mobilization			4%	$19,975
Contractor General Conditions			10%	$51,936
Contractor Overhead and Profit			12%	$68,555
General Contractor OHP on Subs (5% on 20% of Total)			5%	$6,398
Bond and Insurance			2%	$12,925
			Subtotal Construction Cost	$659,173
Design and Construction Contingency			30%	$197,752
			Total Project Cost	$856,925
Soft Costs:				
Design Fee			15%	$128,539
Construction Management Fee (Six months)			10%	$85,692
Project Management Fee (12 months)			10%	$85,692
Design Support During Construction			3%	$25,708
Agency Staff Support			3%	$25,708
			Total Construction Cost w/ Soft Costs	$1,406,016
			SAY:	**$1,407,000**

PHASE IV TOTAL:	**$1,407,000**

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Phase V: Build Maintenance Facility

Finish Grading of Areas to be Paved	3,500	sy	$2.00	$7,000
Asphalt Paving Around Building - 6" Stone Base	3,500	sy	$12.00	$42,000
Asphalt Paving Around Building - Asphalt (4"/2")	3,500	sy	$28.75	$100,625
Sidewalks - 4" Stone Base, 4" Concrete	3,875	sf	$8.50	$32,938
Paint Striping and Parking Bumpers	1	ls	$1,200.00	$1,200
Allowance for Landscaping	1	ls	$10,000.00	$10,000
	Subtotal Site Work for Maintenance Building			$193,763
Finish Grade and Compact Building Pads	2,980	sy	$2.20	$6,556
6" Stone Base Under Slab	26,820	sf	$1.30	$34,866
Footings, Includes Excavation and Backfill	120	cy	$350.00	$42,000
Slab on Grade (8" thick, Bar Reinforcing)	26,820	sf	$8.00	$214,560
Stairs and Ramps	1	ls	$47,500.00	$47,500
Structural Framing (13 lb/gsf)	192	tn	$4,000.00	$768,000
Roof Deck	26,820	sf	$4.50	$120,690
Miscellaneous Steel	29,500	sf	$2.50	$73,750
Bollards	24	ea	$1,500.00	$36,000
Exterior CMU Walls, Including Foundation Wall	13,100	sf	$17.00	$222,700
Interior CMU Walls	21,340	sf	$12.85	$274,219
Built Up Roof	26,820	sf	$7.00	$187,740
Canopies	588	sf	$47.50	$27,930
Firestopping and Caulking	1	ls	$8,500.00	$8,500
Windows - Exterior (20% of Total Wall Area)	2,832	sf	$50.00	$141,600
Storefront Entrance	1	ls	$20,000.00	$20,000
Interior Glazing at Maintenance Offices, Doors	100	sf	$45.00	$4,500
Doors, Frames, Hardware - Exterior HM Single	9	opn'g	$1,500.00	$13,500
Doors, Frames, Hardware - Exterior HM Double	3	opn'g	$2,500.00	$7,500
Doors, Frames, Hardware - Interior HM Single	13	opn'g	$800.00	$10,400
Doors, Frames, Hardware - Interior HM Double	12	opn'g	$1,200.00	$14,400
Overhead Doors at Bays (Motorized) - 16'	11	ea	$12,000.00	$132,000
Overhead Doors at Shop (Motorized) - 10'	2	ea	$8,500.00	$17,000
Coiling Doors at Counters	2	ea	$2,300.00	$4,600
Interior Drywall - Walls	720	sf	$7.50	$5,400
Interior Drywall - Ceilings	2,595	sf	$9.00	$23,355
Misc Drywall - Bulkheads	1	ls	$5,000.00	$5,000

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Phase V: Build Maintenance Facility (continued)

ACT Ceilings	2,945	sf	$5.65	$16,639
Ceramic Tile (Walls and Floors)	2,975	sf	$10.50	$31,238
Paint Walls and Ceilings	25,375	sf	$1.25	$31,719
Misc Painting - Doors & Frames, Bollards, Etc	1	ls	$10,000.00	$10,000
VCT Flooring and Vinyl Base	4,290	sf	$5.25	$22,523
Metallic Floor Hardener on Shop Floors	19,555	sf	$3.00	$58,665
Lockers	35	ea	$385.00	$13,475
Locker Benches	36	lf	$30.00	$1,080
Cabinets - Assume Upper and Lower	10	lf	$550.00	$5,500
Countertops	110	sf	$35.00	$3,850
Toilet Partitions, Ceiling Hung	6	ea	$1,000.00	$6,000
Access Ladder	1	ea	$1,200.00	$1,200
Fire Extinguishers and Cabinets - Allowance	10	ea	$250.00	$2,500
Woven Wire Partition at Tool Crib	240	sf	$7.25	$1,740
Allowance for Toilet Accessories, Blinds, Etc	1	ls	$7,500.00	$7,500
Signage Allowance	1	ls	$15,000.00	$15,000
Allowance for Blocking	1	ls	$5,000.00	$5,000
Plumbing	29,500	sf	$13.00	$383,500
HVAC	29,500	sf	$14.50	$427,750
Electrical	29,500	sf	$26.50	$781,750
Fire Suppression	29,500	sf	$4.25	$125,375
Fire Alarm and Security	29,500	sf	$6.50	$191,750
Equipment Allowance	1	ls	$1,500,000.00	$1,500,000
			Subtotal Direct Cost	$6,301,782
Contractor Mobilization			2%	$126,036
Contractor General Conditions			10%	$642,782
Contractor Overhead and Profit			12%	$848,472
General Contractor OHP on Subs (5% on 80% of Total)			5%	$316,763
Bond and Insurance			2%	$164,717
			Subtotal Construction Cost	$8,400,550
Design and Construction Contingency			30%	$2,520,165
			Total Project Cost	$10,920,715

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Phase V: Build Maintenance Facility (continued)

	Total Project Cost	$10,920,715
Soft Costs:		
Design Fee	8%	$873,657
Construction Management Fee - 18 months	8%	$873,657
Project Management Fee - 24 months	6%	$655,243
Design Support During Construction	3%	$327,621
Agency Staff Support	3%	$327,621
	Total Construction Cost w/ Soft Costs	$13,978,516
	SAY:	**$13,979,000**
	PHASE V TOTAL:	**$13,979,000**

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Phase VI: Build Operations and Administration Facility

Finish Grading of Areas to be Paved	7,110	sy	$2.00	$14,220
Asphalt Paving Around Building - 6" Stone Base	7,110	sy	$12.00	$85,320
Asphalt Paving Around Building - Asphalt (4"/2")	7,110	sy	$28.75	$204,413
Sidewalks - 4" Stone Base, 4" Concrete	6,140	sf	$8.50	$52,190
Sidewalks - Add for Special Finish	5,040	sf	$1.50	$7,560
Concrete Curbs and Islands	1,950	lf	$13.50	$26,325
Paint Striping and Parking Bumpers	1	ls	$5,500.00	$5,500
Allowance for Landscaping	1	ls	$35,000.00	$35,000
Subtotal Site Work for Operations and Administration Facility				$430,528
Finish Grade and Compact Building Pads	1,210	sy	$2.20	$2,662
6" Stone Base Under Slab	10,900	sf	$1.30	$14,170
Footings, Includes Excavation and Backfill	50	cy	$350.00	$17,500
Slab on Grade (6" thick, Bar Reinforcing)	10,900	sf	$6.50	$70,850
Stairs and Ramps	1	ls	$47,500.00	$47,500
Structural Framing (11 lb/gsf)	83	tn	$4,000.00	$332,000
Roof Deck	10,900	sf	$4.50	$49,050
Floor Deck for Second Floor	4,225	sf	$10.50	$44,363
Miscellaneous Steel	15,125	sf	$2.50	$37,813
Exterior CMU Walls, Including Foundation Wall	9,660	sf	$17.00	$164,220
Interior CMU Walls	5,220	sf	$12.85	$67,077
Built Up Roof	10,900	sf	$7.00	$76,300
Canopies	588	sf	$47.50	$27,930
Firestopping and Caulking	1	ls	$8,500.00	$8,500
Windows - Exterior (30% of Total Wall Area)	4,140	sf	$50.00	$207,000
Storefront Entrance - Lobby, Both Sides Glass	1	ls	$40,000.00	$40,000
Automatic Entance Doors at Lobby w/ ADA Buttons	2	ea	$8,500.00	$17,000
Interior Glazing at Offices, Doors	100	sf	$45.00	$4,500
Doors, Frames, Hardware - Exterior HM Single	3	opn'g	$1,500.00	$4,500
Doors, Frames, Hardware - Exterior HM Double	2	opn'g	$2,500.00	$5,000
Doors, Frames, Hardware - Interior HM Single	42	opn'g	$800.00	$33,600
Doors, Frames, Hardware - Interior HM Double	1	opn'g	$1,200.00	$1,200
Interior Drywall - Walls	10,120	sf	$7.50	$75,900
Interior Drywall - Ceilings	2,720	sf	$9.00	$24,480
Misc Drywall - Bulkheads	1	ls	$15,000.00	$15,000

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Phase VI: Build Operations and Administration Facility (continued)

ACT Ceilings	12,405	sf	$5.65	$70,088
Ceramic Tile (Walls and Floors)	3,000	sf	$10.50	$31,500
Paint Walls and Ceilings	23,200	sf	$1.25	$29,000
Misc Painting - Doors & Frames, Etc	1	ls	$10,000.00	$10,000
VCT Flooring and Vinyl Base	10,100	sf	$5.25	$53,025
Flooring Allowance at Board Room and @nd Floor	5,025	sf	$8.50	$42,713
Walk Off Mats at Entrance	120	sf	$20.00	$2,400
Lockers	149	ea	$385.00	$57,365
Cabinets - Assume Upper and Lower	16	lf	$550.00	$8,800
Countertops	132	sf	$35.00	$4,620
Specialty Cabinets - Uniform Storage - Allowance	28	lf	$300.00	$8,400
Specialty Cabinets - Receptionist Desk at Admin	16	lf	$350.00	$5,600
Toilet Partitions, Ceiling Hung	7	ea	$1,000.00	$7,000
Partition, Accordian Fold at Training Room	216	sf	$60.00	$12,960
Access Ladder	1	ea	$1,200.00	$1,200
Fire Extinguishers and Cabinets - Allowance	10	ea	$250.00	$2,500
Allowance for Toilet Accessories, Blinds, Etc	1	ls	$25,000.00	$25,000
Signage Allowance	1	ls	$40,000.00	$40,000
Allowance for Blocking	1	ls	$10,000.00	$10,000
Elevator - 2 Stop, Hydraulic	1	ea	$90,000.00	$90,000
Plumbing	15,125	sf	$10.00	$151,250
HVAC	15,125	sf	$17.50	$264,688
Electrical	15,125	sf	$35.00	$529,375
Fire Suppression	15,125	sf	$4.25	$64,281
Fire Alarm and Security	15,125	sf	$6.50	$98,313
			Subtotal Direct Cost	$3,438,719
Contractor Mobilization			2%	$68,774
Contractor General Conditions			10%	$350,749
Contractor Overhead and Profit			12%	$462,989
General Contractor OHP on Subs (5% on 80% of Total)			5%	$172,849
Bond and Insurance			2%	$89,882
			Subtotal Construction Cost	$4,583,962
Design and Construction Contingency			30%	$1,375,189
			Total Project Cost	$5,959,151

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Phase VI: Build Operations and Administration Facility (continued)

	Total Project Cost	$5,959,151
Soft Costs:		
Design Fee	8%	$476,732
Construction Management Fee - 12 months	8%	$476,732
Project Management Fee - 18 months	6%	$357,549
Design Support During Construction	3%	$178,775
Agency Staff Support	3%	$178,775
	Total Construction Cost w/ Soft Costs	$7,627,713
	SAY:	**$7,628,000**
	PHASE VI TOTAL:	**$7,628,000**

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Scope of Work by Phase

Phase III: Fence and Secure the Site

Install 8' high chain link and concrete block fence around the perimeter of the facility.
Install motorized gates at the west and north east entrances.
Install card readers at each gate leaf.

Assumes electric is available onsite, as shown on Electrical Site Plan (As-Built).

Phase IV: Complete Site Work, Including Utilities and Building Pads

Minimal clearing of site, stripping of any topsoil and rough grading of site.
Fine grade and compact building pads - no stone or additional fill included.
Install fire water, domestic water and sanitary sewer lines to within 5' of building pads and stub up for future connection.
Separate service for each building is included. Pipe sized per as-built drawings.
Install storm pipe, inlets and manholes, as required for proper drainage and to avoid ponding. Storm system installation anticipates future use of the site.
Install electrical ductbank with empty conduit and pull lines from transformer to within 5' of buildings. Separate service for each building is included.

Assumes a relatively flat site with limited grading required, per existign grades shown o nthe Electrical Site Plan.
Area of disturbance is net of improved areas completed in Phases I and II.
All site improvements adjacent to buildings, including pavings, walks, curbs and landscaping to be completed in the Phase in which the building is constructed.
No import or export of materials, other than spolis from pipe and ductbank trenches is included.
No rock removal or removal of hazardous or unsuitable soil is included.
Existing detention basins, as shown on Electrical Site Plan, are to remain and no additional work in those areas is included.
Possible "retaining wall" shown as dark line on site plan is not included.

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Scope of Work by Phase

Phase V: Build Maintenance Facility

Re-grade building pad and place stone base for slab on grade.
Install 8" Slab on Grade with bar reinforcing and vapor barrier.
Footings assumed as 12" x 24" continuous wall footings with CMU foundation walls.
Exterior stairs and ramps to be cast in place, with handrails each side.
All exterior and interior walls, except at office spaces to be CMU.
Exterior walls to include integral finish, such as ground face, one side only.
Interior walls to be painted CMU.
Structural steel framing for mezzanines, roof and any structure hung equipment is included as an allowance per square foot of building
Windows are included at 20% of total exterior wall area.
Interior glazing at Maintenance Manager and Supervisor offices is included, as well as an allowance for glazing at doors.
Storefront entrance is included at main entrance only.
All other doors and frames to be standard hollow metal with hardware appropriate for opening (panic as required).
Overhead doors are included for each end of the bays and at parts and tire storage areas.
Drywall walls are included at office spaces, such as training, file copy and data rooms. No interior wall furring is assumed.
Ceilings at toilet and locker areas and halls are included as drywall, all other ceilings in areas with ceiling heights 10' or less are ACT.
Ceramic tile is included at locker rooms on walls full-height and floors.
All other walls to be painted.
Floors in office spaces, kitchen, break room include VCT with vinyl base.
All other floors at "shop" areas are concrete with hardener/sealer.
Attached furnishings such as lockers, toilet room accessories, signage, wire partition at Tool Crib, etc. are included.
All trade work (mechanical, plumbing, electrical, etc.) are included as costs per square foot based on industry standards and historic costs for similar buildings.
An allowance for equipment is included.

Site work surrounding building is included. It is assumed that most of the area around the building will be paved. Walks communicating between parking areas and buildings are included as concrete.
An allowance for limited landscaping around building is included.

Livermore Amador Valley Transit Authority
Satellite Bus Facility Expansion
Order of Magnitude Cost Estimate

Scope of Work by Phase

Phase VI: Build Operations and Administration Facility

Re-grade building pad and place stone base for slab on grade.
Install 6" Slab on Grade with bar reinforcing and vapor barrier.
Footings assumed as 12" x 24" continuous wall footings with CMU foundation walls.
Exterior stairs and ramps to be cast in place, with handrails each side.
All exterior and interior walls, except at office spaces to be CMU.
Exterior walls to include integral finish, such as ground face, one side only.
Interior walls defining Driver area and locker room spaces included as CMU.
Structural steel framing for second floor and roof is included as an allowance per square foot of building
Windows are included at 30% of total exterior wall area.
Interior glazing at Maintenance Manager and Supervisor offices is included, as well as an allowance for glazing at doors.
Storefront entrance is included at main entrance and interior of lobby.
Automatic Doors are included at main entrance on each side.
All other doors and frames to be standard hollow metal with hardware appropriate for opening (panic as required).
Drywall walls are included at all interior walls not noted to be CMU.
Fire rated or moisture proof drywall included where required.
Ceilings at toilet and locker areas, toilet rooms and board room are included as drywall, all other ceilings are ACT.
Ceramic tile is included at locker rooms on walls full-height and floors and on floors only of toilet rooms.
All other walls to be painted.
Floors in all other first floor spaces include VCT with vinyl base.
An allowance is included for upgraded flooring at Board Room and all second floor areas.
Accordian fold partition at second floor training room is included.
Attached furnishings such as lockers, toilet room accessories, signage, walk off mats at Lobby are included.
All trade work (mechanical, plumbing, electrical, etc.) are included as costs per square foot based on industry standards and historic costs for similar buildings.
Site work surrounding building is included. Employee parking to the north of the building, concrete curbs, islands and walks are included.
Allowances for upgraded finish on walk to lobby and for landscaping included.

Excludes all unattached furniture, cubicles and equipment.

AGENDA

ITEM 8

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Projects & Services Committee

January	Action	Info
Minutes (November)	X	
Bus Stop Management Program Update		X
Clipper Update		X
Queue Jump Repair Update		X
Atlantis O&M Facility	X	

February	Action	Info
Minutes	X	
Award of COA Contract	X	
Quarterly Performance Report on Operations and Marketing		X

March	Action	Info
Minutes	X	

April	Action	Info
Minutes	X	
Fall Services Changes	X	

May	Action	Info
Minutes	X	
WAAC Appointments	X	
Marketing Work Plan	X	
Quarterly Performance Report on Operations and Marketing		

June	Action	Info
Minutes	X	