Volume III: Supplemental Data

Study of Feasibility and Efficacy of State of Vermont Contracting for Importation, Transportation, Warehousing and Wholesale Distribution of Liquor

Prepared for

State of Vermont

Agency of Administration

Contract 7635

Revised

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Submitted By:

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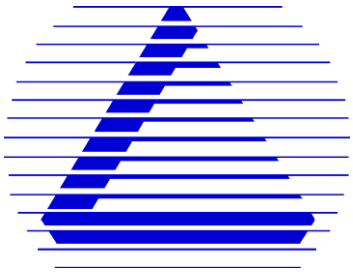
APPENDIX A

State of New Hampshire
Liquor Commission



Strategic Information Technology Plan
FY 2004 - 2005

June 2003

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1 EXECUTIVE SUMMARY

To accomplish the SLC's mission of optimizing profitability while providing proper controls over alcohol and tobacco requires over 400 computers and a complex state wide network connecting over 70 local networks used by over 600 employees daily. A combination of vendor software and in-house developed software is utilized to meet the IT needs of the commission. Over 30 outside entities are interfaced with to fully accomplish the business needs. A staff of 14 IT personnel are used to keep these systems up and fully functional.

This review of the needs of the SLC for the next two years has identified five significant areas within IT that are to be addressed:

- Training – training for the staff has been sub-standard for several years and is to be addressed. The Enforcement Bureau will enhance their ability to provide alcohol and tobacco education with improved multi-media presentation creation capabilities and possible remote training capabilities.
- Obsolete Replacement – there are both hardware and software systems that require replacement as their age makes them expensive to maintain and/or incapable of continuing their purpose. Old hand-helds, laptops and a licensing system are to be replaced.
- Disaster Recovery – the SLC has been developing a business recovery plan that requires IT to have a hot disaster backup site. Additional equipment will be leased and installed at Law Warehouses to address these needs.
- Software Enhancements – several reporting needs have been identified to identify the effectiveness of its programs and assist in future decision making. T the outdated payroll system wil be replaced with an attendance and leave system. Gross profit and beverage import reporting is to be addressed. New POS enhancements will be addressed to provide new sales opportunities with the stored-value-cards.
- Field Access – better access into the SLC network and HQ paper records is needed to support field personnel and their increased usage of computers in the field. Wireless LAN technology will be added to some stores to allow field personnel access without disturbing the store or even needing physical access. The State's document management system will be accessible for use with Enforcement and Finance records.

Due to the budget constraints of the next budget these initiatives have been kept modest with several in-house development projects. Most new initiatives can be addressed within the operating budget of the next two years. The POS changes and the Document Management are not funded at this time. Total IT expenditures are projected at $1M in FY2004 and $1.4M in FY2005. The significant increase in 2005 is due to a buyout of the POS software which will reduce the annual payment to ACR Systems from $200,000 to $60,000 after FY2005.

2 NEW HAMPSHIRE STATE LIQUOR COMMISSION, ORGANIZATION

2.1 MISSION

For the benefit of the citizens of New Hampshire, the New Hampshire State Liquor Commission (SLC) will optimize profitability by serving customers well and maintain proper controls over the sale, distribution and use of alcoholic beverages.

The SLC regulates the sale of alcohol in the state of New Hampshire. New Hampshire is one of 18 states in the nation where the government directly controls the distribution of alcoholic beverages as well as being responsible for the regulation of alcoholic beverages. The SLC is the third largest revenue producer for the state.

2.2 ORIGIN AND BACKGROUND

The New Hampshire State Liquor Commission was first appointed on June 15, 1934, and the first four liquor stores were opened on August 17th of that year. Gross revenue from 15 stores in the first year totaled $670,000 and went to $1,190,00 from 27 stores in the second year. At the end of the 68th operating year (June 30, 2002), the SLC had 71 stores with gross sales of $332M and turned over a net profit of over $83M to the state's general fund.

The enabling legislation for the SLC is Chapters 175 through 180 and Chapter 126-K of the Revised Statutes Annotated as well as Administrative Rules relative to the sale of alcoholic beverages and tobacco.

The Commission concentrates on the following four areas:

- The responsible distribution and sale of spirits and wine,
- The prevention of the sale of tobacco to minors,
- Ensuring public safety through the diligent enforcement of liquor and tobacco laws,
- Educating licensees and the general public on responsible alcohol usage and the laws and regulations governing it.

The NH State Liquor Commission is headquartered in Concord, NH at 50 Storrs Street. This same building also houses a warehouse and a store. The Commission, Marketing and Merchandising Bureau and the Administration Services Bureau are housed at this location. The IT division is located at this facility.

The Enforcement Bureau is located at 10 Commercial Street in Concord. This facility was moved into in 1999 and houses the Enforcement management and support staff.

The SLC operates 71 stores located throughout the state.

The SLC also utilizes the services of Law Warehouses, a privately owned warehouse and transportation companies, to store and distribute product. They maintain their own IT staff and facilities.

2.3 ORGANIZATION

The SLC is organized into the **Office of the Commission** and three bureaus: **Sales and Marketing**, **Enforcement and Licensing** and **Administrative Services**. The Sales and Marketing Bureau is the retail and wholesale business part of the SLC and is responsible for the operation of the its 72 liquor stores, merchandising, advertising, warehousing and transportation. The Enforcement and Licensing Bureau is responsible for the enforcement of all liquor and tobacco laws and rules as well as the licensing of all private business which sell, transport or

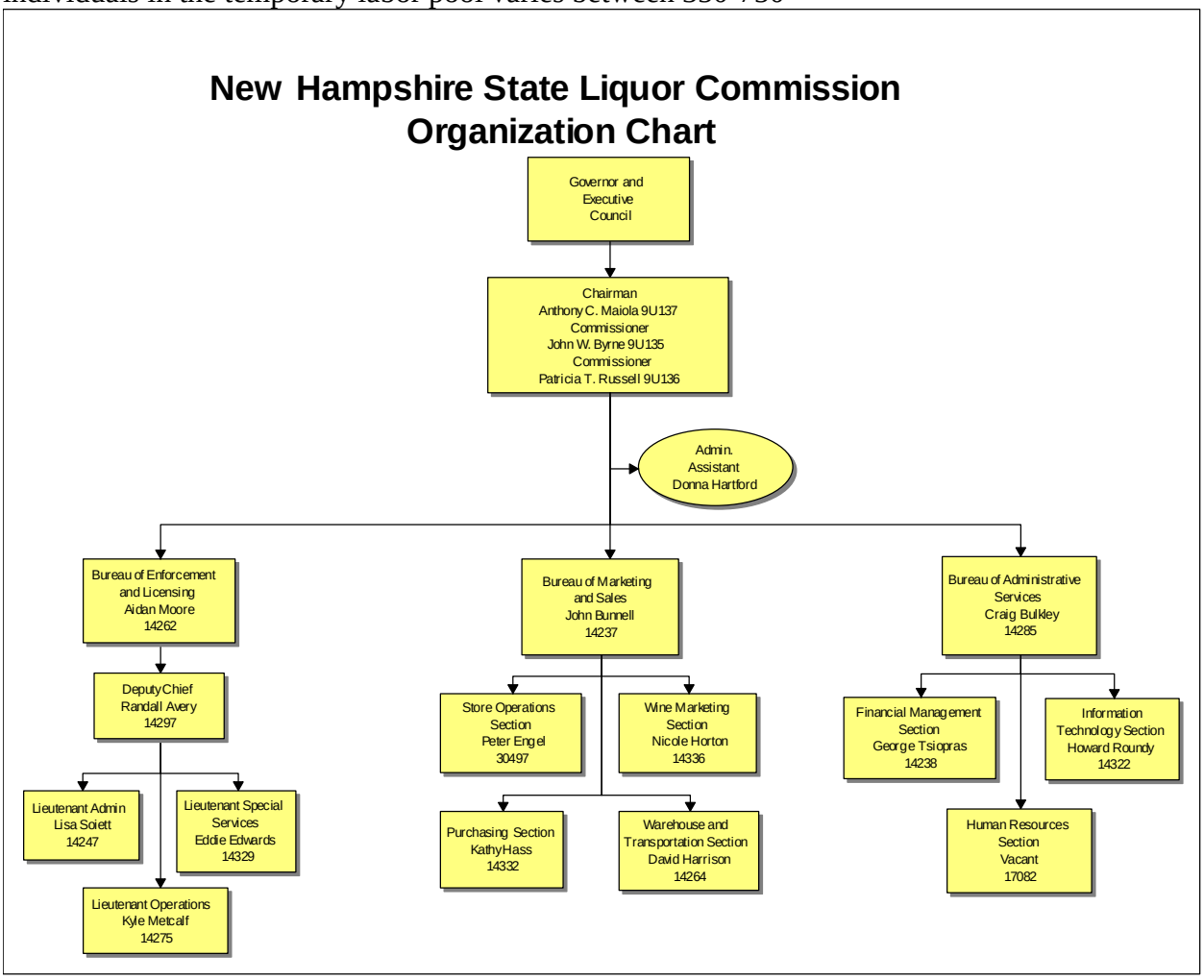
represent alcoholic beverages. The Administrative Services Bureau provides Finance and Human Resources services as well as general administrative support to the SLC.
The day-to-day management and decision-making structure consists of the three appointed Commissioners (Chairman and two commissioners - all appointed for six-year terms), the three bureau chiefs, and their respective subordinate management teams.

The authority to make day-to-day management decisions is delegated to the lowest possible level. Major decisions affecting strategic, operational, legal, administrative rules, and other high level issues and objectives are made at the Commission level. The three bureau chiefs are responsible for the operations management in their respective bureaus. Their subordinate managers are likewise responsible for managing their respective operations.

There are 686 employees as follows:

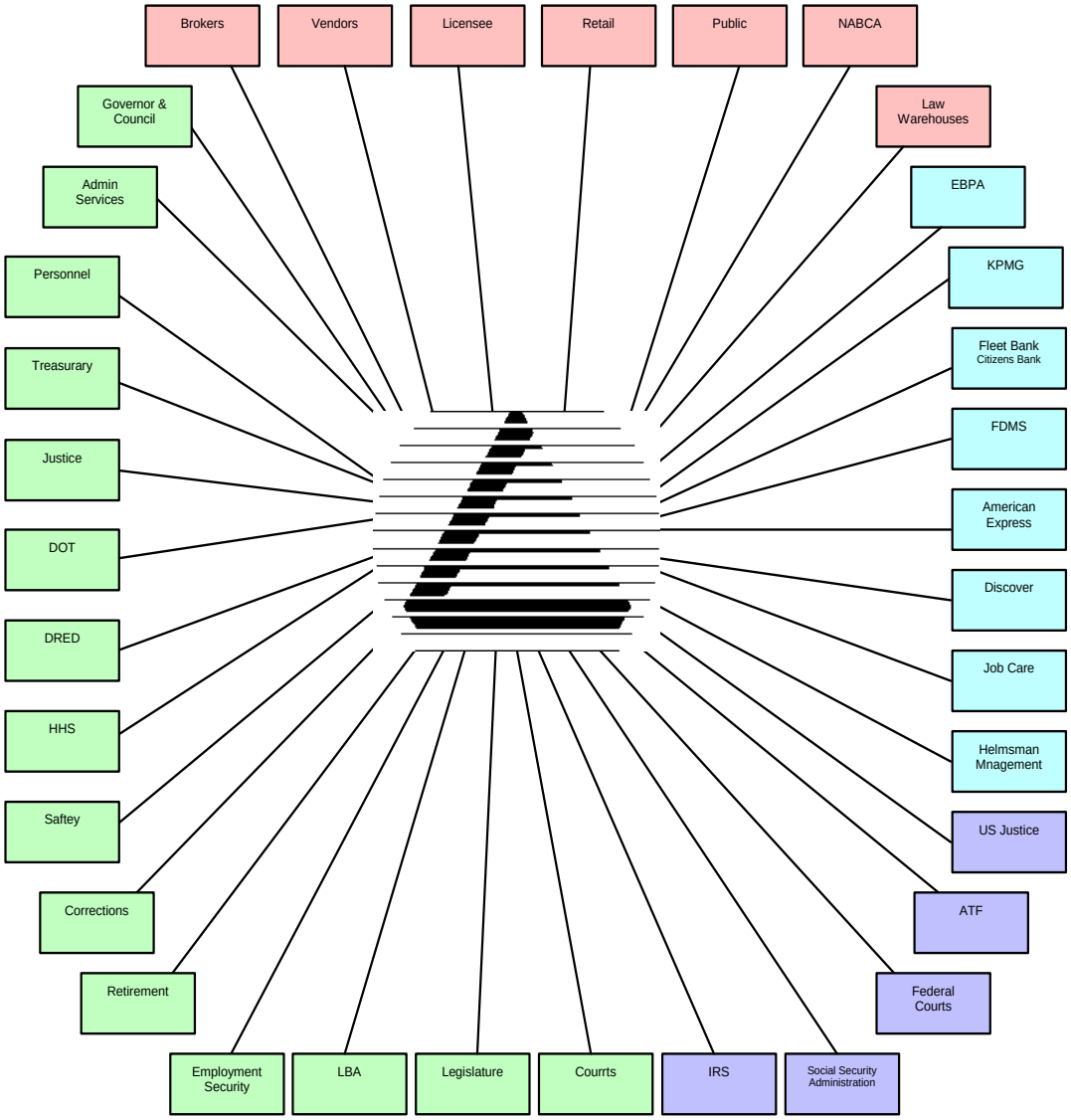
Positions	Store	Non-Store	Total
Permanent	201	102	303
Temporary	373*	11	384
Total	573	113	686

*Full time equivalents, based on a 40 hour workweek per employee. The actual number of individuals in the temporary labor pool varies between 350-750



2.4 CONTEXT DIAGRAM

The SLC touches many organizations within state government, the federal government and in the private sector.



3 STRATEGIC ISSUES

3.1 BUREAU OF ENFORCEMENT

3.1.1 Licensing

3.1.1.1 License system

- Pending legislation will change the license types and the fee structure of the Liquor Licenses. Substantial rework of the existing system will be done to accommodate this change.
- Improve access to licensing information for licensing and enforcement personnel.
- Add public access to limited information and status on licensed establishments.
- Improve search and reporting abilities are needed for both staff and the public. Improvement in the quantity and quality of the information stored.
- An improvement in the physical access to the network and increased speed is also needed.
- Change the licensee's method to pay fines to utilize credit cards and the internet.
- Reduce the effort for a prospective licensee to obtain information on the correct type of license needed and then provide an easy method to ask for it. Create an unattended method that would determine the type of license based on the answers to a series of questions.
- Rework the renewal process. Licensees that do not require an inspection are to be able to renew online. Add alternative methods of payment: credit card, debit card, on account, ACH, electronic check, etc. Provide a method for a licensee to obtain copies of renewal documents without direct interaction with licensing personnel.
- Improve the method of having field reports entered into the licensing system. Eliminate the paper forms used in the field and the post interview data entry.
- Add a method for Law Enforcement to flag a license to not renew or an individual from getting a license.
- Have a replacement system with the above functionality by August 2004.

3.1.1.2 Commission Enforcement Action

- Make Commission action on enforcement issues more available to the public.
- Post these actions on the web site by January 2004 in PDF format.

3.1.1.3 Beverage Import Reporting

- Implement the beverage industry's new electronic method to report product importation into a state. Create an electronic method of collecting similar data from the wholesalers and an automated reconciliation process.

3.1.1.4 Document Management

- Eliminate the paper licensee records.
- Make the documents available so that they can be retrieved via the staff's computers including the remote field staff.
- Improve the remote staff network access with wireless access points in the field and double

the useable bandwidth over the current dial-up.

3.1.2 Law Enforcement

3.1.2.1 IMC Training

- The staff needs to understand the IMC system better to fully utilize it. A training effort needs to be initiated and some research into its features and uses should be undertaken.

3.1.2.2 Criminal Reporting Access

- Improved access to CJIS and SPOTS is needed for the field personnel. Integration into the State Police digital radio system to supply some of these capabilities.

3.1.3 Alcohol Education

3.1.3.1 Staff Training to enhance abilities to create effective multimedia training

- Improve ability to utilize existing equipment and software. Research and training on the cameras, graphics software, presentation software, sound equipment and CD burning is needed. Improve the interfacing of these tools to create a cohesive authoring environment.
- Add video and audio to the presentations.
- Produce course material for school and public forums. CDs with multimedia presentations, handout materials and testing materials.

3.1.3.2 Effectiveness Measurement

- Measure the effectiveness of the education programs by comparing the number of violations to the amount of education provided to the licensee.

3.1.3.3 Remote Facilities

- Research the viability of interactive remote training. Training given in Concord that is broadcast to other locations with a two way communications ability could be an effective method of training.

3.2 BUREAU MARKETING AND MERCHANDISING

3.2.1 Store Operations

3.2.1.1 Telxon repair cost

- Address the issue of our spiraling repair cost of our aging Telxon equipment

3.2.1.2 Staff Training

- Train store personnel on the resources currently available to them for use in their daily jobs
- Maximize our efficiency in our electronic communication capabilities between Headquarters and individual stores
- Optimize the use of our substantial database by store operations, supervisor/ managers, and store personnel

3.2.1.3 Store Operations Improvements

3.2.1.3.1 Electronically improve our current method of load checking and receiving, and to identify specific products which will go directly to the selves, based on current inventory

3.2.1.3.2 Streamline our current practice of printing in mass quantities sale cards, shelf captions, and other point of sale materials.

3.2.1.3.3 Increase efficiency and streamline the antiquated paper trail involved in the affidavit process

3.2.1.3.4 Increase gross profit by defining profitability by store, by category within that store, and by item within that store, and offer the same option with a group of stores, or statewide

3.2.1.3.5 Improve customer service and awareness by providing stores with the option of answering their telephone, leaving or taking a message, and relaying store specific info via the ISS

3.2.1.3.6 Develop a more secure and multifunctional store security system which will provide broader coverage and more detail

3.2.1.4 POS Improvements

- Increase customer awareness and increase sales by prompting the customer at the point of purchase regarding current sales promotions or complimentary products on sale
- Increasing incremental sales by offering a product specific gift card in place of a paper mail in coupon
- Decrease the liability associated with underage sales by electronically verifying the validity of any drivers license

3.2.1.5 Customer Interaction

- Provide customer interaction with informational materials and aid them in product searches through the use in store kiosk
- Increase sales potential and improve customer service by allowing customers to " shop on line" at a specific store, and have the order assembled and prepaid (credit card) prior to the hurried customer's arrival

3.2.1.6 Supplies tracking

- Reduce cost and increase accountability by categorizing and tracking store supplies and bags as inventory items with a defined value

3.2.2 Merchandising

3.2.2.1 Research and Reporting

- Improve the ability to evaluate product through its contribution to gross profit.
- Improve the ability to evaluate the effectiveness of a sale
- Improve the ability to evaluate the effect of a products activity on a class or group

3.2.3 Warehouse and Transportation

- Improve the ability to count inventory through electronic means.
- Improve the receiving and shipping tracking via shipping container codes

3.3 ADMINISTRATIVE SERVICES

3.3.1 Finance

3.3.1.1 Document Management

- Reduce or eliminate paper storage so as to create a more productive environment. Create an environment where most documents are stored so that they can be retrieved via the staff 's computers.

3.3.1.2 Customer Access

- Provide our licensees with 24x7 access to their account information that does not directly involve AR staff. This should include financial, order and past purchase information.

3.3.2 Human Resources

- Improve the ability to properly track all forms of leave. Automate the calculation of all leave. Provide better access to all employees to their attendance and leave information.

3.3.3 Information Technology

3.3.3.1 Staff training

- Improve the knowledge base of the staff. Windows management, network management and programming languages are prime targets.

3.3.3.2 Disaster recovery

- Create the hot site at Law warehouses.
- Populate with servers and networking equipment
- Add site to LiquorNet
- Practice business recovery plan

3.3.3.3 Storage

- Increase the available disk storage by 40%

3.3.3.4 Cost containment

- Reduce the cost of maintenance of the laptops.

3.3.3.5 Maintenance capabilities

- Improve remote network and server maintenance capabilities
- Automate desktop update procedures
- Keep software licenses current

4 INFORMATION TECHNOLOGY INITIATIVES

In accordance with 9:4-b, when other levels of government are involved, the State's Project Collaboration Policy will be adhered to unless otherwise noted in the Description of the project.

Statewide IT Issue	Initiative Title / Description	Effort Due Date	Maintenance or Change	Estimated Cost	Funds General	Funds Other Specify
	4.1 PERSONNEL ATTENDANCE AND LEAVE SYSTEM	80	In-house	$0.00	$0.00	$0.00
	Replace the in-house developed payroll system with a system that better addresses the actual needs of the SLC. Eliminate the financial calculations. Enhance the attendance and leave portions to include all forms of leave and adding comprehensive leave calculation capabilities. Add web based employee access to personal information. Improve the interfaces to NHGHRS, NHIFS and the SLC GL. Strategic issues addresses: 2.3.2	10/30/03				
	4.2 WEB SITE REDESIGN	180	In-house	$0.00	$0.00	$0.00
	Reconsider the existing information on the SLC web site to determine what is still relevant and what needs to be removed or added. Develop the future structure. There are several known needs: enhancing the ability to handle Commission actions and rules, Licensee account status, improved product search and public ordering for pickup. Change the look and feel to match the State's new Webster style. Strategic issues addresses: 2.1.1.2, 2.3.1.2, 2.2.1.5	8/30/03				

	4.3 GROSS PROFIT AND SALES REPORTING	180	In-house	$0.00	$0.00	$0.00
	Create a new reporting system for marketing that allows for better interactive analysis of trends. A new gross profit database will be created. Several predetermined queries will also be created as well as new ad hoc query tools to enhance the current BIS ad hoc and export tools. All reporting and analysis will be available online. Strategic issues addresses: 2.2.2.1, 2.2.1.3.4	12/30/03				

2002-13	**4.4 DISASTER RECOVERY**	120	Change	$5,000.00 plus $15,000.00 per year	$5,000.00 plus $15,000.00 per year	$0.00
	Build a hot site at Law Warehouse. Acquire the servers, storage and network hardware. SLC IT staff will install and configure this equipment. Create a recovery plan and test it. This will be leased hardware with a time frame to match the HQ lease and have ongoing cost. A minimal amount of outside consultant use is anticipated. Strategic issues addresses: 2.3.3.2	12/30/03				

	4.5 POS ENHANCEMENTS	30	Change	$50,000.00	$50,000.00 un-funded	$0.00
	Pursue new features with ACR to improve our POS environment. Prompt the customer at the point of purchase regarding current sales promotions or complimentary products on sale. Offer a product specific gift card. Electronically verifying the validity of a driver's license. Strategic issues addresses: 2.2.1.4	9/30/03				

2002-3	**4.6 LICENSING**	180	Change	$200,000.0	$200,000.0	$0.00

	Replace the old in-house developed licensing with the new State standard system from SA. This system will provide the necessary storage and tracking license holders including violations. Web access including public access to violations and renewals will be available on appropriate licenses. A field inspection module will provide for remote updating. Strategic issues addresses: 2.1.1.1	1/1/04		0	0	

	4.7 SUPPLIES TRACKING	60	In-house	$0.00	$0.00	$0.00
	Enhance the supply ordering system to include shipping and inventory tracking. Strategic issues addresses: 2.2.1.6	9/30/04				

	4.8 ALCOHOL EDUCATION EFFECTIVENESS	30	In-house	$0.00	$0.00	$0.00
	Create a system that will compare the training given to licensees and their violation record for the purpose of determining the effectiveness of the training. The licensing system will have to supply the training data while the IMC system will have to supply the violation data to a new database from which the reporting can be created. Strategic issues addresses: 2.1.3.2	6/30/04				

2002-17	**4.9 NETWORK ACCESS**	30	Maintenance	$10,000.00	$10,000.00	$0.00
	Determine alternative methods for the field staff to gain access to the SLC network with good bandwidth. The investigators desire access during late night and early morning to submit reports and access previous violation information. The licensing specialists need access during the day to current and new licensing data. Examine better methods such as WLAN at stores and police radio interface. Create pilot locations and expand as funds permit. Strategic issues addresses: 2.1.1.1, 2.1.2.2	2/04				

	4.10 BEVERAGE IMPORT REPORTING	30	In-house	$0.00	$0.00	$0.00

	Create a system that accepts vendor and wholesaler data on beverage imports based on the Committee of the States pilot project for the purpose of automating the reconciliation of manufacturer and wholesaler data.. This will maintain a database of the reported information and simplify the process of finding discrepancies. Strategic issues addresses: 2.1.1.3	3/30/04				

2002-5	**4.11 DOCUMENT MANAGEMENT / WORK FLOW**	180	Change	$200,000.00	$200,000.00 un-funded	$0.00
	Investigate (and implement if appropriate) the File Net system that the State has contracted for to determine if it can resolve the paper storage and access and/or the work flow issues. Strategic issues addresses: 2.1.1.4, 2.3.1.1	6/30/05				

2002-10 2002-18	**4.12 TRAINING**	On-going	Change	$30,000.00 per year	$30,000.00 per year	$?0.00
	Improve the ability of internal trainers to create and deliver better training programs for computer related, operations related and alcohol and tobacco related subjects. Create a comprehensive plan for all staff in the use of IT systems. Cover the needs of all three bureaus with both in-house and out-sourced training. Training from the basic Windows usage to MS Office optimization to very technical OS and network training. Investigate and implement if possible remote training (video conferencing) capabilities for both Commission employees and licensees. This will be an ongoing project that will affect all Commission staff, its external IT support partners, liquor suppliers and some public. Since this is ongoing funding will vary from year to year and may form time to time come from non-General Fund sources such as criminal justice or tobacco grants. Strategic issues addresses: 2.1.2.1, 2.1.3.1, 2.1.3.3, 2.2.1.2, 2.3.3.1					

	4.13 SOFTWARE UPDATES	On-going	Maintenance	$50,000.00	$50,000.00	$0.00
	Keep all licenses current on all required software. Keep all required software at the appropriate release level. Software includes: • Unisys Business Information Server • Unisys Internet Commerce Enabler • Microsoft Office • Microsoft SQL Server • Microsoft Project • Microsoft Publisher • Microfocus COBOL Net Express • Network Associates McAfee anti-virus • IMC ??? • Blue Ocean Track-IT • Adobe Acrobat • Ulead Cool 3D • Ulead Photoimpact • WinZIP • CuteFTP Strategic issues addresses: 2.3.3.5					

	4.14 STORAGE	30	Maintenance	$5,000.00 per year	$5.000.00 per year	$0.00
	Reexamine the disk storage needs and acquire the appropriate increment to be added to the SAN. The effort to reduce paper is demanding more storage. The Document Management system must also be considered. Add any additional SAN storage the to existing lease. Strategic issues addresses: 2.3.3.3	9/30/03				

	4.15 TELXON REPLACEMENT	120	Change	$320,000.00	$320,000.00	$0.00
	Replace the 14 year old hand held devices used by the stores for inventory. The replacements are to have better scanning ability and programming ability so that they can be used for load receiving as well as inventory. If possible utilize the same device for warehouse receiving and picking. Because of cost this will be split between two years. Strategic issues addresses: 2.2.1.1, 2.2.1.3.1, 2.2.3	8/30/04				

	4.16 LAPTOP REPLACEMENT	30	Change	$20,000.00	$20,000.00	$0.00
	Replace the 4 year old laptops with new technology capable of running the latest Windows operating system. There are 50 laptops currently in use most of them in Enforcement. Most of these are to be replaced in FY04 with "tablet" type of laptops as these are recommended for the projected license system replacement. For budget reasons a few non-Enforcement laptops may have to be replaced in FY05. Strategic issues addresses: 2.3.3.4	9/30/04				

	4.17 STORE PRINTING	45	In-house	$0.00	$0.00	$0.00
	Change the method of creating shelf labels, shelf talkers and other marketing material so that it is store specific and on demand at the store. This will eliminate printing for product that is not in the store and allow the store to keep its material fresh. Strategic issues addresses: 2.2.1.3.2	4/30/04				

5 IT BUDGET

5.1 ACTUAL EXPENDITURES FOR PRIOR BIENNIUM

5.1.1 FY2002 Cost

Actual FY 2002	Operating Costs				Capital Costs			
Category	**General**	**Federal**	**Other**	**Subtotal**	**General**	**Federal**	**Other**	**Subtotal**
Software	545,227	0	0	545,227	0	0	0	0
Hardware	17,204	0	0	17,204	0	0	0	0
Consultants	98,118	0	0	98,118	0	0	0	0
Service Vendors	0	0	0	0	0	0	0	0
Maintenance	20,149	0	0	20,149	0	0	0	0
Leases	50,000	0	0	50,000	0	0	0	0
Telecom (data)	114,518	0	0	114,518	0	0	0	0
Supplies	3,064	0	0	3,064	0	0	0	0
IT Training	3,838	0	0	3,838	0	0	0	0
Other	28,664	0	0	28,664	0	0	0	0
Total	**880,782**	0	0	**880,782**	0	0	0	0

5.1.2 FY 2003 Costs

Actual FY 2003	Operating Costs				Capital Costs			
Category	**General**	**Federal**	**Other**	**Subtotal**	**General**	**Federal**	**Other**	**Subtotal**
Software	238,177	0	100	238,277	0	0	0	0
Hardware	10,000	0	0	10,000	0	0	0	0
Consultants	131,634	0	0	131,634	0	0	0	0
Service Vendors	0	0	0	0	0	0	0	0
Maintenance	128,869	0	0	128,869	0	0	0	0
Leases	114,111	0	0	114,111	0	0	0	0
Telecom (data)	80,436	0	0	80,436	0	0	0	0
Supplies	25,896	0	0	25,896	0	0	0	0
IT Training	1,339	0	0	1,339	0	0	0	0
Other	31,262	0	0	31,262	0	0	0	0
Total	**761,724**	0	100	**761,824**	0	0	0	0

5.2 IT BUDGET FOR CURRENT BIENNIUM

5.2.1 2004 Budget

Budget FY 2004	Operating Costs				Capital Costs			
Category	**General**	**Federal**	**Other**	**Subtotal**	**General**	**Federal**	**Other**	**Subtotal**
Software	393,871	0	100	393,971	0	0	0	0
Hardware	182,100	0	0	182,100	0	0	0	0
Consultants	0	0	0	0	0	0	0	0
Service Vendors	0	0	0	0	0	0	0	0
Maintenance	151,400	0	0	151,400	0	0	0	0
Leases	145,517	0	0	145,517	0	0	0	0
Telecom (data)	90,000	0	0	90,000	0	0	0	0
Supplies	4,500	0	0	4,500	0	0	0	0
IT Training	3,000	0	0	3,000	0	0	0	0
Other	36,080	0	0	36,080	0	0	0	0
Total	**1,006,468**	0	100	**1,006,468**	0	0	0	0

5.2.2 2005 Budget

Budget FY 2005	Operating Costs				Capital Costs			
Category	**General**	**Federal**	**Other**	**Subtotal**	**General**	**Federal**	**Other**	**Subtotal**
Software	794,506	0	100	794,606	0	0	0	0
Hardware	183,395	0	0	183,395	0	0	0	0
Consultants	0	0	0	0	0	0	0	0
Service Vendors	0	0	0	0	0	0	0	0
Maintenance	161,700	0	0	161,700	0	0	0	0
Leases	147,017	0	0	147,017	0	0	0	0
Telecom (data)	90,000	0	0	90,000	0	0	0	0
Supplies	5,000	0	0	5,000	0	0	0	0
IT Training	3,000	0	0	3,000	0	0	0	0
Other	39,643	0	0	39,643	0	0	0	0
Total	**1,424,261**	0	100	**1,424,361**	0	0	0	0

5.3 FY 2006-2007 CAPITAL BUDGET

	Budget Amount			
Description	**General**	**Federal**	**Other**	**Total**
None	0	0	0	0

Note 1: IT Categories and object code cross-references are provided in Table 4

Table 4

IT Categories and Object Codes

Category	Object Code
Software	0220, 0312
Hardware	0310, 0313, 0314, 0315, 0316, 0317, 0329, 0330
Consultants	0115, 0465
Service Vendors	0116, 0466
Maintenance	0230, 0231, 0243
Leases	0256
Telecom (data)	0215
Supplies	0223, 0224
IT Training	0805
Other	0101, 0290

APPENDIX B

State of Utah
Department of Alcoholic Beverage Control

REQUEST FOR PROPOSAL

for

Project Management and Consulting Services

K. Stackhouse May 19, 1997

This Request for Proposal contains the following sections

I. Request, Conditions and Instructions to Vendors
II. Overview
III. Problem Statement
IV. Problem Synopsis
V. Objectives
VI. Evaluation Criteria

Attachment A: *Analysis of Existing DABC Information Systems and Processes and Recommendations for Improvements*

Attachment B: *Point of Sale (POS) Package Identification Project Evaluation and Recommendation Report*

II. OVERVIEW

An analysis of the State of Utah Department of Alcoholic Beverage Control's (UDABC) current systems architecture and software was recently performed. During this analysis, the department's high level business processes (manual and automated) were documented and reviewed. A copy of the report is attached to this document as Attachment A.

The result of the analysis was a recommendation that virtually every automated system should be replaced by purchasing commercial applications, wherever appropriate, or building custom systems if necessary. The decision to build or buy must be based on a thorough documentation of the agency's business processes and information requirements. The time line for the project is very aggressive and is driven by Year 2000 compliance issues.

The UDABC is seeking a consulting partner to assist with project management, system requirements gathering and definition, product selection, testing and installation as well as end user training and system documentation. It is the Department's intent to replace current software with purchased software wherever possible; however, the UDABC recognizes that some systems are better suited for development in-house. The decision should be based on the results of the functional analysis and documented business requirements.

The consulting staff will work in tandem with the UDABC's Information Technology staff and will provide training and knowledge transfer throughout the project. The intent of this approach is to provide the Department with appropriate systems solutions while improving the skill set of the UDABC technical staff.

III. PROBLEM STATEMENT

The Department consists of ten functional business units (known as divisions) some of which utilize in-house developed software packages. The majority of these packages are at the end of their life cycle and no longer capable of supporting business needs for which they were written. Furthermore, it should be presumed that none of the packages are Year 2000 compliant. These factors, coupled with a need to automate certain business processes, have placed the department in a critical state.

IV. PROJECT SYNOPSIS

The UDABC will contract with a vendor who will provide experience in project management, analysis, planning and integration, to identify and implement a strategic information systems environment. Consultant staff will work with the Department's staff and will provide training where necessary to ensure that the staff has the necessary skill set to anticipate and react to the Department's future information systems needs. The project is largely driven by Year 2000 compliance issues and must be completed no later than June 30, 1999.

V. OBJECTIVES

Project Management
Objectives:

1. The project requires an accomplished Project Manager experienced in well-defined project management and systems development methodologies.

    1.1 The role of Project Manager is critical to the success of the UDABC's information system efforts. The individual who manages the project will work with a UDABC counterpart and will be jointly responsible for managing overall systems delivery project activities. Specifically the individual will:

        1.1.1 Define the scope of the projects with UDABC business owners.
        1.1.2 Ensure the development of documentation of current business benchmarks against which progress is measured.
        1.1.3 Assess and manage risks.
        1.1.4 Ensure the preparation of documents relating to competitive requests for proposals.
        1.1.5 Oversee the development of detailed systems requirements and deliverable documents.
        1.1.6 Identify skills and competencies of team members required to accomplish projects.
        1.1.7 Anticipate and identify problems.
        1.1.8 Set clear, achievable and challenging goals and objectives, develop action plans, identify milestones, conduct periodic reviews.
        1.1.9 Oversee implementation.
        1.1.10 Communicate post-implementation review recommendations to the project team and the UDABC.

    1.2 Manage project(s) using a well-defined methodology, which must include:

        1.2.1 Strict time/resource estimating, planning and scheduling.
        1.2.2 Regular status reporting.
        1.2.3 A prototyping approach to development, in which the users' expectations are managed and user input is sought by means of shared development of systems prototypes.
        1.2.4 A phased 'deliverables' approach, in which each member of the team is responsible for deliverable products, none of which are scheduled to take more than 80 hours to complete.
        1.2.5 A product release schedule approach to development, in which the users' expectations are managed by means of clearly communicated schedules of what features and functions to expect and when they will be delivered.

Develop Comprehensive System Requirements
Objectives:

2. The recently completed high level analysis of the Department's system environment revealed the need to purchase or build replacement systems for existing UDABC software.

    2.1 Before replacement packages can be selected, a Requirements Definition and Product Selection phase (if applicable) must be undertaken for each subsystem. The complexity of each system is on par with that of the UDABC Point of Sale system and will require comparable analysis. (A copy of the POS package identification report is attached as Attachment B. A Request for Proposal has been generated with the intent to purchase a commercial application.) The selected vendor must provide staff who meet the following criteria:

        2.1.1 Well trained in requirements analysis and documentation.
        2.1.2 Possess excellent written and oral communication skills.
        2.1.3 Follow a well-defined methodology with standard documents.

    2.2 Minimum deliverables for each subsystem analysis should include:

        2.2.1 User Requirements Definition, which lists and prioritizes those features that the direct users of the system have determined to be significant.
        2.2.2 Recommended Solutions or Programming Specification; this document will objectively evaluate the available solutions against the User Requirements Definitions and those items identified as critical success factors.
        2.2.3 Cost Implementation Plan, which presents a project timeline and resource requirements so that informed decisions can be made for scheduling and budgetary purposes.

Participate in Build/Buy Decision
Objectives:

3. The vendor selected to assist with UDABC reengineering efforts is expected to actively participate in decisions to build or buy replacement software.

    3.1 Key to the success of the project is the identification of those systems well-suited for replacement by off the shelf packages versus those better suited for development in house. The vendor staff will be expected to participate as follows:

        3.1.1 Compare Department requirements against available packages.
        3.1.2 Prepare Requests for Proposals, participate in product selection and implementation.
        3.1.3 Prepare Systems Design and Development documents.
        3.1.4 Identify testing strategy, oversee testing phase.
        3.1.5 Participate in user sign off and system implementation.
        3.1.6 Design and assist in user training and system documentation.

Team Training and Mentoring
Objectives:

4. Vendor staff will be expected to work in tandem with the Department's staff with the intention of providing staff with training and experience in all aspects of project management, analysis and system development.

    4.1 Project Management

        4.1.1 All UDABC Information Technology staff should be trained in a disciplined project management methodology. Some training will take the form of mentoring, but vendor staff should be capable of providing or recommending formal training where necessary.

    4.2 Functional Analysis and Requirements Development

        4.2.1 Appropriate UDABC staff should be educated in analysis and requirements gathering and documentation. This education may take the form of mentoring, or formal training.

VI. EVALUATION CRITERIA

Vendors responding to this proposal must provide the following:

- Detailed resumes for all proposed resources as well as their fee per hour and applicable travel/per diem fees. The following positions have been identified as critical; vendor is requested to supplement the list as appropriate:

  Project Manager
  Senior Business Analyst
  Business Analyst
  Senior Oracle Developer
  Oracle Developer

- Case studies (minimum of three) of similar undertakings.

- Five client recommendations.

- Explanation of the relationship between the company and it's staff (employees or sub contractors).

- Evidence that the staff is Oracle and client/server savvy.

- Company's philosophy on installing new systems; *e.g*. How do you decide what to do?

- Evidence of guarantee of services; *e.g.* How will you guarantee that all systems are implemented and functional by the year 2000?

- Estimated number of onsite vendor employees. This will assist UDABC in planning and providing workspaces (desk, computer, telephones, etc.) for vendor staff.

All parties responding agree to the following:

- Pay will be based upon successful completion of deliverables which will be determined within the contract.

- Project Manager will be assigned to the project from inception to completion; the replacement of other staffed personnel must be agreed upon by vendor and UDABC.

- Deliverables must be clearly defined; vendor will be paid as milestones are delivered.

APPENDIX C
Consultant Services For Automated Warehouse System RFP

VIRGINIA DEPARTMENT OF
ALCOHOLIC BEVERAGE CONTROL

PURCHASING OFFICE
2901 HERMITAGE ROAD
P.O. BOX 27491
RICHMOND, VA 23261-7491

RFP NUMBER # S-203-03

TITLE: Consultant Services For Automated Warehouse System

ISSUE DATE: 06/26/03

PURCHASE OFFICER_____

Debra C. Corley
PHONE (804) 213-4425 **FAX** (804) 213-4429

Sealed Proposals Will Be Received Until August 1, 2003 @ 2:00 P.M., (Eastern Daylight Time (EDT), For Furnishing The Goods and Services Described Herein And Then Opened In Public.

Proposals will be opened on the date and hour shown above. Late proposals will not be accepted.

PROPOSALS SENT BY U.S. MAIL ARE TO BE MAILED TO THE ADDRESS SHOWN ABOVE. PROPOSALS HAND DELIVERED OR SENT BY MEANS OTHER THAN U.S. MAIL (I.E. FEDERAL EXPRESS) ARE TO BE ADDRESSED TO: **Department of Alcoholic Beverage Control, 2901 Hermitage Road, Central Office, Second Floor, Room 2059, Richmond, Virginia 23220.** It is the responsibility of the OFFEROR (not the Agency) to ensure proposals are delivered to the specified location by the date and time above. To distinguish proposals from other mail, each envelope or package should be marked according to documents enclosed, as follows: **"BID DOCUMENT"**. It is the intent of the Purchasing Office to assist in recognition of these important documents.

Proposals must be submitted on this and the attached form(s), and must be signed in ink.

All Inquiries For Information Should Be Directed To **Debra C. Corley, Procurement Manager**
Phone (804) 213-4425 Fax (804) 213-4429 E-Mail: dccorly@abc.state.va.us

This solicitation is subject to the provisions of the Commonwealth of Virginia General Terms and Conditions and any revisions thereto, which are hereby incorporated into this proposal in their entirety. If not attached, a copy of these terms and conditions is available for review at the purchasing office or at the Department of General Services, Division of Purchases and Supply's web site address, http://www.dgs.state.va.us. In addition, a copy can be obtained by calling (804) 213-4425. Special terms and conditions attached shall also be part of your proposal.

In Compliance With This Request For Proposals And To All The Conditions Imposed Therein And Hereby Incorporated By Reference, The Undersigned Offers And Agrees To Furnish The Goods and Services In Accordance With The Attached Signed Proposal Or As Mutually Agreed Upon By Subsequent Negotiation.

NOTE: This public body does not discriminate against faith-based organizations in accordance with the *Code of Virginia*, § ***2.2-4343.1*** or against a bidder or offeror because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment.

Name And Address Of Firm _____ _____ _____ Zip Code: _____ FEI/FIN NO.:_____ FAX No.:_____ E-Mail Address: _____		G. Date:_____ __ By:_____ (Signature In Ink) Name: _____ (Please Print) Title: _____ Phone No.: (_____)_____

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13. ATTACHMENTS:

14. APPENDICES:

NOTE TO PROSPECTIVE OFFERORS: You are requested to review the provisions of RFP Section 6.1.2.1 to promote a clear understanding of the words "must", "shall", "should" and "may" as used in this Request For Proposals document.

1. **PURPOSE:** The purpose of this Request for Proposals (RFP) is to solicit sealed proposals from qualified sources to establish a contract through competitive negotiations with one qualified contractor to provide consulting and industrial engineering services. It is anticipated that these services may be required during the entire procurement process from requirements identification through successful implementation of a new material handling system to accommodate the product distribution operations of the Commonwealth of Virginia, Department of Alcoholic Beverage Control (herein referred to as Agency, Department, ABC, or Department of ABC).

2. **BACKGROUND:**

2.1 Current Warehouse Operations

The Department of ABC warehouses liquor for distribution to its retail outlet stores statewide. The warehouse is located adjacent to the ABC Central Office, 2901 Hermitage Road, Richmond, Virginia. The square footage of the warehouse is approximately 300,000 square feet.

Alcoholic beverages are shipped from distributors directly to the warehouse, where ABC distributes, by truck, to over 275 retail outlets throughout the State of Virginia, with this number increasing to 300 within the next 12 to 18 months. ABC manages warehouse activity information through Optum's "MOVE" automated warehouse management system, which includes bar code scanning and radio frequency (RF) technology. The system provides the capability to optimize the operation and movement of inventory within the warehouse. Inventory is tracked from the time of receipt into the warehouse until it is shipped to the ABC retail outlet stores. This tracking is accomplished through a series of predefined tasks that transfers inventory from "location" to "location" using bar code scanning and RF technology.

2.2 Business Problems

Capacity - In recent years, the Department added a significant amount of new items and additional retail outlets to serve a growing population with changing tastes and consumption patterns. The new items and expanded outlets are contributing to the record growth in sales and profitability seen in recent years. However, significant capacity constraints are already hindering the Department's ability to keep pace with demand. ABC does not have the current capacity to pick an optimal amount of product to meet the consumer needs. The lack of product slots in the warehouse places severe limitations on ABC's ability to supply the products desired in the marketplace and maintain an adequate supply of product to meet demand. Based on current trends, the situation is only expected to worsen as demand grows. Presently, there is very little square footage in the central warehouse complex not used for product storage and distribution.

Throughput - Warehouse throughput, a factor of the number of products carried, the number of products in each order and the number of orders filled, also requires significant modification. With the expected growth in the number of stores, the number of items carried, and product demand, the ability to ship accurate and adequate supplies of product in a cost effective manner is in need of significant improvement. This improvement is needed sooner rather than later since ABC expects a 40% growth in the number of orders and 30% increase in volume over the next several years.

2.3 Vision

ABC is interested in improving capacity and throughput in its warehouse through the possible use of a racking and warehouse automation system. ABC expects the system to: (1) meet current and forecasted demand and inventory requirements of new stores, (2) improve space utilization of the warehouse, (3) improve process efficiency (reduction in cost per case shipped); (4) avoid increased labor commitments, (5) improve shipping and inventory accuracy, and (6) position ABC to expand sales and profits in the future.

3. PROCUREMENT CONDITIONS:

3.1 This RFP is designed for award in phases, and directs that the proposal must be presented in a phased approach so that ABC can select those phases that can be funded. ABC has obtained funding approval to acquire the services of a consultant/consulting firm for the initial phase that includes analyzing current warehouse operations through development of a solicitation along with a cost estimate for the new material handling system.

3.2 Since this RFP is based upon having funds available, ABC is not obligated to purchase/implement all phases of this RFP. ABC will select the phases to be awarded and reserves the right to award some, all or none of the remaining phases after completion of the first phase.

3.3 The phases are outlined below and described more fully in the Statement of Needs:

Phase 1	Requirements Definition and Development of Material Handling System Solicitation with Cost Estimate
Phase 2	Release of Solicitation; Receipt and Assistance with Evaluation of Bids/Proposals
Phase 3	Contract Negotiations and Award
Phase 4	Project Management

4. STATEMENT OF NEEDS: The Contractor shall provide services related to professional planning, design and implementation of a new material handling system for the Department of Alcoholic Beverage Control. As stated in Section 3 of this RFP, services to be provided by the Contractor are divided into phases. Since the Contractor shall be providing direction and assistance to ABC during the procurement process of the selected material handling system, all actions related to the procurement process must be accomplished in accordance with the guidelines set forth in the *Virginia Public Procurement Act*, and the Agency Procurement and Surplus Property Manual issued by the Virginia Department of General Services, Division of Purchases and Supply.

4.1 The Contractor shall have experience in industrial engineering, facilities planning and layout of warehousing and distribution centers, material handling and storage systems planning, design, warehousing and distribution systems planning, systems integration, workflow, throughput and capacity planning, and project implementation.

4.2 Phase 1

The Contractor shall conduct an analysis of current warehouse operations for inventory control and distribution of alcoholic beverages, define requirements and develop a solicitation for a new material handling system. Phase 1 includes, but is not limited to, the tasks listed below. The Contractor is not constrained from supplementing this list with additional elements deemed necessary to permit the development of alternative approaches or the application of proprietary analytical techniques.

4.2.1 Review the current warehouse distribution operation including layout, number of picking slots, number of products carried, bulk storage, etc. Prepare and conduct a briefing with documentation on alternatives for improving warehouse capacity and throughput for ABC operations. Current space restrictions should not limit proposed alternatives. Alternatives may be presented using either or both of the following scenarios: (1) utilization of current cubic space, (2) recommendation of building modifications or evaluation of new construction to best accommodate ABC's needs. Both should address workflow and labor optimization, and systems integration.

4.2.2 Prepare a written description/specifications and provide cost estimates of the "best suited" solution, and recommend appropriate staffing levels.

4.2.3 Identify the "leading edge" suppliers of applicable warehouse systems (equipment and software if required), and provide a list of names, addresses and telephone numbers.

4.2.4 Prepare and provide a preliminary warehouse floor layout depicting the "best suited" material handling system in place that meets the Agency's current and projected requirements for the next ten years.

4.2.5 Assist in the preparation of a written solicitation for the procurement of the material handling system to best meet the needs of the Agency. This includes development of the specific scope of work, specifications, evaluation criteria, etc.

4.3 Phase 2

4.3.1 Participation in a pre-bid/pre-proposal conference if required.

4.3.2 Evaluate bids or proposals received in response to the solicitation. Research information provided by the bidder/offeror, company information, recommended solution and feasibility to implement; present findings and recommendations to ABC.

4.4 Phase 3

Actively participate in contract negotiation sessions including development of a detailed Statement of Work. During this Phase, the contractor should be aware if structural renovations are required and ensure all activities are synchronized and included on a master work plan. After the determination by the Agency to award the contract for the material handling system, the contractor shall assist in the defense of the decision should it be challenged or protested.

4.5 Phase 4

After award of contract, closely monitor the work of the contractor through final acceptance ensuring selected system/solution is installed and implemented according to the contractual documents. If ABC elects to hire an architectural/engineering firm, the contractor shall work directly with this firm to coordinate any activities relating to structural renovation.

H.

I.

J. 5. COST OF PROPOSALS

The Offeror is responsible for all costs incurred for proposal preparation in response to this RFP. The Commonwealth is not liable for any proposal preparation costs.

6. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

6.1 General Instructions:

6.1.1 RFP Response: To be considered for selection, Offerors must submit a complete response to this RFP. One (1) original and six (6) identical copies of each proposal must be submitted. Return all pages received and place in the front of each copy of the proposal. No other distribution of the proposal shall be made by the Offeror.

6.1.2 Proposal Preparation:

6.1.2.1 Proposals shall be signed by an authorized representative of the Offeror. All information requested must be submitted. Failure to submit all information requested may result in the purchasing agency requiring prompt submission of missing information and/or giving a lowered evaluation of the proposal. Proposals, which are substantially incomplete or lack key information, may be rejected by the purchasing agency at its discretion.

Offerors must document the extent to which they can meet the specific requirements of the RFP. Please note the terms "must", "shall", "should" and "may" are used to identify the criticality of the requirements. "Must" and "shall" identify "mandatory" requirements whose absence will have a major negative impact on the suitability of the consultant/consulting firm to provide required services. Items labeled as "should" are highly desirable, although their absence will not have as large an impact. Items labeled "may" will be useful but are not necessary. Depending on the overall response to the RFP, some individual "must" and shall" items may not be fully satisfied, but it is the intent to satisfy most, if not all, "must" and "shall" requirements. The inability of an Offeror to satisfy a "must" or "shall" requirement does not automatically remove that Offeror from consideration; however, it may seriously affect the overall rating of the Offeror's proposal.

6.1.2.2 Proposals should be prepared simply and economically, providing a straightforward, concise description of capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content. Offerors are encouraged to elaborate on their qualifications and performance data or staff expertise pertinent to the proposed project.

6.1.2.3 Proposals should be organized in the order in which the requirements are presented in the RFP with all pages of the RFP returned in the front of the proposal. All pages of the proposal hard copy should be numbered. Each paragraph in the proposal should reference the paragraph number of the corresponding section of the RFP. It is also helpful to cite the paragraph number, sub letter, and repeat the text of the requirement as it appears in the RFP. If a response covers more than one (1) page, the paragraph number and sub letter should be repeated at the top of the next page. The proposal should contain a table of contents which cross references the RFP requirements. Information which the Offeror desires to present that does not fall within any of the requirements of the RFP should be

inserted at an appropriate place or be attached at the end of the proposal and designated as additional material. Proposals that are not organized in this manner risk elimination from consideration if the evaluators are unable to find where the RFP requirements are specifically addressed.

6.1.2.4 Each copy of the proposal should be bound or contained in a single volume where practical. All documentation submitted with the proposal should be contained in that single volume.

6.1.2.5 Offerors shall clearly and specifically identify the goods and/or services being offered and enclose complete and detailed descriptive literature and specifications with the proposal to enable the evaluation panel to determine if the goods and/or services meet the requirements of the solicitation. Failure to do so may cause the proposal to be considered non-responsive.

Ownership of all data, materials and documentation originated and prepared for the State pursuant to the RFP shall belong exclusively to the State and be subject to public inspection in accordance with the *Virginia Freedom of Information Act*. Trade secrets or proprietary information submitted by an Offeror shall not be subject to public disclosure under the *Virginia Freedom of Information Act*; however, the Offeror must invoke the protections of §2.2-4342F of the *Code of Virginia*, in writing, either before or at the time the data is submitted. The written notice must specifically identify the data or materials to be protected and state the reasons why protection is necessary. The proprietary or trade secret material submitted must be identified by some distinct method such as highlighting or underlining and must indicate only the specific words, figures, or paragraphs that constitute trade secret or proprietary information. The classification of an entire proposal document, line item prices and/or total proposal prices as proprietary or trade secrets is not acceptable and will result in rejection and return of the proposal.

6.1.3 Oral Presentation

Offerors who submit a proposal in response to this RFP may be required to give an oral presentation of their proposal to the State agency. This provides an opportunity for the Offeror to clarify or elaborate on the proposal. This is a fact finding and explanation session only and does not include negotiation. The issuing State agency will schedule the time and location of these presentations. Oral presentations are an option of the evaluation panel and may or may not be conducted.

6.2 Specific Proposal Instructions:

Proposals should be as thorough and detailed as possible so the evaluation panel may properly evaluate your capabilities to provide the required goods/services. Offerors are required to submit the following items as a complete proposal:

6.2.1 The return of this complete RFP and all addenda acknowledgments, if any, signed, and filled out as required.

6.2.2 Offeror Data Sheet (Attachment A), and other specific items or data requested in the RFP.

Include a listing of current and/ or previous contractual clients receiving services similar to the scope required by this contract, including contacts, addresses and telephone numbers for each.

6.2.3 A written narrative statement and/or information package including the following:

6.2.3.1 Contractor's experience in providing services described herein.

6.2.3.2 Names, qualifications and experience of personnel to be assigned to this project.

6.2.3.3 Resumes of staff to be assigned to this project.

6.2.4 Specific plans or methodology for performance of work including:

6.2.4.1 What, when and how the service will be performed to include a draft work plan.

6.2.4.2 Timeframe for completion.

6.2.5 Proposed Price. Indicate in the Pricing Schedule, Section 12.

6.3 Participation in State Procurement Transactions by Small Businesses, and Businesses Owned by Women and Minorities

It is the policy of the Commonwealth of Virginia to contribute to the establishment, preservation and strengthening of small businesses and businesses owned by women and minorities, and to encourage their participation in State procurement activities. The Commonwealth encourages Offerors to provide for the participation of small businesses and businesses owned by women and minorities through partnerships, joint ventures, subcontracts, and other contractual opportunities. Submission of a report of past efforts to utilize the goods and services of such businesses and plans for involvement on this contract is required. By submitting a proposal, Offerors certify that all information provided in response to this RFP is true and accurate. Failure to provide information required by this RFP will ultimately result in rejection of the proposal.

All information requested by this RFP on the ownership, utilization and planned involvement of small businesses, women-owned businesses and minority-owned businesses must be submitted. If an Offeror fails to submit all information requested, the purchasing agency may require prompt submission of missing information after receipt of Offeror proposals.

Instructions, including definitions, and forms for providing the required information, are included in the Appendix 1 to this RFP. You are not required to use the forms so long as the minimum information required is provided in the prescribed format.

7. EVALUATION AND AWARD CRITERIA

7.1 Evaluation Criteria:

The Evaluation Panel using the following criteria, the order of which is not indicative of their weight or importance, shall evaluate responses.

7.1.1. Qualifications, experience and capability of the Offeror and its personnel assigned to this project in providing similar services (to include references from current commercial or government accounts).

7.1.2. Specific plans or methodology to be used to perform the services.

7.1.3 Price

7.1.4 Participation of small, women-owned and minority-owned businesses.

7.2 Award Of Contract:

Selection shall be made of two or more Offerors deemed to be fully qualified and best suited among those submitting proposals on the basis of the evaluation factors included in the Request for Proposals, including price, if so stated in the Request for Proposals. Negotiations shall be conducted with the Offerors so selected. Price shall be considered, but need not be the sole determining factor. After negotiations have been conducted with each Offeror so selected, the Agency shall select the Offeror, which, in its opinion, has made the best proposal, and shall award the contract to that Offeror. The Commonwealth may cancel this Request for Proposals or reject proposals at any time prior to an award, and is not required to furnish a statement of the reason why a particular proposal was not deemed to be the most advantageous (*Code of Virginia*, §2.2-4395D). Should the Commonwealth determine in writing and in its sole discretion that only one Offeror is fully qualified, or that one Offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that Offeror.

The award document will be a contract incorporating by reference all the requirements, terms and conditions of the solicitation, and the successful contractor's proposal as negotiated.

8. REPORTING AND DELIVERY REQUIREMENTS

The Contractor shall deliver all reports and respond, orally and/or in writing, to all inquiries from the ABC Contract Administrator or designee. The ABC Contract Administrator will be identified upon award.

8.1 The Contractor shall conduct an analysis of current warehouse operations; prepare a written report and present findings to ABC on alternatives for improving warehouse capacity and throughput within sixty (60) days after award of contract. The report and briefing shall include at a minimum each element outlined in Section 4 of the Statement of Needs, as well as a final work plan incorporating the entire process.

8.2 The Contractor shall prepare a draft solicitation for the new material handling system for review by ABC within ninety (90) days after award of contract. ABC shall have the right to edit or modify the solicitation and require additional elaboration, as it deems necessary. The final solicitation shall be ready for distribution within ten (10) days after approval by ABC.

8.3 Solicitation responses shall be reviewed and evaluated by the Contractor, and recommendations presented to ABC within thirty (30) days after the due date set for receipt of responses.

8.4 After award of the contract for the new material handling system, the Contractor shall monitor the work of the contractor and provide periodic progress reports. The specific report schedule will be determined during contract negotiations and prior to award. The progress report shall outline the following:

8.4.1 The status of project tasks.

8.4.2 A summary of any meetings held during the reporting period.

8.4.3 An indication of any delays or anticipated delays in meeting target completion dates.

8.4.4 An explanation of the reasons for any delays or anticipated delays.

8.4.5 A proposed plan to resolve issues and delays.

8.4.6 The Contractor shall provide a final project completion report within 90 days after system is functional.

8.5 The Contractor shall submit the following reports regarding the utilization of small businesses, women-owned businesses, and minority-owned businesses.

8.5.1 Periodic Progress Reports/Invoices: The Contractor shall provide a periodic report on involvement of small businesses, women-owned businesses, and minority-owned businesses. This report will specify the actual dollars contracted to be spent to date with such businesses and actual dollars expended to date with such businesses on this contract. This information shall be provided separately for small businesses, women-owned businesses and minority-owned businesses. The specific reporting schedule will be determined during negotiations and prior to award.

8.5.2 Final Actual Involvement Report: The Contractor shall submit, within ten (10) days of contract completion, a report on the actual dollars spent with small businesses, women-owned businesses and minority-owned businesses during the performance of this contract. At a minimum, this report shall include for each firm contracted with and for each such business class (i.e., small, women-owned, minority-owned) a comparison of the total actual dollars spent on this contract with the planned involvement of the firm and business class as specified in the proposal, and the actual percent of the total estimated contract value.

9. GENERAL TERMS & CONDITIONS: Attachment B

10. SPECIAL TERMS & CONDITIONS: Attachment C

11. **METHOD OF PAYMENT**: The Contractor will be paid on the basis on invoices submitted for acceptable services/deliverables received. The Contractor shall submit invoices within thirty (30) days after completion of services. All invoices shall be forwarded directly to ABC at the address below:

Department of Alcoholic Beverage Control
Attn: Accounts Payable
P. O. Box 27491
Richmond, VA 23261

12. **PRICING SCHEDULE:**

Identify all costs included for each Phase. A firm fixed price must be stated for Phases 1, 2 and 3. The cost for Phase 4 (Project Management) may include pricing options based on the Offeror's experience with various systems installations.

Phase 1 $_____

Phase 2 $_____

Phase 3 $_____

Phase 4 $_____

ATTACHMENT A
OFFEROR DATA SHEET

1. **QUALIFICATION OF OFFEROR**: The Offeror must have the capability and capacity in all respects to fully satisfy all of the contractual requirements, to include financial stability, no criminal history or proceedings, etc. Offeror's signature on this solicitation certifies that his firm is properly licensed for providing the goods/services specified. The Offeror must be legally authorized to do business in the Commonwealth of Virginia.

2. **YEARS OF BUSINESS:** Indicate the length of time you have been in business providing this type of service years _____ months.

3. State the number of qualified employees in your employment with experience in the type of work described in this solicitation. _____ Describe your plans to increase your personnel resources if necessary to perform this contract, and state other similar contracts you are currently working on.

4. **REFERENCES:** Indicate below a listing of at least four (4) recent references for which you have provided this type of service. Include the date service was furnished and the name and address of the person the Department of Alcoholic Beverage Control has your permission to contact. A narrative statement should be provided for each reference describing the scope of work, size and type of service provided to each reference. Additional sheets may be used if necessary.

DATES SERVICE FURNISHED	PERSON TO CONTACT	ADDRESS	PHONE & FAX NO.

5. **Service shall be provided by (check one):**

_____ Corporation _____ Company _____ Partnership _____ Individual

_____ Association _____ Sole Proprietor _____ Other (Specify)

If corporation, list State and date of incorporation. If not a corporation, state the type of business organization, names and addresses of owners, address and phone number of principal place of business, date business began and State in which organized.

_____

_____

Are you a subsidiary firm? Yes ____ No ____. If yes, list the name and location of your parent affiliation.

_____

6. **Statistical information only**, is your firm:

(1) Minority owned? _____
(2) Female owned? _____

If yes, are you registered with the Va. Dept. of Minority Business Enterprise? _____
(3) Virginia firm? _____

ATTACHMENT B
GENERAL TERMS AND CONDITIONS

A. **VENDORS MANUAL:** This solicitation is subject to the provisions of the Commonwealth of Virginia *Vendors Manual* and any changes or revisions thereto, which are hereby incorporated into this contract in their entirety. The procedure for filing contractual claims is in section 7.19 of the *Vendors Manual*. A copy of the manual is normally available for review at the purchasing office and is accessible on the Internet at www.dgs.state.va.us/dps under "Manuals."

B. **APPLICABLE LAWS AND COURTS:** This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The contractor shall comply with all applicable federal, state and local laws, rules and regulations.

C. **ANTI-DISCRIMINATION:** By submitting their proposals, offerors certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and § 2.2-4311 of the *Virginia Public Procurement Act (VPPA).* If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (*Code of Virginia*, § 2.2-4343.1E).

In every contract over $10,000 the provisions in 1. and 2. below apply:

1. During the performance of this contract, the contractor agrees as follows:

   a. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

   b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.

   c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.

2. The contractor will include the provisions of 1. above in every subcontract or purchase order over $10,000, so that the provisions will be binding upon each subcontractor or vendor.

D. **ETHICS IN PUBLIC CONTRACTING:** By submitting their proposals, offerors certify that their proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other offeror, supplier, manufacturer or subcontractor in connection with their proposal, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance,

deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

E. **IMMIGRATION REFORM AND CONTROL ACT OF 1986:** By submitting their proposals, offerors certify that they do not and will not during the performance of this contract employ illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986.

F. **DEBARMENT STATUS:** By submitting their proposals, offerors certify that they are not currently debarred by the Commonwealth of Virginia from submitting proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.

G. **ANTITRUST:** By entering into a contract, the contractor conveys, sells, assigns, and transfers to the Commonwealth of Virginia all rights, title and interest in and to all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the Commonwealth of Virginia under said contract.

H. **MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS FOR RFPs**

Failure to submit a proposal on the official state form provided for that purpose may be a cause for rejection of the proposal. Modification of or additions to the General Terms and Conditions of the solicitation may be cause for rejection of the proposal; however, the Commonwealth reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a proposal.

I. **CLARIFICATION OF TERMS:** If any prospective offeror has questions about the specifications or other solicitation documents, the prospective offeror should contact the buyer whose name appears on the face of the solicitation no later than five working days before the due date. Any revisions to the solicitation will be made only by addendum issued by the buyer.

J. **PAYMENT:**

1. To Prime Contractor:

   a. Invoices for items ordered, delivered and accepted shall be submitted by the contractor directly to the payment address shown on the purchase order/contract. All invoices shall show the state contract number and/or purchase order number; social security number (for individual contractors) or the federal employer identification number (for proprietorships, partnerships, and corporations).

   b. Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.

   c. All goods or services provided under this contract or purchase order, that are to be paid for with public funds, shall be billed by the contractor at the contract price, regardless of which public agency is being billed.

   d. The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act.

e. **Unreasonable Charges**. Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, the Commonwealth shall promptly notify the contractor, in writing, as to those charges which it considers unreasonable and the basis for the determination. A contractor may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification. The provisions of this section do not relieve an agency of its prompt payment obligations with respect to those charges which are not in dispute (*Code of Virginia,* § 2.2-4363).

2. To Subcontractors:

a. A contractor awarded a contract under this solicitation is hereby obligated:

(1) To pay the subcontractor(s) within seven (7) days of the contractor's receipt of payment from the Commonwealth for the proportionate share of the payment received for work performed by the subcontractor(s) under the contract; or

(2) To notify the agency and the subcontractor(s), in writing, of the contractor's intention to withhold payment and the reason.

b. The contractor is obligated to pay the subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the contractor that remain unpaid seven (7) days following receipt of payment from the Commonwealth, except for amounts withheld as stated in (2) above. The date of mailing of any payment by U. S. Mail is deemed to be payment to the addressee. These provisions apply to each sub-tier contractor performing under the primary contract. A contractor's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the Commonwealth.

K. **PRECEDENCE OF TERMS:** Paragraphs A-J of these General Terms and Conditions shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.

L. **QUALIFICATIONS OF OFFERORS:** The Commonwealth may make such reasonable investigations as deemed proper and necessary to determine the ability of the offeror to perform the services/furnish the goods and the offeror shall furnish to the Commonwealth all such information and data for this purpose as may be requested. The Commonwealth reserves the right to inspect offeror's physical facilities prior to award to satisfy questions regarding the offeror's capabilities. The Commonwealth further reserves the right to reject any proposal if the evidence submitted by, or investigations of, such offeror fails to satisfy the Commonwealth that such offeror is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.

M. **TESTING AND INSPECTION:** The Commonwealth reserves the right to conduct any test/inspection it may deem advisable to assure goods and services conform to the specifications.

N. **ASSIGNMENT OF CONTRACT:** A contract shall not be assignable by the contractor in whole or in part without the written consent of the Commonwealth.

O. **CHANGES TO THE CONTRACT:** Changes can be made to the contract in any of the following ways:

1. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.

2. The Purchasing Agency may order changes within the general scope of the contract at any time by written notice to the contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The contractor shall comply with the notice upon receipt. The contractor shall be compensated for any additional costs incurred as the result of such order and shall give the Purchasing Agency a credit for any savings. Said compensation shall be determined by one of the following methods:

   a. By mutual agreement between the parties in writing; or

   b. By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the contractor accounts for the number of units of work performed, subject to the Purchasing Agency's right to audit the contractor's records and/or to determine the correct number of units independently; or

   c. By ordering the contractor to proceed with the work and keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The contractor shall present the Purchasing Agency with all vouchers and records of expenses incurred and savings realized. The Purchasing Agency shall have the right to audit the records of the contractor as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to the Purchasing Agency within thirty (30) days from the date of receipt of the written order from the Purchasing Agency. If the parties fail to agree on an amount of adjustment, the question of an increase or decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes Clause of this contract or, if there is none, in accordance with the disputes provisions of the Commonwealth of Virginia *Vendors Manual*. Neither the existence of a claim nor a dispute resolution process, litigation or any other provision of this contract shall excuse the contractor from promptly complying with the changes ordered by the Purchasing Agency or with the performance of the contract generally.

P. **DEFAULT:** In case of failure to deliver goods or services in accordance with the contract terms and conditions, the Commonwealth, after due oral or written notice, may procure them from other sources and hold the contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the Commonwealth may have.

Q. **TAXES:** Sales to the Commonwealth of Virginia are normally exempt from State sales tax. State sales and use tax certificates of exemption, Form ST-12, will be issued upon request. Deliveries against this contract shall usually be free of Federal excise and transportation taxes. The Commonwealth's excise tax exemption registration number is 54-73-0076K.

R. **USE OF BRAND NAMES:** Unless otherwise provided in this solicitation, the name of a certain brand, make or manufacturer does not restrict offerors to the specific brand, make or manufacturer named, but conveys the general style, type, character, and quality of the article desired. Any article which the public body, in its sole discretion, determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose

intended, shall be accepted. The offeror is responsible to clearly and specifically identify the product being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the Commonwealth to determine if the product offered meets the requirements of the solicitation. This is required even if offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding only the information furnished with the bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a bid nonresponsive. Unless the offeror clearly indicates in its proposal that the product offered is an equal product, such proposal will be considered to offer the brand name product referenced in the solicitation.

S. **TRANSPORTATION AND PACKAGING:** By submitting their proposals, all offerors certify and warrant that the price offered for FOB destination includes only the actual freight rate costs at the lowest and best rate and is based upon the actual weight of the goods to be shipped. Except as otherwise specified herein, standard commercial packaging, packing and shipping containers shall be used. All shipping containers shall be legibly marked or labeled on the outside with purchase order number, commodity description, and quantity.

T. **INSURANCE:** By signing and submitting a proposal under this solicitation, the offeror certifies that if awarded the contract, it will have the following insurance coverages at the time the contract is awarded. For construction contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with §§ 2.2-4332 and 65.2-800 et seq. of the *Code of Virginia*. The offeror further certifies that the contractor and any subcontractors will maintain these insurance coverages during the entire term of the contract and that all insurance coverages will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

INSURANCE COVERAGES AND LIMITS REQUIRED:

1. Workers' Compensation - Statutory requirements and benefits.

2. Employer's Liability - $100,000.

3. Commercial General Liability - $500,000 combined single limit. Commercial General Liability is to include Premises/Operations Liability, Products and Completed Operations Coverage, and Independent Contractor's Liability or Owner's and Contractor's Protective Liability. The Commonwealth of Virginia must be named as an additional insured when requiring a Contractor to obtain Commercial General Liability coverage.

4. Automobile Liability - $500,000 - Combined single limit. (Only used if motor vehicle is to be used in the contract.)

U. **ANNOUNCEMENT OF AWARD:** Upon the award or the announcement of the decision to award a contract over $30,000, as a result of this solicitation, the purchasing agency will publicly post such notice on the DGS/DPS eVA web site (www.eva.state.va.us) for a minimum of 10 days.

V. **DRUG-FREE WORKPLACE:** During the performance of this contract, the contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over $10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "*drug-free workplace"* means a site for the performance of work done in connection with a specific contract awarded to a contractor, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

W. **NONDISCRIMINATION OF CONTRACTORS**: An offeror, or contractor shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, national origin, age, or disability, or against faith-based organizations. If the award of this contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.

X. **eVA BUSINESS-TO-GOVERNMENT VENDOR REGISTRATION:** The eVA Internet electronic procurement solution, web site portal www.eva.state.va.us, streamlines and automates government purchasing activities in the Commonwealth. The portal is the gateway for vendors to conduct business with state agencies and public bodies.

All vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet e-procurement solution either through the eVA Basic Vendor Registration Service or eVA Premium Vendor Registration Service, and complete the Ariba Commerce Services Network registration.

Vendors are strongly encouraged to register prior to submitting an offer. Failure to register will result in the proposal being found non-responsive and rejected. All vendors must register in both the eVA and the Ariba Commerce Services Network Vendor Registration Systems.

a. eVA Basic Vendor Registration Service: $25 Annual Fee plus a Transaction Fee of 1% per order received. The maximum transaction fee is $500 per order. eVA Basic Vendor Registration Service includes electronic order receipt, vendor catalog posting, on-line registration, and electronic bidding, as they become available.

b. eVA Premium Vendor Registration Service: $200 Annual Fee plus a Transaction Fee of 1% per order received. The maximum transaction fee is $500 per order. eVA Premium Vendor Registration Service includes all benefits of the eVA Basic Vendor Registration Service plus automatic email or fax notification of solicitations and amendments, and ability to research historical procurement data, as they become available.

   Effective until July 1, 2003, the Commonwealth will direct AMS not to invoice for the 1% transaction fee for orders issued during the period July 1, 2002, through June 30, 2003, to allow additional time for vendors to become electronically enabled. AMS will continue to invoice for transaction fees accrued prior to July 1, 2002. To enable vendors to analyze the future impact of transaction fees, AMS will issue "no pay" invoices for transaction fees that would normally accrue during the period of July 1, 2002, through June 30, 2003. For contracts that extend beyond June 30, 2003, contractors may request price adjustments to incorporate the eVA transaction fee, as provided in the Price Escalation/De-escalation clause in the Special Terms and Conditions of the contract.

c. Ariba Commerce Services Network Registration. The Ariba Commerce Services Network (ACSN) registration is required and provides the tool used to transmit information electronically between state agencies and vendors. There is no additional fee for this service.

ATTACHMENT C
SPECIAL TERMS AND CONDITIONS

A. **PROPOSAL ACCEPTANCE PERIOD**: Any proposal in response to this solicitation shall be valid for ninety (90) days. At the end of the ninety (90) days the proposal may be withdrawn at the written request of the Offeror. If the proposal is not withdrawn at that time it remains in effect until an award is made or the solicitation is cancelled.

B. **IDENTIFICATION OF BID/PROPOSAL ENVELOPE:** If a special envelope is not furnished, or if return in the special envelope is not possible, the signed bid/proposal should be returned in a separate envelope or package, sealed and identified as follows:

"**BID DOCUMENT**"

From:_____ _____ _____
Name of Offeror Due Date Time

_____ _____
Street or Box Number RFP No.

_____ _____
City, State, Zip Code RFP Title

Name of Contract/Purchase Officer or Buyer Debra C. Corley

The envelope should be addressed as directed on Page 1 of the solicitation.

If a proposal not contained in the special envelope is mailed, the offeror takes the risk that the envelope, even if marked as described above, may be inadvertently opened and the information compromised which may cause the bid or proposal to be disqualified. Proposals may be hand delivered to the designated location in the office issuing the solicitation. No other correspondence or other proposals should be placed in the envelope.

C. **AVAILABILITY OF FUNDS:** It is understood and agreed between the parties herein that the agency shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this agreement.

D. **WORK SITE DAMAGES**: Any damage, including damage to finished surfaces resulting from the performance of this contract shall be repaired to the Commonwealth's satisfaction at the Contractor's expense.

E. **CONTRACTOR PROPERTY DAMAGE**: The Contractor shall be entirely responsible for any loss or damage to its own materials, supplies and equipment, and to the personal property of its employees while they are maintained on the work site.

F. **SUBCONTRACTS**: No portion of the work shall be subcontracted without prior written consent of the Agency. In the event that the Contractor desired to subcontract some part of the work specified herein, the Contractor shall furnish the purchasing agency the names, qualifications and experience of their proposed subcontractors. The Contractor shall, however, remain fully liable and responsible for the work to be done by its subcontractor(s) and shall assure compliance with all requirements of the contract.

G. **CANCELLATION OF CONTRACT:** The purchasing agency reserves the right to cancel and terminate any resulting contract, in part or in whole, without penalty, upon 60 days written notice to the contractor. In the event the initial contract period is for more than 12 months, the resulting contract may be terminated by either party, without penalty, after the initial 12 months of the contract period upon 60 days written notice to the other party. Any contract cancellation notice shall not relieve the contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of cancellation.

H. **MINORITY/WOMEN OWNED BUSINESSES SUBCONTRACTING AND REPORTING:** Where it is practicable for any portion of the awarded contract to be subcontracted to other suppliers, the contractor is encouraged to offer such business to minority and/or women-owned businesses. Names of firms may be available from the buyer and/or from the Division of Purchases and Supply. When such business has been subcontracted to these firms and upon completion of the contract, the contractor agrees to furnish the purchasing office the following information: name of firm, phone number, total dollar amount subcontracted and type of product/service provided.

I. **eVA BUSINESS-TO-GOVERNMENT CONTRACTS:** The eVA Internet electronic procurement solution, web site portal www.eva.state.va.us , streamlines and automates government purchasing activities in the Commonwealth. The portal is the gateway for vendors to conduct business with state agencies and public bodies.

Failure to comply with the requirements in a. and b. below will be just cause for the Commonwealth to reject your bid/offer or terminate this contract for default.

Vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet e-procurement solution and agree to comply with the following:

a. Submit a fully executed American Management Systems, Inc., (AMS) Trading Partner Agreement, a copy of which can be accessed and downloaded from www.eva.state.va.us. AMS is the Commonwealth's service provider to implement and host the eVA e-procurement solution.

b. Provide an electronic catalog (price list) for items awarded under a term contract. The format of this electronic catalog shall conform to the eVA Catalog Interchange Format (CIF) Specification that can be accessed and downloaded from www.eva.state.va.us.

J. **CONFIDENTIALITY** (PROPRIETARY INFORMATION, DUPLICATION AND DISCLOSURE): The Contractor agrees that by virtue of performing the Contract it (the Contractor) will have access to information proprietary to the Commonwealth of Virginia, its Offerors, and contractors and that disclosure of such information could cause irreparable damage to the Commonwealth and its citizens. Therefore, Contractor agrees to hold all information disclosed through performance of this Agreement in strict confidence as required by this Section and to use such information only in performance of this Contract. No information provided by or to the Commonwealth shall be duplicated or furnished to others without the prior written consent of the Commonwealth of Virginia, Department of Alcoholic Beverage Control (ABC).

Contractor acknowledges that in the course of performing services hereunder its personnel and sub-contractors (if any) will have access to confidential information about the Commonwealth's business, operations, employees, customers, and Offerors. Contractor agrees that, except as directed by ABC, the Contractor, its employees, and its sub-contractors shall not at any time during or after the term of this Contract (a) disclose any Confidential Information to any third party, (b) permit any third party to examine and/or make copies of any reports, documents or electronic data containing Confidential Information (whether they are prepared by Contractor or come into Contractor's possession or Contractor's control by reason of Contractor's services) or (c) use any Confidential Information for any reason other than in the performance of services hereunder. Upon termination or expiration of this Contract, Contractor shall

return to the Commonwealth or at the Commonwealth's request destroy all reports, documents, electronic data and other matter in Contractor's possession or under Contractor's control that contain or relate to Confidential Information. Contractor may disclose Confidential Information to such of its personnel as have a need therefore in the performance of their duties for the Commonwealth, provided, however, that Contractor shall inform all such personnel of their confidentiality obligations hereunder and shall use its absolute best efforts to ensure their compliance therewith. Contractor shall not be required to treat as confidential any information which:

(a) Contractor can demonstrate was in its possession prior to execution of this Contract;
(b) Has become generally available in the public domain without breach of this Agreement; and/or
(c) Becomes lawfully available to Contractor from a source other than the Commonwealth.

ANY RELEASE OF PROPRIETARY OR CONFIDENTIAL INFORMATION BY THE CONTRACTOR OR CONTRACTOR'S EMPLOYEES AND/OR SUBCONTRACTORS SHALL BE CONSIDERED A BREACH OF THIS CONTRACT. THE CONTRACTOR SHALL NOT USE THE CONFIDENTIAL INFORMATION OF THE COMMONWEALTH FOR ITS OWN BENEFIT OR FOR THE BENEFIT OF ANY THIRD PARTY. THE PROVISIONS OF THIS SECTION SHALL CONTINUE IN PERPETUITY AND SURVIVE ANY TERMINATION OR EXPIRATION OF THIS AGREEMENT.

K. **NEWS RELEASES:** No public disclosure or news release pertaining to this procurement shall be made without prior written approval of the Issuing Office. **FAILURE TO COMPLY WITH THIS PROVISION MAY RESULT IN THE PROPOSAL BEING DISQUALIFIED.**

APPENDIX D

WASHINGTON STATE LIQUOR CONTROL BOARD RFP

WMS REQUIREMENTS DESCRIPTION

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SECTION 8 - WAREHOUSE MANAGEMENT SYSTEM

This section defines the requirements for the Technical Response for the Warehouse Management System. The Bidder must respond to all items designated (MR) or (SR) as described in Section 2.

The response must provide sufficient information for each designated item to enable the evaluators to judge the quality of the response. Scores will be awarded based upon the content of the answers of each individual designated item and, where appropriate, information provided by reference or evaluator follow-up of items in questions.

In response to Section 6, the Bidder was asked to provide a detailed **Concept of Operations** identifying all operational and functional features of the proposed system. The bidder should keep this concept of operations in mind while preparing their response to this section.

As a reminder, the bidders are asked to propose standard Warehouse Management System software package(s) that best meet the needs of the Washington State Liquor Control Board. Any modifications required to the standard software package will be addressed in detailed design reviews after award of contract. **Bidder must understand they are responsible for the software modifications to the WMS. Since there is a limited amount of funds available for software modifications, it is in the Bidder's best interest to propose a WMS that best meets the requirements thus minimizing the modifications required.** Bidder's proposed WMS will be evaluated as part of section six (6) and eight (8) with all costs associated with modifications estimated by the technical team members. Please provide hourly pricing for software personnel for estimating purposes.

8.1 (SR) OVERVIEW

A. This section contains the Warehouse Management System (WMS) philosophy that will govern the operation of the new Distribution Center (DC) for the Washington State Liquor Control Board (WSLCB). The guidelines and requirements identified in this document will serve as the basis of design development, system configuration, and provide installation/startup requirements. All material handling sub-systems shall fully integrate with the WMS. The WMS must also communicate with the existing WSLCB Enterprise Business System (EBS) for integration of business processes. The WMS system will be required to detect material handling exception conditions and provide recovery procedures, which minimize the impact of these "errors" on total DC operations.

B. The WSLCB WMS provides the functional support for the warehousing and distribution operations of the WSLCB warehouse. The WMS provides the management, information, and control functions that are necessary to achieve the desired level of management in receiving, storage, picking, store order strategy, inventory reconciliation, and shipping operations for the efficient use of the material handling sub-systems. The system shall address the following:

1. Provide an efficient and accurate system for material movement, storage, and handling from receipt through shipping.

2. Provide operation states such that there is at least one method of storing/retrieving product in the event of a partial and/or total system failure
3. Minimize personnel requirements for normal day-to-day operation of the warehouse facility
4. Interface with the WSLCB Enterprise System to receive and transmit production parameters
5. Maintain material movement and activity transactions
6. Maintain accurate Warehouse inventory management for all liquor products.

C. The WMS computer system directs the movement, and tracking of liquor product within the physical domain of the WSLCB warehouse facility. The main components (servers, disk arrays) of the system hardware shall be located in the Warehouse Computer Room. The WMS orchestrates the activities of the Material handling sub-systems in the performance of the activities needed to handle store product orders.

D. The WMS is responsible for providing all information systems functionality necessary to support the Operations Narrative described in Section 6.

E. The WMS systems must interface with the material handling equipment identified in the Operations Narrative and Material Handling Equipment section as appropriate. Examples of these interfaces would include:

1. Fork Truck Mounted RF Terminals
2. Hand-Held Bar Code Readers and RF Terminals
3. Various Line and Bar-Code Printers
4. De-Palletizers
5. Automated Material Handling Equipment
6. Pick-to-Light Sub-system
7. Conveyor Sub-system
8. Fixed-Position bar-code Scanners

F. The WMS hardware that is proposed by the bidder shall be network compatible with the WSLCB EBS and the warehouse local area network (LAN), see *figure 8.1*. The proposed WMS system shall be able to operate across a minimum 10BaseT TCP/IP Ethernet computer network and employ disk array technology. It is envisioned that LAN networks and disk arrays will provide the level of operational security that is required.

G. It shall be the Bidder's responsibility to furnish the appropriately sized and configured computer systems, disk arrays, network managers, and application management software to support the functional concepts as specified, so that the system is not the limiting factor in the determination of system throughput. Wherever possible, the system should make use of the latest releases of system

software, middleware and layered application products, including the Operating System, Network Manager, and Database Manager.

8.2 (SR) SYSTEM PHILOSOPHY

A. The system covered by this specification logically consists of functional areas, and material handling sub-systems operating together as an integrated system as depicted in *Figure 8.2*. Bidder is to provide a description of their system philosophy for this project. The description should, at a minimum, address the following bullets in this section.

B. The functional areas are identified as:

1. Receiving
2. Put-Away
3. Order Planning
4. Pallet and Case Picking
5. Full Case and Split-Case Picking
6. Replenishment
7. Store Order Shipment
8. Vendor and Customer Returns and Scrap
9. Re-warehousing
10. Physical/Cycle Inventory Management

C. The Material handling sub-systems are identified as:

1. Radio Frequency System
2. Conveyor Control System
3. Automated Storage and Retrieval or Carousel Control System
4. Full Case and Split Case Pick-to-Light Control System

D. Each of the Material handling sub-systems shall be automated and capable of coordinating product movement, storage, and retrieval while working in conjunction with the WMS. Each Material handling sub-system shall have the capability for "stand-alone" operation and be capable of detecting errors, exception conditions, and provide recovery procedures, which minimize the impact of failure on the operation.

E. The WMS system shall be integrated with the WSLCB Enterprise System via the planned computer networks. Information from the WSLCB Enterprise system will be downloaded to the WMS as defined in the Operations Narrative section. After execution of an activity, required update information will be uploaded to the WSLCB Enterprise System.

F. The Bidder shall coordinate the design, development, integration, test, and installation of the WMS and the associated material handling sub-systems to

achieve a seamlessly integrated system. The Bidder's responsibility includes, but is not limited to, incorporating design details, coordinating development schedules with building construction, and providing support for the WSLCB Enterprise System development team during integration and installation.

8.3 DESIGN & CONFIGURATION CRITERIA

8.3.1 (SR) Design Criteria

A. Design of the WMS begins with the details contained in this bid package. It proceeds with the completion of a detailed functional specification containing all system requirements, including required process and data flows. The first step of this process is to define existing current functions and data. The output of this process will be the comprehensive functional specification for the WMS. Bidder's WMS supplier is to define their design process for the development of the functional specifications for this project. In addition, indicate how your process will address or incorporate the items in the following bullets in this section.

B. The WSLCB enterprise system will coordinate inbound shipments from suppliers, store order requisitions, stock replenishment, and outbound shipments. Orders from stores are transmitted to the EBS, which in turn builds order profiles that are then transmitted to the DC for order picking and shipping to the store.

C. The WMS must be able to quickly and inexpensively meet the ever-changing requirements of the entire distribution network. With this in mind, the application must include:

1. Table-driven configuration capability.
2. Graphical User Interface (preferred, not required).
3. Availability to use commercial report writers to access the WMS data.
4. Built upon one of the industry-standard relational database management systems that supports SQL and is ODBC-compliant.
5. An existing, proven interface to the bid radio frequency (RF) equipment.
6. An industry-standard, non-proprietary application development environment (e.g. C, C++, COBOL) which is not dependent upon a sole software programming language tools provider.
7. Data Warehouse Interface and/or Legacy System Interface; where Legacy systems are the various computer systems and/or databases that contain data that is still useful but is not worth the cost/risk of converting/reentering.

D. The WMS is composed of several functional areas that handle the operations of the Distribution Center. The system communicates with the EBS to obtain expected receipt, store order and product descriptive information and to transmit shipping and inventory information. See Section 8.2.B for system functions.

E. It is preferable that the development of the WMS's software will have used object-oriented software engineering techniques. In that absence, the WMS

should employee a commonly accepted, non-proprietary application development environment (e.g. C, C++, COBOL) which is not dependent upon a sole software programming language tools provider.

F. It is highly desirable that the Bidder standardizes on a common database manager across subsystems. In this absence, the methodology by which the subsystems communicate must be standardized to the greatest degree possible (e.g. sockets, stored procedures, FTP, ODBC).

G. The system must support "paperless" operations via bar-code scanning and portable data collection using hand-held and or vehicle-mounted RF terminals, with a back-up mode that enables the use and production of printed pick lists and labels. Additionally, the system must provide the capability to generate and/or read bar code labels for receiving**,** put away, picking, replenishments, sortation, shipping, and various other material management tasks.

8.3.2 (SR) Architecture

A. It is the Bidder's responsibility to propose and develop the detailed design of the system architecture based on standard equipment offerings and industry practices. The Bidder can consider combining the functionality of the subsystems into various combinations of physical hardware and software platforms, but the Bidder shall clearly provide a description of their proposed solution in response to this section. The Bidder shall describe their intended system architecture and system configuration as part of their response. This description shall clearly describe their proposed fail-over and state their calculated Mean Time Between Failure (MTBF) rate. The proposed solutions should at a minimum meet the functions described in this specification for each system

B. *Figure 8.2*, "Conceptual System Architecture", illustrates the system concept and its relationship to the material handling subsystems and the external WSLCB EBS. This is only a general conceptual diagram for planning purposes. The architecture covered by this document logically consists of an over-arching WMS integrated with several material handling subsystems. Collectively these systems are identified as the:

1. Warehouse Management System (WMS)
2. Radio Frequency Interface System
3. Conveyor Control System
4. Automated Storage and Retrieval or Carousel Control System
5. Full Case and Split Case Pick-to-Light Control System

C. Each of the Conveyor, Automated Material Handling and Pick-to-Light Systems are envisioned to be supported with a higher level integrating Sub System which will be integrated within the WMS.

D. The material handling subsystems include all software, firmware and hardware required to identify the tracking product, ensure an acceptable read, associate product data to a storage location, and communicate in a format acceptable to the WMS level computer systems indicated in the conceptual system

architecture. The Material handling sub-system software is designed to provide identity and location information as requested to the overarching WMS.

E. The architecture of the WMS must accommodate the interface and information requirements of the existing WSLCB Enterprise Business System.

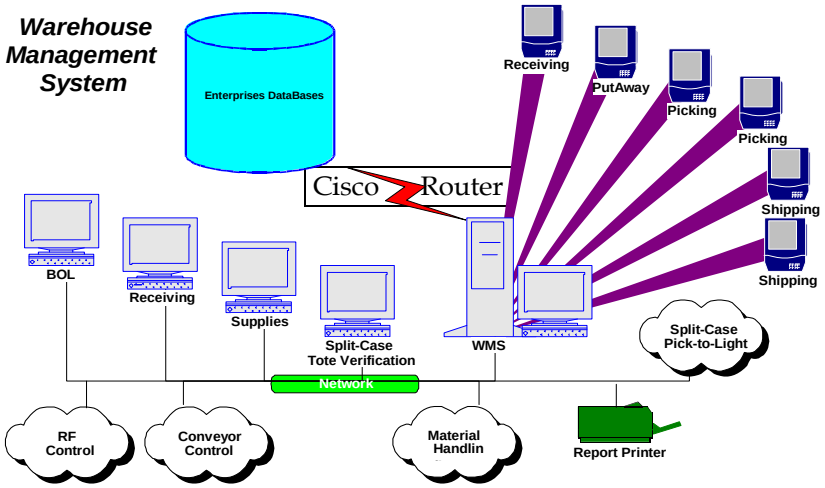


Figure 8.2, "Conceptual System Architecture" Diagram

8.3.3 (SR) Resource Management

A. The proposed WMS may have resource management capabilities. Bidder is to describe these capabilities in response to this section based on the following general concept.

B. Resources required to successfully perform specific Distribution Center (DC) tasks (people, equipment, facilities), will have standardized work rates/capacities which are based on historical/engineered work measurements. The WMS may enable DC management to schedule, assign, monitor and manage specific DC resources as needed to perform specific warehouse tasks, such as: Receiving; Inspection; Put-away; Inventory Management; Picking; Sortation; Tote Contents Verification; Shipment Staging; and Shipping.

C. Management of the DC's resources will depend on regular, manual or automated, updates of the parameters which define each resource and its availability. The WMS will become an indispensable tool for planning the DC's daily operation.

8.4 (SR) SYSTEM AVAILABILITY AND COMPONENT REDUNDANCY

A. The Bidder shall provide a material handling and WMS system that minimizes downtime and meets availability requirements. Critical failure points determined by the Bidder will dictate system and component redundancy where necessary and practical. Provide a description of the critical failure points and the necessary system and component redundancy in your proposed system In addition, describe how your proposed system will meet the following requirements.

B. Maximum material handling sub-system downtime due to single-point failure in the affected Material handling sub-system shall not exceed 2 hours. A single-point of failure cannot render the entire system inoperable for more than 15 minutes.

C. The system philosophy dictates that it shall be possible to retrieve a pallet or carton, if it is available in the storage areas, regardless of the state of the control system. Special attention is to be paid during the detail design phase of the system to provide for multiple modes of operation.

8.5 (SR) SYSTEM DESIGN

Describe the ability of your proposed system to meet each of the following general system design requirements:

1. The System shall allow retrieval of product available in storage areas, regardless of the state of the WMS, material handling subsystems, or control components.
2. The System shall not be dependent on time critical responses from logically higher level systems. Each material handling subsystem shall provide positive confirmation of status to enable continuous run-time monitoring.
3. The Pallet ID, Case ID and Tote identity shall be positively reconfirmed at all critical locations, to ensure accurate product and order tracking through the critical processes.
4. All aspects of the system are to be designed with the safety of operation and maintenance personnel in mind.
5. Material handling sub-system events and alarms may be transmitted to and journalized by the WMS.
6. The WMS may journalize all system events and alarms in a manner that can be searched and queried by WSLCB systems personnel using available and delivered relational database and operating system tools.
7. High priority alarms shall be made apparent by means of rotating beacons or strobe lights. These alarm lights shall be strategically located throughout the facility.
8. The WMS shall be designed with user friendliness, and maintenance ease taken into account. User friendliness implies that Human Interfaces shall be menu driven, screen oriented, and provide on-line context sensitive help
9. The overall system shall be designed to operate continuously for 20 hours a day, 6 days per week without scheduled downtime. Backups shall be accomplished during non-production period.
10. The WMS hardware as recommended by the bidder shall be network compatible with the EBS Host System and be equipped with a disk array. The disk array will mirror data to provide protection against disk failures. Provide model numbers, options and configuration for both computer hardware and software.
11. The WMS and RDBMS are envisioned to be based on either a Unix or AS/400 operating system. **The WSLCB has determined through it's research that a WMS or RDBMS based on the Windows NT operating system is not acceptable as a WMS solution.** The bidder shall clearly

state in this response their proposed solution and identify the advantages and benefits to be derived from use of such a system. It is the Bidder's responsibility to furnish an appropriately sized and configured computer system to meet the functional requirements specified in this document. This system shall be sized such that it is not the limiting factor in determining the overall system throughput, i.e. the system shall be sized to support all real time control, displays, data management, reporting and communication functions without throughput degradation at peak operating capacity. In addition, please provide information on the following system and peripheral requirements for the WMS:

a. An appropriately sized Computer system (main memory, disk drives, tape drive, communication ports, etc.) configured to provide for data redundancy in the event of a system failure. Provide the following system performance criteria after all programs and databases have been loaded and the system is fully operational:

   1. Average CPU Utilization
   2. Average Disk I/O Utilization (for any disk)
   3. Average Disk Space Utilization (for a minimum disk size of 4 GB)

b. Latest releases of system software and layered products as necessary including the operating system, any middleware, database manager, screen management, etc.

c. Communication port(s) for subsystems and all other peripheral devices required.

8.6 (SR) STRATEGY AND CONTROL DEVICES

The control strategy and devices for implementing the material handling sub-systems are of primary importance to the smooth operation of the warehouse. These control elements include all devices necessary to ensure proper and safe operation of the warehouse distribution facility. Describe the control strategy and necessary devices to be included in your proposed system.

8.7 SYSTEM COMPONENT REQUIREMENTS

A. This section describes the specific needs of the various Systems and Material handling subsystem components that are anticipated to be elements of the system solution. Indicate your proposed systems compliance to the following components.

B. Note on Sub System Terminology: For purposes of this RFP, a subsystem refers to any delivered software, hardware, firmware and combination thereof that can handle the duties of sequencing, managing and integrating activities within a specific subsystem in the delivered Material Handling and WMS System. It is not necessary that the subsystem be an 'off-the-shelf' product or even a discrete entity but, rather, be able to assume all functions of the subsystem integration concept.

8.7.1 (SR) Radio Frequency Terminals

A. Note: Terminal implies a unit that can be either a terminal or a computer. Hand-Held implies a terminal that moves with the operator and is not fixed to a piece of equipment.

B. The Hand-Held Radio Frequency (RF) terminal must be capable of scanning up to 12 feet. The bar-coded laser scanner must also be able to accurately scan at close proximity (e.g. 2 feet). The RF system shall provide a maximum of three (3) second response time for transactions.

C. Each material handling vehicle will be equipped with an RF capable of scanning up to 12 feet. The bar-coded laser scanner must also be able to accurately scan close proximity product (e.g. 2 feet).

D. The quantity of hand-held and vehicle-mounted RF terminals, established by the concept, are provided in the following table.

Area	Component Description	Quantity
Receiving	Hand-Held Terminal	4
	Vehicle-Mounted Terminal	6
Bad Order Locker	Hand-Held Terminal	2
Rework	Hand-Held Terminal	2
Pallet Storage	Vehicle-Mounted Terminal	6
De-Palletizing	Hand-Held Terminal	4
	Vehicle-Mounted Terminal	4
Material Handling	Hand-Held Terminal	2
Full/Split-Case Picking	Hand-Held Terminal	4
Shipping/No-Read	Hand-Held Terminal	5

Figure 8.7.1, Radio Frequency Terminals

E. The Hand-Held and Vehicle-Mounted Terminals shall meet the following minimums:

1. Communication to the WMS via RF communication
2. Alternative transmission data rate starting at 9,600 bps
3. Sealed tactile alpha-numeric keyboard
4. Light weight
5. Capable of scanning up to 12 feet
6. Capable of reading UPC/EAN, Interleaved 2 of 5 code, as well as SCC 14 and SSCC 18 (future)
7. Rugged industrial construction, such that the unit can withstand a 5 foot drop to a concrete floor without the loss of function and data
8. Operating temperature range of -10 to +50 degrees centigrade
9. Water and dust resistant
10. Withstand a drop of 5 feet.

F. Since the concept assumes that the Hand-Held terminals will have an integral long range scanner, the Vehicle-Mounted terminals will have to meet the following minimums in addition to those stated previously:

1. Powered from the vehicle battery
2. Attached hand-held non-contact laser scanner

G. In recommending RF equipment, the facility's proximity to rail lines, airport and densely populated industrial facilities must be considered. The bidder must perform an RF site survey of the facility that validates 100% RF coverage in the facility with the quoted RF equipment (base stations, antennas and terminals).

8.7.2 (SR) Desk-Top Personal Computers

A. The bidder shall provide, install, and commission desktop Personal Computers (PC) at various work areas. The quantity of these computers, established by the concept, are provided in the following table:

Area	**Quantity**
Warehouse Office	2
Receiving	2
Bad Order Locker	1
Rework	1
De-Palletizer	4
Carousel	1
Split-Case Picking	2
Shipping	2
Maintenance Office	1

Figure 8.7.2, Personal Computer Terminals

B. These computers will communicate via the warehouse LAN (*figure 8.2)*. These PCs shall be commercially available, utilize current technologies, and support communications via Ethernet networks using Transmission Control Protocol/Internet Protocol (TCP/IP).

8.7.3 (SR) Printers

The bidder shall provide and install bar-code printers, report printers and high-speed impact printers that support three-part paper at various work areas. The quantity of report, bar code and impact printers, established by the concept, are provided in the following table:

Area	**Component Description**	**Quantity**
Warehouse Office	Report Printer	2
	Bar Code Printer	2
Receiving	Report Printer	1
	Bar Code Printer	2
	Report Impact	2
Bad Order Locker	Report Printer	1

	Bar Code Printer	1
Rework	Report Printer	1
	Bar Code Printer	1
De-Palletizer	Report Printer	1
	Bar Code Printer	4
Material Handling	Report Printer	1
Full Case Picking	Report Printer	1
Split-Case Picking	Report Printer	1
	Bar Code Printer	2
Shipping	Report Printer	1
	Bar Code Printer	2
	High-Speed Impact	4

Figure 8.7.3, Printers

8.7.4 (SR) Fixed Bar Code Readers

Scanners of this type shall display the last number that was read, or a "NO READ". The readable percentage shall be at least 99%. A mechanism for the detection of a load, which is unreadable, shall be proposed as a component element of the Fixed Bar Code Reader Station. The bidder shall develop a system that detects when a bar code reader has failed due to ***too many*** bad reads or not communicating when a product carton/tote is present. Provide a description of your design including general location and number of fixed bar code readers.

8.7.5 (SR) Conveyor Control System

Provide a description of your proposed conveyor control system function and components. Describe how your control system will address the functions below.

A. The conveyor control system shall be responsible for coordinating the activities of the conveyor system(s) within the domain of the De-palletizers, Pallet Stackers, Pallet Conveyor, Case Induction Conveyor, Case Discharge Conveyor, Tote Accumulation Conveyor, Full Case and Split Case Replenishment Conveyor and the Shipping Conveyor. The Conveyor Control System is envisioned to be comprised of a Cell Director, Conveyor Controllers, Sortation Control Systems and an Enhanced Maintenance Diagnostic system.

B. Each conveyor control system is expected to have a separate conveyor controller to minimize the impact of a single point of failure by not completely stopping the entire conveyor system in the event of a failure. The design of the bidder's conveyor control system shall be developed with the intent of minimizing system failures. The control subsystem shall communicate with the WMS.

C. Describe how the conveyor control system will perform the following functions:

1. Real time communications with the WMS.

2. Real time communications between the Cell Director and the lower level sub-system controllers: De-palletizer, Pallet Conveyor, Case Induction Conveyor, Case Discharge Conveyor, Tote Accumulation Conveyor, Case Replenishment Conveyor and the Shipping I/O Controller(s).
3. Process store/move transactions from the WMS and confirm the completion of these transactions.
4. Load tracking within the domain of the conveying and de-palletizing systems.
5. Send system and component status information to WMS.
6. Provide man-machine interface functions for the manual loading of cases or totes.
7. Provide and direct loads within the domain of the sortation loops.
8. Issue automatic requests to WMS system for scheduling pick up of empty pallet stacks when the pallet stacker dispenses a full stack.
9. Coordinate pickup/drop-off of loads within the domain of the conveyor and de-palletizer systems whether automatically or by manual means.
10. Forward equipment status information to WMS.
11. Local alarm annunciation.
12. Failure and abnormal condition detection, annunciation and recovery.
13. Receiving and processing pallet de-palletizing information on a per pallet location basis.

8.7.5.1 (SR) Conveyor Cell Director

A. The conveyor cell director shall be compatible with the bidder supplied WMS system. The Bidder shall clearly state their proposed solution including the advantages and benefits to be derived from use of such a system. It shall be the Bidder's responsibility to furnish an appropriately sized and configured computer system to meet the functional requirements specified herein. This system shall be sized such that it is not the limiting factor in determining the conveyor system throughput, i.e. the system shall be sized to support all real time control, displays, data management, reporting and communication functions without throughput degradation at peak operating capacity.

B. Provide information on the following system and peripheral requirements for the Conveyor Cell Director:

1. An appropriately sized computer system (main memory, disk drives, tape drive, communication ports, etc.) configured to provide for data redundancy in the event of a system failure. Provide the following system performance criteria after all programs and databases have been loaded and the system is fully operational:
    a. Average CPU Utilization

b. Average Disk I/O Utilization (for any disk)

c. Average Disk Space Utilization (for a minimum disk size of 2 GB)

2. Latest releases of system software and layered products as necessary including the operating system, middleware, database manager, screen management, etc.

3. Communication ports for WMS, I/O Conveyor Controllers and all other peripheral devices required.

8.7.5.2 (SR) Conveyor Controllers

Provide a description of your proposed conveyor controllers function and components. Describe how these controllers will address the functions below.

A. The conveyor control system(s) shall use controllers to provide for the movement, delivery, tracking, and sorting of totes, pallets, and cases. Describe how these controllers shall perform the following functions:

1. Real time communications with the sub system.

2. Real time communications with the De-palletizers (depending on Bidder design).

3. A positive tracking scheme combining positive load presence and conveyor running feedback to track material within the domain of the conveyor system.

4. Real time control of conveyors, merges, transfers, and vertical lifts (based on Bidder's design).

5. Forwarding of all equipment status information to WMS.

6. Alarm annunciation.

7. Failure condition detection and recovery.

8. Execute Energy Management routines when conveyors are not conveying product.

9. Real time communication with the maintenance operator interface workstations sending equipment status and tracking data. The diagnostic and monitoring system shall graphically display equipment set-up, status and tracking information for the conveyor, conveyor sorters and de-palletizer systems.

10. Minimize manpower requirements for the normal day-to-day operation of the de-palletizing operations.

B. The Conveyor System controller(s) shall be based on either Allen-Bradley or Modicon PLCs. Other PLC manufacturers may be acceptable, but will require Owner's approval. Describe your proposed controllers.

C. Bidders are asked to specify standard sortation control system if their standard package utilizes a PC that, by design operates functions dedicated to the controller or cell director as described in this section. PC's will follow appropriately sized computers as defined in other sections. All designs should be described in detail.

8.7.5.3 (SR) Conveyor Panels

The Conveyor System(s) shall include the conveyor controller(s), all panels and field I/O termination panels for field wiring from control devices. Each shall be conveniently located near the conveyor system. These panels shall be commissioned according to the requirements contained in Section 10.11.3 Motor Control Panels.

8.7.6 (SR) Automated Material Handling Control System

Note on Automated Material Handling Terminology: For purposes of this RFP, automated material handling control system refers to either an Automated Storage and Retrieval System Control System or a Carousel Control System.

8.7.6.1 (SR) Subsystem Controls

A. The subsystem controls (or the associated hardware and software performing this function) shall be responsible for coordinating the activities of the automated material handling equipment. The subsystem is expected to have separate controllers as needed to minimize the impact of a single point of failure by not completely stopping the entire automated handling system in the event of a failure. The subsystem shall communicate with the WMS.

B. Describe how the control subsystem will perform the following functions:

1. Real time communications with the WMS.
2. Real time communications with the material handling I/O Controller(s).
3. Process store/retrieve/move transactions from WMS and confirm the completion of the transaction.
4. Send system and component status information to WMS.
5. Maintain a list of open work transactions.
6. Provide man-machine interface functions for the operator directed movement of cases.
7. Local alarm annunciation.
8. Failure and abnormal condition detection, annunciation and recovery.

C. The control subsystem shall be compatible with the bidder supplied WMS system. The bidder shall clearly state their proposed solution for the control subsystem including the advantages and benefits to be derived from use of such a system. It shall be the bidder's responsibility to furnish an appropriately sized and configured computer system to meet the functional requirements specified herein. This system shall be sized such that it is not the limiting factor in determining the

system throughput, i.e. the system shall be sized to support all real time control, displays, data management, reporting and communication functions without throughput degradation at peak operating capacity.

D. Provide information on the following system and peripheral requirements for the control subsystem:

1. An appropriately sized computer system (main memory, disk drives, tape drive, communication ports, etc.) configured to provide for data redundancy in the event of a system failure. Provide the following system performance criteria after all programs and databases have been loaded and the system is fully operational:
    a. Average CPU Utilization
    b. Average Disk I/O Utilization (for any disk)
    c. Average Disk Space Utilization (for a minimum disk size of 2 GB)
2. Latest releases of system software and layered products as necessary including the operating system, middleware, database manager, screen management, etc.
3. Communication ports for WMS, I/O automated material handling controller and all other peripheral devices required.

8.7.6.2 (SR) Automated Handling Equipment Controllers

A. The System controller(s) shall be based on either Allen-Bradley or Modicon PLCs. Other PLC manufacturers and/or technologies may be acceptable, but will require Owner's approval. Programmable Logic Controllers (PLC's) are preferred for controllers. However, realizing that the controllers are an integral component of the equipment, other microprocessor based controllers are acceptable provided their use is beneficial to the Owner. Describe the PLCs proposed for automated handling equipment controllers including the advantages and benefits to be derived from their use.

B. The control system(s) shall provide for input/output handling, storing, retrieving, and moving of cases or pallets. Describe how these controllers shall perform the following functions:

1. Real time communications with the sub system.
2. Real time communications between the Controllers (depending on bidders design).
3. A positive tracking scheme combining positive load presence equipment running feedback to track material within the domain of the automated handling system.
4. Real time control of P/Ds, lifts, transfers, and extractors (based on bidder's design).

5. Forwarding of all equipment status information to WMS.

6. Alarm annunciation.

7. Failure condition detection and recovery.

8. Minimize manpower requirements for the normal day-to-day operation of the de-palletizing operations.

8.7.6.3 (SR) Controller Panels

The Controller System(s) shall include the automated handling equipment controllers, all panels and field I/O termination panels for field wiring from control devices and shall be conveniently located near the system. These panels shall be commissioned according to the requirements contained in Section 10.11.3 Motor Control Panels.

8.7.7 (SR) Pick-to-Light Control System

A. This section outlines the control system hardware requirements for the design requirements of the Pick-To-Light Systems. The Pick-To-Light System is used to pick bottles to totes from the case flow rack and full cases to conveyor from the full case rack. These requirements are preliminary and it will be the responsibility of the bidder to further develop the detail requirements to design a completely integrated operational system. See Section 6 for functional requirements.

B. This system is envisioned to interface with the other material handling systems. The architecture depicted in *figure 8.2* is a general diagram for planning purposes. It is the Bidder's responsibility to propose and develop the detail design based on their standard equipment offerings. This design shall meet the requirements stated within this specification at peak throughput rate. Other design combinations of physical hardware platforms are acceptable, but the bidder shall clearly provide a description of their proposed solution as part of their response. The bidder shall describe their intended system architecture and system configuration as part of their bid.

C. The Pick-To-Light System Package that the bidder shall commission logically consists of a PTL subsystem (depending on Bidder design), Zone Controllers with local hand-held bar code scanners, Pickface Displays, and Down Aisle Initiation Displays. Describe each of these components as used in the proposed design.

8.7.7.1 (SR) Pick-To-Light Cell Director

A. Describe how the Pick-To-Light Cell Director will meet the perform the following activities:

1. Coordinating Full Case and Split Case Pick-To-Light activities
2. Directing operator interface activities
3. Supporting maintenance dialogs
4. Configuring the system
5. Providing workload planning functions

6. Providing the main external interface communications with WMS.

B. Describe how the PTL Cell Director will perform the following functions:

1. Real time communications with the WMS.
2. Real time communications with the Picking Zone Controllers within its domain.
3. Receive Workorder Wave Picking Files and transactions from WMS and confirm the completion of picks.
4. Send system and component status information to WMS.
5. Failure and abnormal condition detection, annunciation and recovery.
6. Send system and component status information to WMS.
7. Maintain a list of open wave transactions, and replenishment information.
8. Provide man machine interface functions for the manual loading of work transactions in degraded mode of operations.
9. Local alarm annunciation.

C. The cell director shall be compatible with the bidder supplied WMS system. The bidder shall clearly state their proposed solution including the advantages and benefits to be derived from use of such a system. It shall be the bidder's responsibility to furnish an appropriately sized and configured computer system to meet the functional requirements specified herein. This system shall be sized such that it is not the limiting factor in determining the system throughput, i.e. the system shall be sized to support all real time control, displays, data management, reporting and communication functions without throughput degradation at peak operating capacity.

D. Provide information on the following system and peripheral requirements for the PTL system(s):

1. An appropriately sized computer system (main memory, disk drives, tape drive, communication ports, etc.) configured to provide for data redundancy in the event of a system failure. Provide the following system performance criteria after all programs and databases have been loaded and the system is fully operational:
    a. Average CPU Utilization
    b. Average Disk I/O Utilization (for any disk)
    c. Average Disk Space Utilization (for a minimum disk size of 2 GB)
2. Latest releases of system software and layered products as necessary including the operating system, middleware, database manager, screen management, etc.
3. Communication ports for WMS, I/O Case Pick-To-Light Controls, zone controllers, system support modem, associate workstations and all other peripheral devices required.

8.7.8 (SR) Associate Interface Workstations

The bidder shall provide the quantities and describe the proposed Associate Interface Workstations addressing the criteria below.

A. The bidder shall recommend and provide Associate and Maintenance Interface Workstations based on their standard offerings for machine interface stations. The Bidder shall supply and install at least one workstation in the Data Room and one in the Maintenance Area. These workstations shall graphically display real-time equipment status information, system configuration, allow for work planning, system setup data, abnormal conditions, and internal system data (i.e. zone controller, pickface modules, etc.). Alarms shall be annunciated with the date, time, appropriate system, description of abnormal condition, and location of abnormal condition. This software shall complement diagnostics on specific equipment to assist maintenance personnel in locating and repairing failures.

B. It is envisioned that the workstations shall be at least 19", high-resolution color graphic, standard ASCII keyboard, minimum 8 foreground and 8 background colors.

C. Modem - The system controller shall be equipped with a modem, which the Bidder can dial into for the purpose of diagnosing and resolving system problems. This activity shall allow the vendor to recommend actions to be performed on the system by Owner personnel. This phone/modem support shall last for the duration of the warranty.

D. A minimum of one (1) laser jet printer for alarms printing. The Bidder will have a report printer on the Material Handling Network Ethernet Segment. The bidder shall supply a system, which will direct report printouts to this printer.

8.7.9 (SR) Disk Storage

Disk storage for the WMS is anticipated to be provided by a series of storage arrays that employ the use of Redundant Array of Independent Disk (RAID) technology. It is envisioned that the RAID unit will be configured to provide a reasonable level of data security while not "slowing" processing. There shall be no data loss due to a single disk failure

8.8 WSLCB FACILITY NETWORK

A. (MR) The Owner will be providing wired 10Base-T jack plates as coordinated by the bidder in the Warehouse Computer Room. The bidder will be responsible for providing the hardware, software, and wiring layout and wiring to connect all network capable devices delivered under this contract to the 10Base-T jack plates installed by the Owner as well as any cable punch-downs and cross-connects to the Owner-installed ports located in the Warehouse Computer Room.

B. (SR) The Bidder will be required to supply the equipment to connect their devices to the network ports and to specify the network communications, wiring and equipment. The Owner's Host system will support communications using TCP/IP protocol unless otherwise coordinated with the Owner in writing.

C. (MR) The Owner will provide, manage, and control the assignment of all Internet Protocol (IP) addresses required by the bidder. The bidder network must use CAT5 Certified UTP cabling and connections. At the recommendation of the bidder and with the Owner's approval, selective use of fiber optic cabling may be used as well. In addition, the Bidder as implemented must pass network certification.

8.9 (SR) SORTING & TRACKING

Describe the positive sorting and tracking scheme to be provide in the proposed system. The system shall be a self correcting, self-recovering, positive tracking scheme for the delivery of cases, totes, and pallets to the assigned destination. This scheme shall combine both positive presence sensors (i.e. photo-eyes, switches, proximity sensors, etc.) with conveyor running feedback sensors (i.e. encoders, etc.), and timers in the control System as required to provide a positive tracking scheme combined with identification devices (i.e. Bar Code Scanners, etc.). By combining these elements for the tracking of cases, totes, and pallets, a positive tracking scheme can be achieved. Because of the importance to successfully track loads to the correct destination, the Owner and/or Owner's Representative will participate with the bidder in the design, development, and implementation of these tracking schemes. The bidder shall expect that the Owner will review, comment, and approve the logic, software, and the organization of the software.

8.10 (SR) APPLICATION SOFTWARE REQUIREMENTS

A. The following requirements apply to all application software, including PLC control system software, for all Material Handling Sub-Systems. Describe how the supplier's standard offerings will meet these requirements:

1. All software shall be provided to meet requirements of the approved Functional and Design Specifications developed by the bidder and approved by the Owner for the WMS and Sub-systems.
2. Software includes operating systems, software utilities, middleware, network control, application software packages, etc. which are currently available for purchase and offered as ready for use. Software quoted for the WMS shall be the most current released version of the software, including the latest updates and enhancements, as of bid submittal date, unless Bidder obtains Owner's written approval for substitutions.
3. Bidder will submit to Owner for approval a detailed data model that comprises bidder's database design for the complete delivered system. This should be delivered shortly after delivery and acceptance of the final design.
4. All systems interface designs must be submitted to Owner for review and approval prior to acceptance of the final design.
5. All algorithms developed as part of this project (i.e. tote inspection selection, replenishment / picking) must be submitted to Owner for review and approval.

6. Prior to the beginning of coding, the bidder shall communicate to the Owner, for approval, the coding standards, which the bidder plans to utilize in the implementation of the control systems. These standards should address such items as header blocks, comments, formats, and overall structure.

7. Prior to the beginning of coding, the bidder shall communicate to the Owner, for approval, the naming conventions, which the bidder plans to utilize in the implementation of the control systems. These conventions should maintain consistency and show the relationship between the names for design modules, program, subroutine and function names, and file names.

8. All components of the software that are developed on this project shall be written and identified in a related fashion. All programs shall be related by a naming convention to the section of the detail design document, which the bidder shall develop, describing the function of the program. Sub-functions shall be related by names, which are, as in the case of the main program logical and predictable by the naming convention. Source code, object code, and executable modules shall have names, which are logically predictable based on the naming convention.

9. Associate interfaces that are developed on this project and are within the same sub-system of the WMS shall have the same "look and feel". The "look and feel" of custom developed or modified Human interfaces shall be compatible with the commercial application software packages for the appropriate system. For custom applications, such as the conveyor controller, conventions for the use of function keys, buttons, screen layouts, alarms and exceptions shall be established and used throughout the WMS, for custom and modified software.

10. All source files shall contain a comment header which shall contain the following as a minimum.

    a. **Vendor Company:** (bidder's company name, address, phone number and software contact person)

    b. **Author:** (Name of program author)

    c. **Program version:** (A number which shall be unique and consecutive for each version of the software released to Owner)

    d. **Program Function:** (An English description of what the purpose of the program is, and the basic operations it performs to accomplish that purpose. Any parameters which are external to the program shall be described, as well as the output of the program.)

    e. **Include File Names:** (A list of all include files e.g. parameter file, common area file, etc.)

    f. **Compile/Link Instructions:** (Name of command files for compiling and linking this module)

11. Command files (procedures) shall be provided to compile and link either a single program or all application programs from a single command line.

12. User-Friendly Graphical Interface – It is desirable that the system software shall be equipped with a point-and-click, Windows-like graphical user interface (GUI) that is easy to use and requires minimal computer skills.
13. To the greatest degree possible, flexibility of the delivered system and sub-system should be designed to take advantage of table-driven, user-selected configuration options (i.e. replenishment strategies by item or item class, or zone) that can provide mass-customization by such values as vendor, customer, order, item, item classification,etc..
14. Software and database security shall be provided with a multi-level password control scheme. The security scheme shall be implemented such that it does not interfere with operations once access has been granted to the system. Also it shall not be required to re-enter the password while moving from one function to another within the same level.
15. Software requiring terminal entries shall be menu driven, screen oriented, and provide for on-screen editing of entries to minimize Associate errors. It is desirable that software requiring terminal entries be via forms using the form development package provided with the relational database.
16. A convention for use of function keys on menu screens and within functions shall be developed. All function keys shall be described as to their meaning on the screen.
17. A convention shall be developed to define a line or lines of the screen for the display of error messages. On screen error messages shall be highlighted by means of an alternate color, reverse video and/or bold characters. All error/alarm/help messages must be informative and not directional to another reference.
18. It shall not be required that as a normal course of events an associate will need to load and run a job. All such operations shall be done from a system operation menu.
19. Input prompt messages requesting the Associate to scan a piece of data should be available to the Associate to enter the data from a keyboard without composing any special characters.
20. All application programs shall be written in a structured, modular form. Tables and parameters shall be placed before the execution section where applicable, and commented to make value changes straightforward and clear.
21. All application dependent numeric values shall be placed in one or more parameter files. This file shall be included where these values are required. No device addresses or numeric values shall be 'hard coded' in the execution section.
22. All application programs shall allow multiple program access to data files where feasible. Programs requiring exclusive access to a file must be identified as such in system flow diagram.

23. No program shall require any "customizing" of the existing computer operating system.
24. All programs shall incorporate orderly start-up and initialization, as well as orderly shutdown, which can be triggered from an application level through a screen function.
25. The bidder shall update the bidder supplied Design Documents to match the as-built conditions. This implies all Program Data Flow Diagrams of software modules.
26. All startup and shutdown of interfaces between the WMS and its sub-systems (RF, Material Handling, Conveyor, PTL) shall be driven by the startup and shutdown processes of the WMS. Any failure of one or more of the subsystems to startup / shutdown during such a process shall be highly visible through on-screen messages to the operator performing the action.
27. Database Scripts - All database scripts shall be provided and documented as source code.
28. Program documentation - All elements that are necessary to support a working system shall be documented as follows:
    a. Vendor - Vendor name, address, telephone number, and contact
    b. Author - Name of the author
    c. Language - The programming language that is used
    d. Version - A number which is unique and consecutive for each version of the software released
    e. Function - An English language description of what the purpose of the element is, and the basic operations that it performs
    f. External Parameters - Any parameters that are external to the element must be described
    g. Output - The expected output of the element must be described
    h. Modules - All components of the software must be written and identified in a related fashion
29. Construction Procedures - All procedures for tasks such as Inclusion, Compile/Link, and Command Procedures must be described
30. Database schemata and data dictionaries shall be provided for all tables
31. Constants - All application dependent values shall be placed in a parametric table. Constant values must not be “hard-coded” in any way
32. Year 2000 Compliance - All programs shall be guaranteed to function properly during and beyond the Year 2000.

8.11 GENERAL SOFTWARE REQUIREMENTS

8.11.1 (SR) System Software

The overall system software shall include the operating system software complemented with utilities necessary to edit, compile, and link programs, and other unbundled system utilities required for WMS operation and program development. The bidder shall not provide any special "customizing" of the operating system or third party system software. Describe the proposed operating system and any necessary utilities.

8.11.2 (SR) System Diagnostics

The system diagnostic modules shall provide for system operational status. Specifically, failure conditions shall be identified, located and alarmed. Software shall be provided to display system status on the associate, supervisor, and maintenance terminals. As a minimum, this software shall indicate abnormal conditions with time, date, description of abnormal condition, and location of abnormal condition. This software shall complement diagnostics on specific equipment to assist maintenance personnel in locating and repairing failures. As minimum, diagnostic software shall annunciate abnormal conditions in the automated material handling equipment component failures, conveyor system component failures, pick-to-light component failures, bar code reader failures, RF system failures, and computerized equipment failures. Describe your proposed system diagnostics process.

8.11.3 (SR) Displays and Reports

A. Software shall be provided to display and print at least the reports listed below. It shall be possible to specify selection and sort criteria for these reports/displays from the items on the menus. All reports/displays shall list the select and sort criteria as part of the display/report. It shall be possible to direct any report to the local terminal (default), a disk file, and/or a printer. The displays and reports specified here are not intended to be all-inclusive. Other displays and reports may be necessary for proper and efficient operation of the system and for troubleshooting based on the bidder's detailed software design. All such displays and reports shall be provided by the bidder. The layouts and formats of all displays and reports shall be generated by the bidder during the software design phase and submitted to the Owner for approval. The bidder shall define, design, and implement the operational database to provide the displays and reports specified herein.

1. Minimum display/reporting requirements are:

    a. Log-On Displays. Associate, Supervisor and Maintenance Log-on screens.

    b. Subsystem Displays. All necessary Supervisor, Material Handling, De-palletizer, and RF terminal operational displays such as: function selection menu; order processing screens (e.g. receive, put-away, replenish, pick, ship, cycle/physical inventory).

    c. System Status Displays. Real-time equipment status showing the status of the turret and order picking trucks, the de-palletizer, material handling, pick-to-light, and conveyor activity. This also includes communication links to bar code readers, terminals showing associates logged-on, etc. This screen shall be refreshed automatically, at least once every 10 seconds.

d. Pending Work and Work-In-Process Displays. Summarized pending work and work-in-process by area (e.g. Receiving, QC/BOL, De-palletization, Material Handling, Split Case and Full Case Picking and Shipping) and that includes subtotals and totals. This screen shall be refreshed automatically, at least once every 10 seconds.

e. Activity Log Reports. Activity Log Report for a shift, a day, or any user queried time period that can be presented by:

f. Summary Reports include summary report of activity for a shift, day, week, year-to-date, and user-queried time period by: all activity; activity type (e.g. receiving, put-away, picking, replenishment, inventorying); product identifier; subsystem; RF vehicle.

g. Pending Work Order List Display. Pending work order list by: store order; brand code; subsystem (e.g. receiving; turret and order picker trucks; split-case picking; case handling equipment).

h. Alarm Log Reports. Alarm Log Report for a shift, a day, and any user queried time period. The system shall maintain query periods for up to twelve (12) months. Queries supported by: date/time; alarm number; alarm priority; subsystem.

i. Maintenance Displays. Maintenance/Supervisory Screens and Functions. This will include such components as: password maintenance; RF terminal assignment by vehicle type and area; alarm text, priority, subsystem, and logging selection; authorized employee file display and maintenance; shipping leg assignment.

j. RF Communication System Monitoring Reports. As part of the RF Communication system, the bidder develops detail monitoring and utilization reports outlining the performance level of the conventional fork, turret and order picker vehicles. These reports shall, at a minimum contain the following data: vehicle associate; accumulated time logged-on; time accumulated delivering parts; number of work assignments; utilization calculations.

k. Ad Hoc Displays. In addition to the displays and reports specified above, the WMS shall all have the capability of providing ad hoc displays of data extracted from the database. These displays shall be primarily for problem analysis and troubleshooting. The data selection and sort criteria shall be under the control of the user.

8.11.4 Abnormal Condition Handling

8.11.4.1 (SR) Error Detection

Abnormal conditions and abnormal condition handling are dependent on the bidder's control strategy and are not included in the operational description. However, mechanisms shall be provided for detecting, initiating appropriate actions, and notifying Owner's personnel of abnormal process conditions and system status. Abnormal condition handling shall, at a minimum, include the following:

1. Emergency Shutdown.
2. Emergency Stop (e-stop) activation.
3. Load ID (i.e. Case, Pallet, Tote) unreadable/unknown.
4. Unreadable/unknown empty pallet.
5. Transfer device failure.
6. Conveyor spurs full.
7. Divert not verified.
8. Conveyor jam.
9. System communications failure.
10. Restart after controller failure.

8.11.4.2 (SR) System Failure Analysis

System component failure and recovery is highly dependent on the detailed design and therefore not addressed in this specification. The bidder shall perform a detailed system component failure analysis and its impact on the system operation to develop a recovery plan as part of the detailed design.

8.12(SR) WARRANTY

A. Bidder to provide standard parts and labor warranties for all software and components.

8.13INTERFACE REQUIREMENTS

8.13.1 WSLCB Enterprise System

A. The WSLCB Enterprise System is the business level system with which the WMS must communicate. This system is a remote operating AS/400 computer system that interfaces with WMS via an Ethernet Network using TCP/IP. The WSLCB will provide all of the hardware and software so that the AS/400 is a fully functional member of the WSLCB network. The AS/400 application system will be modified and expanded by the Owner as required to meet the functional requirements of the facility. However, these modifications must not require any major changes to the WSLCB's business process unless agreed to by the Owner during detailed design. The interface between the WMS and the WSLCB Enterprise System will be designed to accommodate downloads via file transfer and/or interactive communications as is jointly determined by the Owner and Bidder in the final design process

1. The WSLCB Enterprise System provides the following:
    a. Receive & Maintain Purchase Order Requests from Distributors
    b. Maintain Product Inventory Count Quantities
    c. Store Order Processing
    d. Inbound Scheduling

e. Bailment Processing

f. Warehouse Stock Replenishment

g. Replenishment Forecasting

h. Financial Information (Accounts Receivable/Payable, General Ledger, Sales Analysis, Freight Payment, etc.)

i. Inventory Reconciliation

j. Communication with the WMS and Warehouse Business Systems

8.13.2 (SR) WSLCB EBS and WMS Messages

Describe the proposed WMS's standard message and transaction acknowledgement. The exact format, interfacing and acknowledgement specifications between the WSLCB EBS and WMS and between the WMS and its subsystems will be developed during detail design with the Bidder.

A. Transactions between EBS and the WMS, whether the transaction is being sent down, or whether the transaction is sent up, must be acknowledged by the receiving computer to maintain a positive transfer of data. Lack of acknowledgment shall cause the data to be retransmitted. A comprehensive communications error log shall exist for storing all exception messages and necessary descriptive data and should be viewable through the standard menu screen system.

B. Transactions between WMS and its subsystems, whether the transaction is being sent down, or whether the transaction is sent up, should be designed for positive acknowledgement by the receiving computer to maintain a positive transfer of data.

8.13.3 (SR) EBS Downloads to WMS

Describe how the proposed WMS's standard offering will address these typical downloads

A. Following is a list of the typical downloads to the WMS from the EBS, which are expected by the EBS business processes. Specific downloads will be developed during detail design with the successful bidder.

1. Daily Store Order Shipment Profile

   Typical information to be included:
   a. Store Number
   b. Bill of Lading Number
   c. Brand Code/SCC
   d. Quantity Ordered by Brand Code/SCC
   e. Package Type (Case or Unit)
   f. Supplies Ordered

2. Daily Expected Receipts Profile (may include inbound carrier schedule)
   Typical information to be included:
   a. Supplier Identification

b. Carrier Identification
c. Purchase Order Number
d. Brand Code/SCC
e. Quantity Ordered by Brand Code/SCC
f. Quantity Expected on this carrier
g. Expected (scheduled) Date/Time of arrival

3. Emergency Additions/Updates to Purchase Orders on Expected Receipts Profile

   Typical information to be included:
   a. Action Code (add, update, delete)
   b. Truck (load) Identification
   c. Supplier Identification
   d. Carrier Identification
   e. Purchase Order Number
   f. Brand Code/SCC
   g. Old Quantity Ordered by Brand Code/SCC
   h. New Quantity Ordered by Brand Code/SCC
   i. Old Quantity Expected on this carrier
   j. New Quantity Expected on this carrier

4. SCC/Brand/UPC Descriptive Data Maintenance

   Typical information to be included:

   a. Action code (add, update, delete)
   b. Brand Code/SCC
   c. Brand Code /SCC Text Description
   d. UPCs
   e. Current Price
   f. Case Weight
   g. Case Dimensions
   h. Status codes
   i. Current Supplier
   j. Number of Units per Case
   k. Sub pack, sleeve quantity
   l. Possible Special Shipping Instructions
   m. Possible Historical data for planning

5. Inventory Count Requests

   Typical information to be included:
   a. Brand Code/SCC

6. Inventory Transactions, (transfers, purges, holds, etc)

   Typical information to be included:
   a. Action Code (transfers, purge, hold,…)

b. Brand Code/SCC
c. Various inventory fields

8.13.4 (SR) WMS Uploads to the EBS

Describe how the proposed WMS's standard offering will address these typical uploads

A. Following is a list of the typical uploads from the WMS to the EBS which are expected by the EBS business processes. Specific uploads will be developed during detail design with the bidder.

1. Actual Store Order Shipments

   Typical information to be included:
   a. Store Number
   b. Bill of Lading Number
   c. Brand Code/SCC
   d. Quantity Shipped by Brand Code/SCC
   e. Package Type (Case or Unit)
   f. Order Exceptions
2. Actual Receipt Confirmation and Disposition

   Typical information to be included:
   a. Supplier Identification
   b. Purchase Order Number
   c. Carrier Identification
   d. Brand Code/SCC
   e. Quantity Received by Brand Code
   f. Count of Damaged Goods
   g. Results of Open Case Inspection
   h. Order Shortages or Overages
   i. Receipt of Unordered Product
   j. Actual Receipt date and time
3. Inventory Transactions, transfers, adjustments.

   Typical information to be included:
   a. Brand Code/SCC
   b. Action code (transfers, adjustments…)
   c. Inventory Quantities
4. Result of Inventory Count Request

   Typical information to be included:
   a. Brand Code/SCC
   b. Inventory Counts

5. Inventory Balances on Hand (for periodic inventory reconciliation & physical inventory process reporting)

   Typical information to be included:
   a. Brand Code/SCC
   b. Inventory Quantities

6. Outbound Carrier Schedule to Fax (specify if applicable)

   Typical information to be included:
   a. Carrier Identifier
   b. Fax Phone number
   c. Route
   d. Store number
   e. Case/Tote Quantities
   f. Weight
   g. Loading Appointment

7. Outbound carrier information for Claims

   Typical information to be included:
   a. Store number
   b. Carrier Identifier (assigned to store)
   c. Carrier Address, phone
   d. Carrier Contact

8. Notification of Receipt of 'Not Normally Carried Product'

   Typical information to be included:
   a. Item description
   b. Quantity Received
   c. Package Type (Case or Unit)
   d. Supplier Name/Identifier
   e. Carrier Identification
   f. Date/time received
   g. Status of product

8.13.5 Other Interfaces between the EBS and WMS

A. Below are some additional interfaces that must exist between the EBS and WMS.

1. System processing messages and acknowledgments
2. Testing
3. Initial System Data Load (e.g. inventory, brand/UPC data, outbound carriers)

4. Statistical data for business planning and reporting

8.14INVENTORY CONTROL

8.14.1 (SR) General

Describe how the proposed WMS's standard offering will address the following general inventory control requirements.

A. The WMS will control the receipt, putaway, movement, and shipping of the inventory quantities in the distribution center. The EBS will control the enterprise master inventory for purposes of stock replenishment and forecasting, store shipment profiles, bailment inventory processing, posting of receipt, payment of invoice and other current business functions. The WMS will upload any additional inventory adjustments outside of receipts and shipping (e.g.transfers of reworked stocked back to available inventory, returns to supplier, damaged product transferred to QA or BOL after received and stored, results of a physical inventory or cycle count). When these inventory adjustments are uploaded to the EBS, it will make corresponding adjustments to the enterprise master inventory. The EBS also needs to be able to notify the WMS to place stock into a hold status (not available for shipment) as a result of such things as a LCB business decision, supplier recall, etc.

B. Additionally, on a user-defined schedule, the WMS will upload inventory counts for all brands in the system. This upload will be used by the EBS to do the periodic inventory reconciliation to the enterprise master inventory. A similar process would be used to reconcile the WMS and EBS inventories as a result of a complete physical inventory.

C. Requests for an inventory count of a certain product could be requested by EBS staff on an as required basis or as a result of the reconciliation process.

8.14.2 (SR) Inventory Transactions, Transfers, Adjustments

Various conditions could occur in the distribution center that would require a transfer of a quantity of stock from one inventory status to another that would either make the quantity unavailable for shipment, or, in other situations, 'available' for shipment. These transactions need to be communicated to the EBS to adjust the enterprise master inventory quantities so that shipment requests can be filled or shipments can be restricted if needed. An example would be the movement of an item from BOL to VNA or split case to be available for shipment. Describe how the WMS will generally handle this transactions.

8.14.3 (SR) Brand Descriptive Data Maintenance

Brand descriptive data is maintained on the enterprise master database by the EBS through several processes. Certain items of descriptive information, such as text description, UPC, case dimensions, weight, units-per-case, etc., need to be downloaded to the WMS on a daily basis. This process would also control adding and deleting brands. UPC maintenance also needs the ability to be downloaded on an immediate basis. In addition, the WMS needs to be able to upload changes to case dimensions and weight. Describe how the WMS will generally handle these maintenance transactions.

8.14.4 (SR) Material Flow Control and Tracking

A. Application software will be provided to sequence picking from the narrow aisle storage to replenish automated material handling and pick-to-light storage based upon store orders. This software will also sequence picking from the automated material handling and pick-to-light storage to fill orders.

B. The material tracking software will track stock movements from receiving through shipping. Reports will be available to determine inventory movements by brand code, by employee identification, by lot, by supplier and by time period (day, month, etc.). Detailed and summary reports will be provided. Refer to the Display and Reports section for additional specification requirements.

END OF SECTION

APPENDIX E
RFP FOR MATERIAL HANDLING SYSTEM

VIRGINIA DEPARTMENT OF ALCOHOLIC BEVERAGE CONTROL

PURCHASING OFFICE
2901 HERMITAGE ROAD
P.O. BOX 27491
RICHMOND, VA 23261-7491

RFP NUMBER # S-216-05
TITLE: Material Handling System
ISSUE DATE: September 8, 2004
PURCHASE OFFICER: Debra C. Corley
PHONE: (804) 213 4425
FAX: (804) 213-4429

Sealed Proposals Will Be Received Until September 30, 2004, @ 4:00 P.M., (Eastern Daylight Time (EDT), For Furnishing The Goods and Services Described Herein.

Proposals will be opened on the date and hour shown above. Late proposals will not be accepted.

PROPOSALS SENT BY U.S. MAIL ARE TO BE MAILED TO THE ADDRESS SHOWN ABOVE. PROPOSALS HAND DELIVERED OR SENT BY MEANS OTHER THAN U.S. MAIL (I.E. FEDERAL EXPRESS) ARE TO BE ADDRESSED TO: Department of Alcoholic Beverage Control, 2901 Hermitage Road, Central Office, Second Floor, Room 2059, Richmond, Virginia 23220. It is the responsibility of the OFFEROR (not the Agency) to ensure proposals are delivered to the specified location by the date and time above. To distinguish proposals from other mail, each envelope or package should be marked according to documents enclosed, as follows: "BID DOCUMENT". It is the intent of the Purchasing Office to assist in recognition of these important documents.

Proposals must be submitted on this and the attached form(s), and must be signed in ink.

All Inquiries For Information Should Be Directed To: Debra C. Corley, Procurement Manager
Phone (804) 213-4425 Fax (804) 213-4429 E-Mail: dccorly@abc.state.va.us

In Compliance With This Request For Proposals And To All The Conditions Imposed Therein And Hereby Incorporated By Reference, The Undersigned Offers And Agrees To Furnish The Goods and Services In Accordance With The Attached Signed Proposal Or As Mutually Agreed Upon By Subsequent Negotiation.

*Virginia Contracting License No. _____
Class: _____ Specialty Codes: _____

NOTE: This public body does not discriminate against faith-based organizations in accordance with the Code of Virginia, § 2.2-4343.1 or against a bidder or offeror because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment.

Name And Address Of Firm _____ _____ _____ _____ __ Zip Code: _____ FEI/FIN NO.:_____ FAX No.:_____ E-Mail Address: _____		Date:_____ By: _____ (Signature In Ink) Name: _____ (Please Print) Title: _____ Phone No.: (_____)_____

***MANDATORY PRE-PROPOSAL CONFERENCE / OPTIONAL SITE VISITS**: Optional site visits will be held at the Department of Alcoholic Beverage Control, Central Office Complex, on September 13, 2004, at 3:00 PM, and immediately following the pre-proposal conference on September 14, 2004. A mandatory pre-proposal conference will be held on Tuesday, September 14, 2004, at 9:00 a.m., also at the Department of Alcoholic Beverage Control, Central Office Complex. Reference Paragraph 10.0, General Terms and Conditions (Attachment B) herein.

eVA BUSINESS-TO-GOVERNMENT VENDOR REGISTRATION: The eVA Internet electronic procurement solution, web site portal www.eva.state.va.us, streamlines and automates government purchasing activities in the Commonwealth. The portal is the gateway for vendors to conduct business with state agencies and public bodies. All vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet e-procurement solution either through the eVA Basic Vendor Registration Service or eVA Premium Vendor Registration Service. **All offerors must register in eVA; failure to register will result in the proposal being rejected.** (Reference General Terms and Conditions – Attachment B)

NOTE TO PROSPECTIVE OFFERORS: The term Offeror as referenced in this solicitation refers to the individual or firm preparing and submitting a proposal in response to this Request for Proposals. The term Contractor refers to an individual or firm that has entered into an agreement to provide goods or services to the Commonwealth. In addition, it also refers to a firm who, when awarded the contract, will be responsible for goods and services required, as a result of this solicitation. You are requested to review the provisions of RFP Section 7.0 to promote a clear understanding of the words "must", "shall", "should" and "may" as used in this Request for Proposals document.

VERSION HISTORY

Table 0.1 - Version History

Version #	Date	Name	Section #	Description
1.0	9-3-04	Debra C. Corley	All	Initial Release

Table 0.2 - Definition of Terms

Term	Definition
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
BOM	Bill of Material
FOB	Free on Board
VA ABC	Virginia Department of Alcoholic Beverage Control
MHE	Material Handling Equipment
MHS	Material Handling System
OEM	Original Equipment Manufacturer
POP	Period of Performance
RFP	Request for Proposal
SOW	Statement of Work
SPK	Installation and Start-up Spare Parts Kit
STD	Standard
TDP	Technical Data Package
ACP	Area Control Panel
MCP	Motor Control Panel
LPN	License Plate Number
TOR	Top of Roller
WCS	Warehouse Control System
WMS	Warehouse Management System

Table 0.3 – Applicable Documents

NUMBER	REV	DESCRIPTION
SKVAAABC0850-P	F	FUTURE FUNCTIONAL FACILITY LAYOUT (GENERAL ARRANGEMENT)
		CURRENT FACILITY LAYOUT (Facility Layout.dwg)

Table 0.4 - Applicable Standards

BOCA	Building Officials and Code Administrators International, Inc.
IBC 2000	International Building Code - 2000
CEMA	Conveyor Equipment Manufacturers Association
OSHA	Occupational Safety and Health Act of 1970 (OSHA)
NFPA 70	National Electric Code (NEC) 2002 Edition
NFPA 79	Electrical Standard for Industrial Machinery (2002 Edition)
RMI	Rack Manufacturers Institute
UL 508	Underwriters Laboratories, Industrial Control Equipment
IEEE STD 142-1991	Grounding of Industrial and Commercial Power Systems

CONTENTS

1.0 PURPOSE

The purpose of this Request for Proposals (RFP) is to solicit sealed proposals from qualified sources to establish a firm fixed-price contract through competitive negotiations with one qualified contractor for the acquisition, installation and maintenance of a new full-function material handling system including equipment, software and services to accommodate the product distribution operations of the Commonwealth of Virginia, Department of Alcoholic Beverage Control (herein referred to as Agency, Department, ABC, or Department of ABC).

2.0 BACKGROUND

2.1 Current Warehouse Operations

The Department of ABC warehouses liquor for distribution to its retail outlet stores statewide. The warehouse is located adjacent to the ABC Central Office, 2901 Hermitage Road, Richmond, Virginia. The square footage of the warehouse is approximately 300,000 square feet.

Alcoholic beverages are shipped from distributors directly to the warehouse, where ABC distributes, by truck, to over 295 retail outlets throughout the State of Virginia, with this number increasing to approximately 325 within the next 12 to 18 months. ABC manages warehouse activity information through Optum's "MOVE" automated warehouse management system, which includes bar code scanning and radio frequency (RF) technology. The system provides the capability to optimize the operation and movement of inventory within the warehouse. Inventory is tracked from the time of receipt into the warehouse until it is shipped to the ABC retail outlet stores. This tracking is accomplished through a series of predefined tasks that transfers inventory from "location" to "location" using bar code scanning and RF technology.

2.2 Business Problems

Capacity - In recent years, the Department added a significant amount of new items and additional retail outlets to serve a growing population with changing tastes and consumption patterns. The new items and expanded outlets are contributing to the record growth in sales and profitability seen in recent years. However, significant capacity constraints are already hindering the Department's ability to keep pace with demand. ABC does not have the current capacity to pick an optimal amount of product to meet the consumer needs. The lack of product slots in the warehouse places severe limitations on ABC's ability to supply the products desired in the marketplace and maintain an adequate supply of product to meet demand. Based on current trends, the situation is only expected to worsen as demand grows. Presently, there is very little square footage in the central warehouse complex not used for product storage and distribution.

Throughput - Warehouse throughput, a factor of the number of products carried, the number of products in each order and the number of orders filled, also requires significant modification. With the expected growth in the number of stores, the number of items carried, and product demand, the ability to ship accurate and adequate supplies of product in a cost effective manner is in need of significant improvement. This improvement is needed sooner rather than later since ABC expects a 40% growth in the number of orders and 30% increase in volume over the next 10 years.

2.3 Vision

ABC is interested in improving capacity and throughput in its warehouse through the possible use of a racking and warehouse automation system. ABC expects the system to: (1) meet current and forecasted demand and inventory requirements of new stores, (2) improve space utilization of the warehouse, (3) improve process efficiency (reduction in cost per case shipped);

(4) avoid increased labor commitments, (5) improve shipping and inventory accuracy, and (6) position ABC to expand sales and profits in the future.

To accommodate this new system, facility modifications are required. ABC is currently in the process of hiring an architectural/engineering firm to prepare the construction plans and specifications. ABC has contracted with a logistics consultant, Tompkins Associates, to assist ABC in the selection of the architectural/engineering firm as well as the award of this RFP. In addition, Tompkins Associates is responsible for the project coordination and scheduling of the construction contractor and the material handling contractor to ensure timely implementation of the new system.

3.0 PROCUREMENT CONDITIONS

This section intentionally left blank.

4.0 STATEMENT OF NEEDS

The Contractor shall provide all labor, equipment, materials and supplies required to furnish and install a new turnkey material handling system including equipment, software and services that satisfy the functional requirements described. Offerors are encouraged to submit enhancements or alternatives to the general layout and technology selections that will improve system performance or reduce system cost.

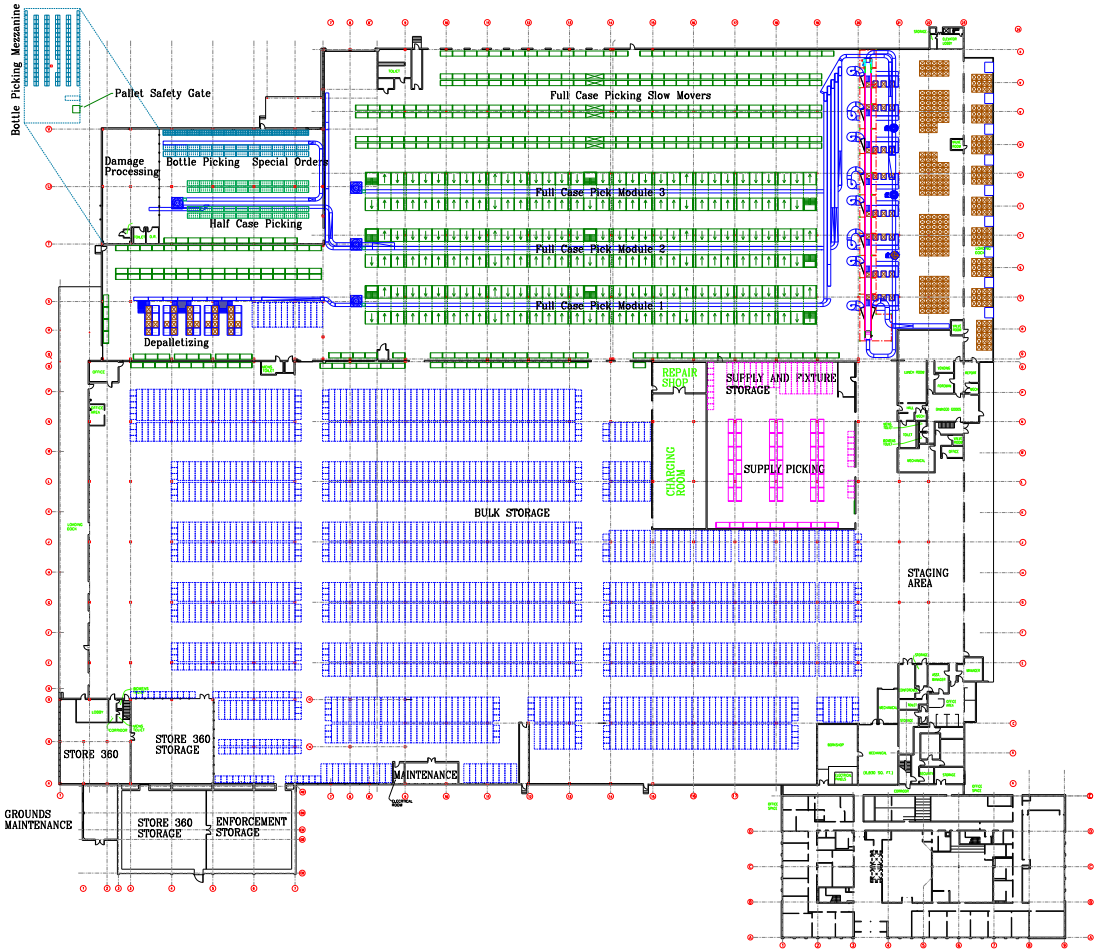
ABC intends to continue operations throughout the duration of the project. The Contractor shall not interfere with the daily operations of the facility. ABC will not unreasonably withhold requests to change operational procedures or processes that would assist the Contractor in completing the contract.

4.1 SYSTEM DESCRIPTION

A high level layout with functional areas identified is shown in figure Fig 4.1 System Layout and Figure 4.2 Facility Level Material Flow. Contractor's proposed material handling system shall meet or exceed all functional requirements.

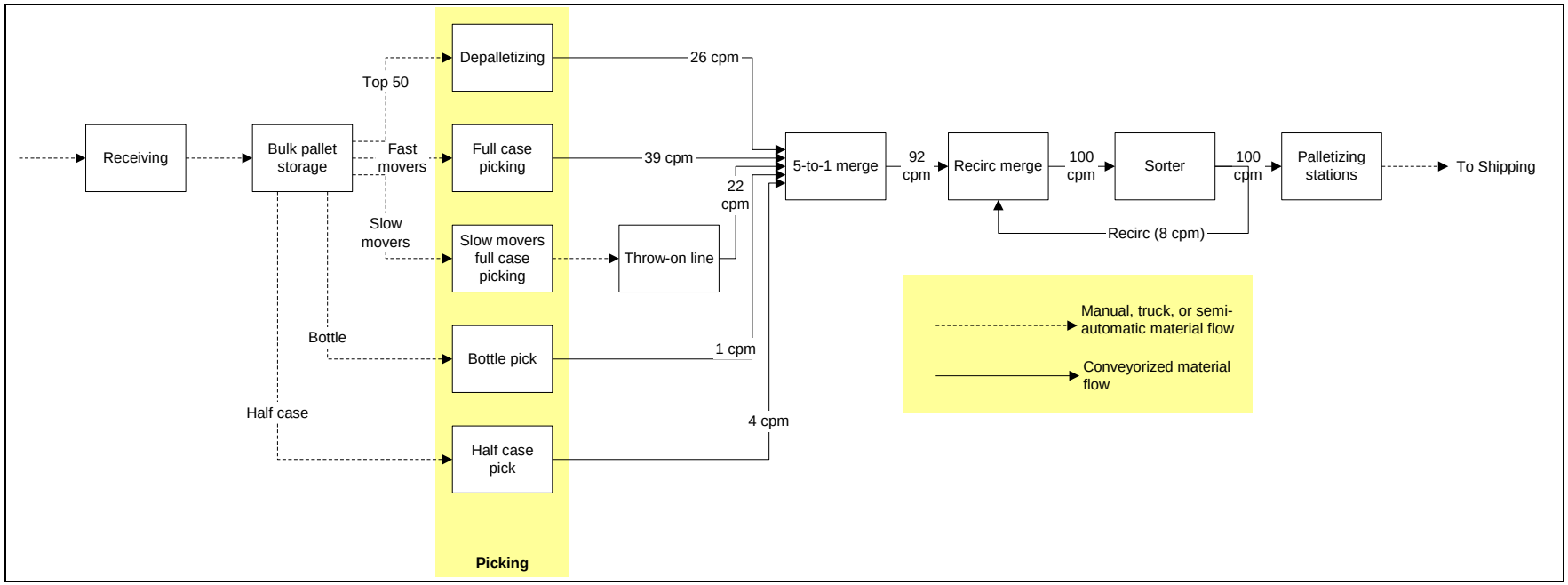
Offeror shall field verify all measurements to accommodate proposed system. Tompkins and Associates will verify proposed system meets design specifications, functionality and throughput rates as shown in Figure 4.2 Facility Level Material Flow.

Fig 4.1 System Layout



Product is received and flows through the facility as shown in 4.2. Design throughput rates, expressed in cases per minute (cpm) are also shown on the diagram.

Figure 0.2 - Facility level material flow



4.1.1 Receiving
In Receiving, pallets of incoming cases are received and checked for proper contents. They are transported, via lift truck, to Bulk Pallet Storage.

4.1.2 Bulk Pallet Storage
This area provides temporary storage of pallets of cases until the cases are ready to be replenished to the Picking area.

4.1.3 Depalletizing
The top 50 SKUs are brought to the Depalletizing area for Picking operations. Pallets are delivered to a Depalletizing station via lift truck. Case labels are printed at central WMS printers located in the Depalletizing area, Pick Module area, and Half Case Room. Each case is labeled and pushed onto the take-away conveyor. One label is the equivalent to one package to be picked.

4.1.4 Full Case Picking
The Full Case Picking module has two levels, each with its own take-away conveyor. Pickers are provided a stack of pick tickets with adhesive LPN labels. The pick ticket identifies the pick location and are sequenced to reduce picker travel time. As a full case is picked, the label is applied and the case is placed on the take-away conveyor.

4.1.5 Slow Movers Full Case Picking
The Slow Movers Full Case Picking area has three levels. Pickers are provided a stack of pick tickets with adhesive LPN labels. The pick ticket identifies the pick location and are sequenced to reduce picker travel time. As a full case is picked, the label is applied and the case is placed on the order picker's pallet. When the pallet is full or the picks are complete, the pallet is transported via order picker to the Throw-on line. Cases are placed on the Throw-on line by the picker, or other stationary personnel.

4.1.6 Throw-on Line
This conveyor section accepts cases from the Slow Movers Full Case Picking area and transports them to the 5-to-1 merge.

4.1.7 Bottle Pick
In the Bottle Pick area, pickers pick individual bottles into a shipping carton. The carton is labeled with a shipping label and placed on the take-away conveyor.

4.1.8 Half-Case Pick
In the Half-Case Pick area, pre-made half cases are picked from carton flow rack, labeled, and placed on the take-away conveyor.

4.1.9 5-to-1 Merge
The 5-to-1 Merge combines the flows from the different picking areas and manages the merging of five conveyor lines into one.

4.1.10 Recirculation Merge
This merge combines the output of the 5-to-1 merge with the recirculation line.

4.1.11 Sorter
The sorter provides the following functions:

- Case identification – The bar code on each case is scanned as the case is inducted onto the sorter. The bar code is decoded and a lookup is performed to determine the case's destination. The destination is mapped by the sort plan to a physical lane and that lane is assigned to the case.
- Induction – The case is properly spaced to optimize throughput and reliable handling. The case is then transferred to the sorter.
- Transport to assigned divert – The position of the case is tracked by the sorter as it is transported to its assigned divert lane.
- Divert – The case is diverted to its assigned lane. The sorter uses photo-eyes at each lane to confirm a successful divert.
- Recirculation – if the assigned lane is full and the case is unable to divert, it is assigned to recirculation and goes off the end of the sorter.

4.1.12 Palletizing Stations

The sorter diverts cases to Palletizing Stations where the operator sorts each of the cases to one of three pallets. Once a wave is complete, the pallet is taken to the shipping area

4.2 MATERIAL HANDLING SYSTEM OVERVIEW:

4.2.1 Pallet rack: 1125 bays, 2250 positions decked rack for full case order picking as further described in section 4.4.1of this Statement of Needs.

4.2.2 Pick Modules: Three (3), two (2) level pallet flow pick modules each with 63 bays of 1 high 2 deep pallet flow as described in section 4.4.2 of this Statement of Needs.

4.2.3 Conveyor: Contractor shall provide appropriate type of conveyor required to meet throughputs and functionality as described in section 4.4.3 and be capable of handling products listed in Table 4.1 – In Process Case Sizes & Weights.

4.2.4 Depalletization stations as follows and as shown on the drawing and as further described in section 4.4.3.1.

4.2.4.1 Contractor shall provide ergonomically suitable depalletizing stations from which operators will be able to manually pick 6800 cases per day.

4.2.4.2 These depalletizing stations shall be able to handle eight (8) pallets at a time using pallet conveyor for staging and positioning pallet loads

4.2.4.3 Using hydraulic lift tables each operator shall be able to adjust the height of the current layer to eliminate or reduce the amount of bending during picking

4.2.5 Sorter as follows and as shown on the drawings

4.2.5.1 Contractor shall provide a sortation system that is able to sort greater than 100 cases per minute

4.2.5.2 Sorter shall include open mesh steel decked support/maintenance structure

4.2.5.3 Sorter and down lanes must be able to sort/transport cases of liquors without damage/breakage

4.2.6 Palletization stations:

4.2.6.1 Contractor shall provide ergonomically suitable palletizing stations with elevated work platforms located adjacent to sorter run-out lanes

4.2.6.2 Each palletizing stations shall be designed to build 3 pallets at a time

4.2.6.3 Using hydraulic lift tables each operator shall be able to adjust the height of the current layer to eliminate or reduce the amount of bending during pallet building

4.2.7 Other ancillary equipment:

4.2.7.1 Contractor shall provide three (3) pallet stretch wrapping machines

Each stretch wrapper shall function as follows:

- The stretch wrapper shall be of the turntable type having the capability to wrap 20 pallets per hour. The stretch wrapper shall stretch wrap to within 6 inches of the top of turntable. Product to be stretch wrapped is a 48 inch x 40 inch industrial pallet with a minimum height of 36 inches and a maximum height of 8 feet, and a maximum weight of 3000 lbs. The wrap pattern shall be 2 base layers, 2 top layers, 50% film overlap, double wrap and no top sheet.
- The stretch wrapper shall have a lanyard activator switch mounted at a convenient height and location for fork truck driver operation.

4.2.7.2Contractor shall provide three (3) label printers, three (3) PC's and three (3) CRT's to print 6" x 4" pick labels at the rate of 250 labels per minute. ABC will provide the connections to the printers and the PC's.

4.2.8 Control System Architecture: The control system architecture shall include machine control, a WCS and an interface to the facility WMS. Details are provided in section 4.4.8.

4.3 DESIGN REQUIREMENTS

4.3.1 Product Characteristics

- The proposed Conveyor System shall be designed to convey the following products:

Table 0.1 – In Process Case Sizes & Weights

Case	Length (in)	Width (in)	Height (in) Flaps Down	Weight (lb)
MAXIMUM	30	24	19	60
MINIMUM	9	9	4	5
AVERAGE	15	11	12	34

Table 0.2 –Pallets Loads

	Length (in)	Width (in)	Height (in) Empty	Height (in) Pallet plus Load	Maximum Weight (lb) Pallet plus Load
PALLET	48	40	6	72-96	3000

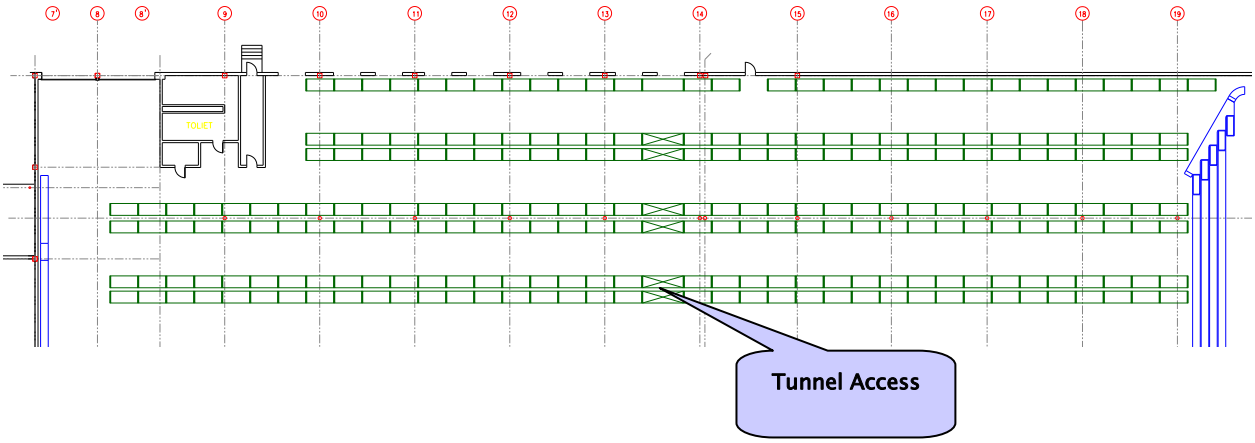
4.4 SUB SYSTEMS

4.4.1 Pallet Rack

4.4.1.1 Equipment

4.4.1.1.1 Full case Picking, Slow Movers: Three (3) levels, Two (2) beam levels 2250 pallet locations

Figure 0.3 Full Case Pick - Slow Movers

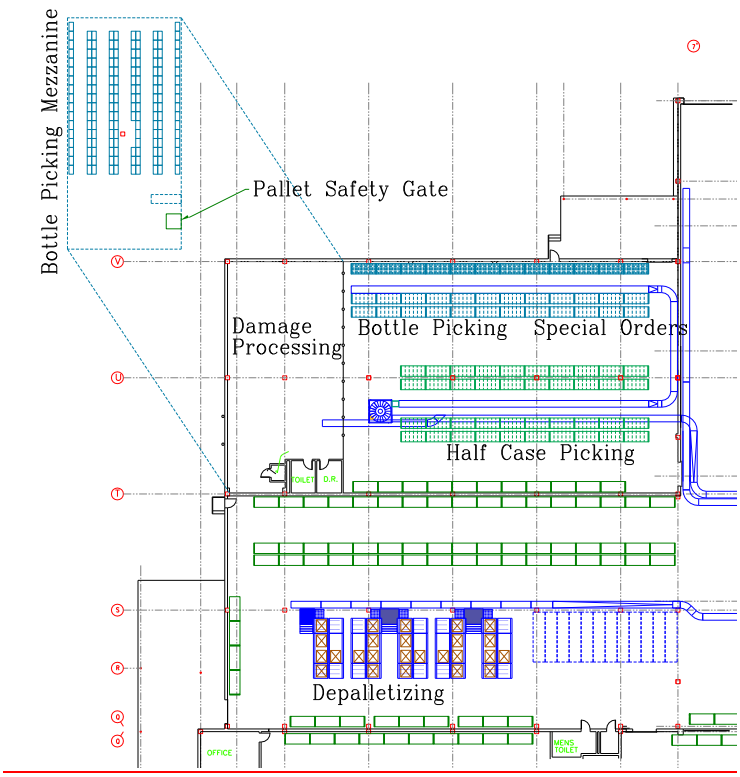


4.4.1.1.2 Half Case and Bottle Picking: Relocation of existing racking. Contractors shall maximize use of existing racks in Half Case Room.

4.4.1.1.3 Twelve (12) bays, four (4) beam levels Decked Rack, Thirty two (32) bays Carton Flow, four (4) levels per bay, Five lanes per level 159 units, heavy duty Steel Shelving with 5 shelves per unit

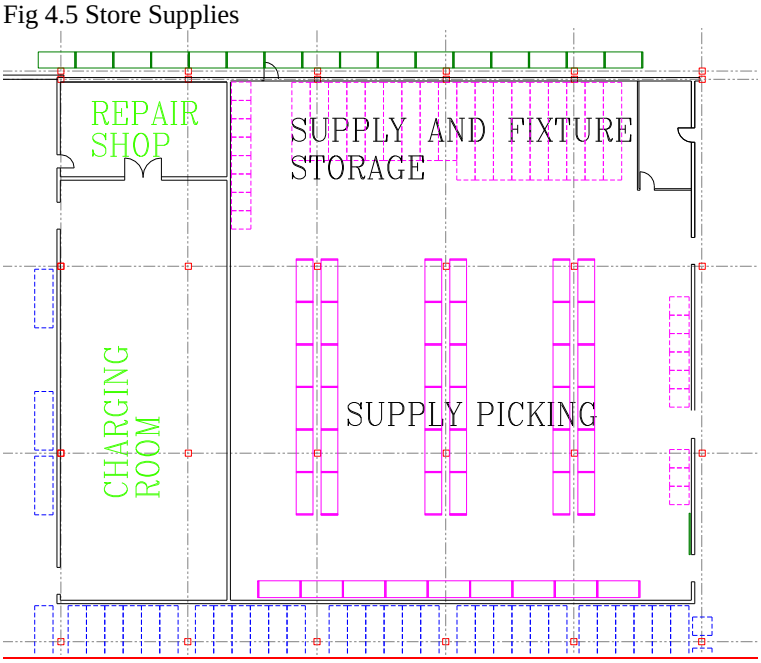
- Contractor shall provide a free standing structural mezzanine located between column line 2 and 4 and extending from the wall at column T to the wall and column line V.
- Mezzanine shall be nine (9) ft. clear to bottom of steel.
- The equipment shall meet all safety, health, and ergonomic criteria identified by OSHA and relevant industry standards.
- Contractor shall provide and install one pallet accessible safety lift gate for placing and removing pallet loads from the mezzanine.
- Contractor shall provide and install all necessary hand rail toe kick plates and stairs in accordance with OSHA and state and local codes.
- Mezzanine shall be designed for a loading of 125 lbs. per square ft.

Figure 0.4 Half Case and Bottle Picking



4.4.1.1.4 Store Supplies and Equipment: To be assumed existing. Relocate and install bulk pallet racks in new location.

Fig 4.5 Store Supplies



4.4.1.2 Installation

4.4.1.2.1 Storage Rack System elements shall be designed to bolt together. There shall be no field welding required

4.4.1.2.2 Uprights shall be anchored to the floor using expandable inserts. Anchoring methodology must meet all applicable codes (including seismic) and be reviewed and approved by VA ABC See Section 5.4 for additional details

4.4.1.3 Documentation See section 5.8.2

4.4.1.4 Schedule See Section 4.5.2

4.4.1.5 Design Requirements

4.4.1.5.1 Product Characteristics See Table 4.2

4.4.1.5.2 Mechanical Design Requirements

Table 0.3 – Racking

AREA	UPRIGHTD EPTH (inches)	UPRIGHT HEIGHT (inches)	BEAM (inches)	BAYS	LEVELS PER BAY (Including Floor)	CLEARANCE (inches)	LOAD RATING (LBS/ Beam Pair)
Slow Mover Picking	42	228	96	375	3	102	6000

4.4.1.6 System Details (Detailed description of rack in each area)

4.4.1.6.1 Slow Mover Picking

4.4.1.6.1.1 Single Selective Pallet storage rack

4.4.1.6.1.2 Contractor shall provide rack as shown on drawings

4.4.1.7 Store Supply and Equipment Storage (relocation of existing bulk pallet racks – no new racking needed)

4.4.1.8 Other Requirements

4.4.1.8.1 Protective Equipment

4.4.1.8.1.1 Contractor to provide suitable end of aisle protection at all exposed end positions

4.4.1.9 Half Case and Bottle Pick - Area 3

4.4.1.9.1 Contractor shall maximize use of existing racks in Half Case Room, Figure 4.4 Half Case and Bottle Picking.

4.4.1.9.2 Decked case storage rack –

4.4.1.9.2.1 Contractor shall provide/relocate rack as shown on drawings

4.4.1.9.2.2 Shall be provided with wire decking or other open decking material.

4.4.1.9.2.3 Decking shall not overlap the front face of the beam.

4.4.1.9.2.4 Support bars shall be provided as necessary to support the load rating

4.4.1.9.2.5 Contractor shall provide end of aisle protection of rack frames

4.4.1.9.3 Steel Shelving

4.4.1.9.3.1 Contractor shall provide heavy duty closed style shelving as shown on drawings.

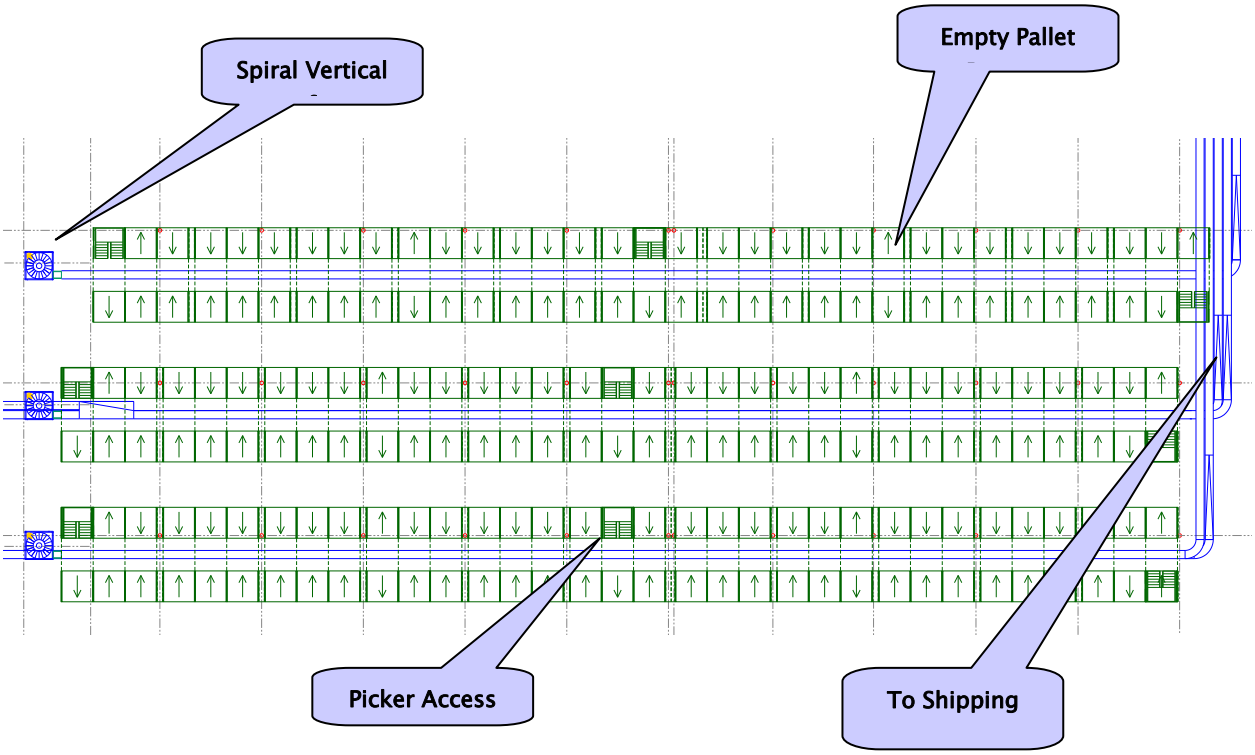
Table 0.4 –Bottle Pick Shelving: This Table intentionally deleted from RFP.

4.4.1.10 Carton Flow Rack – Relocation of Existing

Table 0.5 – This Table intentionally deleted from RFP.

4.4.2 Pick Modules

Figure 0.6 Full Case Pick Modules



4.4.2.1 Full Case Pick Modules

4.4.2.1.1 There shall be three (3) full case pick modules. Each module shall consist of two levels. Each level shall have 63 bays of 1 high, 2 deep inbound pallet flow.

4.4.2.1.2 Contractor shall construct the Pallet Flow rails around facility columns.

4.4.2.1.3 Pallet Flow shall be configured with two lanes per bay

4.4.2.1.4 5 pallet lanes on the East side and 4 pallet lanes on the West side shall be configured as empty Pallet return lanes.

4.4.2.1.5 Contractor shall supply and install continuous floor mounted protective rail (minimum 3") along the outside of the carton flow rack uprights.

4.4.2.1.6 Contractor shall provide additional pallet positions to the top of the western side of pick module 1 and the top of the eastern side of pick module 3.

4.4.2.1.7 Each pallet position shall be equipped with a minimum of 3 front to back safety bars.

4.4.2.1.8 All of the remaining upright supports shall be 21' tall to allow for future additional pallet locations.

4.4.2.1.9 Contractor shall provide fire suppression system to the three full case pick modules that comply with all national and state codes. ABC will provide water drops at each module that meet design requirements.

4.4.3 Conveyor

4.4.3.1 Depalletizing

4.4.3.1.1 The top 50 SKUs will be picked from five (5) Depalletizing Stations.

4.4.3.1.2 Conveyor for each depalletizing station shall consist of the following:

- Seller shall provide a pallet staging loop. This loop must be capable of staging and circulating 7 pallet loads, described in Table 4.2 – Pallet Loads, at a time.
- Each loop shall have a lifting mechanism at the zone closest to the personnel work station capable of lifting the pallet to an elevation that will allow the operator to pick the highest layer without bending at the waist. This table will be operated by a foot pedal and shall be enclosed in a way to prevent injury during lifting operation.
- Each work area shall be equipped with a ball transfer table to provide ergonomically efficient work station.
- Balls shall be 1" diameter or greater.
- Balls shall be mounted in a staggered pattern on 2" centers, 18 balls per square foot.

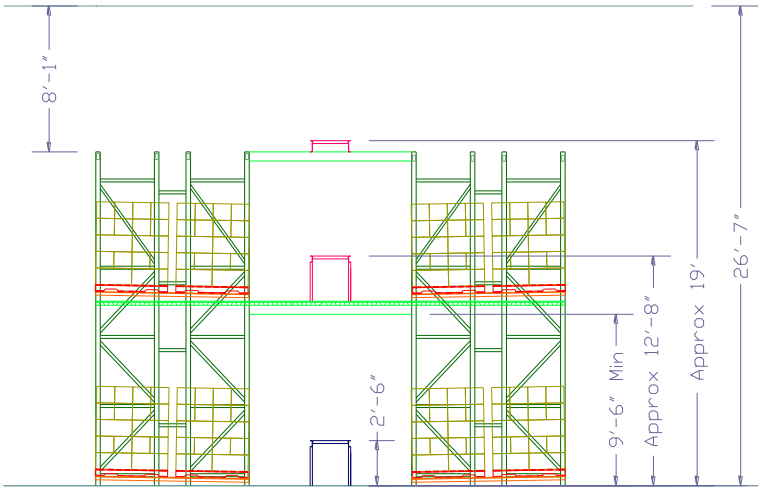
4.4.3.1.3 After the operator has applied a shipping label to the case they will push the case out onto the take-away conveyor. The take-away conveyor is to be live roller type conveyor.

4.4.3.1.4 At the end of the depalletizing stations product will be conveyed onto an incline belt on roller conveyor. This conveyor will incline up to approximately 19 ft elevation and feed onto a horizontal transportation conveyor that runs over the top of pick module 1. It is expected that the conveyor be supported by the pick module structure in this area.

4.4.3.1.5 After crossing over the pick module the conveyor will turn to the east. Product will then be transported on accumulation conveyor and a breaking belt to the 5 to one merge.

4.4.3.2 Full Case Picking Medium movers

Figure 0.7 Pick Module Elevation



4.4.3.2.1 There will be three (3), two level full case pick modules. Each pick module will have belt conveyor on the first level running from the south end of the pick module to the north end. At the north end of the pick module there will be an incline spiral conveyor or other means of conveying product from the first level to the second level.

4.4.3.2.2 The second level will have conveyor running from the north end of the pick module to the south end.

4.4.3.2.3 After exiting the pick module on the second level at approximately 12' 8" elevation and turning to the east there will be an incline belt on roller conveyor changing elevation to approximately 19'. Product will then be transported to the 5 to one merge.

4.4.3.3 Throw-on Line Slow movers full case picking

4.4.3.3.1 Product is placed on the infeed conveyor. From there it is transported to an incline conveyor. The incline goes from the 30" Top of Roller (TOR) to approximately 19' elevation. After reaching that elevation it turns to the south crossing over top of pick module number 2. It is expected that the conveyor be supported by the pick module in this area.

4.4.3.3.2 After crossing over the pick module the conveyor will turn to the east. Product will then be transported to the 5 to one merge.

4.4.3.4 Bottle Pick

4.4.3.4.1 In the Bottle Pick area, pickers pick individual bottles into a shipping carton. The carton is labeled with a shipping label and placed on the take-away conveyor. Product is then transported to the half-case pick area.

4.4.3.5 Half-Case Pick

4.4.3.5.1 In the Half-Case Pick area, pre-made half cases are picked from carton flow rack, labeled, and placed on the take-away conveyor. Cartons are then transported to an incline spiral conveyor or other means of conveying product from the 30" TOR to 12' 6" Elevation. The products will then be transported to the south and through a new wall penetration. Appropriate fire protection around this penetration is the seller's responsibility. Once through the wall the conveyor will turn to the south and feed onto an incline conveyor. This conveyor will incline to approximately 19' elevation. The conveyor will then turn to the south and parallel the conveyor coming from the throw-on line. The two conveyor's will then merge together through a 2 to 1 plow merge over the pick module.

4.4.3.6 5-to-1 Merge

4.4.3.6.1 The 5-to-1 Merge combines the flows from the different picking areas and manages the merging of five conveyor lines into one. The merge and discharge conveyor are to be designed to handle a through-put of up to 92 cases per minute.

4.4.3.6.2 The control logic for this merge shall be designed to ensure through-put requirements for the merge are met or exceeded. Prioritization between lanes shall be designed to ensure optimal balancing of flow through the merge.

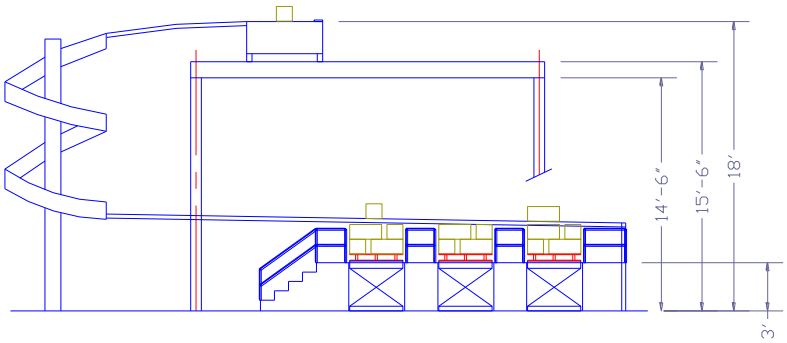
4.4.3.6.3 The Offeror shall provide a detailed description of the logic proposed for controlling the merge with their proposal.

4.4.3.6.4 From the 5-to-1 merge the conveyor will travel to the south approximately 26' and then turn to the west. At that point product will be transported onto a decline conveyor. This conveyor will decline to 18' TOR. At that point it continues west parallel with the sorter recirculation loop. The two conveyor's will then merge together through a 2 to 1 plow merge.

4.4.4 Sorter

Contractor shall provide a complete sorter system as outlined on reference drawings (Table 1.3 – Applicable Documents) capable of handling product as described under product characteristics, Table 4.1 – In Process Case Sizes & Weights and Table 4.2 –Pallets Loads

Figure 0.8 Sorter Elevation



4.4.4.1 The preferred type of sorter is sliding shoe. However, if the Offeror has an acceptable alternative for handling the product, consideration will be given to that technology.

~~4.4.4.2~~

~~4.4.4.3~~4.4.4.2 Wherever possible, system elements shall be designed to bolt together to minimize the amount of field welding required in the VA ABC facility.

- Case identification – The bar code on each case is scanned as the case is inducted onto the sorter. The bar code is decoded and a lookup is performed to determine the case's destination. The destination is mapped by the sort plan to a physical lane and that lane is assigned to the case.
- Induction – The case is properly spaced to optimize throughput and reliable handling. The case is then transferred to the sorter.
- The sorter shall have a total of nine (9) diverts. The lone divert to the right side is for no-reads. The remaining diverts are to the left side of the sorter.
- Divert – The case is diverted to its assigned lane.
- Contractor shall provide a "Divert Confirm" Photo eye for each discharge lane.
- Contractor shall provide a "Lane Full" Photo eye for each discharge lane chute and run-out.
- Contractor shall provide a "Lane Full" Photo eye for the no-read discharge lane slide
- Contractor shall provide stack lights at each divert lane
    - Each stack shall indicate "Lane Full" and "Jam Detect"
- Contractor shall design the discharge chutes with a combination of gravity wheel sections, sliding chutes and gravity run-outs to achieve the design intent.
- Discharge chutes shall convey product without jams
- Transitions shall provide smooth product flow from the sorter divert along the routes.
- Discharge chute design shall control product to minimize impact of heavy packages with other product accumulated in the discharge chute.
- Run-out lanes shall be designed such that the line pressure caused by accumulating cases is easily overcome to allow removal of any case.
- The sorter diverts cases to gravity spiral decline conveyors. From the discharge end of these spirals product will discharge onto gravity run-out conveyor.
- The run-out shall have appropriate slope to allow product flow with minimal intervention. However, the product must decelerate enough to prevent damage from impacting other cases on the run-out lanes.
- Recirculation – if the assigned lane is full and the case is unable to divert, it is assigned to recirculation and goes off the end of the sorter. This conveyor shall consist of the optimal balance of both transportation and accumulation conveyor and shall transport product back to the induction end of the sorter for re-induction.
- Offeror shall provide an outline of the proposed sort scheme plan along with their proposal. This shall to include information on handling wave close-out.

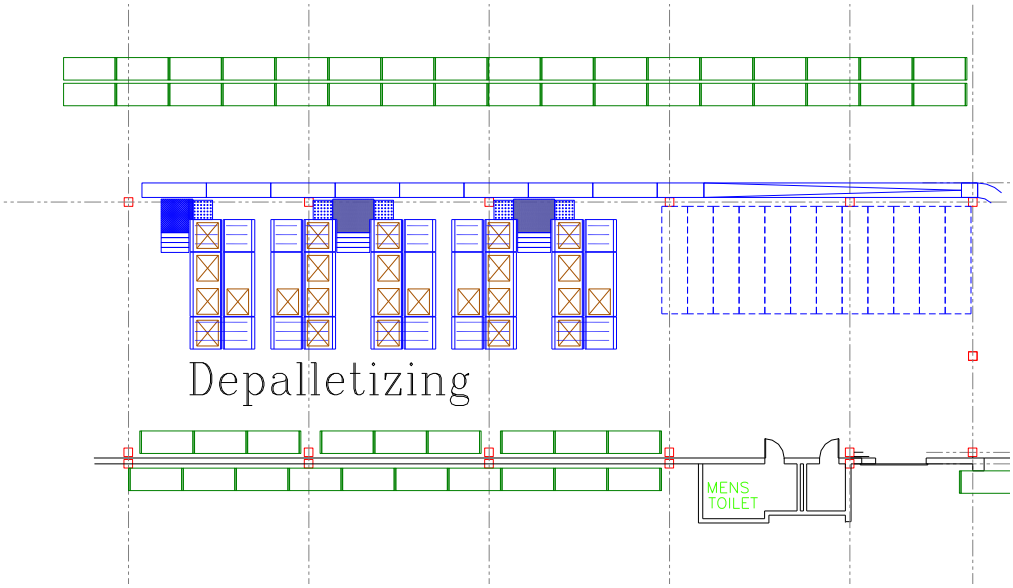
~~4.4.4.4~~4.4.4.3 Platform

- Contractor shall design the platform to support the sorter and the induction system.
- Contractor shall provide drawings, stamped and signed by a licensed engineer, showing load capacity and acquire permits required for platform installation.
- Access stairs to the platform shall include personnel protection in accordance with all applicable safety standards.
- Decking, grating, stairs, guardrails, and kick plates shall meet all OSHA standards.
- Contractor shall provide all platform floor supports.
- All supports shall meet local seismic requirements.

- Contractor shall provide necessary lighting, fire suppression within the pick module to tie into the owner's (ABC) systems as required by local, city and state code as well as insurance underwriting. Contractor shall use a certified fire protection engineer.
- Contractor shall supply adequate ventilation for a reasonable work environment.
- Contractor shall provide emergency lighting for personnel egress in event of power failure.
- Contractor shall provide fire suppression system to the sorter that complies with all national and state codes. ABC will provide water drops at each module that meet design requirements.

4.4.5 Depalletizing Stations

Figure 4.9 Depalletizing Stations



4.4.5.1 There shall be five (5) Depalletizing Stations.

4.4.5.2 Along with the associated conveyor described in section 4.4.3.1, the depalletizing stations shall consist of the following:

- Contractor shall provide an elevated, decked work platform. The top of platform shall be approximately 5'-6" elevation.
- Decking shall be comprised of corrugated steel "B" deck with a minimum ¾ inch layer of poly-top plywood (or approved alternative) mounted on top.
- Decking shall be required to support a minimum of 80 lbs/sq ft capacity.
- Contractor shall provide anti-fatigue diamond plate vinyl top surfaced mats in each work area. These mats are to be a minimum of ½" thick.
- Contractor shall provide a ball transfer table to provide a smooth transition from the pallet to the take-away conveyor.

4.4.5.3 Stairwells

- Contractor shall provide stairs at each depalletizing station to allow personnel to access the platform. These stairs will be compliant with all applicable codes.
- Contractor shall provide all handrails and safety guarding required to insure the personnel will not be able to reach or fall into the moving conveyor and the lifting platform.
- Contractor shall provide necessary emergency lighting to illuminate the stairways for personnel evacuation.

4.4.6 Palletizing Stations

Figure 0.10 Palletizing Stations

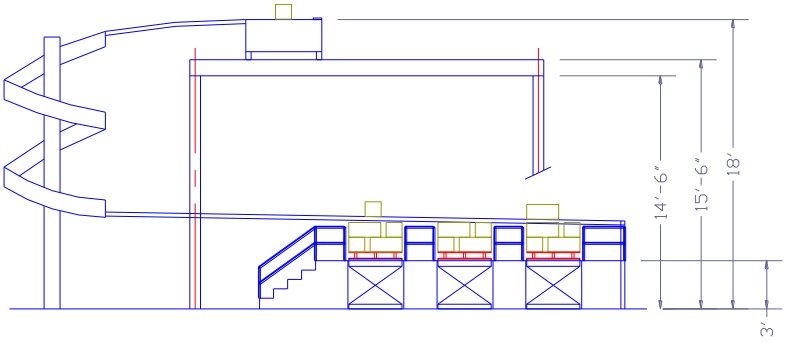
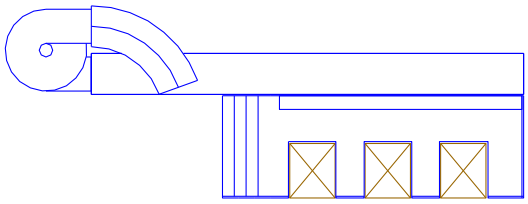


Figure 0.11 Palletizing Platform Plan View



4.4.6.1 There shall be eight (8) Palletizing Work Platforms.

4.4.6.2 Each palletizing platform shall consist of the following:

- Contractor shall provide an elevated, decked work platform. The top of platform shall be approximately 36" elevation.
- Decking shall be comprised of corrugated steel "B" deck with a minimum ¾ inch layer of poly-top plywood (or approved alternative) mounted on top.
- Decking shall be required to support a minimum of 80 lbs/sq ft capacity.
- Contractor shall provide anti-fatigue diamond plate vinyl top surfaced mats in each work area. These shall be a minimum of ½" thick.

4.4.6.3 Stairwells

- Contractor shall provide stairs at each palletizing station to allow personnel to access the platform. These stairs must be compliant with all applicable codes.
- Contractor shall provide all handrails and safety guarding required to insure the personnel will not be able to reach or fall into the moving conveyor and the lifting platform during operation.
- Contractor shall provide necessary emergency lighting to illuminate the stairways for personnel evacuation in the event of power failure.

4.4.7 Other Ancillary Equipment

4.4.7.1 Contractor shall provide three (3) pallet stretch wrapping machines

4.4.7.2 Each stretch wrapper shall function as follows:

- The stretch wrapper shall be of the turntable type having the capability to wrap 20 pallets per hour. The stretch wrapper shall stretch wrap to within 6 inches of the top of turntable. Product to be stretch wrapped is a 48 inch x 40 inch industrial pallet with a minimum height of 36 inches and a maximum height of 8 feet, and a maximum weight of 3000 lbs. The wrap pattern shall be 2 base layers, 2 top layers, 50% film overlap, double wrap and no top sheet.
- The stretch wrapper shall have a lanyard activator switch mounted at a convenient height and location for fork truck driver operation.

4.4.7.3 Printer Requirements:

- Contractor shall provide three (3) label printers, three (3) PC's and three (3) CRT's to print 6" x 4" pick labels at the rate of 250 labels per minute. ABC will provide the connections to the printers and the PC's.

4.4.8 Control System Architecture

This section describes the control system architecture. The Offeror's proposal should describe how the proposed design meets each of the requirements below.

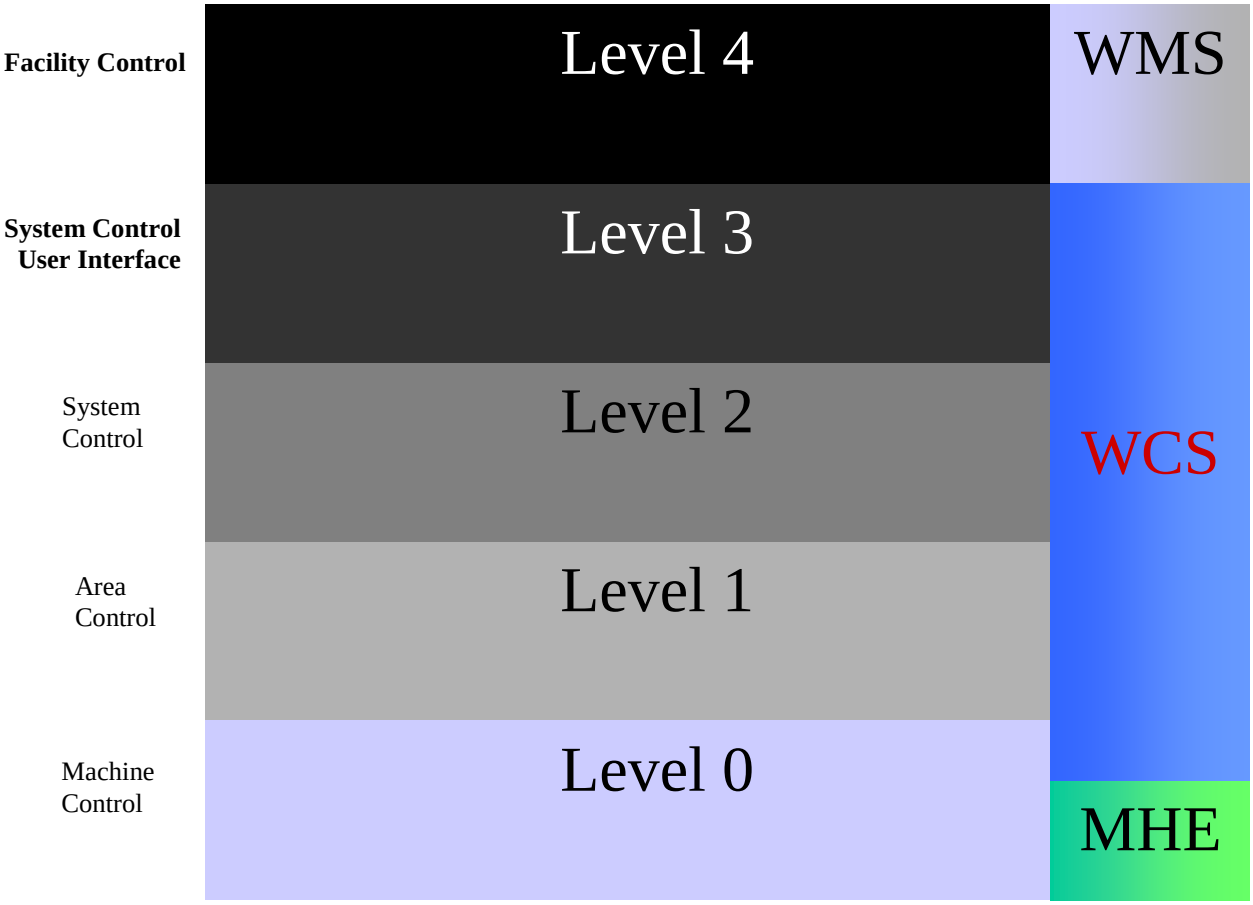
4.4.8.1 Description of Architecture

The conceptual control system architecture is shown in Figure 4.12. The system architecture is composed of layers:

- Level 4 – Warehouse Management System (WMS) provides facility-level control of all warehouse operations. The WMS is currently in place and was provided by Optum.
- Level 3 – System Control and User Interface provides a graphical front-end to facilitate operation of the system by the user. Level 3 shall interfaces with the Agency's current WMS (Optum's Move)
- Level 2 – System control is responsible for routing and sorting logic and interfaces to the area controllers.
- Level 1 – Area control is responsible for monitoring and controlling a group of equipment in the material handling system.
- Level 0 – Direct machine control provides I/O functions and controls motors and actuators.

Levels 1 through 3 make up the Warehouse Control System (WCS), which must interface to both the WMS and the automated material handling equipment.

Figure 0.12 - Conceptual control system architecture



4.4.8.2 WMS Interface

The WCS interfaces with the WMS to receive destination information for the sorter. The destination information maps carton IDs to sorter lanes. Upon successful divert of a case, the sorter sends a divert confirm message to the WMS identifying the case ID, sort lane, and time of divert.

4.4.8.2.1 Shipping Container Code (SCC) Match

Additionally, the WCS interfaces with the WMS to receive a standard EAN Identification number known as the Shipping Container Code (SCC). The SCC information is matched to the pick label information to differentiate the case contents with the pick label description. Most cases will have SCC labels applied to two adjacent sides of the case. If there is a match, the case is diverted as described above. If there is a no-read of the SCC label, then the case is diverted as described above. If there is a mis-match of the pick label and the case contents, then the case is diverted to the jackpot lane for resolution.

4.4.8.3 Bar Code Data

A bar coded license plate label is affixed to the top of the carton during the picking process. The bar code is scanned by an overhead scanner as the carton is inducted onto the sorter. The bar code label specifications are as follows:

Table 0.6 Bar Code Data

1.	Code orientation	Picket fence
2.	Bar code height	1.5 inches
3.	Quiet zone	0.5 inches
4.	Symbology	UCC 128, 8-characater numeric, subset C
5.	Narrow bar width	20 mil
6.	Bar code text	8 digits, Courier New Bold, 12 points
7.	Numbering	00000001 through 99999999
8.	Color	Code-black, text-black, background-white

4.4.8.4 Sorter Control

The GUI for the sorter area graphically depicts the status of the sorting equipment. The sorter's controls also automatically detects the following conditions:

- Jam – Through the use of photo-eyes at the divert location, the sorter's controls detects the presence of a jam. When a jam is detected, the sorter is automatically shut down to prevent damage to either product or equipment. The sorter GUI shows the status as fault (red). Once the jam is cleared, the GUI is automatically updated and the sorter is manually started.
- Lane full – Through the use of a lane-full photo-eye, the sorter's controls detects a lane full condition. Any cartons bound for that lane are recirculated. The GUI is updated to yellow (alert) for that lane.
- No-read – No reads are automatically sorted to the no-read lane
- Unknown – Unknown cartons are sorted to the unknown lane

4.4.8.5 Graphical User Interface

The GUI is used by Operations and Maintenance to monitor the performance of the system and includes the following:

- System overview – Provides a graphical representation of the entire automated material handling system
- Area screens – Provides a graphical representation of a portion of the material handling system under control of that area
- Color code – Consistent use of colors to graphically represent the status of various material handling system elements: red for fault, yellow for alert, green for running.
- Connection status – Real-time status of the connection between the WCS and WMS as well as the different levels of the architecture.

4.4.8.6 Reports

The WCS has the ability to generate reports:

- Sorter statistics – details on the sorter performance
- Sorter lane statistics – details on events at each lane (e.g., diverts and jams)
- Scanner performance – read and no-read rate for each scanner in the system

4.5 PROJECT MANAGEMENT

NOTICE TO OFFERORS: Tompkins Associates will work in conjunction with ABC in the oversight and management of the entire warehouse distribution project including material handling equipment installation and implementation, and facility renovations. Tompkins Associates will assist ABC in the contract administration phase of the project, ensuring quality goods and services are received according to specifications, within the contracted time frame. ABC responsibilities referenced in this RFP may be delegated to Tompkins Associates at the sole discretion of ABC. ABC will notify the Contractor of such delegations.

4.5.1 Implementation Team: Contractor shall designate a project manager and team with sufficient experience with material handling system implementation projects of similar size and complexity.

4.5.2 Schedule: Contractor shall be responsible for developing a detailed master project schedule that will include all pertinent milestones and project control measures for the following project phases and meet or improve upon the milestone dates shown in table 4.7. Offerors should include a proposed master schedule with their proposals. The Contractor shall provide a refined schedule within one (1) week of contract award.

- Project kickoff (Within one (1) week immediately following contract award culminating in a site survey followed by a joint team project kickoff meeting at the project site), meet or improve upon the schedule milestones shown below.
- Design (commences with finalization of layout and concludes with approval of detailed equipment design reviews prior to release for manufacturing and conference room pilots for SW design, including look and feel of GUI's)
- Fabrication (equipment fabrication and SW development)
- Integration & testing (starts with benchtesting of SW and concludes with end to end, fully integrated system testing)
- System burn-in (commences with the conclusion of integrated system testing and ramps up to full system capacity using test product while addressing punchlist items from testing)
- Training (conducted during system burn-in)
- Transition to Operations (continued on-site support during ramp up to full volume with live product)
- Follow-on support (commencement of warranty and off-site support)

Table 0.7 – Schedule Milestones

Milestone	Date	Comments
Contract Award	11/1/04	Project kickoff meeting shall be conducted within 1 week of contract award
Design complete	12/31/04	A review or series of reviews shall be conducted at the completion of the design phase, prior to release for manufacturing
Building available for installation (facility mods complete) – Commencement of Installation	Projected 3/1/05	Building improvements will prevent access prior to this date. Building ready to receive materials.
Commencement of On-site Testing	4/15/05	Anticipated to start with static equipment testing
Completion of Testing	7/15/05	Will conclude with end-to-end, fully integrated system testing
Completion of System Burn-in	7/29/05	Ramp up to full production with test product
Completion of Transition to live operations	8/12/05	Ramp up to full production with live product
Commencement of warranty and follow-on support	8/12/05	

4.5.2.1 Schedule shall include the delivery of all hardware and services and documentation as specified in this Statement of Needs. Facility renovations will be conducted concurrently. The Contractor shall be required to work together, and sometimes around construction operations and schedules.

4.5.2.2 Contractor shall maintain the schedule throughout the project and submit weekly updates to VA ABC Project Manager.

4.5.2.3 Deviations from the Project Schedule shall be communicated to VA ABC as soon as identified. Contractor shall maintain a detailed Project Schedule using Microsoft Project, outlining the design, development, manufacturing, delivery and support of their provided equipment.

4.5.2.4 A Manufacturing and Delivery Schedule Plan shall be developed as part of the master schedule providing a summary of the manufacturing requirements, dependencies and key dates for all major hardware items.

4.5.2.5 Contractor shall plan, organize and manage the effort to ensure effective internal control to meet the requirements specified in this Statement of Needs.

4.5.3 Project Reviews

4.5.3.1 VA ABC will conduct periodic program reviews with Contractor during installation and implementation .

4.5.3.2 Program reviews will take place at VA ABC facility.

4.5.3.3 Reviews may be held at the deployment site as the program progresses and site activity increases.

4.5.3.4 One (1) week prior to the program review Contractor will submit an agenda for the meeting.

4.5.3.5 During the Review, Contractor shall provide all necessary technical data, presentation material and project schedule. VA ABC will maintain an Action Item List, which will be reviewed at the end of each program review meeting.

4.5.3.6 Contractor shall submit minutes of the program review meeting one (1) day after the program review.

4.5.3.7 The Contractor shall report program status against the Program Master Schedule to VA ABC Project Manager or designee in a weekly Progress Report. In addition, Contractor shall submit written monthly progress reports. These reports shall, at a minimum, consist of milestones completed since the last report, activities behind schedule, and potential problem areas "red flag items",

4.5.3.8 Approval of the equipment design does not eliminate the obligation of Contractor to meet the contractual requirements of this RFP.

4.5.4 Change Orders

4.5.4.1 Where VA ABC requests a change in specifications, functionality or equipment of the VA ABC System or any components thereof that will materially effect Contractor's Project Schedule and/or price, Contractor shall verbally notify ABC immediately of the requirement for a "Change in Scope" change order, and within five (5) days of this verbal notification, Contractor shall advise VA ABC through issuance of a written 'Change in Scope' Change Order request.

4.5.4.2 The Change Order will detail the affect of the requested change on the Project Schedule and anticipated cost.

4.5.4.3 Where deviations to the Project Schedule occur as a result of Contractor requested changes in specifications, functionality or equipment, or delay in supply of Contractor furnished System components, or delay in response from the OEM Seller furnished equipment, then Contractor shall be wholly responsible for bearing costs incurred by VA ABC or their sub-contractors as a result of such delay.

4.5.4.3.1 Such costs include but are not limited to additional personnel costs incurred by VA ABC employees, any additional costs incurred by VA ABC sub-contractors, and travel costs arising as a direct result of the identified deviation or delay.

4.5.4.4 Contractor shall include changes to the Contract Schedule as part of the Progress Report, and provide VA ABC with both hard and electronic copies.

4.6 OTHER REQUIREMENTS

4.6.1 Drawings.

4.6.1.1 Contractor's drawings shall be delivered in AutoCAD 2000 format and maintained by version (revision) control.

4.6.1.2 Contractor's drawing numbering System and drawing hierarchy shall be presented to VA ABC for approval.

4.6.1.3 Contractor's top assembly drawings shall provide the connection between Contractor's drawing set and VA ABC General Arrangement and Control Area Drawings.

4.6.1.4 Contractor shall arrange the drawing set to break down along control area boundaries as defined by VA ABC.

4.6.2 Documentation

4.6.2.1 All technical documentation shall be delivered to:

Virginia Alcoholic Beverage Control

2901 Hermitage Road

Richmond, Virginia 23220

Attn: Gordon Millikan

4.6.2.2 All lists shall be provided in hard copy form as well as Microsoft Excel 97 (or a more current version) data file on diskette.

4.6.2.3 Contractor shall submit all Professional Engineer stamped drawings required for the equipment installation permits.

4.6.3 Workmanship And Governing Codes

4.6.3.1 All equipment and work performed shall be free of defects and done in a professional manner.

4.6.3.2 All equipment must conform to all applicable national, state and local safety codes, and seismic requirements.

4.6.3.3 When Statement of Needs exceeds code requirements, the Statement of Needs shall govern.

4.6.3.4 All cutting and welding marks shall be ground smooth and painted to match the colors of the respective equipment. Touch-up paint will be used to cover any blemishes created in handling and installation.

4.6.3.5 Contractor shall ensure all of its Original Equipment Manufacturer's (OEM) Sellers comply with all laws, ordinances, rules and regulation bearing on the project.

4.6.3.6 If the OEM Seller furnishes any equipment or work that is not in conformance with such laws, ordinances, rules and regulations, Contractor shall bear all costs arising from any corrections.

4.6.4 Quality Requirements

4.6.4.1 Contractor is solely responsible for the quality of all products and/or services provided under this Statement of Needs.

4.6.4.2 Contractor shall, upon request, provide VA ABC access to their facilities for reviews and audits, and such access is to include quality procedures, data or any other information pertinent to execution of this Statement of Needs.

4.6.5 Warranty & Spares

4.6.5.1 The material handling system shall be warranted, parts and labor, for a minimum of one year starting at Acceptance.

4.6.5.2 Contractor shall provide an installation and commissioning spare parts kit sufficient to support the system through acceptance.

4.6.5.3 Contractor shall provide a preventative maintenance plan (during warranty period and subsequent years).

4.6.5.4 ABC requires warranty repairs to be conducted within four (4) business hours of verbal notification to the Contractor. Contractor shall include with his proposal how this requirement will be met to include geographical locations of authorized repair personnel and/or representatives.

4.6.6 Safety

4.6.6.1 All equipment and supports shall meet OSHA codes as well as local, state and national applicable codes.

4.6.6.2 All equipment shall have operator protection per OSHA requirements.

4.6.6.3 All operator protection is subject to review and acceptance by VA ABC.

4.6.7 Paint Specifications

4.6.7.1 Contractor shall provide all equipment in standard OEM colors.

4.6.8 Labeling

4.6.8.1 If labeled, the Conveyor System assemblies shall be labeled with a permanently affixed product nameplate, not to exceed 3" x 5", containing the following information:

- Manufacturer's Name and Address.
- Product Name.
- Model Number.
- Date of Manufacture.

4.6.8.2 No other markings, labels, or logos shall be permitted that may be interpreted as intended primarily for advertising or promotional purposes, unless approved, in writing, by VA ABC.

4.6.9 Site Audit

4.6.9.1 Contractor shall be responsible for site audits to confirm building configuration and facility modification schedule to coordinate equipment installation.

4.6.10 Related Equipment

4.6.10.1 During design and prior to installation, the Contractor shall coordinate with the Installer to make any alterations to either the support structures or modifications to floor supports, decking, or deck support structures (if needed).

4.6.11 Environment

4.6.11.1 Operating environment 40°F to 110°F (non air conditioned building in Virginia)

4.6.11.2 Storage environment prior to installation 0°F to 120°F

4.6.11.3 Humidity 20% to 95% relative humidity non-condensing.

4.6.12 Power Requirements

4.6.12.1 Due to the fast track nature of the building renovation process, the Offeror shall provide, as part of their proposal, a best-guess estimate of the following:

- Locations of all motor control panels
- Estimated power requirements for each control panel and other major equipment

4.6.13 Air Supply

4.6.13.1 Contractor shall provide and install compressed air equipment as required for the operation of the proposed equipment.

4.6.14 Electrical Requirements

4.6.14.1 Contractor shall provide all equipment, materials, supplies and labor to complete all final electrical service connections at the sub-panels. ABC will provide electrical feeds to the Contractor-provided sub-panels.

5.0 DELIVERABLES BY PROJECT PHASE

5.1 Project Kick-off

5.1.1 Implementation Schedule (in PERT and Gantt format) within five (5) days of contract award with all dependencies (internal & external) noted

5.1.1.1 Contractor shall provide detailed implementation plan for all aspects of the project based on current and expected manufacturing loads.

5.1.1.2 Schedule shall be modified during kickoff to establish target dates for all deliverables and reviews described in this RFP.

5.1.2 Project Organizational Chart with contact information for all members.

5.1.3 Communication Plan including templates to be used for meeting agendas, minutes, action items & reports.

5.1.4 Overview of design highlighting any open issues

5.1.5 Review of preliminary test plan & milestones

5.1.6 Review of preliminary training plan

5.2 Design

5.2.1 Contractor shall provide detailed system layout including critical cross sections and normal conveyor support and hanger designs

5.2.2 Contractor shall provide detailed System Description (see Appendix 14)

5.2.3 Production Approval Drawings: Contractor shall deliver one (1) electronic copy of engineering documentation, including assembly drawings and indented BOM.

5.2.4 Spare Parts List: Contractor shall provide a list of all recommended spare parts that shall be subject to agreement by VA ABC.

5.2.4.1 All lists shall be provided in hard copy form as well as Microsoft Excel 97 (or a more current version) data file.

5.2.4.2 The quantity of each spare shall support a one (1) year period of operation.

5.2.4.3 Critical Spares shall be identified

5.2.4.4 The spare parts listing shall include as a minimum:

Vendor part number.
Manufacturer's part number (if different than the Vendor Part Number).
Manufacturer's name.
Manufacturer's address (minimum: city & state).
Manufacturer's telephone number.
Price in US Dollars.
Quantity required.
Lead time for reorder/delivery by Part Number and Description.

5.2.5 Contractor shall conduct a detailed systems operational walkthrough that will illustrate controls functionality in each area

5.2.6 Contractor shall provide an electrical design package including control panel design, field wiring drawing and detailed BOM's prior to commencement of panel fabrication or parts ordering

5.2.7 Contractor shall provide a SW design document prior to commencing code development

5.3 Fabrication (HW & SW)

5.3.1 Contractor shall provide detailed schedule for fabrication and delivery of equipment for each area & report progress against schedule during weekly status meetings. Equipment installation schedule shall be coordinated with facility modifications schedule.

5.3.2 Fabrication Inspection

5.3.2.1 VA ABC has the right to inspect the OEM Seller or Contractor's factory during the manufacture of the components to be used on this project.

5.3.2.2 VA ABC has the opportunity to review all stages of the manufacturing process and to review Contractor's Quality Assurance procedures and documents.

5.3.2.3 VA ABC has the opportunity to review the inspection results of components obtained by Contractor from their Sellers.

5.3.3 Code Inspections

5.3.3.1 Contractor shall provide code for inspection at intervals / milestones agreed to during project kickoff.

5.4 Installation

5.4.1 Contractor shall provide a detailed schedule for installation for each area and report progress against schedule at weekly status meetings. Equipment installation schedule shall be coordinated with facility modifications schedule. In the event of schedule slips, Contractor shall provide contingency plans to recover. Frequency of status meetings on site will increase in the event of schedule slip.

5.4.2 Contractor shall submit a copy of site safety procedures one month prior to the commencement of installation that shall comply with the client site safety procedures.

5.4.3 Contractor shall provide an installation and spare parts kit with final equipment delivery for each subsystem.

5.5 Integration & Test

5.5.1 One month after the kickoff meeting, Contractor shall develop and submit a detailed test plan that covers testing through each phase of the implementation.

5.5.1.1 Test plan shall establish dates for submittal of test procedures for each phase of testing.

5.5.1.2 Test plan shall establish a test review board including members from Contractor and VA ABC project team

5.5.1.3 Test plan shall include go/no-go criteria for approval to progress to next phase of testing, burn-in and transition to operations.

5.5.1.4 Test plan shall cover all subjects included in this RFP.

5.6 Burn-in

5.6.1 A punchlist shall be maintained during burn-in that will be reviewed by the Test Board for approval to move from burn-in to Transition to Operations.

5.7 Training

5.7.1 Contractor shall develop detailed training plan and submit for final approval prior to the commencement of installation.

5.7.2 Contractor shall provide operations, maintenance and IT training at the MHE Systems level.

5.7.2.1 Contractor's training materials shall cover maintenance activities and shall include comprehensive mechanical information and trouble shooting guide. Contractor format may be used for this material.

5.8 Transition to Operations

5.8.1 Formal Acceptance documents shall be prepared by the Contractor and signed by VA ABC upon approval of the Test Board

5.8.2 Technical Data Package (TDP).

5.8.2.1 Contractor shall provide three (3) complete hard copy sets, and one (1) electronic copy of all TDP documentation to VA ABC Richmond facility within ten (10) working days after equipment acceptance by VA ABC.

5.8.2.1.1 Hard copies of System and assembly drawings shall be ANSI D sized prints.

5.8.2.1.2 Hard copies of manuals and training materials shall be bound and labeled.

5.8.2.1.3 Electronic copy shall be CD-ROM.

5.8.2.2 Technical Data Package shall include:

As Built Drawings.
As Built indented BOM.
Operator Use and Safety Training Session support documentation.
Maintenance Manuals and Training Materials.
Operator Training Manual(s).
Schedule of routine preventative maintenance and inspection.
List of maintenance equipment and training required.
Equipment Warrantees.
List and sufficient details about all consumable materials.
Manual of Safety Practices.
Replacement Parts List.

5.8.3 Bill of Material.

5.8.3.1 Contractor shall compile an indented Bill of Material (BOM) in Microsoft Excel 97 (or a more current version) format listing items to the replaceable component level. Contractor shall provide a sample Bill of Material for approval showing information under the following column headings:

Item or Tag Number.
Drawing or Part Number.
Quantity.
Unit of Measure.
Part Description.
Next Higher Assembly.
Manufacturer's Name & Part Number for commercial items.

5.9 Follow-on Support

5.9.1 Contractor shall provide single point of contact system support for the duration of the warranty period. Support shall be tailored to the operating schedule of VA ABC.

6.0 Deliverables

Table 0.1 Deliverables

Deliverable	Approx Date	Comments
Implementation Schedule	Project kickoff meeting	MS Project; dependencies shown, owners shown for each task
Project Organization Chart	Project kickoff meeting	Include all contact information
Communication Plan	Project kickoff meeting	Includes templates for all agendas, reports etc.
Preliminary Design Review	Project kickoff meeting	Layouts & SDD
Preliminary Trainng & Test Plan Reviews	Project kickoff meeting	
Final Design Reviews (equipment, electrical & controls)	12/15/04 – 1/15/05	Reviews of all design documents, production approval drawings, and operational walkthrough described in section 5.2. Specific dates to be determined during kickoff
Test Plan	1/7/05	Submit one month after kickoff meeting
Spares List	1/15/05	
Fabrication & code inspections	2/15/05 – 4/15/05	target dates established during kickoff
Site safety plan	2/15/05	Submit one month prior to commencement of install
Training Plan	3/15/05	Submit prior to commencement of installation
Installation & commissioning spare parts kit	4/1/05	With final equipment deliveries for each subsystem
Punchlist	7/15/05	Prior to commencement of Burn-in
Acceptance documents	8/12/05	Upon completion of transition to operations
Commencement of Warranty & follow-on support	8/12/05	Upon completion of transition to operations
Technical Data Package (TDP)	8/22/05	10 days after completion of transition to operations

7.0 PROPOSAL PREPARATION AND SUBMISSION

7.1 **General Instructions**:

7.1.1 RFP Response: To be considered for selection, Offerors must submit a complete response to this RFP. One (1) original and six (6) identical copies of each proposal must be submitted. Return all pages received and

place in the front of each copy of the proposal. No other distribution of the proposal shall be made by the Offeror.

7.1.2 Proposal Preparation:

7.1.2.1 Proposals shall be signed by an authorized representative of the Offeror. All information requested must be submitted. Failure to submit all information requested may result in the purchasing agency requiring prompt submission of missing information and/or giving a lowered evaluation of the proposal. Proposals, which are substantially incomplete or lack key information, may be rejected by the purchasing agency at its discretion.

Offerors must document the extent to which they can meet the specific requirements of the RFP. Please note the terms "must", "shall", "should" and "may" are used to identify the criticality of the requirements. "Must" and "shall" identify "mandatory" requirements whose absence will have a major negative impact on the suitability of the consultant/consulting firm to provide required services. Items labeled as "should" are highly desirable, although their absence will not have as large an impact. Items labeled "may" will be useful but are not necessary. Depending on the overall response to the RFP, some individual "must" and shall" items may not be fully satisfied, but it is the intent to satisfy most, if not all, "must" and "shall" requirements. The inability of an Offeror to satisfy a "must" or "shall" requirement does not automatically remove that Offeror from consideration; however, it may seriously affect the overall rating of the Offeror's proposal.

7.1.2.2 Proposals should be prepared simply and economically, providing a straightforward, concise description of capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content. Offerors are encouraged to elaborate on their qualifications and performance data or staff expertise pertinent to the proposed project.

7.1.2.3 Proposals should be organized in the order in which the requirements are presented in the RFP with all pages of the RFP returned in the front of the proposal. All pages of the proposal hard copy should be numbered. Each paragraph in the proposal should reference the paragraph number of the corresponding section of the RFP. It is also helpful to cite the paragraph number, sub letter, and repeat the text of the requirement as it appears in the RFP. If a response covers more than one (1) page, the paragraph number and sub letter should be repeated at the top of the next page. The proposal should contain a table of contents which cross references the RFP requirements. Information which the Offeror desires to present that does not fall within any of the requirements of the RFP should be inserted at an appropriate place or be attached at the end of the proposal and designated as additional material. Proposals that are not organized in this manner risk elimination from consideration if the evaluators are unable to find where the RFP requirements are specifically addressed.

7.1.2.4 Each copy of the proposal should be bound or contained in a single volume where practical. All documentation submitted with the proposal should be contained in that single volume.

7.1.2.5 Offerors shall clearly and specifically identify the goods and/or services being offered and enclose complete and detailed descriptive literature and specifications with the proposal to enable the evaluation panel to determine if the goods and/or services meet the requirements of the solicitation. Failure to do so may cause the proposal to be considered non-responsive.

Ownership of all data, materials and documentation originated and prepared for the State pursuant to the RFP shall belong exclusively to the State and be subject to public inspection in accordance with the *Virginia Freedom of Information Act*. Trade secrets or proprietary information submitted by an Offeror shall not be subject to public disclosure under the *Virginia Freedom of Information Act*;

however, the Offeror must invoke the protections of §2.2-4342F of the *Code of Virginia*, in writing, either before or at the time the data is submitted. The written notice must specifically identify the data or materials to be protected and state the reasons why protection is necessary. The proprietary or trade secret material submitted must be identified by some distinct method such as highlighting or underlining and must indicate only the specific words, figures, or paragraphs that constitute trade secret or proprietary information. The classification of an entire proposal document, line item prices and/or total proposal prices as proprietary or trade secrets is not acceptable and will result in rejection and return of the proposal.

7.1.3 Oral Presentation

Offerors who submit a proposal in response to this RFP may be required to give an oral presentation of their proposal to the State agency. This provides an opportunity for the Offeror to clarify or elaborate on the proposal. This is a fact finding and explanation session only and does not include negotiation. The issuing State agency will schedule the time and location of these presentations. Oral presentations are an option of the evaluation panel and may or may not be conducted.

7.2 **Specific Proposal Instructions**:

Proposals should be as thorough and detailed as possible so the evaluation panel may properly evaluate your capabilities to provide the required goods/services. Offerors are required to submit the following items as a complete proposal:

7.2.1 The return of this complete RFP and all addenda acknowledgments, if any, signed, and filled out as required.

7.2.2 Offeror Data Sheet (Attachment A), and other specific items or data requested in the RFP.Include a listing of current and/ or previous contractual clients receiving goods/services similar to the scope required by this contract, including contacts, addresses and telephone numbers for each.

7.2.3 Corporate Financial Status:

7.2.3.1 For publicly held companies, Offerors must provide:

- A copy of their firm's (information systems division or corporation only, if consolidated statements are published) audited financial statements from the most recent fiscal year, and the preceding two fiscal years.
- Their Dunn and Bradstreet credit rating number.
- Their Moody's Investment Service Bond Rating and/or Standard and Poor's Bond Rating if they have publicly held debt.

7.2.3.2 For privately held companies, Offerors must provide a copy of their financial statements for the most recent and two preceding fiscal years that have been reviewed by a Certified Public Accountant firm; and, their Dunn and Bradstreet credit rating number; **OR** provide a copy of their audited financial statements for the most recent and two preceding fiscal years.

7.2.4. A written narrative statement and/or information package including the following:

7.2.4.1 Contractor's experience in providing goods/services described where Contractor was responsible for all phases of the project herein (from design through follow on support).

7.2.4.2 Names, qualifications and experience of personnel to be assigned to this project.

7.2.4.3 Project Organizational chart with resumes for key members of the project team

7.2.5 Detailed descriptive information regarding quality of proposed system including:

7.2.5.1 Layout drawings showing relative locations of all equipment with specific technologies clearly indicated (ie – type of conveyor shall be clearly depicted)

7.2.5.2 Contractor shall identify any technology or components not previously used successfully by Seller.

7.2.5.3 Drawings showing critical elevations for operational considerations

7.2.5.4 Preliminary point load drawings for rack and conveyor

7.2.5.5 Technical descriptions of all technologies proposed (cut sheets when available)

7.2.5.5 Detailed description of how control system meets requirements described in this RFP

7.2.5.6 Layout drawings and technical description for all fire suppression systems provided in the three pick modules and the sorter. The description shall cite all applicable state and local fire codes.

7.2.5.7 Completed compliance matrix

7.2.5.8 Contractor shall provide details of any options proposed with separate pricing.

7.2.6 Specific plans or methodology for performance of work including:
7.2.6.1 Description of how equipment installation will be conducted with continuing daily operations and facility modifications.
7.2.6.2 Description of test philosophy and sample or template test plan
7.2.6.3 Description of training philosophy and sample or template training plan

7.2.6.4 Shipping Details

7.2.6.4.1 Contractor shall provide an estimated number of truckloads.

7.2.6.4.2 Contractor shall provide the shipping location.

7.2.7 Timeframe for completion.
7.2.7.1 Detailed project schedule including all required elements described in this RFP

7.2.8 Description of post delivery support
7.2.8.1 How support will be provided for the entire system
7.2.8.2 Description of warranty terms

7.2.9 Proposed Price. Indicate in the Pricing Schedule, Section 13.

7.2.10 Participation in State Procurement Transactions by Small Businesses, and Businesses Owned by Women and Minorities

It is the policy of the Commonwealth of Virginia to contribute to the establishment, preservation and strengthening of small businesses and businesses owned by women and minorities, and to encourage their participation in State procurement activities. The Commonwealth encourages Offerors to provide for the participation of small businesses and businesses owned by women and minorities through partnerships, joint ventures, subcontracts, and other contractual opportunities. Submission of a report of past efforts to utilize the goods and services of such businesses and plans for involvement on this contract is required. By submitting a proposal, Offerors certify that all information provided in response to this RFP is true and accurate. Failure to provide information required by this RFP will ultimately result in rejection of the proposal.

All information requested by this RFP on the ownership, utilization and planned involvement of small businesses, women-owned businesses and minority-owned businesses must be submitted. If an Offeror fails to submit all information requested, the purchasing agency may require prompt submission of missing information after receipt of Offeror proposals.

Instructions, including definitions, and forms for providing the required information, are included in the Appendix to this RFP (see separate electronic/hard copy document). You are not required to use the forms so long as the minimum information required is provided in the prescribed format.

Table 0.1 Proposal Schedule – This table intentionally deleted from this RFP.

8.0 EVALUATION AND AWARD CRITERIA

The Evaluation Panel shall evaluate responses using the following criteria, the order of which is not indicative of their weight or importance.

8.1 Evaluation Criteria

8.1.1 Quality of Proposed System

- Proposed system design & technology selection
- Controls system design & features

8.1.2 Qualifications, experience and capability of Offeror and its personnel assigned to this project

- Project team capabilities
- Offeror's recent experience with implementations of similar scope & complexity
- References
- Financial Stability

8.1.3 Plan/Approach for Project Implementation

- Performance Schedule
- Coordination with facility modification construction contractor
- Plan for installation while operations are on-going
- Training and testing plans

8.1.4 Price

- Turn-key price

8.1.5 Post Delivery Support

- Warranty Terms
- Follow-on support plan and capabilities

8.1.6 Participation of small, women-owned and minority-owned businesses

8.2 **Award of Contract**:

Selection shall be made of two or more Offerors deemed to be fully qualified and best suited among those submitting proposals on the basis of the evaluation factors included in the Request for Proposals, including price, if so stated in the Request for Proposals. Negotiations shall be conducted with the Offerors so selected. Price shall be considered, but need not be the sole determining factor. After negotiations have been conducted with each Offeror so selected, the Agency shall select the Offeror, which, in its opinion, has made the best proposal, and shall award the contract to that Offeror. The Commonwealth may cancel this Request for Proposals or reject proposals at any time prior to an award, and is not required to furnish a statement of the reason why a particular proposal was not deemed to be the most advantageous (*Code of Virginia*, §2.2-4395D). Should the Commonwealth determine in writing and in its sole discretion that only one Offeror is fully qualified, or that one Offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that Offeror.

The award document will be a contract incorporating by reference all the requirements, terms and conditions of the solicitation, and the successful contractor's proposal as negotiated.

9.0 REPORTING AND DELIVERY REQUIREMENTS

The Contractor shall deliver all reports and respond, orally and/or in writing, to all inquiries from the ABC Contract Administrator or designee. The ABC Contract Administrator will be identified upon award.

9.1 The Contractor shall adhere to reporting and delivery requirements described by Project Phase in Section 5.0, Deliverables in Section 6 and outlined in Table 6.1 Deliverables.

9.2 Contractor shall keep and distribute meeting minutes for all project related reviews, meetings & telephone conferences

- Minutes shall be distributed within 24 hours of completion of meeting
- Minutes shall include the project action item list (separate attachment) with any additions or modifications that resulted from the meeting
- Weekly status meetings (or telecons) shall be conducted between Contractor project manager and VA ABC project team with a subsequent report issued that addresses the following:
    - Review of previous week's activity
    - Schedule review and look ahead
        - percent complete depicted for all tasks
        - Contingencies discussed for any tasks behind schedule
    - Action Item review
    - Risk assessment
    - The report shall include a running log in table format of:
        - Deviations from baseline system design
        - Deviations from baseline schedule
    - A resource availability matrix shall be provided that shows the anticipated locations (on-site or off-site of all key project personnel for the project)

9.3 The Contractor shall submit the following reports regarding the utilization of small businesses, women-owned businesses, and minority-owned businesses.

9.3.1 Periodic Progress Reports/Invoices: The Contractor shall provide a periodic report on involvement of small businesses, women-owned businesses, and minority-owned businesses. This report will specify the actual dollars contracted to be spent to date with such businesses and actual dollars expended to date with such businesses on this contract. This information shall be provided separately for small businesses, women-owned businesses and minority-owned businesses. The specific reporting schedule will be determined during negotiations and prior to award.

9.3.2 Final Actual Involvement Report: The Contractor shall submit, within ten (10) days of contract completion, a report on the actual dollars spent with small businesses, women-owned businesses and minority-owned businesses during the performance of this contract. At a minimum, this report shall include for each firm contracted with and for each such business class (i.e., small, women-owned, minority-owned) a comparison of the total actual dollars spent on this contract with the planned involvement of the firm and business class as specified in the proposal, and the actual percent of the total estimated contract value.

10.0 GENERAL TERMS AND CONDITIONS (ATTACHMENT B)

See separate electronic/hard copy document.

11.0 SPECIAL TERMS AND CONDITIONS (ATTACHMENT C)

See separate electronic/hard copy document.

12.0 METHOD OF PAYMENT/PAYMENT SCHEDULE

The Contractor will be paid on the basis of invoices submitted for completion of milestones or acceptable goods/services received. The Contractor shall submit invoices within thirty (30) days after completion of milestones or goods /services have been accepted by ABC. All invoices shall be forwarded by the Contractor directly to ABC at the address below:

Department of Alcoholic Beverage Control
Attn: Accounts Payable
P. O. Box 27491
Richmond, VA 23261

The final payment schedule will be negotiated prior to award of contract. The following is a proposed payment schedule; however, Offerors should include a proposed payment schedule with their proposal.

Milestone Invoice Submittal	Billing Amount
Design Review Acceptance, including Drawings and Documentation	10%
Start of Equipment Delivery at site	10%
Equipment Delivery Complete at site	30%
Installation Complete and all Documentation delivered	30%
Acceptance Test Complete, including all Action Items; all Documentation delivered; and Equipment Accepted by Client	20%

13.0 PRICING SCHEDULE

All Offerors are required to complete the following Pricing Schedule. Identify all costs included for each category.

13.1 Equipment Cost(includes equipment (HW & SW), materials, supplies and incidentals)

13.1.1.	Conveyor		$_____
13.1.2	Depalletizing Stations	$_____	
13.1.3	Racking		$_____
13.1.4	Pick Modules		$_____
13.1.5	Sortation		$_____
13.1.5.1	SCC Sort Divert		$_____
13.1.6	Palletizing Stations		$_____
13.1.7	Stretch Wrappers		$_____
13.1.8	Label Printers		$_____
13.1.9	Other Equipment (Not Listed Above) (please list equipment, if any)	$_____	

Total 13.1. Equipment $_____

13.2 Equipment Installation/Labor Cost $_____

13.3 Electrical Installation Cost (goods and services) $_____

(includes controls, HW and power distribution panels, and all other related costs [labor, equipment and materials] to render material handling system fully operational)

13.4	Mechanical Installation Cost (good and services) (includes compressed air equipment, A & E and header steel for any ceiling hung equipment)	$_____
13.5	Fire Suppression	$_____
13.6	Controls (HW and SW)	$_____
13.7	Engineering and Project Management	$_____
13.8	Warranty and follow-on support (for one full year)	$_____
13.9	Extended warranty and support (year two)	$_____
13.10	Freight	$_____

GRAND TOTAL FOR COMPLETE SYSTEM $_____

14.0 APPENDICES

14.1 Drawings

14.1.1 System Layout

14.1.2 Facililty Drawings

14.2 SDD Template (for use by Offeror if proposing a solution other than system specified in this RFP)

14.3 Compliance Matrix

14.4 Small, Women and Minority Owned Business Participation Forms