

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
ACQUISITION SERVICES
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

December 28, 2005

CHANGE NOTICE NO. 5
TO
CONTRACT NO. 071B3001292
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR Symbiosis 3965 Okemos Road, Suite B2 Okemos, MI 48864 murali@1symbiosis.com	TELEPHONE (517) 347-7500 G. Murali
	VENDOR NUMBER/MAIL CODE
	BUYER/CA (517) 373-3993 Dale Reif
Contract Compliance Inspector: Patty Bogard Vegetative Management System – Dept. of Information Technology	
CONTRACT PERIOD: From: April 23, 2003 To: April 23, 2009	
TERMS Net 45	SHIPMENT N/A
F.O.B. Destination	SHIPPED FROM N/A
MINIMUM DELIVERY REQUIREMENTS N/A	

NATURE OF CHANGE (S):

Effective immediately, \$956,000.00 is hereby added to this contract to define and finish the fourth phase of the project. Per the contract, the State has identified six phases for completion of the entire project. See the attached proposal.

All other terms, conditions, specifications and pricing remain unchanged.

Buyer changed to Dale N. Reif.

AUTHORITY/REASON:

Per agency and vendor agreement, and DMB/ACQUISITION SERVICES approval.

INCREASE: \$956,000.00

TOTAL REVISED ESTIMATED CONTRACT VALUE: \$ 3,484,948.00

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Proposal for •

Vegetative Management System (Phase 4)

Client:

Department of Natural Resources
Forest, Mineral and Fire Management

Submitted By:

Symbiosis International
10/17/2005

TABLE OF CONTENTS

EFFECT ON CONTRACT

This proposal is a follow up to our proposal for VMS Phase 3 submitted on 01/14/2005. Against that proposal, the State of Michigan had issued a Change Notice No. 4 to Contract No. 071B3001292 between State of Michigan and Symbiosis's International on 03/08/2005.

The Department of Natural Resources (DNR), State of Michigan issued Purchase Order # 084P5200780 and 084P5202472 against the above-mentioned BPO for Symbiosis to complete Phase 3 of the project.

DESCRIPTION OF CHANGE

Executive Summary

SYMBIOSIS International is a full-service systems integration and software consulting company that is quickly becoming an industry leader in Information Technology solutions. Symbiosis established its partnership with Department of Natural Resources on April 30, 2003, when we obtained the Purchase Order # 084P4001360 for executing the Vegetative Management Solution project for DNR/DIT. Initially, Symbiosis received the award for the Phase 1 contract for VMS with a completion date of 12/30/2003. Then, State of Michigan amended this contract to include Phase 2.0 tasks on 11/03/2003 and Phase 3.0 tasks on 03/08/2005

Now, VMS project is almost near completion of Phase 3 and DNR/ DIT with Symbiosis have started looking towards tasks in Phase 4. Based on the critical success factors and the constraints defined by DNR/DIT, Symbiosis and DNR/DIT decided to undertake an equivalent of about three modules in Phase 4.

To maintain consistency DNR/DIT has suggested the creation of the Phase 4 Proposal to span 52 weeks. The intended start date for Phase 4 will be Oct 01, 2005.

To undertake the planned modules and some additional efforts as outlined by DNR/DIT in Phase 4, Symbiosis has provided the pricing details for Phase 4 Proposal in **APPENDIX A**.

To meet the needs of Phase 4, Symbiosis plans to add/remove a few more resources to the team along with the existing resources from Phase 3. Phase 3 gained significant benefits from the flexible development team and so Symbiosis intends to make the best use of the flexible team in Phase 4 also. Additional details are in Appendix C – VMS Phase 4 Staffing Chart. Phase 4 offers multiple challenges for Symbiosis. The biggest challenge is the partial completion of the Receipts and Deposits module. Symbiosis has achieved the impossible in the past and we believe that we have aligned the TOP GUN resources to meet the forthcoming challenges. With excellent support from DNR/DIT's VMS Core Team, Symbiosis is confident in its ability to execute Phase 4 successfully.

Symbiosis Services Approach

Symbiosis International will implement the functionalities as identified in the statement of work in this document. Any additional work must be approved through the identified Change Management process.

Critical Success Factors and Prime Failure Indicators:

Critical Success Factors

The critical success factors as agreed between Symbiosis and DNR/DIT for Phase 4 proposal are as follows:

Follow the Process. Examples: Follow Life-Cycle Implementation Plan as outlined in Phase 3 for system development. Follow the State of Michigan's contractual and project management processes.

Deliver new and enhanced functionalities to VMS periodically, within each Purchase Order. These functionalities should provide tangible benefits to the end users and management team.

Make the best efforts to ensure the continuity of the VMS project in the midst of funding and other uncertainties.

Prime Failure Indicators:

Missing the deadline of any task in the critical path. Both parties should put their best efforts to meet the deadlines of every task in the critical path. Every potential failure should be seriously analyzed and corrective action taken to prevent or mitigate that failure. Prompt responses from DNR/DIT clients and end users will help in this goal.

This includes any approvals, sign offs, setting up field meetings, local meetings, prompt action for procurement of hardware/software and licenses and prompt resolution for internal and external application interfaces.

Constraints

Complete the design, implementation and training of 'Receipts & Remittance' for the Receipts and Deposits Module Part 1 by 10/01/2006.

There will be limited time availability of key FMFM and DIT resources.

Removal of the Vendor Project Manager role and consequent re-basing of the project

Goals and Objectives:

Implement modules that will add immediate value to DNR's end-users.

Ensure proper work loading and Resource leveling is achieved

Ensure parallel running and the smooth transition from TSale to VMS.

Re-evaluate Training Plan for Phase 4 & beyond

QA/End User testing needs to be completed within 10 business days

Smooth the project progress in the absence of the vendor project manager

Statement of Work

Scope of Work

Symbiosis International will complete design/implementation/training of 'Receipts & Remittance' for the module 7 (Receipts and Deposits), and Design of module 8 (Proposal). Symbiosis will execute additional work/deliverables from the Change Management section. Complete scope details are as below. Also, refer to Appendix B (Phase 4 – Gantt chart) and Appendix D (Phase 4 – Project plan) for further details.

E. Project Deliverables

DNR/DIT and Symbiosis agreed on the following project deliverables for Phase 4.0:

Design – ‘Receipts & Remittance’ of Receipts & Deposits Module – Part 2

Activity/Task Description – The purpose of this activity is to complete the design of the ‘Receipts & Remittance’ of the Receipts & Deposits module Part 2 based on the requirements document. This task was started in Phase 3.0 and is targeted for completion in Phase 4.0. This task will include the following:

Have meetings with VMS Core Team and other key stakeholders to create the design of the module.

Create a visual prototype, using .NET, Infragistics and Visual Studio with minimal coding. The prototype will have the proposed implementation look and feel. Most of the components for this module will be in place; however, they may not be fully functional. The Dev team will lay out the actual workflow and hard code all data.

Create the Design document that will include the screen layouts, screen functionality, screen element details and screen navigation details.

Create Test Plan document, based on the use cases.

Create Story problems, based on use cases.

Create preliminary database design /data model.

Have meeting with the VMS Field Team to finalize the design of the module.

Address the data sync analysis & integration with prior modules, per mutually agreed terms.

Completion Criteria (for Invoicing) – This task will be completed when all of the deliverables are approved by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document. We will complete the documents in Microsoft Word, Excel, Power Point, or HTML format. We will email these documents in soft copy form. The Dev team will show the prototype visually to the Core Team and the VMS Field team. The Dev team will capture the design screens from the prototype in the design document. Symbiosis will save the prototype and the final approved documents in the Share Drive.

Deliverables –

Design document

Prototype

Test plan document

Story Problems

Preliminary database design / data model

Implement – ‘Receipts & Remittance’ of the Receipts & Deposits Module – Part 1 (QA Ready (with integration to VMS) + QA Complete + Sign Off)

Activity/Task Description – This effort involves the completion of the ‘Receipts & Remittance’ part of the Receipts and Deposits module. We will implement the ‘Receipts & Remittance’ part of this module per the approved design, prototype, and the requirements document. At the completion of the QA Ready state, it will be ready for all Quality Assurance testing. The development team will have completed all Iterative/ Unit testing on all functionalities, prepared the database, written all code and met the integration and data sync requirements (per mutually agreed terms) for the module. This task will include the following:

Develop the Alpha Version of the module.

Conduct a review of the Alpha version and identify the change requests – Core Team.

Apply the change requests, per change management process, to the module.

Create Test Cases (functional & field edits) from the approved test plan document.

Conduct the functional testing - PM and Core Team.

Identify & correct the test script errors and bugs in the module.

Conduct functional testing – VMS Field Team.

Conduct usability testing – VMS Field Team and Core team
Conduct field edit testing – PM team
Obtain feedback/document all the desired change requests.
Resolve all identified bugs.
Implement the new changes, per change management process.
Move the module to Staging and test.
Bring the module back to QA (if needed).

Completion Criteria (for Invoicing) – This task will be completed when the VMS Core team has accepted the deliverables in accordance to the Deliverables Acceptance Procedure as outlined in this document. The module with all functionality has been tested in QA (functional, field edit and usability), bugs have been corrected in the module and new agreed upon changes have been documented. This module is ready for Production.

Deliverable –

Approved Test cases in Rational Test Manager (accessed through the TM Web).
All functional, field edit and usability testing duly completed.
A module that is fully functional in Staging or QA, per mutually agreed terms.

Design – Proposal Module

Activity/Task Description – The purpose of this activity is initiating the creation of the design of Proposal module based on the requirements document. This task will include the following:

Have meetings with VMS Core Team and other key stakeholders to create the design of the module.
Create a visual prototype, using .NET, Infragistics and Visual Studio with minimal coding. The prototype will have the proposed implementation look and feel. Most of the components for this module will be in place; however, they may not be fully functional. The Dev team will lay out the actual workflow and hard code all data.
Create the Design document that will include the screen layouts, screen functionality, screen element details and screen navigation details.
Create Test Plan document, based on the use cases.
Create Story problems, based on use cases.
Create preliminary database design /data model.
Have meeting with the VMS Field Team to finalize the design of the module.
Address the data sync analysis & integration with prior modules, per mutually agreed terms.

Completion Criteria (for Invoicing) – This task will be completed when all of the deliverables are approved by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document. We will complete the documents in Microsoft Word, Excel, Power Point, or HTML format. We will email these documents in soft copy form. The Dev team will show the prototype visually to the Core Team and the VMS Field team. The Dev team will also capture the design screens from the prototype in the design document. We will save the prototype and the final approved documents in the Share Drive.

Deliverables –

Design document
Prototype
Test plan document
Story Problems
Preliminary database design / data model

Create Training Documentation for ‘Receipts & Remittance’ of the Receipts & Deposits Module – Part 1

Activity/Task Description – The purpose of this activity is to create the training manual for the ‘Receipts & Remittance’ part of the Receipts and Deposits module. The VMS Field team & Core team will work with the Symbiosis team to get this task to completion.

Completion Criteria (for Invoicing) – This task will be fully completed when all the deliverables as outlined in this section are delivered and approved.

Deliverable – Completed training documentation, per mutually agreed terms.

Conduct Training for ‘Receipts & Remittance’ of the Receipts & Deposits Module – Part 1

Activity/Task Description – The purpose of this activity is to complete end user training for the ‘Receipts & Remittance’ part of the Receipts and Deposits module. This task will include the following:

Arrange trainer.

Set up training lab.

Do mock-up training in Lansing.

Do training in the field.

Create and conduct Training Survey.

Arrange all logistics related to training with regard to end user availability, location, loading application on mobile laptops etc.

Completion Criteria (for Invoicing) – This task will be fully completed when all the deliverables as outlined in this section are delivered and approved.

Deliverable –

Completed training for the modules.

Compiled results of training survey

Create Reports

Activity/Task Description – The purpose of this activity is to create reports as given below:

Customers/Performance tab NSF report.

Cash only report.

No bid list report.

Cutting without paying report.

Completion Criteria (for Invoicing) – This task will be fully completed when all the deliverables as outlined in this section are delivered and approved.

Deliverable –

Completed reports as above.

Change Management

Activity/Task Description – This task involves all work towards incorporating changes and enhancements for any module, and any miscellaneous tasks that we will identify during Phase 4. This may involve one or more of analysis, design, coding, unit testing and integration testing of the modules in QA. Testing by the VMS Core team and VMS Field team (as needed) and finally moving the changes to Production after all approvals.

Completion Criteria – Completion criteria for enhancements and miscellaneous tasks (change management items) will be defined as outlined in the task definition of the approved change management process.

Deliverable - As defined in the tasks identified in change management.

Weekly Status Meeting

Activity/Task Description – This activity involves the effort spent by the VMS Project team during Weekly and Monthly Status meetings from 10/01/2005 until 09/30/2006 (52 weeks).

Completion Criteria – The Project Manager from the State of Michigan will verify the hours utilized for the project from 10/01/2005 until 09/30/2006 (52 weeks).

Deliverable – Attendance by team members and status reports by Symbiosis Project Manager. Symbiosis will submit invoices against the hours, utilized by the project team on weekly status meetings, on a monthly basis.

Project Management Efforts during Transition

Activity/Task Description – This activity involves the effort utilized by a Project Manager from Symbiosis International who will perform project management activities from the initiation to the closure of the VMS Project from 10/01/2005 until 09/30/2006 (52 weeks) or until replacement is in place. He will abide by the State of Michigan's Project Management Methodology for this project. The following tasks as outlined in the VMS Project Charter, from Phase 1, will be his prime tasks:

Primary Vendor contact for all official communication.

Responsible for formal project status feedback (hours, milestones, tasks, issue logging, etc.) per negotiated schedule.

Meets with DIT Project Manager to review progress, resolve issues, manage contract changes, and manage purchase orders.

Responsible for contractor deliverables, quality, and overall performance.

Completion Criteria – The Project Manager from the State of Michigan will verify the hours utilized by the Symbiosis Project Manager for the project from 10/01/2005 until 09/30/2006 (52 weeks) or until replacement is in place.

Deliverable – Invoices against project management efforts on a monthly basis.

Travel

Activity/Task Description – This activity involves all travel expenses incurred during the execution of the VMS Project from 10/01/2005 until 09/30/2006 (52 weeks).

Completion Criteria – We will complete this task as per the need of the project. State of Michigan will reimburse all charges borne by Symbiosis, in accordance with the State of Michigan's travel guidelines

Deliverable – Invoices against travel, as needed.

Deliverables Acceptance Procedure:

The Acceptance Procedure of any deliverable (reports, demonstrations) will be as follows:

The VMS Core Team will "receive" the deliverable elements and proceed to a first evaluation. The document will be approved, in the case of agreement; otherwise suggestions will be submitted to Symbiosis. In case the problem remains after corrections, the Symbiosis Project Manager together with the VMS Core team will be responsible to find an agreeable solution. DNR/DIT and Symbiosis have agreed for the following period as time effort for sign off for the deliverables.

Requirements Gathering Sign-off : Five Business Days by DNR/DIT

Design Sign-off : Five Business Days by DNR/DIT

Prototype Sign-off : Five Business Days by DNR/DIT

QA Ready Sign-off: All end user testing needs to start within five Business days after Module is QA Ready.

Module Delivery Sign-Off: DNR/DIT would need to complete all Sign-Off within five business days after Module has passed all QA/End User Testing.

All other project documents: Five Business Days by DNR/DIT

Symbiosis will expect DNR/DIT to respond to Symbiosis within this defined period.

Project Methodology

Symbiosis will use the State of Michigan's Project Management Methodology for all project management activities.

Project Timeline

Project Start: October 1, 2005 (Assuming that the State of Michigan will issue the new PO before September 30, 2005)

Project Complete: September 30, 2006

Training Plan: DIT/DNR and Symbiosis will outline the additional details later.

PRICING

Symbiosis has enclosed the Pricing spreadsheet in **APPENDIX A**, they are :

- **Appendix A – Phase 4.0 BPO Pricing:** Symbiosis has outlined the fixed prices for all the VMS Phase 4.0 deliverables in this document. Upon the completion of each of the deliverables as outlined in the Statement of Work, Symbiosis will submit the line item deliverables as invoices for billing purposes.

- **Bug Fixes/Warranty:** Symbiosis will provide free bug fixes for all modules up to 120 days from the date of release of the modules/enhancements or the date of QA sign off in case production release is planned more than five business days after QA sign off. DNR/DIT will approve bug fixes beyond this warranty date using a Change Management process. Symbiosis will charge all efforts towards non-warranty items separately.

- **Enhancements/Maintenance:** Enhancements are additional functionality or changes in functionality requested by DNR, that Symbiosis and DIT/DNR have not previously identified in the project scope. DNR/DIT will approve the enhancements for any module using a Change Management process. Symbiosis will charge the efforts towards these tasks separately.

- **Invoices:** Symbiosis will submit invoices for deliverables only after approvals from VMS Core Team.

- **Travel:** For all business meetings for the VMS Project outside Lansing, MI, Symbiosis will bill all travel expenses separately on actual costs, as per State of Michigan's travel rules and regulations.

PROJECT TEAM PERSONNEL

Symbiosis will continue to have a flexible staffing structure to meet one of the critical success factors identified earlier.

Symbiosis will assign the following staff for the VMS Project for Phase 4.

Project Manager – Govindarajan Murali
Business Analyst – Govindarajan Umakanth
Subject Matter Expert (Field) - Michael T Mang
Subject Matter Expert (Finance) – Sherry Casler
Designer/Developer 1 - Karthik Narayanan
Designer/Developer 2 – Murugappan Ramanathan
Designer/Developer 3 – Thangavelu Suseela
Designer/Developer 4 – Ali-Reza Namvar-Sephidan
QA Analyst 1 – Darin W Witkowski
QA Analyst 2 – TBD
Professional Trainer – TBD
Project Administrative Support – Kimberly Bennet

Also, refer **APPENDIX C** for the VMS Staffing Chart.

PROJECT EVALUATION

The Symbiosis Project Manager will evaluate and monitor the project progress. He will also report the project issues, discussions, risks, and progress through the Weekly/Monthly Status report. He will distribute the Status Report to the VMS Core team and other stakeholders, per the Communication Plan, as outlined in Phase 1.

AUTHORIZED CONTRACT EXPEDITOR

G. MURALI

Vice President

Symbiosis International

Phone: (517) 449-7251/ (517) 373 2562 / Fax 517-347-4245

Email: Murali@1symbiosis.com or muralig@michigan.gov

APPENDIX

	APPENDIX	DESCRIPTION
	APPENDIX A	Phase 4 – BPO Pricing Details
	APPENDIX B	Phase 4 – Gantt Chart
	APPENDIX C	Phase 4 - VMS Staffing Chart
	APPENDIX D	Phase 4 - VMS Project Plan

#	DELIVERABLES	Total Amount
1	Receipts & Deposits Design (Receipts & Remittance)	\$232,000
2	Receipts & Deposits Implement (Receipts & Remittance)	\$332,000
3	Training Documentation for Receipts & Deposits (Receipts & Remittance)	\$32,000
4	Conduct Training for Receipts & Deposits (Receipts & Remittance)	\$10,000
5	Proposal Module Design	\$100,000
6	Reports	\$20,000
7	Change Management	\$200,000
8	Weekly Status Meeting	\$10,000
9	Project Management	\$10,000
10	Travel	\$10,000
GRAND TOTAL		\$956,000.00

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
ACQUISITION SERVICES
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

March 8, 2005

CHANGE NOTICE NO. 4
TO
CONTRACT NO. 071B3001292
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR Symbiosis 3965 Okemos Road, Suite B2 Okemos, MI 48864 murali@1symbiosis.com	TELEPHONE (517) 347-7500 G. Murali
	VENDOR NUMBER/MAIL CODE
	BUYER/CA (517) 241-1646 Greg Faremouth
Contract Compliance Inspector: Patty Bogard Vegetative Management System – Dept. of Information Technology	
CONTRACT PERIOD: From: April 23, 2003 To: April 23, 2009	
TERMS Net 45	SHIPMENT N/A
F.O.B. Destination	SHIPPED FROM N/A
MINIMUM DELIVERY REQUIREMENTS N/A	

NATURE OF CHANGE (S):

Effective immediately, \$877,502.00 is hereby added to this contract to define and finish the third phase of the project. Per the contract, the State has identified six phases for completion of the entire project. See the attached work statement.

All other terms, conditions, specifications and pricing remain unchanged.

AUTHORITY/REASON:

Per agency and vendor agreement, and DMB/ACQUISITION SERVICES approval.

INCREASE: \$877,502.00

TOTAL REVISED ESTIMATED CONTRACT VALUE: \$ 2,528,948.00

Proposal for: 

Vegetative Management System (Phase 3)

Client:

Department of Natural Resources

Forest, Mineral and Fire Management

Submitted By:



Symbiosis International

01/14/2005

VMS Phase 3 Proposal

TABLE OF CONTENTS

<u>1</u>	<u>EFFECT ON CONTRACT</u>	3
<u>2</u>	<u>DESCRIPTION OF CHANGE</u>	4
<u>2.1</u>	<u>Executive Summary</u>	4
<u>2.2</u>	<u>Symbiosis Services Approach</u>	4
<u>2.3</u>	<u>Critical Success Factors and Prime Failure Indicators:</u>	5
<u>2.4</u>	<u>Constraints</u>	5
<u>2.5</u>	<u>Goals and Objectives:</u>	6
<u>2.6</u>	<u>Statement of Work</u>	6
2.6.1	Scope of Work	6
2.6.2	Project Deliverables	6
2.6.3	Deliverables Acceptance Procedure:	12
2.6.4	Project Methodology	12
2.6.5	Project Timeline	12
<u>3</u>	<u>PRICING</u>	13
<u>4</u>	<u>PROJECT TEAM PERSONNEL</u>	14
<u>5</u>	<u>PROJECT EVALUATION</u>	15
<u>6</u>	<u>AUTHORIZED CONTRACT EXPEDITOR</u>	15
<u>7</u>	<u>APPENDIX</u>	16

VMS Phase 3 Proposal

1 EFFECT ON CONTRACT

This proposal is a follow up to our proposal for VMS Phase 2 submitted on 10/29/2003. Against that proposal, the State of Michigan had issued a Change Notice No. 2 to Contract No. 071B3001292 between State of Michigan and Symbiosis's International on 11/03/2003.

The Department of Natural Resources (DNR), State of Michigan issued Purchase Order # 084P4001360 against the above-mentioned BPO for Symbiosis to complete Phase 2 of the project.

2 DESCRIPTION OF CHANGE

2.1 Executive Summary

SYMBIOSIS International is a full-service systems integration and software consulting company that is quickly becoming an industry leader in Information Technology solutions. Symbiosis established its partnership with Department of Natural Resources on April 30, 2003, when we obtained the Purchase Order # 084P4001360 for executing the Vegetative Management Solution project for DNR/DIT. Initially, Symbiosis received the award for the Phase 1 contract for VMS with a completion date of 12/30/2003. Then, State of Michigan amended this contract to include Phase 2.0 tasks on 11/03/2003.

Now, VMS project is almost near completion of Phase 2 and DNR/DIT with Symbiosis have started looking towards tasks in Phase 3. Based on the critical success factors and the constraints defined by DNR/DIT, Symbiosis and DNR/DIT decided to deploy three modules in Phase 3.

To maintain consistency DNR/DIT has suggested the creation of the Phase 3 Proposal to span 31 weeks. The intended start date for Phase 3 will be Feb 28, 2005.

To deploy the planned modules and some additional efforts as outlined by DNR/DIT in Phase 3, Symbiosis has provided the pricing details for Phase 3 Proposal in **APPENDIX A**.

To meet the additional needs of Phase 3, Symbiosis plans to add a few more resources to the team along with the existing resources from Phase 2. Phase 2 gained significant benefits from the extended development team and so Symbiosis intends to make the best use of the extended team in Phase 3 also. Additional details are in Appendix C – VMS Phase 3 Staffing Chart. Phase 3 offers multiple challenges for Symbiosis. The biggest challenge is the design of the Receipts and Deposits module. Symbiosis has achieved the impossible in the past and we believe that we have aligned the TOP GUN resources to meet the forthcoming challenges. With excellent support from DNR/DIT's VMS Core Team, Symbiosis is confident in its ability to execute Phase 3 successfully.

2.2 Symbiosis Services Approach

Symbiosis International will implement the functionalities as identified in the statement of work in this document. Any additional work must be approved through the identified Change Management process.

2.3 Critical Success Factors and Prime Failure Indicators:

Critical Success Factors

The critical success factors as agreed between Symbiosis and DNR/DIT for Phase 3 proposal are as follows:

- a) Follow the Process. Examples: Follow Life-Cycle Implementation Plan as outlined in Phase 2 for system development. Follow the State of Michigan's contractual and project management processes.
- b) Deliver new and enhanced functionalities to VMS periodically, within each Purchase Order. These functionalities should provide tangible benefits to the end users and management team.
- c) Make the best efforts to ensure the continuity of the VMS project in the midst of funding and other uncertainties.

Prime Failure Indicators:

- a) Missing the deadline of any task in the critical path. Both parties should put their best efforts to meet the deadlines of every task in the critical path. Every potential failure should be seriously analyzed and corrective action taken to prevent or mitigate that failure. Prompt responses from DNR/DIT clients and end users will help in this goal. This includes any approvals, sign offs, setting up field meetings, local meetings, prompt action for procurement of hardware/software and licenses and prompt resolution for internal and external application interfaces.

2.4 Constraints

- a) Complete all implementation and training for the Receipts and Deposits Module by 10/01/2006.
- b) Complete all implementation and training for the Pre-Sale Requirements module by 01/01/2006.
- c) There will be limited time availability of key FMFM and DIT resources.

VMS Phase 3 Proposal

2.5 Goals and Objectives:

- a) Implement modules that will add immediate value to DNR's end-users.
- b) Ensure proper work loading and Resource leveling is achieved
- c) Ensure parallel running and the smooth transition from TSale to VMS.
- d) Re-evaluate Training Plan for Phase 3 & beyond
- e) QA/End User testing needs to be completed within 10 business days

2.6 Statement of Work**2.6.1 Scope of Work**

Symbiosis International will implement/develop module 5 (Prospectus), design module 6 (Pre-Sale Requirements), and design module 7 (Receipts and Deposits). Additionally, Symbiosis will also complete the training for Customers and Prospectus. Symbiosis will execute additional work/deliverables from the Change Management section. Complete scope details are as below. Also, refer to Appendix B (Phase 3 – Gantt chart) and Appendix D (Phase 3 – Project plan) for further details.

2.6.2 Project Deliverables

DNR/DIT and Symbiosis agreed on the following project deliverables for Phase 3.0:

2.6.2.1 Implement - Prospectus Module (QA Ready (with integration to VMS) + QA Complete + Sign Off)

Activity/Task Description – This effort involves the beginning of the construction phase. We will implement the Prospectus module per the approved design, prototype, and the requirements document. At the completion of the QA Ready state, it will be ready for all Quality Assurance testing. The development team will have completed all Iterative/ Unit testing on all functionalities, prepared the database, written all code and met the integration and data sync requirements (per mutually agreed terms) for the module. This

VMS Phase 3 Proposal

task will include the following:

- Develop the Alpha Version of the module.
- Conduct a review of the Alpha version and identify the change requests – Core Team.
- Apply the change requests, per change management process, to the module.
- Create Test Cases (functional & field edits) from the approved test plan document.
- Conduct the functional testing - PM and Core Team.
- Identify & correct the test script errors and bugs in the module.
- Conduct functional testing – VMS Field Team.
- Conduct usability testing – VMS Field Team and Core team
- Conduct field edit testing – PM team
- Obtain feedback/document all the desired change requests.
- Resolve all identified bugs.
- Implement the new changes, per change management process.
- Move the module to Staging and test.
- Bring the module back to QA (if needed).

Completion Criteria (for Invoicing) – This task will be completed when the VMS Core team has accepted the deliverables in accordance to the Deliverables Acceptance Procedure as outlined in this document. The module with all functionality has been tested in QA (functional, field edit and usability), bugs have been corrected in the module and new agreed upon changes have been documented. This module is ready for Production.

Deliverable –

- a) Approved Test cases in Rational Test Manager (accessed through the TM Web).
- b) All functional, field edit and usability testing duly completed.
- c) A module that is fully functional in Staging or QA, per mutually agreed terms.

2.6.2.2 Update Training Documentation for Modules 1, 2 & 3

Activity/Task Description – The purpose of this activity is to update the training manual from Phase 1, which included modules 1, 2, & 3. The last update on the VMS Training manual was on 07/2004. The VMS application has changed tremendously in the last 4 months, which calls for updating the training manual. The VMS Field team will work with the Symbiosis team to get this task to completion.

Completion Criteria (for Invoicing) – This task will be fully completed when all the deliverables as outlined in this section are delivered and approved.

Deliverable – Updated Training manual for Phase 1 (Modules 1, 2 & 3), per mutually agreed terms.

2.6.2.3 Create Training Documentation for Customers Module

Activity/Task Description – The purpose of this activity is to create the training manual for the Customers Module (Module 4). The VMS Field team & Core team will work with

VMS Phase 3 Proposal

the Symbiosis team to get this task to completion.

Completion Criteria (for Invoicing) – This task will be fully completed when all the deliverables as outlined in this section are delivered and approved.

Deliverable – Completed training documentation, per mutually agreed terms.

2.6.2.4 Create Training Documentation for Prospectus Module

Activity/Task Description – The purpose of this activity is to create the training manual for the Prospectus Module (Module 5). The VMS Field team & Core team will work with the Symbiosis team to get this task to completion.

Completion Criteria (for Invoicing) – This task will be fully completed when all the deliverables as outlined in this section are delivered and approved.

Deliverable – Completed training documentation, per mutually agreed terms.

2.6.2.5 Conduct Training for Customers and Prospectus Module

Activity/Task Description – The purpose of this activity is to complete end user training for Customers and Prospectus modules. This task will include the following:

- Arrange trainer.
- Set up training lab.
- Do mock-up training in Lansing.
- Do training in the field.
- Create and conduct Training Survey.
- Arrange all logistics related to training with regard to end user availability, location, loading application on mobile laptops etc.

Completion Criteria (for Invoicing) – This task will be fully completed when all the deliverables as outlined in this section are delivered and approved.

Deliverable –

- (a) Completed training for the modules.
- (b) Compiled results of training survey

2.6.2.6 Design - Pre-Sale Requirements form

Activity/Task Description – The purpose of this activity is to create the design of Pre-Sale Requirements form based on the requirements document. This task will include the following:

- Have meetings with VMS Core Team and other key stakeholders to create the design of the module.

VMS Phase 3 Proposal

- Create a visual prototype, using .NET, Infragistics and Visual Studio with minimal coding. The prototype will have the proposed implementation look and feel. Most of the components for this module will be in place; however, they may not be fully functional. The Dev team will lay out the actual workflow and hard code all data.
- Create the Design document that will include the screen layouts, screen functionality, screen element details and screen navigation details.
- Create Test Plan document, based on the use cases.
- Create Story problems, based on use cases.
- Create preliminary database design /data model.
- Have meeting with the VMS Field Team to finalize the design of the module.
- Address the data sync analysis & integration with prior modules, per mutually agreed terms.

Completion Criteria (for Invoicing) – This task will be completed when all of the deliverables are approved by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document. We will complete the documents in Microsoft Word, Excel, Power Point, or HTML format. We will email these documents in soft copy form. The Dev team will show the prototype visually to the Core Team and the VMS Field team. The Dev team will also capture the design screens from the prototype in the design document. We will save the prototype and the final approved documents in the Share Drive.

Deliverables –

- (a) Design document
- (b) Prototype
- (c) Test plan document
- (d) Story Problems
- (e) Preliminary database design / data model

2.6.2.7 Design - Receipts & Deposits Module

Activity/Task Description – The purpose of this activity is to create the design of the Receipts & Deposits module based on the requirements document. This task will include the following:

- Have meetings with VMS Core Team and other key stakeholders to create the design of the module.
- Create a visual prototype, using .NET, Infragistics and Visual Studio with minimal coding. The prototype will have the proposed implementation look and feel. Most of the components for this module will be in place; however, they may not be fully functional. The Dev team will lay out the actual workflow and hard code all data.
- Create the Design document that will include the screen layouts, screen functionality, screen element details and screen navigation details.
- Create Test Plan document, based on the use cases.
- Create Story problems, based on use cases.
- Create preliminary database design /data model.
- Have meeting with the VMS Field Team to finalize the design of the module.
- Address the data sync analysis & integration with prior modules, per mutually

VMS Phase 3 Proposal

agreed terms.

Completion Criteria (for Invoicing) – This task will be completed when all of the deliverables are approved by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document. We will complete the documents in Microsoft Word, Excel, Power Point, or HTML format. We will email these documents in soft copy form. The Dev team will show the prototype visually to the Core Team and the VMS Field team. The Dev team will capture the design screens from the prototype in the design document. Symbiosis will save the prototype and the final approved documents in the Share Drive.

Deliverables –

- (a) Design document
- (b) Prototype
- (c) Test plan document
- (d) Story Problems
- (e) Preliminary database design / data model

2.6.2.8 Change Management

Activity/Task Description – This task involves all work towards incorporating changes and enhancements for any module, and any miscellaneous tasks that we will identify during Phase 3. This may involve one or more of analysis, design, coding, unit testing and integration testing of the modules in QA. Testing by the VMS Core team and VMS Field team (as needed) and finally moving the changes to Production after all approvals.

Completion Criteria – Completion criteria for enhancements and miscellaneous tasks (change management items) will be defined as outlined in the task definition of the approved change management process.

Deliverable - As defined in the tasks identified in change management.

2.6.2.9 Weekly Status Meeting

Activity/Task Description – This activity involves the effort spent by the VMS Project team during Weekly and Monthly Status meetings from 02/28/2005 until 09/30/2005 (31 weeks).

Completion Criteria – The Project Manager from the State of Michigan will verify the hours utilized for the project from 02/28/2005 until 09/30/2005 (31 weeks).

Deliverable – Attendance by team members and status reports by Symbiosis Project Manager. Symbiosis will submit invoices against the hours, utilized by the project team on weekly status meetings, on a monthly basis.

VMS Phase 3 Proposal

2.6.2.10 Project Management Efforts

Activity/Task Description – This activity involves the effort utilized by a Project Manager from Symbiosis International who will perform project management activities from the initiation to the closure of the VMS Project from 02/28/2005 until 09/30/2005 (31 weeks). He will abide by the State of Michigan's Project Management Methodology for this project. The following tasks as outlined in the VMS Project Charter, from Phase 1, will be his prime tasks:

- Primary Vendor contact for all official communication.
- Responsible for formal project status feedback (hours, milestones, tasks, issue logging, etc.) per negotiated schedule.
- Meets with DIT Project Manager to review progress, resolve issues, manage contract changes, and manage purchase orders.
- Responsible for contractor deliverables, quality, and overall performance.

Completion Criteria – The Project Manager from the State of Michigan will verify the hours utilized by the Symbiosis Project Manager for the project from 02/28/2005 until 09/30/2005 (31 weeks).

Deliverable – Invoices against project management efforts on a monthly basis.

2.6.2.11 Travel

Activity/Task Description – This activity involves all travel expenses incurred during the execution of the VMS Project from 02/28/2005 until 09/30/2005.

Completion Criteria – We will complete this task as per the need of the project. State of Michigan will reimburse all charges borne by Symbiosis, in accordance with the State of Michigan's travel guidelines

Deliverable – Invoices against travel, as needed.

VMS Phase 3 Proposal

2.6.3 Deliverables Acceptance Procedure:

The Acceptance Procedure of any deliverable (reports, demonstrations) will be as follows:

The VMS Core Team will "receive" the deliverable elements and proceed to a first evaluation. The document will be approved, in the case of agreement; otherwise suggestions will be submitted to Symbiosis. In case the problem remains after corrections, the Symbiosis Project Manager together with the VMS Core team will be responsible to find an agreeable solution. DNR/DIT and Symbiosis have agreed for the following period as time effort for sign off for the deliverables.

1. Requirements Gathering Sign-off : Five Business Days by DNR/DIT
2. Design Sign-off : Five Business Days by DNR/DIT
3. Prototype Sign-off : Five Business Days by DNR/DIT
4. QA Ready Sign-off: All end user testing needs to start within five Business days after Module is QA Ready.
5. Module Delivery Sign-Off: DNR/DIT would need to complete all Sign-Off within five business days after Module has passed all QA/End User Testing.
6. All other project documents: Five Business Days by DNR/DIT

Symbiosis will expect DNR/DIT to respond to Symbiosis within this defined period.

2.6.4 Project Methodology

Symbiosis will use the State of Michigan's Project Management Methodology for all project management activities.

2.6.5 Project Timeline

Project Start: Feb 28, 2005 (Assuming that the State of Michigan will issue the new PO before February 21, 2005)

Project Complete: September 30, 2005

Training Plan: The plan for VMS Training is for September 2005. DIT/DNR and Symbiosis will outline the additional details later.

3 PRICING

Symbiosis has enclosed the Pricing spreadsheet in **APPENDIX A**, they are:

- **Appendix A – Phase 3.0 BPO Pricing:** Symbiosis has outlined the fixed prices for all the VMS Phase 3.0 deliverables in this document. Upon the completion of each of the deliverables as outlined in the Statement of Work, Symbiosis will submit the line item deliverables as invoices for billing purposes.
- **Bug Fixes/Warranty:** Symbiosis will provide free bug fixes for all modules up to 120 days from the date of release of the modules/enhancements or the date of QA sign off in case production release is planned more than five business days after QA sign off. DNR/DIT will approve bug fixes beyond this warranty date using a Change Management process. Symbiosis will charge all efforts towards non-warranty items separately.
- **Enhancements/Maintenance:** Enhancements are additional functionality or changes in functionality requested by DNR, that Symbiosis and DIT/DNR have not previously identified in the project scope. DNR/DIT will approve the enhancements for any module using a Change Management process. Symbiosis will charge the efforts towards these tasks separately.
- **Invoices:** Symbiosis will submit invoices for deliverables only after approvals from VMS Core Team.
- **Travel:** For all business meetings for the VMS Project outside Lansing, MI, Symbiosis will bill all travel expenses separately on actual costs, as per State of Michigan's travel rules and regulations.

4 PROJECT TEAM PERSONNEL

Symbiosis will continue to have a flexible staffing structure to meet one of the critical success factors identified earlier.

Symbiosis will assign the following staff for the VMS Project for Phase 3.

- Project Manager – Stanley Samuel
- Business Analyst – Govindarajan Umakanth
- Subject Matter Expert (Field) - Michael T Mang
- Designer/Developer 1 - Karthik Narayanan
- Designer/Developer 2 – Murugappan Ramanathan
- Designer/Developer 3 – Thangavelu Suseela
- Designer/Developer 4 – Ali-Reza Namvar-Sephidan
- Tester 1 – Darin W Witkowski
- Tester 2 – Govindarajan Murali
- Subject Matter Expert (Finance) - TBD
- Professional Trainer - TBD

Also, refer **APPENDIX C** for the VMS Staffing Chart.

VMS Phase 3 Proposal

5 PROJECT EVALUATION

The Symbiosis Project Manager will evaluate and monitor the project progress. He will also report the project issues, discussions, risks, and progress through the Weekly/Monthly Status report. He will distribute the Status Report to the VMS Core team and other stakeholders, per the Communication Plan, as outlined in Phase 1.

6 AUTHORIZED CONTRACT EXPEDITOR

G. MURALI

Vice President

Symbiosis International

Phone: (517) 449-7251/ (517) 373 2562 / Fax 517-347-4245

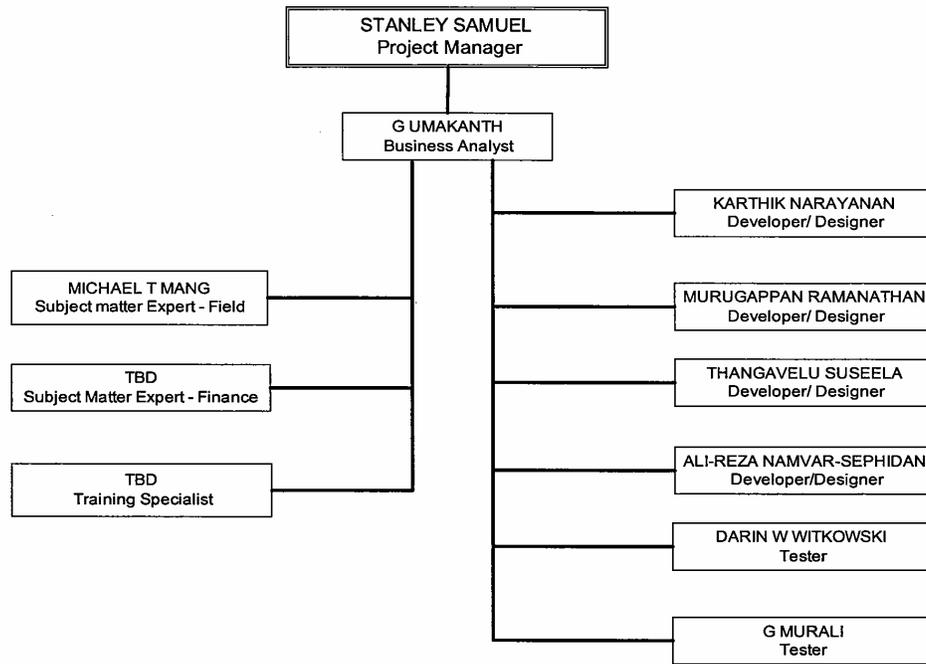
Email: Murali@1symbiosis.com or muralig@michigan.gov

7 APPENDIX

#	APPENDIX	DESCRIPTION
1	APPENDIX A	Phase 3 – BPO Pricing Details
2	APPENDIX B	Phase 3 – Gantt Chart
3	APPENDIX C	Phase 3 - VMS Staffing Chart
4	APPENDIX D	Phase 3 - VMS Project Plan

#	DELIVERABLES	Rate	Total Hrs	Total Amount
1	Implement - Prospectus Module (QA Ready (with integration to VMS) + QA Complete+Sign Off)			\$183,270.00
2	Update Training Documentation for Modules 1, 2 & 3			\$16,140.00
3	Create Training Documentation for Customers Module			\$16,140.00
4	Create Training Documentation for Prospectus Module			\$16,140.00
5	Conduct Training for Customers and Prospectus Module			\$16,320.00
6	Design - Pre-Sale Requirements form			\$121,500.00
7	Design - Receipts & Deposits Module			\$243,000.00
8	Change Management			\$135,000.00
9	Weekly Status Meeting (31 weeks)			\$13,392.00
10	Project Management Efforts (31 weeks)	\$90	1240.00	\$111,600.00
11	Travel			\$5,000.00
GRAND TOTAL				\$877,502.00

Appendix C- Phase 3 VMS Staffing Chart



Submitted by: Symbiosis International

Updated on 01/14/2005

Appendix D - Phase 3.0 BPO Project Plan						
ID	Task Name	Duration	Start	Finish	Predecessors	
1	VMS PHASE 3.0	155 days	Mon 02/28/05	Fri 08/05/05		
2	Implement - Prospectus Module (QA Ready) (with integration to VMS) - QA Complete/Sign O	110 days	Mon 03/14/05	Fri 08/12/05		
3	Develop the Alpha Version of the module.	44 days	Mon 03/14/05	Thu 05/12/05		
4	Conduct a review of the Alpha version and identify the change requests - Core Team.	10 days	Fri 04/22/05	Thu 05/05/05	3FS-15 days	
5	Apply the change requests, per change management process, to the module.	10 days	Fri 04/22/05	Thu 05/05/05	3FS-15 days	
6	Create Test Cases (functional & field edits) from the approved test plan document.	10 days	Fri 05/06/05	Thu 05/19/05	3	
7	Conduct the functional testing - PM and Core Team.	10 days	Fri 05/20/05	Thu 06/02/05	6	
8	Identify & correct the test script errors and bugs in the module.	10 days	Fri 06/03/05	Thu 06/16/05	7	
9	Conduct functional testing - VMS Field Team.	10 days	Fri 06/17/05	Thu 06/30/05	9	
10	Conduct usability testing - VMS Field Team and Core team	10 days	Fri 07/01/05	Thu 07/14/05	9	
11	Conduct field edit testing - PM team	10 days	Fri 07/15/05	Thu 07/28/05	10	
12	Obtain feedback/document all the desired change requests.	45 days	Fri 05/13/05	Thu 07/14/05	3	
13	Resolve all identified bugs.	45 days	Fri 05/13/05	Thu 07/14/05	3	
14	Implement the new changes, per change management process.	50 days	Fri 05/13/05	Thu 07/21/05	3	
15	Move the module to Staging and test.	10 days	Fri 07/22/05	Thu 08/04/05	14	
16	Bring the module back to QA (if needed).	0 days	Fri 08/05/05	Fri 08/12/05	16	
17	Approved Test cases in Rational Test Manager (accessed through the TR Web).	0 days	Fri 08/12/05	Fri 08/12/05	16	
18	All functional, field edit and usability testing fully completed.	0 days	Fri 08/12/05	Fri 08/12/05	16	
19	A module that is fully functional in Staging or QA, per mutually agreed terms.	0 days	Fri 08/12/05	Fri 08/12/05	16	
20	Update Training Documentation for Modules 1, 2 & 3	50 days	Mon 02/28/05	Fri 05/06/05		
21	Create Training Documentation for Customers Module	30 days	Mon 02/28/05	Fri 07/29/05		
22	Create Training Documentation for Prospectus Module	30 days	Mon 02/28/05	Fri 06/03/05		
23	Conduct Training for Customers and Prospectus Module	15 days	Mon 08/12/05	Fri 08/30/05		
24	Arrange trainer.	2 days	Mon 08/12/05	Tue 08/15/05		
25	Set up training lab.	3 days	Wed 08/14/05	Fri 08/19/05		
26	Do mock-up training in Lansing.	2 days	Mon 08/19/05	Tue 08/23/05	25	
27	Do training in the field.	5 days	Wed 08/21/05	Tue 08/27/05	26	
28	Create and conduct End User Survey.	5 days	Mon 08/22/05	Fri 08/26/05	27FF-13 days	
29	Arrange all logistics related to training with regard to end user availability, location, loading app.	10 days	Mon 08/19/05	Fri 08/30/05	25	
30	Completed training for the module.	0 days	Tue 08/27/05	Tue 08/27/05	27	
31	Complete results of training survey	0 days	Fri 08/30/05	Fri 08/30/05	28	
32	Design - Pre-Sale Requirements Team	80 days	Mon 04/25/05	Fri 08/12/05		
33	Have meetings with VMS Core Team and other key stakeholders to create the design of the m	80 days	Mon 04/25/05	Fri 08/12/05		
34	Create a visual prototype, using .NET, Infragistics and Visual Studio with minimal coding. The	50 days	Mon 04/25/05	Fri 07/01/05	33SS	

Appendix D - Phase 3.0 BPO Project Plan					
ID	Task Name	Duration	Start	Finish	Predecessors
35	Create the Design document that will include the screen layouts, screen functionality, screen el	80 days	Mon 04/25/06	Fri 08/12/06	33SS
36	Create Test Plan document, based on the use cases.	80 days	Mon 04/25/06	Fri 08/12/06	33SS
37	Create Story problems, based on use cases.	80 days	Mon 04/25/06	Fri 08/12/06	33SS
38	Create preliminary database design / data model.	80 days	Mon 04/25/06	Fri 08/12/06	33SS
39	Have meeting with the VMS Field Team to finalize the design of the module.	80 days	Mon 04/25/06	Fri 08/12/06	33SS
40	Address the data sync analysis & integration with prior modules, per mutually agreed terms.	80 days	Mon 04/25/06	Fri 08/12/06	33SS
41	Complete Design document	0 days	Fri 08/12/06	Fri 08/12/06	35
42	Completed Prototype	0 days	Fri 07/07/06	Fri 07/07/06	34
43	Test plan document	0 days	Fri 08/12/06	Fri 08/12/06	36
44	Story Problems	0 days	Fri 08/12/06	Fri 08/12/06	37
45	Preliminary database design / data model	0 days	Fri 08/12/06	Fri 08/12/06	38
46	Design - Receipts & Deposits Module	120 days	Mon 03/28/06	Fri 08/04/06	
47	Have meetings with VMS Core Team and other key stakeholders to create the design of the m	120 days	Mon 03/28/06	Fri 08/04/06	
48	Create a visual prototype, using .NET, InfoLogics and Visual Studio with minimal coding. The	75 days	Mon 03/28/06	Fri 07/08/06	47SS
49	Create the Design document that will include the screen layouts, screen functionality, screen el	120 days	Mon 03/28/06	Fri 08/04/06	47SS
50	Create Test Plan document, based on the use cases.	120 days	Mon 03/28/06	Fri 08/04/06	47SS
51	Create Story problems, based on use cases.	120 days	Mon 03/28/06	Fri 08/04/06	47SS
52	Create preliminary database design / data model.	120 days	Mon 03/28/06	Fri 08/04/06	47SS
53	Have meeting with the VMS Field Team to finalize the design of the module.	120 days	Mon 03/28/06	Fri 08/04/06	47SS
54	Address the data sync analysis & integration with prior modules, per mutually agreed terms.	120 days	Mon 03/28/06	Fri 08/04/06	47SS
55	Complete Design document	0 days	Fri 08/04/06	Fri 08/04/06	49
56	Completed Prototype	0 days	Fri 07/08/06	Fri 07/08/06	48
57	Test plan document	0 days	Fri 08/04/06	Fri 08/04/06	50
58	Story Problems	0 days	Fri 08/04/06	Fri 08/04/06	51
59	Preliminary database design / data model	0 days	Fri 08/04/06	Fri 08/04/06	52
60	Change Management (31 weeks)	155 days	Mon 02/28/06	Fri 08/30/06	
61	Weekly Status Meeting (31 weeks)	155 days	Mon 02/28/06	Fri 08/30/06	
62	Project Management Efforts (31 weeks)	155 days	Mon 02/28/06	Fri 08/30/06	
63	Travel (31 weeks)	155 days	Mon 02/28/06	Fri 08/30/06	

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
ACQUISITION SERVICES
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

May 12, 2004

CHANGE NOTICE NO. 3
TO
CONTRACT NO. 071B3001292
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR Symbiosis 3965 Okemos Road, Suite B2 Okemos, MI 48864 murali@1symbiosis.com	TELEPHONE (517) 347-7500 G. Murali
	VENDOR NUMBER/MAIL CODE
	BUYER/CA (517) 241-1646 Greg Faremouth
Contract Compliance Inspector: Patty Bogard Vegetative Management System – Dept. of Information Technology	
CONTRACT PERIOD: From: April 23, 2003 To: April 23, 2009	
TERMS Net 45	SHIPMENT N/A
F.O.B. Destination	SHIPPED FROM N/A
MINIMUM DELIVERY REQUIREMENTS N/A	

NATURE OF CHANGE (S):

Effective immediately, ADD money to contract to finish phase 1 of project. All other terms and conditions remain the same.

AUTHORITY/REASON:

Per agency and vendor agreement, and DMB/ACQUISITION SERVICES approval.

INCREASE: \$100,000.00

TOTAL REVISED ESTIMATED CONTRACT VALUE: \$ 1,651,446.00

**STATE OF MICHIGAN
 DEPARTMENT OF MANAGEMENT AND BUDGET
 ACQUISITION SERVICES
 P.O. BOX 30026, LANSING, MI 48909
 OR
 530 W. ALLEGAN, LANSING, MI 48933**

November 3, 2003

**CHANGE NOTICE NO. 2
 TO
 CONTRACT NO. 071B3001292
 between
 THE STATE OF MICHIGAN
 and**

NAME & ADDRESS OF VENDOR Symbiosis 3965 Okemos Road, Suite B2 Okemos, MI 48864	TELEPHONE (517) 347-7500 G. Murali
	VENDOR NUMBER/MAIL CODE
	BUYER (517) 241-1646 Greg Faremouth
Contract Administrator: Patty Bogard Vegetative Management System – Dept. of Information Technology	
CONTRACT PERIOD: From: April 23, 2003 To: April 23, 2009	
TERMS Net 45	SHIPMENT N/A
F.O.B. Destination	SHIPPED FROM N/A
MINIMUM DELIVERY REQUIREMENTS N/A	

NATURE OF CHANGE (S):

As part of the contract, the vendor is to provide the following Phase II services as described within the attached work statement. The remaining balance added to contract is for future business. All other terms and conditions remain the same.

AUTHORITY/REASON:

Per agency and vendor agreement, and DMB/ACQUISITION SERVICES approval.

INCREASE: \$1,059,050.00

TOTAL REVISED ESTIMATED CONTRACT VALUE: \$ 1,551,446.00

Proposal for:

CONFIDENTIAL

Vegetative Management System (Phase 2)

Client:

Department of Natural Resources

Forest, Mineral and Fire Management

Submitted By:



Symbiosis International

10/29/2003

TABLE OF CONTENTS

1	EFFECT ON CONTRACT	3
2	DESCRIPTION OF CHANGE	3
2.1	EXECUTIVE SUMMARY	3
2.2	SYMBIOSIS SERVICES APPROACH	4
2.3	SYMBIOSIS GOALS & OBJECTIVES	4
2.4	STATEMENT OF WORK.....	5
2.4.1	<i>Scope of Work.....</i>	<i>5</i>
2.4.2	<i>Project Deliverables.....</i>	<i>5</i>
2.4.3	<i>Project Requirements:.....</i>	<i>13</i>
2.4.4	<i>Deliverables Acceptance Procedure:.....</i>	<i>13</i>
2.4.5	<i>Project Risks.....</i>	<i>14</i>
2.4.6	<i>Project Methodology.....</i>	<i>14</i>
2.4.7	<i>Projected Timeline</i>	<i>15</i>
3	PRICING.....	15
4	PROJECT TEAM PERSONNEL.....	16
4.1	VMS STAFFING STRUCTURE:	16
4.2	SKILL-SETS OF ADDITIONAL RESOURCES	17
5	PROJECT EVALUATION	17
6	AUTHORIZED EXPEDITOR.....	17
7	APPENDIX.....	18

1 EFFECT ON CONTRACT

This proposal is the next step after Symbiosis's Phase 1 proposal, which was made for ITB#07113000039. The Department of Natural Resources (DNR), State of Michigan had issued a Purchase Order # 084N3002430 dated 04/30/2003 for Symbiosis to do the project in Phase 1.

Based on the analysis done by Symbiosis International in Phase 1 on the Modules 4-19, DNR and Symbiosis have mutually agreed to deploy 1(one) module in Phase 2. The module identified is Bidders/Interested Parties Module and a preliminary analysis of Prospectus module would also be conducted. It is anticipated that Phase 2 will start on Nov 1, 2003, subject to the issuance of the Purchase Order.

All existing sub-contractors as mentioned in the Phase 1 proposal will remain the same. Symbiosis intends to continue for Phase 2 with the same project team.

2 DESCRIPTION OF CHANGE

2.1 Executive Summary

SYMBIOSIS International is a full-service systems integration and software consulting company that is quickly becoming an industry leader in Information Technology solutions. Our partnership with Department of Natural Resources was established on April 30, 2003, when we obtained the Purchase Order for executing the Vegetative Management Solutions project for DNR/DIT. Symbiosis was initially awarded the Phase 1 contract with a completion date of 12/30/2003.

Symbiosis is now at the juncture, almost half way through Phase 1, where Symbiosis in partnership with DNR needs to start looking towards Phase 2. Hence, Symbiosis has conducted a preliminary analysis of Modules 4-19 and have mutually come upon an agreement with DNR to deploy 1(one) module in Phase 2.

To maintain consistency and to avoid multiple contracts, DNR/DIT has suggested the creation of the Phase 2 Proposal to be in line with the fiscal year of the State of Michigan. The intended start date for Phase 2 is November 1, 2003.

To deploy the planned modules and some additional efforts as outlined by DNR in Phase 2, Symbiosis has provided a Pricing Summary for Phase 2 Proposal in **APPENDIX E**.

To meet the additional needs of Phase 2, Symbiosis plans to continue using the existing resources from Phase. Phase 2 also involves some additional research being conducted by two

professors from Michigan State University (MSU) to improvise the business processes in the DNR's Timber Sale System. Some of these recommended changes would be implemented in Phase 2 and the other recommendations are targeted for implementation in Phase 3 and beyond. Hence, Phase 2 offers multiple challenges for Symbiosis. The biggest challenge is the gradual transition from TSale to VMS. Symbiosis has achieved the impossible in the past and we believe that we have aligned the TOP GUN resources to meet the forthcoming challenges. With the excellent support from DNR/DIT's VMS Core Team, Symbiosis is confident in our ability to execute Phase 2 successfully.

2.2 Symbiosis Services Approach

Symbiosis International will implement the functionalities as identified in the statement of work in this document. Any additional work would need an additional Purchase Order. The Target completion of this work is 05/30/2004

2.3 Symbiosis Goals & Objectives

The goals and objectives for Phase 2 proposal are:

- 1) Need to focus on most of the high risk modules to be addressed in the beginning.
- 2) Implement modules that will add immediate value to DNR's end-users
- 3) Implement modules that will easily mesh/work with the Phase 1 modules, that is, User Management, Bid Opening and Sale Conditions/Groups
- 4) Identify modules to be implemented for Phase 3. Conduct analysis of these modules in Phase 2, to ensure that there is no break in the software design and development continuity.
- 5) Parallel running and the smooth transition from TSale to VMS. Design a data synchronization architecture for the parallel running of TSale and VMS.
- 6) Ensure proper work loading and Resource leveling is achieved
- 7) Ensure Staff Continuity for the full length of Phase 2

- 8) Execute the project as defined for Phase 2 within the State of Michigan's fiscal year, with an overlap between Phase 1 & Phase 2.
- 9) Will be committed to use DIT's technology direction, provided it is within contractual obligations. Continue using the same technology products as defined in Phase 1, that is, Microsoft .NET, Rational suite of products and NIKU.
- 10) Re-evaluate Training Plan for Phase 2 & beyond
- 11) Provide change management efforts on the modules implemented in Phase 1
- 12) Provide maintenance for Phase 1 modules

2.4 STATEMENT OF WORK

2.4.1 Scope of Work

Symbiosis International will design and develop Module 4 (Bidders and Interested Parties). Symbiosis will also initiate the design for Module 5 (Prospectus). All additional work/deliverables will be executed based on additional funding obtained in Fiscal 2003-2004.

2.4.2 Project Deliverables

The details of all the project work as identified for Phase 2 is based on mutual agreements between DNR and Symbiosis International are as follows. The modules are mentioned by Module numbers across this proposal, so please refer the above identification for the modules.
Phase 2 Modules: Module 4 – Bidders/ Interested Parties and Module 5 – Prospectus

2.4.2.1 Funding Student Data Collection

Activity/Task Description – This task will be done by Professor David W MacFarlane from Michigan State University (MSU). New equations for estimating volume in the cruise module were developed largely by Fowler and Hussain (2000, and many other references), but a general statistical validation and estimate of precision and bias has not been performed for them using data independent of that used to calibrate the models. Thus, there is uncertainty regarding the general performance of these equations for predicting the true volume available across MDNR timberlands.

Data needs to be collected to perform validation analyses, towards understanding the performance of the Fowler and Hussain volume equations, so that recommendations can be made regarding how they should be utilized in the new TSALE model.

Hence this task will involve collection of individual tree volume data for validating volume equations in TSALE cruise module. Primary (field-based) individual tree data will be collected by student researchers from MSU, with logistical support / cooperation from Michigan DNR. Specifically, Michigan DNR timberland managers will assist Dr. MacFarlane and students in locating appropriate stands for the data needed.

Completion Criteria – This task will be an ongoing task for the next 1 year, and it involves the data collection work during this 1 year period. This work will be done by students at MSU, under the guidance of Prof David MacFarlane. The standard protocol for any data collection/research work at MSU is that all funding be made ahead of time for the entire research. Hence, this invoice will be billed towards funding the students for this research.

Deliverable - Field-based collection of individual tree volume data for validating volume equations in TSALE cruise module.

2.4.2.2 Project Initiation

Activity/Task Description – This task will be conducted as part of the Project Management efforts. This would include the following:

- Conducting a Kickoff Meeting
- Review and Update the Communication Plan
- Review and Update the Project Charter
- Creation of a Risk Management Plan
- Creation of a WBS/Project Plan
- Review and Update the Quality Plan

Completion Criteria – This task will be completed when all of the above documents are approved by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document. These documents will be completed in Microsoft Word, Excel, Power Point or HTML format. These will be emailed in soft copy form. The original document will be saved in the Share Drive.

Deliverable – Project Plan, Communication Plan, Quality Plan, Project Charter and Risk Management Plan

2.4.2.3 Use Case - Module 4

Activity/Task Description – This effort involves the analysis of the Bidders and Interested Parties Module. The analysis involves various interactions with the VMS Field Team and VMS

Core Team members, analyzing the Application Specifications document and the preliminary use cases document created.

Completion Criteria – This task will be completed when the use case document is approved by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document. This document will be completed in Microsoft Word, Excel, Power Point or HTML format. This will be emailed in soft copy form. The original document will be saved in the Share Drive.

Deliverable – Use case Document for Bidders and Interested Parties – Module 4

2.4.2.4 Analysis of Current TSale appraisal Practices

Activity/Task Description – This effort will be done by Professor Karen Potter-Witter from MSU. The analysis of current timber sale appraisal practices involves the following:

- Document current practices by the USDA Forest Service, other Lake States state forest management agencies, and practices supported by the Association of Consulting Foresters of America.
- Summarize selected, representative, recognized timber sale appraisal systems.
- Summarize the state of the art of timber sale appraisal based upon current published research, documentation, and expert opinion
- Summarize the investigator's research on FMFM timber sales transactions with respect to variables significantly related to timber sale bids.

Completion Criteria – This task will be completed when the report has been accepted by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document. This document will be completed in Microsoft Word, Excel, Power Point or HTML format. This will be emailed in soft copy form. The original document will be saved in the Share Drive.

Deliverable - Report on analysis of current timber sale appraisal practices by USDA Forest Service, other Lake States state forest management agencies, and practices supported by the Association of Consulting Foresters of America.

2.4.2.5 Analysis of Data Synch

Activity/Task Description – The deployment of VMS modules is planned to be done in phases. When a module is deployed in VMS, the corresponding functionality in TSale will be disabled. This implies that FMFM users will need VMS to use the newly deployed modules and TSale to use the remaining modules. As many of the modules interact with many other modules, the remaining modules in TSale will need the data that used to be processed by the disabled modules. That data will now be available in VMS and so TSale will need to obtain that data from VMS. In the same way, new modules being deployed in VMS will need data that is processed by remaining TSale modules. Thus VMS will need to access data from TSale.

VMS modules are being implemented in such a way that the modules with least interactions with other modules are deployed first. Initially, the effort to synchronize data between VMS and TSale will be minimal. As more and more modules are deployed, this effort will increase very much due to the rapid increase in complexity of the data synchronization. Hence, a detailed analysis of this data synchronization would need to be done.

Completion Criteria – This task will be completed when the analysis report has been accepted by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document. This document will be completed in Microsoft Word, Excel, Power Point or HTML format. This will be emailed in soft copy form. The original document will be saved in the Share Drive.

Deliverable – Report on the analysis of the Data Synchronization

2.4.2.6 Module 4 – First Iteration Design

Activity/Task Description – The purpose of this activity is to create the design (first iteration) for the Bidders and Interested parties module based on the requirements/project scope document.

Completion Criteria – This task will be completed when the VMS Core team has accepted the initial design as created by Symbiosis in accordance to the Deliverables Acceptance Procedure as outlined in this document.

Deliverable – A design model with suitable documentation, including a preliminary database design.

2.4.2.7 Compare FMFM appraisal practices to other systems (from peer institutions)

Activity/Task Description – This effort will be done by Professor Karen Potter-Witter from MSU. Analysis of FMFM appraisal practices to other systems will include the following:

- Compare the model used by FMFM to develop timber sale appraised price to those used by peer institutions with respect to variables used.
- Compare the process used by FMFM to establish appraised price.

Completion Criteria – This task will be completed when the report has been accepted by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document. This document will be completed in Microsoft Word, Excel, Power Point or HTML format. This will be emailed in soft copy form. The original document will be saved in the Share Drive.

Deliverable - Report on the comparison of the FMFM appraisal practices to other systems (from peer institutions)

2.4.2.8 Use Case - Module 5

Activity/Task Description – This effort involves the analysis of the Prospectus Module. The analysis involves various interactions with the VMS Field Team and VMS Core Team members, analyzing the Application Specifications and the preliminary use cases created.

Completion Criteria – This task will be completed when the use case document is approved by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document. This document will be completed in Microsoft Word, Excel, Power Point or HTML format. This will be emailed in soft copy form. The original document will be saved in the Share Drive.

Deliverable – Use case Document for Prospectus – Module 5

2.4.2.9 Module 4 - Prototype

Activity/Task Description – The purpose of this activity is to create the initial prototype for the Bidders and Interested parties module from the approved Design and requirements. The

prototype will have the proposed implementation look and feel. Most of the components for this module will be in place, however may not be fully functional. The actual work flow will be laid out and this prototype will be made available in QA for review by the VMS Core Team.

Completion Criteria – This task will be completed when the VMS Core team has accepted the prototype as created by Symbiosis in accordance to the Deliverables Acceptance Procedure as outlined in this document.

Deliverable – A prototype delivered in QA with suitable documentation

2.4.2.10 Module 4 – QA Ready

Activity/Task Description – The purpose of this activity is to develop and implement the Bidders and Interested parties module based on the approved Prototype and requirements document. This module will be created in VB.NET writing on a SQL 2000 server. At the completion of this task, it will be ready for all Quality Assurance testing. The development team would have completed all Iterative/ Unit testing on all functionalities within this module, prepared the database, written all code for the application and integrated this module with the existing VMS application. The module would be fully functional. This module will be made available in QA for review by the VMS Core Team.

Completion Criteria – This task will be completed when Symbiosis has moved the actual module with all functionality into QA for testing by the VMS Core Team and VMS Field team.

Deliverable – A fully functional module in QA, with suitable test matrix and test scripts.

2.4.2.11 Module 4 – Completed/ Sign-Off

Activity/Task Description – The purpose of this activity is the final completion of the Bidders and Interested parties module. All testing has been completed by the VMS Field team and Core team. All bugs have been identified and resolved. This module would be ready for move to Production.

Completion Criteria – This task will be completed when the VMS Core team has accepted the fully functional module in accordance to the Deliverables Acceptance Procedure as outlined in this document.

Deliverable – A fully functional module with all suitable module documentation.

2.4.2.12 Evaluation of performance of current FMFM system

Activity/Task Description – This effort will be done by Professor Karen Potter-Witter from MSU. Evaluation of performance of current FMFM system will include the following:

- Performance of the current FMFM appraisal system with respect to developing appraisal prices that reflect fair market value.
- Relationship of current appraisal factors to bid price.
- Recommendation of policy for a minimum acceptable bid, i.e. advertised price.
- Recommendations for improvement, which may include:
 - appraisal factors
 - calculation and use of 'average price', i.e. use of historic MDNR price data
 - changes in current procedure
 - new procedures
 - speed and efficiency
 - timing of appraisal
 - use of computer technology which could be implemented through VMS

Completion Criteria – This task will be completed when the report has been accepted by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document. This document will be completed in Microsoft Word, Excel, Power Point or HTML format. This will be emailed in soft copy form. The original document will be saved in the Share Drive.

Deliverable - Final report of evaluation of performance of current FMFM system

2.4.2.13 Research existing data / data collection methods for Volume determination

Activity/Task Description – This task will be done by Professor David W MacFarlane from MSU. New equations for estimating volume in the cruise module were developed largely by Fowler and Hussain (2000, and many other references), but a general statistical validation and estimate of precision and bias has not been performed for them using data independent of that used to calibrate the models. Thus, there is uncertainty regarding the general performance of these equations for predicting the true volume available across MDNR timberlands.

Data need to be collected to perform validation analyses, towards understanding the performance of the Fowler and Hussain volume equations, so that recommendations can be made regarding how they should be utilized in the new TSALE model.

Dr. MacFarlane will examine existing volume equation information to determine what data needs to be collected for validation and search for existing data sources. A report on the analysis of the existing information / data regarding (Fowler and Hussain 2000, etc...) will be created.

Completion Criteria – This task will be completed when this report is submitted to DNR

Deliverable – Report on the research existing data / data collection methods for Volume determination.

2.4.2.14 Analysis of Reporting Requirements

Activity/Task Description – This task would involve analyzing the reporting requirements for Modules 4-19

Completion Criteria – This task will be completed when the analysis report has been accepted by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document. This document will be completed in Microsoft Word, Excel, Power Point or HTML format. This will be emailed in soft copy form. The original document will be saved in the Share Drive. All required reports will be identified

Deliverable - Report on the analysis of the reporting requirements

2.4.2.15 Travel

Activity/Task Description – This activity involves all travel expenses incurred during the execution of the VMS Project from 11/1/2003 till 05/30/2003.

Completion Criteria – This task will be completed as per the need of the project. All charges will be reimbursed in accordance with the State of Michigan's travel guidelines

Deliverable – Invoices against travel

2.4.2.16 Modifications to Phase 1 Modules

Activity/Task Description – This task involves all work towards incorporating enhancements for Modules 1, 2 and 3 that will be identified during Phase 2. This may involve coding, unit testing and integration testing of the modules in QA. Testing by the VMS Core team and VMS Field team (as needed) and finally moving the changes to Production after all approvals.

Completion Criteria – This task will be completed when the enhancements has been duly tested and accepted by the VMS Core Team in accordance to the Deliverables Acceptance Procedure as outlined in this document.

Deliverable – A fully functional module with the suggested enhancements and all updated documentation.

2.4.3 Project Requirements:

1. For the analysis of the Use-Cases for Module 4, the first field team meeting need to be scheduled during the month of November, 2003
2. The critical success factor for the project would be prompt responses from DNR/DIT users. This would include any approvals, sign offs, setting up field meetings, local meetings, prompt action for procurement of hardware/software and licenses and prompt resolution for internal and external application interfaces.
3. All new requirements coming in QA need to be checked by internal core team, instead of field team
4. QA/End User testing needs to be completed within 10 business days

2.4.4 Deliverables Acceptance Procedure:

The Acceptance Procedure of any deliverable (reports, demonstrations) is realized as follows. The VMS Core Team will "receive" the deliverable elements and proceed to a first evaluation. In case of agreement, the deliverable will be approved. In case of problem the suggestions will be transferred to Symbiosis. In case the problem remains after corrections, the Symbiosis Project Manager together with the VMS Core team will be responsible to find an agreeable solution. The following time-frame has been agreed between DNR/DIT and Symbiosis as time effort for sign off for the deliverables.

1. Use Case Sign-off : 5 Business Days by DNR/DIT
2. Design Sign-off : 5 Business Days by DNR/DIT
3. Prototype Sign-off : 5 Business Days by DNR/DIT

4. QA Ready Sign-off: All end user testing needs to start within 5 Business days after Module is QA Ready.
5. Module Delivery Sign-Off: DNR/DIT would need to complete all Sign-Off within 5 business days after Module has passed all QA/End User Testing.
6. All other project documents: 5 Business Days by DNR/DIT

It would be expected that DNR/DIT would get back to Symbiosis within this defined time frame with any questions.

2.4.5 Project Risks

1. Gradual transition from TSale to VMS – As new modules are implemented in VMS, corresponding functionalities in TSale will be disabled. This necessitates VMS and TSale to access data from each other. This data synchronization will be a key functionality for most of the modules. Based on initial analysis, it has been understood that this is a complex task.
2. Dependence on the deployment schedule of external systems, like IFMAP
3. Challenges on data exchange between VMS and external systems like IFMAP, LOTS & RPS
4. Timely service support of production/QA/Development servers and related issues by DNR/DIT web team

2.4.6 Project Methodology

The State's Project Management Methodology will be used for all project management activities. As recommended by DIT, the project management tool used will be NIKU and for design, development, testing and rollout, the Rational suite of products will be used.

Rational's Unified Process (RUP) will be the process methodology used to develop the software, which includes the following tools.

- ReqPro will be used for Requirements Management
- ClearQuest will be used for Defect Tracking
- ClearCase will be used for Configuration Management
- - TestManager for end user Testing
- Rational's XDE and Rational Rose will be used for Modeling

2.4.7 Projected Timeline

Project Start: Nov 1, 2003 (Assuming that the new PO will be issued by Nov 1, 2003)

Project Complete: May 30, 2004 (Based upon the above mentioned start date and deliverables outlined)

Training Plan: No Training Plan has been outlined within this phase. However, tentative dates have been outlined. Tentative target is Sept 2004 & March 2005

Project Plan - Project Plan has been enclosed in a HTML format in **APPENDIX A**. A detailed project plan will be submitted within 21 days after receipt of PO.

3 PRICING

The Pricing spreadsheet is enclosed in **APPENDIX E**, they are:

1. **Pricing Summary** – A one page summary of the Invoices that will be submitted against the deliverables and the pricing associated against each deliverable.
2. **Hourly rates for Maintenance and Enhancements:**
 - Maintenance for Phase 1 modules will start after the 120 days of the Warranty period. All bug fixes and efforts needed for system upgrades/modifications will be charged on a Time & Material basis. All efforts beyond this cap on cost will be charged separately, after approval from State's Project Core Team. The hourly rates have been identified in the Pricing Proposal – **APPENDIX E**
 - All Enhancements for Phase 1 modules would need to be approved using a Change Management process. All efforts towards this task will be charged separately on a Time & Material basis. The hourly rates have been identified in the Pricing Proposal – **APPENDIX E**

NOTES:

1. Invoices will only include deliverables that have been signed off by DNR. Uncompleted deliverables will be billed after completion in the subsequent invoices.
2. Symbiosis International has used the same hourly rates for each resource that was agreed in Phase 1.
3. The two sub-contracts with Dr. David MacFarlane and Dr Karen Potter-Witter is on a deliverable based contract, hence we do not have an hourly rate for their projects.

4. For all business meetings for the VMS Project beyond Lansing, MI, all travel expenses will be billed separately on ACTUALS as per State of Michigan's travel rules and regulations.
5. Enhancements are additional functionality or change in functionality requested by DNR that have not been previously identified in the project scope of Phase 1.
6. 120 days of Warranty will be provided for the Modules implemented in Phase 2.

4 PROJECT TEAM PERSONNEL

4.1 VMS Staffing Structure:

- **Project Manager – Stanley Samuel**
 - i. Business Analyst – Govindarajan Umakanth
 - ii. Subject Matter Expert (Field) - Michael T Mang
 - iii. Subject Matter Expert - Nemah Hussain
 - iv. Project Analyst / Contract Administrator – Govindarajan Murali
 - v. Professional Trainer from New Horizons Computer Learning Center (No training has been identified in the Phase 2 deliverables)
 - vi. Development Team
 1. Lead .NET Developer – Karthik Narayanan
 2. System Architect – James Thornsberry
 3. Developer/Programmer/Analyst – TBD
- Also refer **APPENDIX D** for the VMS Staffing Chart

4.2 Skill-sets of Additional Resources

The following skill sets will be associated with the additional resources that are being added in Phase 2

- **Developer/Programmer/Analyst** – Expertise in developing Web and Windows applications using VB.NET, VB, ASP.NET , COM +, XML
- **Subject Matter Expert (Field)** – An experienced Forester (at least 10 years) with familiarity with the recent field-level and end-user needs of the timber sale business activity. Experience in using PC's and having good project documentation skills. Should have worked on timber sale preparation, administration, inventory programs and first-line supervision.

5 PROJECT EVALUATION

The project progress will be evaluated and monitored by the Symbiosis Project Manager. Weekly Status Report will be created and provided to the State Project Manager and VMS Core Team. The project progress, issues and concerns will also be communicated through the Weekly Status meetings and also as per the Communication Plan, as outlined in Phase 1.

6 AUTHORIZED CONTRACT EXPEDITOR

G. MURALI

Vice President

Symbiosis International

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7 APPENDIX

#	APPENDIX	DESCRIPTION
1	APPENDIX A	Phase 2 - Project Plan
2	APPENDIX B	Phase 2 – Milestone Delivery
3	APPENDIX C	Phase 2 – High Level Use case for Module 4 & 5
4	APPENDIX D	Phase 2 - VMS Staffing Chart
5	APPENDIX E	Phase 2 – VMS Pricing Summary & Other Rates

Phase 2 Project Plan 11/01/2003 -05/30/2004.mpp

Project Start Date: Mon 11/03/03

Project Finish Date: Fri 05/28/04

Task_Data

ID	Task_Name	Duration	Start_Date	Finish_Date	Predecessors
1	INITIATION PHASE for Phase 2	21 days	Mon 11/03/03	Thu 12/04/03	
2	PO Issued for Phase 2	1 day	Mon 11/03/03	Mon 11/03/03	
3	Conduct Kickoff Meeting	1 day	Tue 11/04/03	Tue 11/04/03	2
4	Create Communication Plan	15 days	Tue 11/04/03	Tue 11/25/03	2
5	Approval of Communication Plan	5 days	Wed 11/26/03	Thu 12/04/03	4
6	Create Project Charter	15 days	Tue 11/04/03	Tue 11/25/03	2
7	Approval of Project Charter	5 days	Wed 11/26/03	Thu 12/04/03	6
8	Create Risk Management Plan	15 days	Tue 11/04/03	Tue 11/25/03	2
9	Approval of Risk Management Plan	5 days	Wed 11/26/03	Thu 12/04/03	8
10	Identify and Define Key Stakeholders	10 days	Tue 11/04/03	Tue 11/18/03	2
11	Create WBS/Project Plan	15 days	Tue 11/04/03	Tue 11/25/03	2
12	Approval of Project Plan	5 days	Wed 11/26/03	Thu 12/04/03	11
13	Create Quality Plan	15 days	Tue 11/04/03	Tue 11/25/03	2
14	Approval of Quality Plan	5 days	Wed 11/26/03	Thu 12/04/03	13
15	Complete - Initiation Phase	0 days	Thu 12/04/03	Thu 12/04/03	14
16	PLANNING PHASE for Phase 2	126 days	Tue 11/04/03	Mon 05/10/04	
17	USE-CASES for Modules 4 & 5	98 days	Tue 11/04/03	Wed 03/31/04	
18	Module 4 - Bidders/Interested Parties Use Case	37 days	Tue 11/04/03	Fri 01/02/04	
19	Analyze Bidders/Interested Parties Module	19 days	Tue 11/04/03	Wed 12/03/03	2
20	Create Use Case for Bidders/Interested Parties Module	18 days	Thu 12/04/03	Fri 01/02/04	19
21	Complete - Use- case for Bidders/Interested Parties	0 days	Fri 01/02/04	Fri 01/02/04	20
22	Module 5 - Prospectus Use Case	61 days	Mon 01/05/04	Wed 03/31/04	
23	Analyze Prospectus Module	31 days	Mon 01/05/04	Wed 02/18/04	21
24	Create Use case for Prospectus Module	30 days	Thu 02/19/04	Wed 03/31/04	23
25	Complete - Use Case for Prospectus Module	0 days	Wed 03/31/04	Wed 03/31/04	24

26	REPORTS	126 days	Tue 11/04/03	Mon 05/10/04	
27	Analysis of Reporting Requirements	63 days	Tue 11/04/03	Tue 02/10/04	2
28	Analyze Reporting Tool	63 days	Wed 02/11/04	Mon 05/10/04	27
29	Complete - Analysis of Reporting Requirements	0 days	Mon 05/10/04	Mon 05/10/04	28
30	DATA SYNCHRONIZATION	64 days	Tue 11/04/03	Wed 02/11/04	
31	Analysis of Data Sync between VMS & TSale	64 days	Tue 11/04/03	Wed 02/11/04	2
32	Complete - Analysis of Data Synch	0 days	Wed 02/11/04	Wed 02/11/04	31
33	EXECUTION PHASE for Phase 2	140 days	Tue 11/04/03	Fri 05/28/04	
34	Evaluation of the Appraisal process	130 days	Tue 11/04/03	Fri 05/14/04	
35	Conduct Research	80 days	Tue 11/04/03	Fri 03/05/04	2
36	Conduct Meetings and Interviews	31 days	Tue 11/04/03	Fri 12/19/03	2
37	Create Analysis Report - Current Tsale appraisal practices	39 days	Tue 11/04/03	Tue 01/06/04	2
38	Complete - Analysis of current Tsale appraisal practices	0 days	Tue 01/06/04	Tue 01/06/04	37
39	Compare FMFM appraisal practices to other systems	37 days	Wed 01/07/04	Mon 03/01/04	38
40	Complete - Compare FMFM appraisal practices to other systems	0 days	Mon 03/01/04	Mon 03/01/04	39
41	Final report of evaluation of performance of current FMFM system	27 days	Mon 03/08/04	Tue 04/13/04	35
42	Complete - Evaluation of performance of current FMFM System	0 days	Tue 04/13/04	Tue 04/13/04	41
43	Approval of the Appraisal by DNR Mgmt	23 days	Wed 04/14/04	Fri 05/14/04	42
44	Evaluation of Volume Equations for Cruise	140 days	Tue 11/04/03	Fri 05/28/04	
45	Research existing data/data collection methods for Volume calculations	110 days	Tue 11/04/03	Fri 04/16/04	2
46	Conduct Field Data Collection	124 days	Mon 12/01/03	Fri 05/28/04	
47	Implement Module 4 - Bidders/Interested Parties	70 days	Mon 01/05/04	Tue 04/13/04	
48	DESIGN - Bidders/Interested Parties	30 days	Mon 01/05/04	Tue 02/17/04	21
49	COMPLETE - First Iteration Design for Bidders/Interested Parties	0 days	Tue 02/17/04	Tue 02/17/04	48
50	IMPLEMENT & UNIT TEST - Bidders/Interested Parties	30 days	Wed 02/18/04	Tue 03/30/04	49
51	COMPLETE - Prototype - Bidders/Interested Parties	0 days	Tue 03/09/04	Tue 03/09/04	50SS+15 days
	Module Bidders/Interested Parties is				

52	QA Ready	0 days	Tue 03/30/04	Tue 03/30/04	50
53	QA/End User Testing - Bidders/Interested Parties	10 days	Wed 03/31/04	Tue 04/13/04	52
54	Completed/SignOff - Bidders/Interested Parties	0 days	Tue 04/13/04	Tue 04/13/04	53
55	CONTROL PHASE for Phase 2	140 days	Tue 11/04/03	Fri 05/28/04	
56	Monitor development/Implementation/Use-Case Creation/Issues	140 days	Tue 11/04/03	Fri 05/28/04	
57	Reveiw Project Documents	140 days	Tue 11/04/03	Fri 05/28/04	2
58	Reveiw/Update Project Plan	140 days	Tue 11/04/03	Fri 05/28/04	2
59	Reveiw/Update QA Plan	140 days	Tue 11/04/03	Fri 05/28/04	2
60	Reveiw/Update Risk Management Plan	140 days	Tue 11/04/03	Fri 05/28/04	2
61	Conduct Quality Assurance	140 days	Tue 11/04/03	Fri 05/28/04	2
62	Meetings/Project Related Tasks	140 days	Tue 11/04/03	Fri 05/28/04	
63	Weekly Meeting	140 days	Tue 11/04/03	Fri 05/28/04	2
64	Monthly Meeting	140 days	Tue 11/04/03	Fri 05/28/04	2
65	Quarterly Meeting	140 days	Tue 11/04/03	Fri 05/28/04	2
66	In-State Travel	140 days	Tue 11/04/03	Fri 05/28/04	2
67	Software Installation & Configuration	140 days	Tue 11/04/03	Fri 05/28/04	2
68	Ad-Hoc Meetings	140 days	Tue 11/04/03	Fri 05/28/04	2
69	Project Administration	140 days	Tue 11/04/03	Fri 05/28/04	2
70	Internal VMS Meeting	140 days	Tue 11/04/03	Fri 05/28/04	2
71	Contract Administration	140 days	Tue 11/04/03	Fri 05/28/04	2
72	Change Management - Clear Case Administration	140 days	Tue 11/04/03	Fri 05/28/04	2
73	Configuration/Change Mangement	140 days	Tue 11/04/03	Fri 05/28/04	2
74	CLOSE OUT PHASE for Phase 2	12 days	Thu 05/13/04	Fri 05/28/04	
75	Conduct Project Acceptance Review & Signoff	12 days	Thu 05/13/04	Fri 05/28/04	55FS-12 days

APPENDIX B - MILESTONE DELIVERY SCHEDULE for PHASE 2 (Nov 1, 2003 - May, 30, 2004)

#	MILESTONES	Nov-03	Dec-03	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04
1	Initiation Complete		4-Dec-03									
2	Use case Mod 4 Complete			2-Jan-04								
3	Use case Mod 5 Complete					31-Mar-04						
4	Analysis of Reporting Req							10-May-04				
5	Analysis of Data Synch				11-Feb-04							
6	Module 4 - First Iteration Design				17-Feb-04							
7	Module - Prototype					9-Mar-04						
8	Module 4 - QA Ready					30-Mar-04						
9	Module 4 - Completed/SignOff						13-Apr-04					
10	Analysis of current timber sale appraisal practices by Prof. Karen Potter-Witter			6-Jan-04								
11	Comparison of FMFM system to other systems by Prof. Karen Potter-Witter					1-Mar-04						
12	Evaluation of performance of current FMFM system by Prof. Karen Potter-Witter						13-Apr-04					
13	Research existing data / data collection methods for Volume determination by Dr David Macfarlane							16-Apr-04				
14	Funding Student Data Collection at MSU	3-Nov-03										

HIGH LEVEL USE CASE FOR MODULE 4 - BIDDERS/INTERESTED PARTIES

This module creates and maintains demographic, preference, and performance information about bidders and other parties interested in obtaining publicly available VMS information. In Phase 2 of VMS, this module will allow authorized VMS users to maintain this information. When VMS is made available for public over the internet, public will be able to maintain their information themselves, limited according to State's security policies.

Screen layouts will be designed with input from VMS users during detailed use case development.

Note: Hereafter "Bidder" is synonymous with Bidder/Interested Party.

Use Case 1: Maintain Bidders/Interested Party Info

Actor: VMS User.

Purpose: To create or maintain information on bidders/interested party.

Main Success Scenario:

1. VMS User indicates desire to maintain bidders.
2. System presents a form with option to create a new bidder or maintain an existing bidder.
3. For maintaining an existing bidder
 - a. VMS User specifies the selection criteria
 - b. System presents a form pre-filled with bidder information pertaining to the selection criteria
 - c. VMS user updates the form with new information or indicates desire to delete the bidder.
4. For creating a new bidder
 - a. VMS User fills the blank form(s) with information about the new bidder
 - b. System creates new bidder

Use Case 2: Select Bidders/Interested Party

Actor: VMS User, Any VMS Module

Purpose: To select a list of bidders based on specified selection criteria for further processing.

Example 1: Select bidders who bid in Baraga county in the last two years and display the result.

Example 2: Select bidders interested in sales of value more than \$10,000 and notify them of the oncoming sale according to their preferences.

Main Success Scenario:

1. Actor specifies the criteria for selecting the bidders and the action to be performed on the list.
2. System applies the selection criteria to retrieve a list of bidders.
3. System performs the specified action on the retrieved list. (Sample actions are: Display the list; Provide the list as a pull down; Notify; Print mailing labels.)

The rest of the document lists the features and requirements not captured in the above use cases, including comments and questions.

1. Information captured should include demographic information, performance information, and preference information.
2. System will provide a method to uniquely identify the bidders. Can SSN or FEIN be used?
3. Sample search criteria:
 - First name, Last name, business name, SSN/FEIN numbers, zip
 - profile preferences (such as FMU/counties, species/products, sale size)
 - status criteria (such as sale won, contract awarded, completion status)
 - negative status like violation, non-completion, suspension)
 - eligibility criteria (such as bond availability, workers compensation)
 - level of information (such as summary, enhanced summary, full bidder package)
 - All bidders/interested parties
 - Non responsive bidders/interested parties
4. VMS shall be able to purge periodically bidders/interested parties based on certain parameters like non responsive bidders/interested parties over a specific period.
5. VMS user shall set profiles and preferences for Bidders/Interested Parties.
6. Preferences (for receiving prospectuses) could be:
 - locations (FMU)
 - locations (County)
 - size of sale (less than , more than, and min max range)
 - species and products
 - level of information (summary, enhanced summary, full bidder package)
 - period of sale (specific year, range)
7. Automatic creation of mail labels, email groups
 - Mailing labels will be created according to the preferences set by the bidders/interested parties for which the sale in the prospectus fall into.

- Email groups will be created according to the preferences set by the bidders/interested parties for which the sale in the prospectus fall into.
8. When the VMS application turns into an Internet application, then Bidders and interested parties could access and maintain their information (profiles and preferences) through the internet.
 9. The above requirement involves bidders/interested parties should be able to access VMS application using a restricted logon to setup/view/update their preferences/profiles. Till such time VMS goes into an Internet application, this will be done by a privileged VMS user.
 10. Instead of permitting bidders/interested parties inside VMS application thru restricted logon, outside interface such as XML file transfer can be looked into. Same thing can be done with cruisers.
 11. FMUs and Counties should be linked. Each FMU can have one or more counties. A county can fall in multiple FMUs.
 12. User should be able to see only those counties under the respective FMU.
 13. User should be able to either choose county and/or FMU when preparing the prospectus.
 14. Prospectuses should be posted in DNR site in michigan.gov to enable public view/print by bidders/interested parties.
 15. Bidders/Interested Parties module interacts heavily with Bid Opening module. (participating bidders, selecting highest bidder, winning bidder information, status of bids, bidder in a warning list such as no bid, suspension, violations, insufficient bond, workers compensation coverage, outliers such as extremely low or high bids, patterns of bidding, bid breaking performance or Non Sufficient Funds issues)
 16. Privileged user (like TSS) can over ride the highest bidder identified by the Bid Opening module. (This point is mentioned here though this may not directly related to bidders/interested parties module.)
 17. Bidders/Interested Parties module interacts with Contract module. (Previous performance issues, requirements document, bond amount status, down payments, workers compensation, external agency permission, Users final comments about sale and bidder performance)
 18. Bid Opening attendees will be considered as a category of bidders/interested parties.
 19. Bidders/Interested Parties module interacts with User Management module. (Assign privileges for users who can add/modify/suspend/remove bidders/interested parties)
 20. Bidders/Interested Parties' module should allow multiple addresses per each Bidder/Interested Party. When Bidder/Interested Party is selected user should be able to indicate which address to use if multiple addresses are present.

HIGH LEVEL USE CASE FOR MODULE 5 – PROSPECTUS MODULE

A prospectus is a collection of Sale Proposals with a scheduled bid opening date, packaged with sale map, general specifications, cutting specifications, and workers compensation requirements. This module will provide **all** the functionality of the current TSale Prospectus Module with the following enhancements:

1. In addition to Lansing office all FMU shall also be able to prepare the prospectus. (Currently only Lansing office can prepare Prospectus.)
2. Currently prospectus is prepared using Word Perfect. This process shall be replaced by a more user friendly process. It could be Microsoft Word Automation.
3. Prospectuses shall be mailed using automated mailing labels that are specifically meeting the preferences set by the bidders/interested parties.
4. Prospectuses shall be emailed to those persons that are specifically meeting the preferences set by the bidders/interested parties.
5. Prospectuses shall be posted in a public website (DNR site in Michigan.gov)
6. Scanned copy of Sale Maps shall be included in the prospectus electronically. This process shall be automated when IFMAP can share the sale map to VMS.
7. A calendar facility shall be available in VMS prospectus module.
8. This calendar should show all the proposed date/time/place for all proposals and can be viewed by all VMS users.
9. The user having privileges to finalize the date/time/place for the sale in a prospectus, should be able to choose a date/time/place that will be shown in the prospectus to avoid any conflicting events.
10. This calendar will be restricted to events in VMS only.
11. This calendar will not interact with any other calendars like GroupWise or State calendars. Manual determination shall be done to eliminate conflict of schedules that could arise from non-VMS events like personal leave or non-VMS meetings etc.

Use Case 1: Generate Prospectus

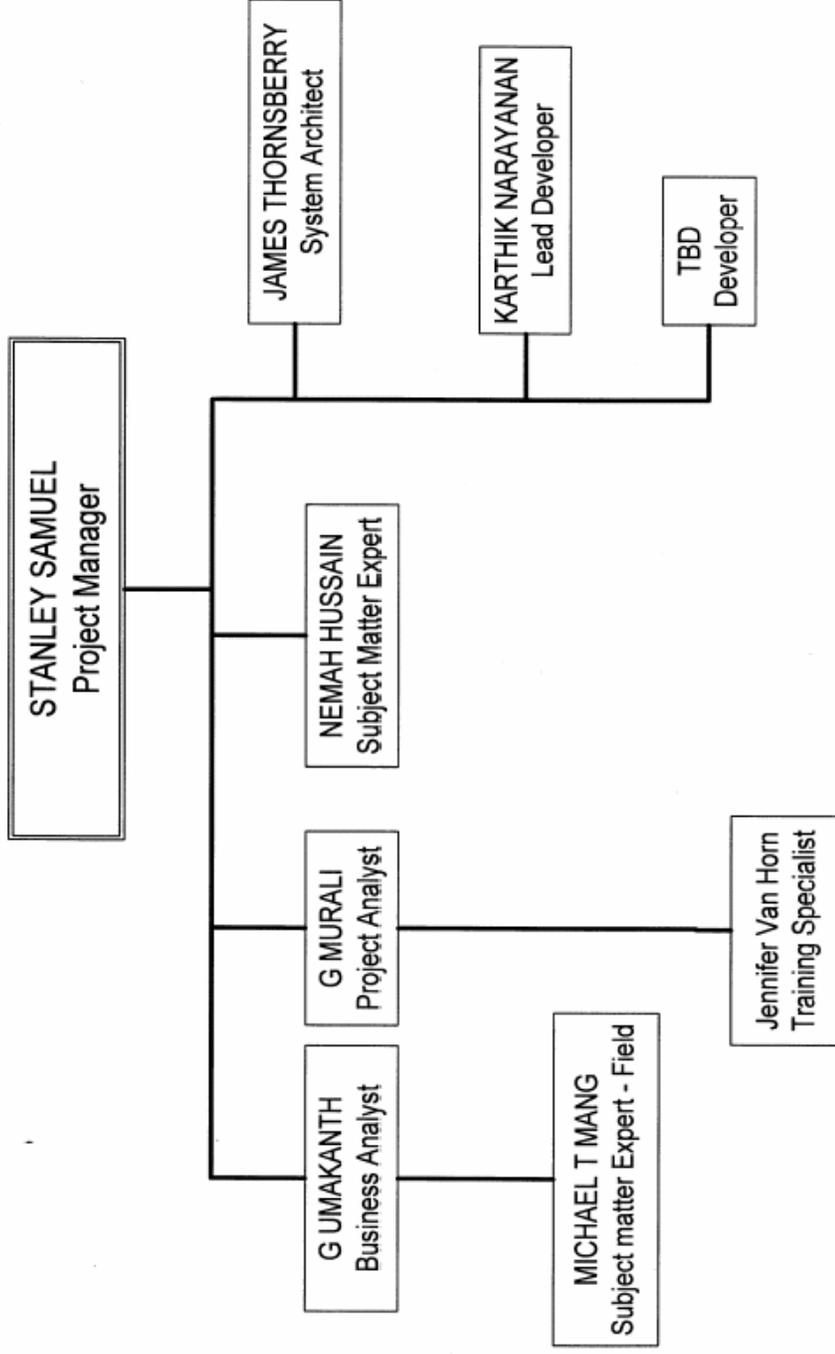
Actor: VMS User

Main Success Scenario:

1. VMS User indicates desire to manage prospectus.
2. System presents the user with a blank or existing prospectus.
3. VMS user adds one or more existing Sales Proposals to the prospectus or deletes Sales Proposals from current prospectus.
4. System presents user with VMS calendar.
5. User selects a bid date, avoiding any schedule conflicts
6. Outside of this use case, VMS User scans the Sale Map(s) and stores the image(s) in the database. One Sale map for each sale proposal in the prospectus.

7. System presents a list of available Sale Maps.
8. VMS User adds one Sale Map(s) from the list to the prospectus. One Sale map for each sale proposal in the prospectus.
9. System lists bidders (and interested parties) meeting the criteria for this prospectus.
10. VMS User revises the selection criteria, if needed.
11. System generates a complete package of the prospectus.
12. System posts the prospectus package on the web, and distributes a notification of the entire package, electronically or by other means preferred by the bidders.

Appendix D - VMS Phase 2 Staffing Chart.doc



APPENDIX E - PRICING SUMMARY OF DELIVERABLES				
Phase 2 (11/01/2003 - 05/30/2004)				
#	Target Completion Date	Deliverables	Amount	Total
Invoice 1	11/3/2003	Funding Student Data Collection at MSU	\$37,950.00	\$37,950.00
Invoice 2	12/4/2003	Initiation Complete	\$4,650.00	\$4,650.00
Invoice 3	1/2/2004	Use case - Module 4 Complete	\$25,440.00	\$25,440.00
Invoice 4	1/6/2004	Analysis of current timber sale appraisal practices by Prof. Karen Potter-Witter	\$2,750.00	\$2,750.00
Invoice 5	2/11/2004	Analysis of Data Synch	\$24,870.00	\$72,095.00
	2/17/2004	Module 4 - First Iteration Design	\$44,475.00	
	3/1/2004	Comparison of FMFM system to other systems by Prof. Karen Potter-Witter	\$2,750.00	
Invoice 6	3/31/2004	Use case - Module 5 Complete	\$36,450.00	\$94,485.00
	3/9/2004	Module 4 - Prototype	\$26,070.00	
	3/30/2004	Module 4 - QA Ready	\$31,965.00	
Invoice 7	4/13/2004	Module 4 - Completed/SignOff	\$19,335.00	\$34,735.00
	4/13/2004	Evaluation of performance of current FMFM system by Prof. Karen Potter-Witter	\$11,000.00	
	4/16/2004	Research existing data / data collection methods for Volume determination by Dr David Macfarlane	\$4,400.00	
Invoice 8	5/10/2004	Analysis of Reporting Req	\$10,050.00	\$19,479.00
	As needed	Travel - reimbursed in accordance with contract terms	\$9,429.00	
Invoice 9	As needed	Modifications to Phase 1 modules	\$17,633.00	\$17,633.00
TOTAL				\$309,217.00
Less 3 % discount				\$9,276.51
GRAND TOTAL				\$299,940.49

MAINTENANCE & ENHANCEMENTS BILLING RATES		
#	Resources	Billing Rate/hr
1	Project Manager	\$90.00
2	Subject Matter Expert 1	\$75.00
3	Subject Matter Expert (Field) 2	\$75.00
4	Business Analyst	\$90.00
5	Contractor Admin/Project Analyst	\$75.00
6	System Designer	\$60.00
7	Developer 1	\$60.00
8	Developer 2	\$60.00
9	Developer 3	\$60.00

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
ACQUISITION SERVICES
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

July 3, 2003

CHANGE NOTICE NO. 1
TO
CONTRACT NO. 071B3001292
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR Symbiosis 3965 Okemos Road, Suite B2 Okemos, MI 48864 murali@1symbiosis.com	TELEPHONE (517) 347-7500 G. Murali
	VENDOR NUMBER/MAIL CODE
	BUYER (517) 241-1646 Greg Faremouth
Contract Administrator: Patty Bogard Vegetative Management System – Dept. of Information Technology	
CONTRACT PERIOD: From: April 23, 2003 To: April 23, 2009	
TERMS Net 45	SHIPMENT N/A
F.O.B. Destination	SHIPPED FROM N/A
MINIMUM DELIVERY REQUIREMENTS N/A	

NATURE OF CHANGE (S):

As part of the contract vendor to provide implementation analysis of all project phases to be accomplished before Phase 2. See enclosed vendor proposal. All other terms and conditions of contract remain the same.

AUTHORITY/REASON:

Per agency and vendor concurrence.

INCREASE: \$21,786.00

TOTAL REVISED ESTIMATED CONTRACT VALUE: \$ 492,326.00



INDEX

1. Proposal Objective.....	Page 2
2. Proposal Details.....	Page 2
3. Work Plan.....	Page 3
4. Staffing Plan.....	Page 4
5. Price Proposal.....	Page 4



ANALYSIS OF VMS MODULES 4 THRU 19 PROPOSAL FROM SYMBIOSIS TO DNR/DIT

DATE: June 12, 2003

PROPOSAL OBJECTIVE:

State of Michigan's Department of Natural Resources (DNR) has a need to do a preliminary analysis of Vegetative Management System (VMS) modules 4 through 19. This proposal will address this need and also identify the modules for VMS Phase 2, such that it will add best value to the DNR's work environment and have least impact on current systems.

PROPOSAL DETAILS:

Symbiosis will:

1. Document the objectives of the project, that is, analysis of VMS modules 4 thru 19.
2. Recommend a tentative schedule of the modules 4 through 19, including reasons for the order, order of implementation, time frame, required dependencies, and opportunities.
NOTE: Due to the nature of the project, some of the modules will be partially implemented, so that there is minimal impact to the current Timber Sale System
3. Recommend a set of modules to be implemented for VMS Phase 2.
4. Identify and document internal and external dependencies among the 19 VMS modules and other external applications.
5. Obtain the project status and projected timeline of the IFMAP project. This will involve interviewing the vendor working on IFMAP, that is, Space Imaging and possibly DNR staff. Understanding the details of the Application Specifications written for the Treatment Tracking and hence identifying the places where IFMAP and VMS will interact. And also to identify which pieces of VMS Application Specs are now in IFMAP Activity Tracking and understand the impacts on modules 4-19.
6. Identify the relationships among Sale Map module, Cruise module and IFMAP.
7. Obtain the project status and projected timeline of the RPS (Receipt Processing System) and identify the interaction needs among RPS and VMS modules.
8. Obtain the project status and projected timeline of the LOTS (Land Ownership Tracking System) and understand the interaction needs among LOTS and VMS. This will also specifically identify the need to use LOTS to determine land acquisition for deposit information (Revenues from Sales to proper account).
9. Will identify the needs, risks, and concerns after evaluating the modules 4 through 19.
10. Will document the differences between the business needs of DNR and the recommended approach from Rational's iterative development for creating the tentative schedule for modules 4 through 19.



11. Initiate the evaluation of the procedures of Appraisal and volume determination equations. Will conduct preliminary discussion with Dr. Karen Potter-Witter to determine the feasibility/scope/cost of doing such a detailed evaluation. Please note that the detailed study of this task is not in the scope of this proposal. That will need to be taken up as a separate task later.
12. Will review the following papers "Fowler/Hussain Volume Equations, Volume Equations Presently Used in T-Sale, and Recommendations for the Future", for the preliminary analysis of the Cruise Module and understand the consequence of the same.
13. Will possibly document an initial draft of the project details, concerns and needs that were missed (if any) during the initial evaluation.
14. Identify the plan and required tools to generate Reports/Queries for all the modules and any licensing requirements
15. Follow all standards and procedures specified by DNR/DIT
16. Provide a guarantee for all work done for DIT/DNR.

Symbiosis requests the following from DNR:

1. Quick feedback from end users and technical staff
2. Provide the App Specs for Treatment Tracking.
3. Arrange to provide suitable staff time from Space Imaging
4. Arrange to provide suitable staff time from consulting company developing LOTS
5. Arrange to provide suitable staff time from DNR managing IFMAP and LOTS projects.
6. Arrange to provide suitable staff time from FMFM Accounting personnel (Laura Harrison)
7. Provide a copy of the paper "Fowler/Hussain Volume Equations, Volume Equations Presently Used in T-Sale, and Recommendations for the Future".

WORK PLAN:

- (1) Receipt of Purchase Order
- (2) Receipt of PO + 7 business days – Identify objectives and propose timeline
- (3) Receipt of PO + 15 business days – Requirements Analysis, Interview with Space Imaging and DNR staff and creation of initial preliminary analysis of Vegetative Management System (VMS) modules 4 thru 19
- (4) Receipt of PO + 20 business days – Submission of preliminary Analysis of Vegetative Management System (VMS) modules 4 thru 19, with recommendation for modules to include in VMS Phase 2.

Total Timeline: 20 business days from the Purchase Order



STAFFING PLAN:

G. Murali and Dr. Nemah Hussain will be the key staff working on this task while other VMS team members will contribute to a smaller extent. Time spent of this task will be tracked separately from VMS Phase 1.

PRICE PROPOSAL:

Resource Name	Project Role	Hours	Rate	Total
Govindarajan Murali	Project Analyst	120	\$ 75	\$ 9,000.00
Nemah Hussain	SME	40	\$ 75	\$ 3,000.00
Stanley Samuel	Project Manager	40	\$ 90	\$ 3,600.00
Karthikeyan Narayanan	Developer	20	\$ 60	\$ 1,200.00
Govindarajan Umakanth	Business Analyst	40	\$ 90	\$ 3,600.00
Cost of Ultra- Grid Tool				\$ 1,386.00
			GRAND TOTAL	\$ 21,786.00

SYMBIOSIS proposes a **FIXED PRICE** of **\$21,786.00** for the preliminary analysis of the Vegetative Management System (VMS) modules 4 through 19.

NOTE:

Please contact Stanley Samuel at 517 335 5510 or G. Murali at 517 373 2562 for any questions.

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
ACQUISITION SERVICES
P.O. BOX 30026, LANSING, MI 48909
 OR
530 W. ALLEGAN, LANSING, MI 48933

April 24, 2003

NOTICE
TO
CONTRACT NO. 071B3001292
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR Symbiosis 3965 Okemos Road, Suite B2 Okemos, MI 48864	TELEPHONE (517) 347-7500 G. Murali
	VENDOR NUMBER/MAIL CODE
	BUYER (517) 241-1646 Greg Faremouth
Contract Administrator: Patty Bogard Vegetative Management System – Dept. of Information Technology	
CONTRACT PERIOD: From: April 23, 2003 To: April 23, 2009	
TERMS <p style="text-align: center;">Net 45</p>	SHIPMENT <p style="text-align: center;">N/A</p>
F.O.B. <p style="text-align: center;">Destination</p>	SHIPPED FROM <p style="text-align: center;">N/A</p>
MINIMUM DELIVERY REQUIREMENTS <p style="text-align: center;">N/A</p>	

The terms and conditions of this Contract are those enclosed. In the event of any conflicts between the specifications, terms and conditions indicated by the State and those indicated by the vendor, those of the State take precedence.

Estimated Contract Value: \$ 470,540.00

**STATE OF MICHIGAN
 DEPARTMENT OF MANAGEMENT AND BUDGET
 ACQUISITION SERVICES
 P.O. BOX 30026, LANSING, MI 48909
 OR
 530 W. ALLEGAN, LANSING, MI 48933**

CONTRACT NO. 071B3001292
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR Symbiosis 3965 Okemos Road, Suite B2 Okemos, MI 48864	TELEPHONE (517) 347-7500 G. Murali VENDOR NUMBER/MAIL CODE BUYER (517) 241-1646 Greg Faremouth
Contract Administrator: Patty Bogard Vegetative Management System – Dept. of Information Technology	
CONTRACT PERIOD: From: April 23, 2003 To: April 23, 2009	
TERMS <p style="text-align: center;">Net 45</p>	SHIPMENT <p style="text-align: center;">N/A</p>
F.O.B. <p style="text-align: center;">Destination</p>	SHIPPED FROM <p style="text-align: center;">N/A</p>
MINIMUM DELIVERY REQUIREMENTS <p style="text-align: center;">N/A</p>	
MISCELLANEOUS INFORMATION: The terms and conditions of this Contract are those enclosed. In the event of any conflicts between the specifications, terms and conditions indicated by the State and those indicated by the vendor, those of the State take precedence. Estimated Contract Value: \$ 470,540.00	

THIS IS NOT AN ORDER: This Contract Agreement is awarded on the basis of our inquiry bearing the [ITB No.07113000039](#). Orders for delivery of equipment will be issued directly by the [Department of Information Technology](#) through the issuance of a Purchase Order Form.

All terms and conditions of the invitation to bid are made a part hereof.

<p>FOR THE VENDOR:</p> <p style="text-align: center;">SYMBIOSIS</p> <hr/> <p style="text-align: center;">Firm Name</p> <hr/> <p style="text-align: center;">Authorized Agent Signature</p> <hr/> <p style="text-align: center;">Authorized Agent (Print or Type)</p> <hr/> <p style="text-align: center;">Date</p>	<p>FOR THE STATE:</p> <hr/> <p style="text-align: center;">Signature</p> <p style="text-align: center;">Greg Faremouth, Buyer Specialist</p> <hr/> <p style="text-align: center;">Name</p> <p style="text-align: center;">Tactical Purchasing, Acquisition Services</p> <hr/> <p style="text-align: center;">Title</p> <hr/> <p style="text-align: center;">Date</p>
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**ACQUISITION SERVICES
STATE OF MICHIGAN**

Contract #071B3001292

TABLE OF CONTENTS

INTRODUCTION 4

SECTION I – CONTRACTUAL SERVICES TERMS AND CONDITIONS

I-A PURPOSE 5

I-B TERM OF CONTRACT 5

I-C ISSUING OFFICE 5

I-D CONTRACT ADMINISTRATOR 6

I-E PURCHASE ORDERS 7

I-F COST LIABILITY 7

I-G CONTRACTOR RESPONSIBILITIES 7

I-H NEWS RELEASES 7

I-I DISCLOSURE 7

I-J ACCOUNTING RECORDS..... 8

I-K INDEMNIFICATION..... 8

I-L NON INFRINGEMENT/COMPLIANCE WITH LAWS 10

I-M WARRANTIES AND REPRESENTATIONS 10

I-O STAFFING OBLIGATIONS 11

I-P WORK PRODUCT AND OWNERSHIP 12

I-Q CONFIDENTIALITY OF DATA AND INFORMATION 13

I-R REMEDIES FOR BREACH OF CONFIDENTIALITY 13

I-S CONTRACTOR'S LIABILITY INSURANCE..... 13

I-T NOTICE AND RIGHT TO CURE 15

I-U CANCELLATION 15

I-V RIGHTS AND OBLIGATIONS UPON CANCELLATION 17

I-W EXCUSABLE FAILURE 18

I-X ASSIGNMENT 19

I-Y DELEGATION..... 19

I-Z NON-DISCRIMINATION CLAUSE 19

I-AA MODIFICATION OF SERVICE 19

I-BB NOTICES..... 21

I-CC ENTIRE AGREEMENT 21

I-DD NO WAIVER OF DEFAULT 21

I-EE SEVERABILITY 21

I-FF HEADINGS..... 21

I-GG RELATIONSHIP OF THE PARTIES 22

I-HH UNFAIR LABOR PRACTICES 22

I-II SURVIVOR..... 22

I-JJ GOVERNING LAW 22

I-KK YEAR 2000 SOFTWARE COMPLIANCE 22

I-LL CONTRACT DISTRIBUTION 23

I-MMSTATEWIDE CONTRACTS..... 23

I-NN STATE STANDARDS	23
I-PP DISCLOSURE OF LITIGATION.....	25
I-QQ STOP WORK	26
I-RR PAYMENT	28

SECTION II –WORKSTATEMENT

BACKGROUND/PROBLEM STATEMENT	31
OJECTIVES.....	31
1.0 INTRODUCTION.....	32
2.0 DESCRIPTION OF SYMBIOSIS SERVICES.....	33
3.0 ADDITIONAL STATE RESPONSIBILITIES.....	45
4.0 ESTIMATED SCHEDULE	47
5.0 DELIVERABLE MATERIALS	49
6.0 COMPLETION CRITERIA.....	56
7.0 KEY ASSUMPTIONS.....	56
8.0 PROJECT CHANGE CONTROL PROCEDURE.....	60
9.0 STAFFING	60
10.0 SYSTEM WARRANTY	61

APPENDICES

See Enclosed CD for Appendices

- A Contractor Not to Exceed Pricing**
- B Module Detail Use-Case Specifications**
- C Project Management Documents**
- D Planned VMS Modules Inventory**
- E Preliminary Module Skills Inventory**
- F VMS Business Area Analysis**
- G VMS Design Contractor Final Reports**
- H VMS State Standard Exception Request**

DEFINITION OF TERMS

TERMS	DEFINITIONS
Blanket Purchase Order	Alternate term for “Contract” used in the State’s Computer system (Michigan Automated Information Network [MAIN])
Cancellation	Ending all rights and obligations of the State and Contractor, except for any rights and obligations that are due and owing.
Contract	A binding agreement entered into by the State of Michigan resulting from a bidder’s proposal; see also “Blanket Purchase Order.”
Contractor	The successful bidder who is awarded a Contract.
DMB	Michigan Department of Management and Budget
DNR	Michigan Department of Natural Resources
Expiration	Except where specifically provided for in the Contract, the ending and termination of the contractual duties and obligations of the parties to the Contract pursuant to a mutually agreed upon date.
FMFM	Department of Natural Resources, Forest Mineral and Fire Management Division
IFMAP	Integrated Forest Monitoring, Assessment and Prescription system currently under development in FMFM to manage the timber resource inventory.
ITB	Invitation to Bid - A generic form used by Acquisition Services to solicit quotations for services or commodities. The ITB serves as the document for transmitting the RFP to interested potential bidders.
RFP	Request For Proposal - A term used by the State to solicit proposals for services such as consulting. Typically used when the requesting agency requires vendor assistance in identifying an acceptable manner of solving a problem.
SME	Subject matter expert.
State	The State of Michigan For Purposes of Indemnification as set forth in section I-J, State means the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees and agents.
Successful Bidder	The bidder(s) awarded a Contract as a result of a solicitation.
VMS	Vegetative Management System for development in this RFP.
Work Product	Work Product means any data compilations, reports, and any other media, materials, or other objects or works of authorship created or produced by the Contractor as a result of and in furtherance of performing the services required by this Contract.



INTRODUCTION

This Contract is issued by Acquisition Services at the Michigan Department of Management and Budget. The document contains four sections:

Section I, Contractual Terms and Conditions. This section describes the general contractual terms and conditions that will be a part of this Contract. By submitting a proposal, each bidder acknowledges its acceptance of these provisions without change.

Section II, Work Statement. This section is a detailed description of the services to be contracted for, including the background and objectives of the work. It is the most important portion of the contract.

Acquisition Services, DMB, will prepare a Contract, which will govern the Contractor's performance of services. The Contract will include the general terms and conditions in Section I and the Work Statement in Section II. The Contract may include additional provisions or revisions to the Work Statement to reflect agreements with the selected Contractor based on proposal submissions and subsequent discussions.



**SECTION I
CONTRACTUAL SERVICES TERMS AND CONDITIONS**

I-A PURPOSE

The purpose of this Contract is to obtain analysis, design, construction, implementation, user training, support and on-going maintenance and enhancement services for the **internet and intranet-based Vegetative Management System (VMS)**.

The contract awarded from this solicitation will be initially time and materials for the first three VMS modules specified in this CONTRACT (refer to appendix B. Module Detail Use-Case Specifications). Implementation of the first three modules must be completed within eight months of contract start-up following a mutually agreed upon schedule. Bidders should note that project progress will be monitored very closely during the time and materials period for compliance with contract requirements, the VMS Quality Plan and agreed upon project standards. A contractor evaluated as unsatisfactory during this period will be terminated.

I-B TERM OF CONTRACT

The State of Michigan is not liable for any cost incurred by any bidder prior to signing of a Contract by all parties. The activities (VMS analysis, design and construction and implementation, follow-up maintenance and enhancement support) in the proposed Contract cover the period **April 2003 through April 2009**. This date range may need to be modified as the pace of the project and the value of follow-up services is reviewed. The State fiscal year is October 1st through September 30th. The prospective Contractor should realize that payments in any given fiscal year are contingent upon enactment of legislative appropriations.

I-C ISSUING OFFICE

This CONTRACT is issued by the State of Michigan, Department of Management and Budget (DMB), Acquisition Services, hereafter known as Acquisition Services, for the State of Michigan, Department of Natural Resources/Forest, Mineral and Fire Management (DNR/FMFM). Where actions are a combination of those of the Acquisition Services and **DNR/FMFM**, the authority will be known as the State.



Acquisition Services is the sole point of contact in the State with regard to all procurement and contractual matters relating to the services described herein. The Acquisition Services is the only office authorized to change, modify, amend, alter, clarify, etc., the prices, specifications, terms, and conditions of this Contract. ACQUISITION SERVICES will remain the SOLE POINT OF CONTACT throughout the contractual process, until such time as the Director of Purchasing shall direct otherwise in writing. All communications concerning this contract must be addressed to:

Greg Faremouth, Buyer
 Strategic Purchasing Division
 DMB, Acquisition Services
 2nd Floor, Mason Building
 P.O. Box 30026
 Lansing, MI 48909
faremouthg@michigan.gov
 (517) 241-1646

I-D CONTRACT ADMINISTRATOR

Upon receipt at Acquisition Services of the properly executed Contract Agreement, it is anticipated that the Director of Purchasing will direct that the person named below or any other person so designated be authorized to administer the Contract on a day-to-day basis during the term of the Contract. However, administration of any Contract resulting from this Request implies no authority to change, modify, clarify, amend, or otherwise alter the prices, terms, conditions, and specifications of such Contract. That authority is retained by Acquisition Services. The Contract Administrator for this project is:

Contract Administrator:
Patty Bogard, Department Specialist
Michigan Department of Information Technology
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I-E PURCHASE ORDERS

Orders for delivery of commodities and/or services may be issued directly by the State Departments through the issuance of a Purchase Order Form referencing this Contract (Blanket Purchase Order) agreement and the terms and conditions contained herein. Contractor is asked to reference the Purchase Order Number on all invoices for payment.

I-F COST LIABILITY

The State of Michigan assumes no responsibility or liability for costs incurred by the Contractor prior to the signing of any Contract resulting from this Request. Total liability of the State is limited to the terms and conditions of any resulting Contract.

I-G CONTRACTOR RESPONSIBILITIES

The Contractor will be required to assume responsibility for all contractual activities offered in this proposal whether or not that Contractor performs them. Further, the State will consider the Prime Contractor to be the sole point of contact with regard to contractual matters, including but not limited to payment of any and all costs resulting from the anticipated Contract. If any part of the work is to be subcontracted, the contractor must notify the state and identify the subcontractor(s), including firm name and address, contact person, complete description of work to be subcontracted, and descriptive information concerning subcontractor's organizational abilities. The State reserves the right to approve subcontractors for this project and to require the Contractor to replace subcontractors found to be unacceptable. The Contractor is totally responsible for adherence by the subcontractor to all provisions of the Contract.

I-H NEWS RELEASES

News releases pertaining to this document or the services, study, data, or project to which it relates will not be made without prior written State approval, and then only in accordance with the explicit written instructions from the State. No results of the program are to be released without prior approval of the State and then only to persons designated.

I-I DISCLOSURE

All information in a bidder's proposal and any Contract resulting from this ITB is subject to the provisions of the Freedom of Information Act, 1976 Public Act No. 442, as amended, MCL 15.231, *et seq.*



I-J ACCOUNTING RECORDS

The Contractor will be required to maintain all pertinent financial and accounting records and evidence pertaining to the Contract in accordance with generally accepted principles of accounting and other procedures specified by the State of Michigan. Financial and accounting records shall be made available, upon request, to the State of Michigan, its designees, or the Michigan Auditor General at any time during the Contract period and any extension thereof, and for three (3) years from the expiration date and final payment on the Contract or extension thereof.

I-K INDEMNIFICATION

1. General Indemnification

Upon receipt of written notice, as required herein, the CONTRACTOR shall indemnify, defend and hold harmless the State, its departments, divisions, agencies, sections, commissions, officers, employees and agents from and against all losses, liabilities, penalties, fines, damages and claims (including taxes), and all related costs and expenses (including reasonable attorneys' fees and disbursements and costs of investigation, litigation, settlement, judgments, interest and penalties), arising from or in connection with any of the following:

- a. any claim, demand, action, citation or legal proceeding against the State, its departments, divisions, agencies, sections, commissions, officers, employees and agents for any negligence or wrongful acts arising out of or resulting from (1) the services and products provided or (2) performance of the work, duties, responsibilities, actions or omissions of the CONTRACTOR or any of its subcontractors under this CONTRACT;
- b. any claim, demand, action, citation or legal proceeding against the State, its departments, divisions, agencies, sections, commissions, officers, employees and agents arising out of or resulting from a material breach by the CONTRACTOR of any representation or warranty made by the CONTRACTOR in the CONTRACT;
- c. any claim, demand, action, citation or legal proceeding against the State, its departments, divisions, agencies, sections, commissions, officers, employees and agents arising out of or related to occurrences that the CONTRACTOR is required to insure against as provided for in this CONTRACT;
- d. any claim, demand, action, citation or legal proceeding against the State, its departments divisions, agencies, sections, commissions, officers, employees and agents arising out of or resulting from the death or bodily injury of any person, or the damage, loss or destruction of any real or tangible personal property, in connection with the performance of services by the CONTRACTOR, by any of its subcontractors, by anyone directly or indirectly employed by any of them, or by



- e. anyone for whose acts any of them may be liable; provided, however, that this indemnification obligation shall not apply to the extent, if any, that such death, bodily injury or property damage is caused by the negligence or reckless or intentional wrongful conduct of the State;
- f. any claim, demand, action, citation or legal proceeding against the State, its departments, divisions, agencies, sections, commissions, officers, employees and agents which results from an act or omission of the CONTRACTOR or any of its subcontractors in its or their capacity as an employer of a person.

2. Patent/Copyright Infringement Indemnification

The CONTRACTOR shall indemnify, defend and hold harmless the State, its departments, divisions, agencies, sections, commissions, officers, employees and agents from and against all losses, liabilities, penalties, fines, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and disbursements and costs of investigation, litigation, settlement, judgments, interest and penalties) incurred in connection with any action or proceeding threatened or brought against the State by a third party to the extent that such action or proceeding is based on a claim that any piece of equipment, software, commodity or service supplied by the CONTRACTOR or its subcontractors, or the operation of such equipment, software, commodity or service, infringes any United States or foreign patent, copyright, trade secret or other proprietary right of any person or entity, which right is enforceable under the laws of the United States. In addition, should the equipment, software, commodity, or service, or the operation thereof, become or in the Contractor's opinion be likely to become the subject of a claim of infringement, the CONTRACTOR shall at the Contractor's sole expense (i) procure for the State the right to continue using the equipment, software, commodity or service or, if such option is not reasonably available to the CONTRACTOR, (ii) replace or modify the same with equipment, software, commodity or service of equivalent function and performance so that it becomes non-infringing, or, if such option is not reasonably available to CONTRACTOR, (iii) accept its return by the State with appropriate credits to the State against the Contractor's charges and reimburse the State for any losses or costs incurred as a consequence of the State ceasing its use and returning it.

3. Indemnification Obligation Not Limited

In any and all claims against the State of Michigan, its departments, divisions, agencies, sections, commissions, officers, employees and agents, by any employee of the CONTRACTOR or any of its subcontractors, the indemnification obligation under the CONTRACT shall not be limited in any way by the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any of its subcontractors under worker's disability compensation acts, disability benefit acts or other employee benefit acts. This indemnification clause is intended to be comprehensive. Any overlap in subclauses, or the fact that greater specificity is



provided as to some categories of risk, is not intended to limit the scope of indemnification under any other subclauses.

4. Continuation of Indemnification Obligation

The duty to indemnify will continue in full force and effect notwithstanding the expiration or early termination of the contract with respect to any claims based on facts or conditions, which occurred prior to termination.

I-L NON INFRINGEMENT/COMPLIANCE WITH LAWS

The Contractor warrants that in performing the services called for by this Contract it will not violate any applicable law, rule, or regulation, any contracts with third parties, or any intellectual rights of any third party, including but not limited to, any United States patent, trademark, copyright, or trade secret.

I-M WARRANTIES AND REPRESENTATIONS

The Contract will contain customary representations and warranties by the Contractor, including, without limitation, the following:

1. The Contractor will perform all services in accordance with high professional standards in the industry;
2. The Contractor will use adequate numbers of qualified individuals with suitable training, education, experience and skill to perform the services;
3. The Contractor will use its best efforts to use efficiently any resources or services necessary to provide the services that are separately chargeable to the State;
4. The Contractor will use its best efforts to perform the services in the most cost effective manner consistent with the required level of quality and performance;
5. The Contractor will perform the services in a manner that does not infringe the proprietary rights of any third party;
6. The Contractor will perform the services in a manner that complies with all applicable laws and regulations;
7. The Contractor has duly authorized the execution, delivery and performance of the Contract;
8. The Contractor has not provided any gifts, payments or other inducements to any officer, employee or agent of the State;
9. The Contractor will maintain all equipment and software for which it has maintenance responsibilities in good operating condition and will undertake all



10. repairs and preventive maintenance in accordance with applicable manufacturer's recommendations;
11. The Contractor will use its best efforts to ensure that no viruses or similar items are coded or introduced into the systems used to provide the services;
12. The Contractor will not insert or activate any disabling code into the systems used to provide the services without the State's prior written approval;
13. A one hundred and twenty (120) day warranty on all purchased and developed software, data conversion programs, and data and customization to the product performed by the contractor.

I-N TIME IS OF THE ESSENCE

The Contractor agrees that time is of the essence in the performance of the Contractor's obligations under this Contract.

I-O STAFFING OBLIGATIONS

The State reserves the right to approve the Contractor's assignment of Key Personnel to this project and to recommend reassignment of personnel deemed unsatisfactory by the State. The State reserves the right to interview all contract staff to ensure they are qualified to fulfill the contract project role assigned.

The Contractor shall not remove or reassign, without the State's prior written approval any of the Key Personnel until such time as the Key Personnel have completed all of their planned and assigned responsibilities in connection with performance of the Contractor's obligations under this Contract. The Contractor agrees that the continuity of Key Personnel is critical and agrees to the continuity of Key Personnel. Removal of Key Personnel without the written consent of the State may be considered by the State to be a material breach of this Contract. The prohibition against removal or reassignment shall not apply where Key Personnel must be replaced for reasons beyond the reasonable control of the Contractor including but not limited to illness, disability, resignation or termination of the Key Personnel's employment.

The State and the Contractor agree that the following personnel are Key Personnel for purposes of this Contract:

- Full-time Project Manager (Stanley Samuel, PMP)
- SME (Nemah Hussain)
- Business Analyst (G. Umakanth)



I-P WORK PRODUCT AND OWNERSHIP

1. Work Products shall be considered works made by the Contractor or equipment and equipment purchased by the contractor for hire by the State and shall belong exclusively to the State and its designees, unless specifically provided otherwise by mutual agreement of the Contractor and the State. If by operation of law any of the Work Product, including all related intellectual property rights, is not owned in its entirety by the State automatically upon creation thereof, the Contractor agrees to assign, and hereby assigns to the State and its designees the ownership of such Work Product, including all related intellectual property rights. The Contractor agrees to provide, at no additional charge, any assistance and to execute any action reasonably required for the State to perfect its intellectual property rights with respect to the aforementioned Work Product. The State would prefer to own all source code for system software work products; however, the State will consider ownership alternatives as proposed by the vendor.

2. Notwithstanding any provision of this Contract to the contrary, any preexisting work or materials including, but not limited to, any routines, libraries, tools, methodologies, processes or technologies (collectively, the “Development Tools”) created, adapted or used by the Contractor in its business generally, including any and all associated intellectual property rights, shall be and remain the sole property of the Contractor, and the State shall have no interest in or claim to such preexisting work, materials or Development Tools, except as necessary to exercise its rights in the Work Product. Such rights belonging to the State shall include, but not be limited to, the right to use, execute, reproduce, display, perform and distribute copies of and prepare derivative works based upon the Work Product, and the right to authorize others to do any of the foregoing, irrespective of the existence therein of preexisting work, materials and Development Tools, except as specifically limited herein.

3. The Contractor and its subcontractors shall be free to use and employ their general skills, knowledge and expertise, and to use, disclose, and employ any generalized ideas, concepts, knowledge, methods, techniques or skills gained or learned during the course of performing the services under this Contract, so long as the Contractor or its subcontractors acquire and apply such information without disclosure of any confidential or proprietary information of the State, and without any unauthorized use or disclosure of any Work Product resulting from this Contract.



I-Q CONFIDENTIALITY OF DATA AND INFORMATION

1. All financial, statistical, personnel, technical and other data and information relating to the State’s operation which are designated confidential by the State and made available to the Contractor in order to carry out this Contract, or which become available to the Contractor in carrying out this Contract, shall be protected by the Contractor from unauthorized use and disclosure through the observance of the same or more effective procedural requirements as are applicable to the State. The identification of all such confidential data and Information as well as the State’s procedural requirements for protection of such data and information from unauthorized use and disclosure shall be provided by the State in writing to the Contractor. If the methods and procedures employed by the Contractor for the protection of the Contractor’s data and information are deemed by the State to be adequate for the protection of the State’s confidential information, such methods and procedures may be used, with the written consent of the State, to carry out the intent of this section.

2. The Contractor shall not be required under the provisions of this section to keep confidential, (1) information generally available to the public, (2) information released by the State generally, or to the Contractor without restriction, (3) information independently developed or acquired by the Contractor or its personnel without reliance in any way on otherwise protected information of the State. Notwithstanding the foregoing restrictions, the Contractor and its personnel may use and disclose any information which it is otherwise required by law to disclose, but in each case only after the State has been so notified, and has had the opportunity, if possible, to obtain reasonable protection for such information in connection with such disclosure.

I-R REMEDIES FOR BREACH OF CONFIDENTIALITY

The Contractor acknowledges that a breach of its confidentiality obligations as set forth in section I-Q of this Contract shall be considered a material breach of the Contract. Furthermore the Contractor acknowledges that in the event of such a breach the State shall be irreparably harmed. Accordingly, if a court should find that the Contractor has breached or attempted to breach any such obligations, the Contractor will not oppose the entry of an appropriate order restraining it from any further breaches or attempted or threatened breaches. This remedy shall be in addition to and not in limitation of any other remedy or damages provided by law.

I-S CONTRACTOR'S LIABILITY INSURANCE

The Contractor shall purchase and maintain such insurance as will protect him/her from claims set forth below which may arise out of or result from the Contractor's operations under the Contract (Purchase Order), whether such operations be by himself/herself or by any subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:



1. Claims under workers' disability compensation, disability benefit and other similar employee benefit act. A non-resident Contractor shall have insurance for benefits payable under Michigan's Workers' Disability Compensation Law for any employee resident of and hired in Michigan; and as respects any other employee protected by workers' disability compensation laws of any other State the Contractor shall have insurance or participate in a mandatory State fund to cover the benefits payable to any such employee.
2. Claims for damages because of bodily injury, occupational sickness or disease, or death of his/her employees.
3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than his/her employees, subject to limits of liability of not less than \$300,000.00 each occurrence and, when applicable \$1,000,000.00 annual aggregate, for non-automobile hazards and as required by law for automobile hazards.
4. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom, subject to a limit of liability of not less than \$50,000.00 each occurrence for non-automobile hazards and as required by law for automobile hazards.
5. Insurance for Subparagraphs (3) and (4) non-automobile hazards on a combined single limit of liability basis shall not be less than \$300,000.00 each occurrence and when applicable, \$1,000,000.00 annual aggregate.
6. Claims for damages because of Errors and Omissions in the performance of duties inherent to the profession of **Systems Development**, subject to a limit of liability of not less than \$300,000.00 each occurrence and, when applicable, \$1,000,000.00 annual aggregate. For this coverage, the State requires that it be named as a co-insured party.

The insurance shall be written for not less than any limits of liability herein specified or required by law, which ever is greater, and shall include contractual liability insurance as applicable to the Contractor's obligations under the Indemnification clause of the Contract (Purchase Order).

UPON CONTRACT EXECUTION, THE CONTRACTOR'S INSURANCE AGENCY MUST FURNISH TO THE DIRECTOR OF THE ACQUISITION SERVICES, ORIGINAL CERTIFICATE (S) OF INSURANCE VERIFYING LIABILITY COVERAGE. THE CONTRACT OR PURCHASE ORDER NO. MUST BE SHOWN ON THE CERTIFICATE OF INSURANCE TO ASSURE CORRECT FILING. These Certificates shall contain a provision that coverage's afforded under the policies will not be canceled until at least fifteen days prior written notice bearing the Contract Number or Purchase Order Number has been given to the Director of Purchasing.



I-T NOTICE AND RIGHT TO CURE

In the event of a curable breach by the Contractor, the State shall provide the Contractor written notice of the breach and a time period to cure said breach described in the notice. This section requiring notice and an opportunity to cure shall not be applicable in the event of successive or repeated breaches of the same nature or if the State determines in its sole discretion that the breach poses a serious and imminent threat to the health or safety of any person or the imminent loss, damage or destruction of any real or tangible personal property.

I-U CANCELLATION

The State may cancel this Contract without further liability or penalty to the State, its departments, divisions, agencies, offices, commissions, officers, agents and employees for any of the following reasons:

1. Material Breach by the Contractor. In the event that the Contractor breaches any of its material duties or obligations under the Contract, which are either not capable of or subject to being cured, or are not cured within the time period specified in the written notice of breach provided by the State, or pose a serious and imminent threat to the health and safety of any person, or the imminent loss, damage or destruction of any real or tangible personal property, the State may, having provided written notice of cancellation to the Contractor, cancel this Contract in whole or in part, for cause, as of the date specified in the notice of cancellation.

In the event that this Contract is cancelled for cause, in addition to any legal remedies otherwise available to the State by law or equity, the Contractor shall be responsible for all costs incurred by the State in canceling the Contract, including but not limited to, State administrative costs, attorneys fees and court costs, and any additional costs the State may incur to procure the services required by this Contract from other sources. All excess reprocurement costs and damages shall not be considered by the parties to be consequential, indirect or incidental, and shall not be excluded by any other terms otherwise included in the Contract.

In the event the State chooses to partially cancel this Contract for cause charges payable under this Contract will be equitably adjusted to reflect those services that are cancelled.

In the event this Contract is cancelled for cause pursuant to this section, and it is therefore determined, for any reason, that the Contractor was not in breach of contract pursuant to the provisions of this section, that cancellation for cause shall be deemed to have been a cancellation for convenience, effective as of the same date, and the rights and obligations of the parties shall be limited to that otherwise provided in the Contract for a cancellation for convenience.



2. Cancellation For Convenience By the State. The State may cancel this Contract for its convenience, in whole or part, if the State determines that such a cancellation is in the State's best interest. Reasons for such cancellation shall be left to the sole discretion of the State and may include, but not necessarily be limited to (a) the State no longer needs the services or products specified in the Contract, (b) relocation of office, program changes, changes in laws, rules, or regulations make implementation of the Contract services no longer practical or feasible, and (c) unacceptable prices for additional services requested by the State. The State may cancel the Contract for its convenience, in whole or in part, by giving the Contractor written notice 30 days prior to the date of cancellation. If the State chooses to cancel this Contract in part, the charges payable under this Contract shall be equitably adjusted to reflect those services that are cancelled.

3. Non-Appropriation. In the event that funds to enable the State to effect continued payment under this Contract are not appropriated or otherwise made available. The Contractor acknowledges that, if this Contract extends for several fiscal years, continuation of this Contract is subject to appropriation or availability of funds for this project. If funds are not appropriated or otherwise made available, the State shall have the right to cancel this Contract at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of cancellation to the Contractor. The State shall give the Contractor written notice of such non-appropriation or unavailability within 30 days after it receives notice of such non-appropriation or unavailability.

4. Criminal Conviction. In the event the Contractor, an officer of the Contractor, or an owner of a 25% or greater share of the Contractor, is convicted of a criminal offense incident to the application for or performance of a State, public or private Contract or subcontract; or convicted of a criminal offense including but not limited to any of the following: embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, attempting to influence a public employee to breach the ethical conduct standards for State of Michigan employees; convicted under State or federal antitrust statutes; or convicted of any other criminal offense which in the sole discretion of the State, reflects upon the Contractor's business integrity.

5. Approval(s) Rescinded. In the event any final administrative or judicial decision or adjudication disapproves a previously approved request for purchase of personal services pursuant to Article 11, Section 5 of the Michigan Constitution of 1963 and Chapter 7 of the Civil Service Rules. Notwithstanding any other provision of this Contract to the contrary, the State Personnel Director is authorized to disapprove contractual disbursements for personal services if the Director determines that the Contract or the disbursements violate Article 11, Section 5, of the constitution or violates applicable Civil Service rules or regulations. Cancellation may be in whole or in part and may be immediate as of the date of the written notice to the Contractor or may be effective as of the date stated in such written notice.



I-V RIGHTS AND OBLIGATIONS UPON CANCELLATION

1. If the Contract is canceled by the State for any reason, the Contractor shall, (a) stop all work as specified in the notice of cancellation, (b) take any action that may be necessary, or that the State may direct, for preservation and protection of Work Product or other property derived or resulting from the Contract that may be in the Contractor's possession, (c) return all materials and property provided directly or indirectly to the Contractor by any entity, agent or employee of the State, (d) transfer title and deliver to the State, unless otherwise directed by the Contract Administrator or his or her designee, all Work Product resulting from the Contract, and (e) take any action to mitigate and limit any potential damages, or requests for Contractor adjustment or cancellation settlement costs, to the maximum practical extent, including, but not limited to, canceling or limiting as otherwise applicable, those subcontracts, and outstanding orders for material and supplies resulting from the canceled Contract.

2. In the event the State cancels this Contract prior to its expiration for its own convenience, the State shall pay the Contractor for all charges due for services provided prior to the date of cancellation and if applicable as a separate item of payment pursuant to the Contract, for partially completed Work Product, on a percentage of completion basis. In the event of a cancellation for cause, or any other reason under the Contract, the State will pay, if applicable, as a separate item of payment pursuant to the Contract, for all partially completed Work Products, to the extent that the State requires the Contractor to submit to the State any such deliverables, and for all charges due under the Contract for any cancelled services provided by the Contractor prior to the cancellation date. All completed or partially completed Work Product prepared by the Contractor pursuant to this Contract shall, at the option of the State, become the State's property, and the Contractor shall be entitled to receive just and fair compensation for such Work Product. Regardless of the basis for the cancellation, the State shall not be obligated to pay, or otherwise compensate, the Contractor for any lost expected future profits, costs or expenses incurred with respect to Services not actually performed for the State.

3. If any such cancellation by the State is for cause, the State shall have the right to set-off against any amounts due the Contractor, the amount of any damages for which the Contractor is liable to the State under this Contract or pursuant to law and equity.

4. Upon a good faith cancellation, the State shall have the right to assume, at its option, any and all subcontracts and agreements for services and materials provided under this Contract, and may further pursue completion of the Work Product under this Contract by replacement contract or otherwise as the State may in its sole judgment deem expedient.



I-W EXCUSABLE FAILURE

1. Neither party shall be liable for any default or delay in the performance of its obligations under the Contract if and to the extent such default or delay is caused, directly or indirectly, by: fire, flood, earthquake, elements of nature or acts of God; riots, civil disorders, rebellions or revolutions in any country; the failure of the other party to perform its material responsibilities under the Contract (either itself or through another contractor); injunctions (provided the injunction was not issued as a result of any fault or negligence of the party seeking to have its default or delay excused); or any other cause beyond the reasonable control of such party; provided the non-performing party and its subcontractors are without fault in causing such default or delay, and such default or delay could not have been prevented by reasonable precautions and cannot reasonably be circumvented by the non-performing party through the use of alternate sources, workaround plans or other means, including disaster recovery plans. In such event, the non-performing party will be excused from any further performance or observance of the obligation(s) so affected for as long as such circumstances prevail and such party continues to use its best efforts to recommence performance or observance whenever and to whatever extent possible without delay provided such party promptly notifies the other party in writing of the inception of the excusable failure occurrence, and also of its abatement or cessation.

2. If any of the above enumerated circumstances substantially prevent, hinder, or delay performance of the services necessary for the performance of the State's functions for more than 14 consecutive days, and the State determines that performance is not likely to be resumed within a period of time that is satisfactory to the State in its reasonable discretion, then at the State's option: (a) the State may procure the affected services from an alternate source, and the State shall not be liable for payments for the unperformed services under the Contract for so long as the delay in performance shall continue; (b) the State may cancel any portions of the Contract so affected and the charges payable thereunder shall be equitably adjusted to reflect those services canceled; or (c) the Contract will be canceled without liability of the State to the Contractor as of the date specified by the State in a written notice of cancellation to the Contractor. The Contractor will not have the right to any additional payments from the State as a result of any excusable failure occurrence or to payments for services not rendered as a result of the excusable failure condition. Defaults or delays in performance by the Contractor which are caused by acts or omissions of its subcontractors will not relieve the Contractor of its obligations under the Contract except to the extent that a subcontractor is itself subject to any excusable failure condition described above and the Contractor cannot reasonably circumvent the effect of the subcontractor's default or delay in performance through the use of alternate sources, workaround plans or other means.



I-X ASSIGNMENT

The Contractor shall not have the right to assign this Contract or to assign or delegate any of its duties or obligations under this Contract to any other party (whether by operation of law or otherwise), without the prior written consent of the State. Any purported assignment in violation of this section shall be null and void. Further, the Contractor may not assign the right to receive money due under the Contract without the prior written consent of the State Purchasing Director.

I-Y DELEGATION

The Contractor shall not delegate any duties or obligations under this Contract to a subcontractor other than a subcontractor named in the bid unless the State Purchasing Director has given written consent to the delegation.

I-Z NON-DISCRIMINATION CLAUSE

In the performance of any Contract or purchase order resulting herefrom, the bidder agrees not to discriminate against any employee or applicant for employment, with respect to their hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, religion, national origin, ancestry, age, sex, height, weight, marital status, physical or mental disability unrelated to the individual's ability to perform the duties of the particular job or position. The bidder further agrees that every subcontract entered into for the performance of any Contract or purchase order resulting herefrom will contain a provision requiring non-discrimination in employment, as herein specified, binding upon each subcontractor. This covenant is required pursuant to the Elliot Larsen Civil Rights Act, 1976 Public Act 453, as amended, MCL 37.2101, *et seq*, and the Persons with Disabilities Civil Rights Act, 1976 Public Act 220, as amended, MCL 37.1101, *et seq*, and any breach thereof may be regarded as a material breach of the Contract or purchase order.

I-AA MODIFICATION OF SERVICE

The Director of Purchasing reserves the right to modify this service during the course of this Contract. Such modification may include adding or deleting tasks that this service shall encompass and/or any other modifications deemed necessary.

This Contract may not be revised, modified, amended, extended, or augmented, except by a writing executed by the parties hereto, and any breach or default by a party shall not be waived or released other than in writing signed by the other party.

The State reserves the right to request from time to time, any changes to the requirements and specifications of the Contract and the work to be performed by the Contractor under the Contract. The Contractor shall provide a change order process and all requisite forms. The State reserves the right to negotiate the process during contract negotiation. At a minimum, the State would like the Contractor to provide a detailed outline of all work to be done, including tasks necessary to accomplish the deliverables,



timeframes, listing of key personnel assigned, estimated hours for each individual per task, and a complete and detailed cost justification.

1. Within five (5) business days of receipt of a request by the State for any such change, or such other period of time as to which the parties may agree mutually in writing, the Contractor shall submit to the State a proposal describing any changes in products, services, timing of delivery, assignment of personnel, and the like, and any associated price adjustment. The price adjustment shall be based on a good faith determination and calculation by the Contractor of the additional cost to the Contractor in implementing the change request less any savings realized by the Contractor as a result of implementing the change request. The Contractor's proposal shall describe in reasonable detail the basis for the Contractor's proposed price adjustment, including the estimated number of hours by task by labor category required to implement the change request.
2. If the State accepts the Contractor's proposal, it will issue a change notice and the Contractor will implement the change request described therein. The Contractor will not implement any change request until a change notice has been issued validly. The Contractor shall not be entitled to any compensation for implementing any change request or change notice except as provided explicitly in an approved change notice.
3. If the State does not accept the Contractor's proposal, the State may:
 - a. withdraw its change request; or
 - b. modify its change request, in which case the procedures set forth above will apply to the modified change request.

If the State requests or directs the Contractor to perform any activities that are outside the scope of the Contractor's responsibilities under the Contract ("New Work"), the Contractor must notify the State promptly, and before commencing performance of the requested activities, that it believes the requested activities are New Work. If the Contractor fails to so notify the State prior to commencing performance of the requested activities, any such activities performed before notice is given by the Contractor shall be conclusively considered to be In-scope Services, not New Work.

If the State requests or directs the Contractor to perform any services or functions that are consistent with and similar to the services being provided by the Contractor under the Contract, but which the Contractor reasonably and in good faith believes are not included within the scope of the Contractor's responsibilities and charges as set forth in the Contract, then prior to performing such services or function, the Contractor shall promptly notify the State in writing that it considers the services or function to be an "Additional Service" for which the Contractor should receive additional compensation. If the Contractor does not so notify the State, the Contractor shall have no right to claim thereafter that it is entitled to additional compensation for performing such services or functions. If the Contractor does so notify the State, then such a service or function shall be governed by the change request procedure set forth in the preceding paragraph.



IN THE EVENT PRICES ARE NOT ACCEPTABLE TO THE STATE, THE CONTRACT SHALL BE SUBJECT TO COMPETITIVE BIDDING BASED UPON THE NEW SPECIFICATIONS.

I-BB NOTICES

Any notice given to a party under this Contract must be written and shall be deemed effective, if addressed to such party as addressed below upon (i) delivery, if hand delivered; (ii) receipt of a confirmed transmission by facsimile if a copy of the notice is sent by another means specified in this section; (iii) the third (3rd) Business Day after being sent by U.S. mail, postage pre-paid, return receipt requested; or (iv) the next Business Day after being sent by a nationally recognized overnight express courier with a reliable tracking system.

For the Contractor: **G.Murali, 3965 Okemos Road, Suite B2 Okemos, MI 48864**

For the State: **Greg Faremouth, 530 West Allegan, Lansing 48933 2nd floor Mason Building.**

Either party may change its address where notices are to be sent giving written notice in accordance with this section.

I-CC ENTIRE AGREEMENT

The contents of this document and the vendor's proposal will become contractual obligations, if a Contract ensues. Failure of the successful bidder to accept these obligations may result in cancellation of the award.

This Contract shall represent the entire agreement between the parties and supersedes all proposals or other prior agreements, oral or written, and all other communications between the parties relating to this subject.

I-DD NO WAIVER OF DEFAULT

The failure of a party to insist upon strict adherence to any term of this Contract shall not be considered a waiver or deprive the party of the right thereafter to insist upon strict adherence to that term, or any other term, of the Contract.

I-EE SEVERABILITY

Each provision of the Contract shall be deemed to be severable from all other provisions of the Contract and, if one or more of the provisions of the Contract shall be declared invalid, the remaining provisions of the Contract shall remain in full force and effect.

I-FF HEADINGS

Captions and headings used in the Contract are for information and organization purposes. Captions and headings, including inaccurate references, do not, in any way, define or limit the requirements or terms and conditions of this Contract.



I-GG RELATIONSHIP OF THE PARTIES

The relationship between the State and the Contractor is that of client and independent Contractor. No agent, employee, or servant of the Contractor or any of its subcontractors shall be or shall be deemed to be an employee, agent, or servant of the State for any reason. The Contractor will be solely and entirely responsible for its acts and the acts of its agents, employees, servants and subcontractors during the performance of this Contract.

I-HH UNFAIR LABOR PRACTICES

Pursuant to 1980 Public Act 278, as amended, MCL 423.231, et seq, the State shall not award a Contract or subcontract to an employer whose name appears in the current register of employers failing to correct an unfair labor practice compiled pursuant to section 2 of the Act. This information is compiled by the United States National Labor Relations Board.

A Contractor of the State, in relation to the Contract, shall not enter into a Contract with a subcontractor, manufacturer, or supplier whose name appears in this register. Pursuant to section 4 of 1980 Public Act 278, MCL 423.324, the State may void any Contract if, subsequent to award of the Contract, the name of the Contractor as an employer, or the name of the subcontractor, manufacturer or supplier of the Contractor appears in the register.

I-II SURVIVOR

Any provisions of the Contract that impose continuing obligations on the parties including, but not limited to the Contractor’s indemnity and other obligations shall survive the expiration or cancellation of this Contract for any reason.

I-JJ GOVERNING LAW

This Contract shall in all respects be governed by, and construed in accordance with, the laws of the State of Michigan. Any dispute arising herein shall be resolved in the State of Michigan.

I-KK YEAR 2000 SOFTWARE COMPLIANCE

The vendor warrants that all software for which the vendor either sells or licenses to the State of Michigan and used by the State prior to, during or after the calendar year 2000, includes or shall include, at no added cost to the State, design and performance so the State shall not experience software abnormality and/or the generation of incorrect results from the software, due to date oriented processing, in the operation of the business of the State of Michigan.



The software design, to insure year 2000 compatibility, shall include, but is not limited to: data structures (databases, data files, etc.) that provide 4-digit date century; stored data that contain date century recognition, including, but not limited to, data stored in databases and hardware device internal system dates; calculations and program logic (e.g., sort algorithms, calendar generation, event recognition, and all processing actions that use or produce date values) that accommodates same century and multi-century formulas and date values; interfaces that supply data to and receive data from other systems or organizations that prevent non-compliant dates and data from entering any State system; user interfaces (i.e., screens, reports, etc.) that accurately show 4 digit years; and assurance that the year 2000 shall be correctly treated as a leap year within all calculation and calendar logic.

I-LL CONTRACT DISTRIBUTION

Acquisition Services shall retain the sole right of Contract distribution to all State agencies and local units of government unless other arrangements are authorized by the Acquisition Services.

I-MM STATEWIDE CONTRACTS

If the contract is for the use of more than one agency and if the goods or services provided under the contract do not meet the form, function and utility required by an agency, that agency may, subject to state purchasing policies, procure the goods or services from another source.

I-NN STATE STANDARDS

1. **EXISTING TECHNOLOGY STANDARDS.** The Contractor will adhere to all existing standards as described within the comprehensive listing of the State’s existing technology standards at <http://www.michigan.gov/dit> (Principles, Policies & Standards link, Policies & Standards link).
2. **PM METHODOLOGY STANDARDS.** The State has adopted a standard, documented Project Management Methodology (PMM) for use on all Information Technology (IT) based projects. This policy is referenced in the document titled “Project Management Methodology” – DMB Administrative Guide Procedure 1380.02 issued June 2000. Vendors may obtain a copy of this procedure by contacting the DMB Office of Information Technology Solutions. The State of Michigan Project Management Methodology can be obtained from the DMB Office of Project Management’s website at <http://www.michigan.gov/dit> (Principles, Policies & Standards link, Strategies & Methodologies link).

The contractor shall use the State’s PMM to manage State of Michigan Information Technology (IT) based projects. The requesting agency will provide the applicable documentation and internal agency processes for the methodology. If the vendor requires training on the methodology, those costs shall be the responsibility of the vendor, unless otherwise stated.



3. ADHERANCE TO PORTAL TECHNOLOGY TOOLS. For all projects involving e-Government, all bidders are expected to read, understand and support compliance with the provisions of Executive Order No. 2000-6 and Executive Directive 2001-1, issued by the State of Michigan, Office of the Governor.

The State of Michigan, e-Michigan Office has adopted the following tools as its Portal Technology development efforts:

- Vignette Content Management and personalization Tool
- Inktomi Search Engine
- Tivoli Directory Services (Presentation Layer)
- WebSphere Application Server
- WebSphere e-Pay Payment Processing Module

Vendors must use the Portal Technology Tools to implement web content management and deployment efforts for agencies. Tools used for web based application development must work in conjunction with Vignette and Inktomi. The interaction with Vignette and Inktomi must be coordinated with the Center of Excellence at the Office of e-Michigan.

Under special circumstances vendors that are compelled to use alternate tools must submit an exception request to the e-Michigan Office for evaluation and approval of each alternate tool prior to proposal evaluation by the State.

Bidders should note that a Standard Exception Request SER-02-003 has been approved for the VMS system development (refer to appendix H - VMS State Standard Exception Request). Based on this standard exception, Microsoft .NET will be used as the development tool for the VMS system and Microsoft IIS will be used as the web server.

I-00 TRANSITION ASSISTANCE

If this Contract is not renewed at the end of this term, or is canceled prior to its expiration, for any reason, the Contractor must provide for up to six months after the expiration or cancellation of this Contract, all reasonable transition assistance requested by the State, to allow for the expired or canceled portion of the Services to continue without interruption or adverse effect, and to facilitate the orderly transfer of such services to the State or its designees. Such transition assistance will be deemed by the parties to be governed by the terms and conditions of this Contract, (notwithstanding this expiration or cancellation) except for those Contract terms or conditions that do not reasonably apply to such transition assistance. The State shall pay the Contractor for any resources utilized in performing such transition assistance at the most current rates provided by the Contract for Contract performance. If the State cancels this Contract for cause, then the State will be entitled to off set the cost of paying the Contractor for the additional resources the Contractor utilized in providing transition assistance with any damages the State may have otherwise accrued as a result of said cancellation.



I-PP DISCLOSURE OF LITIGATION

1. The Contractor shall notify the State in its bid proposal, if it, or any of its subcontractors, or their officers, directors, or key personnel under this Contract, have ever been convicted of a felony, or any crime involving moral turpitude, including, but not limited to fraud, misappropriation or deception. Contractor shall promptly notify the State of any criminal litigation, investigations or proceeding which may have arisen or may arise involving the Contractor or any of the Contractor's subcontractor, or any of the foregoing entities' then current officers or directors during the term of this Contract and three years thereafter.

2. The Contractor shall notify the State in its bid proposal, and promptly thereafter as otherwise applicable, of any civil litigation, arbitration, proceeding, or judgments that may have arisen against it or its subcontractors during the five years preceding its bid proposal, or which may occur during the term of this Contract or three years thereafter, which involve (1) products or services similar to those provided to the State under this Contract and which either involve a claim in excess of \$250,000 or which otherwise may affect the viability or financial stability of the Contractor , or (2) a claim or written allegation of fraud by the Contractor or any subcontractor hereunder, arising out of their business activities, or (3) a claim or written allegation that the Contractor or any subcontractor hereunder violated any federal, state or local statute, regulation or ordinance. Multiple lawsuits and or judgments against the Contractor or subcontractor, in any an amount less than \$250,000 shall be disclosed to the State to the extent they affect the financial solvency and integrity of the Contractor or subcontractor.

3. All notices under subsection 1 and 2 herein shall be provided in writing to the State within fifteen business days after the Contractor learns about any such criminal or civil investigations and within fifteen days after the commencement of any proceeding, litigation, or arbitration, as otherwise applicable. Details of settlements which are prevented from disclosure by the terms of the settlement shall be annotated as such. Semi-annually, during the term of the Contract, and thereafter for three years, Contractor shall certify that it is in compliance with this Section. Contractor may rely on similar good faith certifications of its subcontractors, which certifications shall be available for inspection at the option of the State.

4. Assurances - In the event that such investigation, litigation, arbitration or other proceedings disclosed to the State pursuant to this Section, or of which the State otherwise becomes aware, during the term of this Contract, causes the State to be reasonably concerned about:
 - a. the ability of the Contractor or its subcontractor to continue to perform this Contract in accordance with its terms and conditions, or



- b. whether the Contractor or its subcontractor in performing services is engaged in conduct which is similar in nature to conduct alleged in such investigation, litigation, arbitration or other proceedings, which conduct would constitute a breach of this Contract or violation of Michigan or Federal law, regulation or public policy, then

The Contractor shall be required to provide the State all reasonable assurances requested by the State to demonstrate that: (a) the Contractor or its subcontractors hereunder will be able to continue to perform this Contract in accordance with its terms and conditions, (b) the Contractor or its subcontractors will not engage in conduct in performing services under this Contract which is similar in nature to the conduct alleged in any such litigation, arbitration or other proceedings.

- 5. The Contractor’s failure to fully and timely comply with the terms of this section, including providing reasonable assurances satisfactory to the State, may constitute a material breach of this Contract.

I-QQ STOP WORK

- 1. The State may, at any time, by written stop work order to the Contractor, require that the Contractor stop all, or any part, of the work called for by this Contract for a period of up to 90 days after the stop work order is delivered to the Contractor, and for any further period to which the parties may agree. The stop work order shall be specifically identified as such and shall indicate that it is issued under this section. Upon receipt of the stop work order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the stop work order during the period of work stoppage. Within the period of the stop work order, the State shall either:
 - a. Cancel the stop work order; or
 - b. Cancel the work covered by the stop work order as provided in the cancellation section of this Contract.

- 2. If a stop work order issued under this section is canceled or the period of the stop work order or any extension thereof expires, the Contractor shall resume work. The State shall make an equitable adjustment in the delivery schedule, the contract price, or both, and the Contract shall be modified, in writing, accordingly, if:
 - a. The stop work order results in an increase in the time required for, or in the Contractor’s costs properly allocable to the performance of any part of this Contract.
 - b. The Contractor asserts its right to an equitable adjustment within 30 days after the end of the period of work stoppage; provided, that if the State decides the facts justify the action, the State may receive and act upon a proposal submitted at any time before final payment under this Contract.



3. If the stop work order is not canceled and the work covered by the stop work order is canceled for reasons other than material breach, the State shall allow reasonable costs resulting from the stop work order in arriving at the cancellation settlement.
4. If a stop work order is not canceled and the work covered by the stop work order is canceled for material breach, the State shall not allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop work order.

An appropriate equitable adjustment may be made in any related contract of the Contractor that provides for adjustment and is affected by any stop work order under this section. The State shall not be liable to the Contractor for loss of profits because of a stop work order issued under this section.



I-RR PAYMENT

The total not to exceed price for the VMS Project is \$461,419.30. Payments will be made on a time and material basis based on the schedule included herein.

Hourly Rate Schedule. The following hourly rate schedule is provided as an option for the State. This rate schedule is effective April 23 2003 and remains in effect at the rates indicated through April 23, 2006. . A Project Change Request will be executed by the Parties in the event the State chooses to acquire any of these services.

<u>JOB CATEGORY</u>	<u>HOURLY RATE</u>
Project Manager	\$90
Timber Sales Expert	\$75
Analyst	\$90
Contractor Admin	\$75
Office Developer	\$35
Production Coordinator	\$40
System Designer	\$60
Developer 1	\$60
Developer 2	\$60
QA Tester	\$60
Graphic Designer	\$60
GIS/GPS Developer	\$60
PDA Developer	\$60
Statistician	\$60
Training Specialist	\$75
Help Desk Level 1 onsite	\$35
Help Desk Level 1 offsite	\$20

For the services listed above, payment is due within forty-five days after receipt of a valid invoice from Symbiosis.



Statement of Work

For the

DNR

VMS PROJECT

Revised
April 9, 2003

Symbiosis



TABLE OF CONTENTS

BACKGROUND/PROBLEM STATEMENT 31
OJECTIVES..... 31
1.0 INTRODUCTION 32
2.0 DESCRIPTION OF SYMBIOSIS SERVICES 33
3.0 ADDITIONAL STATE RESPONSIBILITIES..... 45
4.0 ESTIMATED SCHEDULE 47
5.0 DELIVERABLE MATERIALS 49
6.0 COMPLETION CRITERIA..... 56
7.0 KEY ASSUMPTIONS..... 56
8.0 PROJECT CHANGE CONTROL PROCEDURE..... 60
9.0 STAFFING 60
10.0 SYSTEM WARRANTY 61



WORK STATEMENT

BACKGROUND/PROBLEM STATEMENT

The Vegetative Management System (VMS) is being implemented to provide end-to-end automation of the Forest, Mineral and Fire Management Division Timber Sale business area. This is a complex business practice. Sales of timber from stand-managed land generate upwards of \$25 million in revenue annually. Sales must be awarded fairly, timber harvested must be bound by consistent administrative and method constrains, revenue must be accounted for and allocated back to state funding sources, and sales, as actually cut, must feed back data into the overall resource inventory and planning system (IFMAP). It is expected the automation and standardization of the embedded business processes will make this business practice much more efficient.

The overall contract covers the construction of VMS from an application and database design developed in a prior consulting engagement and detailed in the module and used case documents developed by FMFM business and technical staff. VMS has been subdivided into nineteen modules (refer to appendix D). Construction and rollout will proceed on an iterative basis, with each modules (comprised of one or more use cases) being treated as a separate, functional element of VMS, which may be implemented alone or grouped with another module for implementation. Implementation includes a formal round of system release training conducted at a small number of field locations and at division headquarters in Lansing, Michigan. Following acceptance and implementation each module element will go in to maintenance mode. Contractor will provide follow-up maintenance and enhancement services for VMS for three years following conclusion of the base construction phase of the project.

This contract release covers the analysis, design, construction, implementation and training for the first three VMS modules.

OJECTIVES

General

This contract release has four general objective areas:

1. Establish a manageable and effective contract such that construction, rollout, on-going support and overall project and program management objectives are achieved on an economical basis. Appendix C Quality Plan and agreed upon project standards negotiated between the State and Contractor at contract startup will be control this objective.
2. Complete requirements definition, design, construction and implementation of the first three VMS modules. These modules are: Security, Bid Opening and Sale Condition/Condition Group. Detailed Use Case documents are provided for each of these modules in Appendix B.



3. Provide training for the Security, Bid Opening and Sale Condition/Condition Group VMS modules timed to occur once all three modules have been implemented. This includes development of a release-specific training program, comprehensive training kit, user guide, reference material and delivery of instructor lead training sessions at three field locations.

4. The above general objectives must be completed within an 8 month time frame

1.0 INTRODUCTION

1.1 GENERAL

This Statement of Work (SOW) is subject to the terms and conditions of the DIT Michigan Contract between the State of Michigan and Symbiosis (the Agreement) dated April 23, 2003. This SOW defines the scope of work to be accomplished by Symbiosis for the DNR VMS Project. This document:

- Lists the key assumptions on which the scope of work was developed
- Describes the tasks to be performed by Symbiosis
- Describes completion criteria
- Describes deliverable materials
- Details the responsibilities of Symbiosis and the State of Michigan (referred to herein as “the State”)

1.2 CHANGES

Any changes to these underlying assumptions and responsibilities, or any additional work outside the scope described herein (the “Services”), may result in changes to the estimated schedule, fees, or other terms of this SOW or the Agreement. This SOW may be amended during the term of the Agreement, to add additional services, by following the Project Change Control Procedure included in Section 8 of this document.

1.3 SCOPE OF WORK

The goal of the DNR is to have an interactive information and transaction vegetative management system to enhance the way in which the DNR conducts Timber Sales throughout the State of Michigan. This Statement of Work represents the tasks and responsibilities required to develop, implement, test, integrate, maintain, support, train, and operate a web-based VMS. Symbiosis services include:

- Development and implementation of web-based VMS application software modules and components
- Create training materials and conduct training sessions for VMS application software modules and components
- Maintenance of the VMS application software modules and components



During the contract period, Symbiosis shall use and operate the hardware, communications network equipment, and software associated with providing the web-based VMS service.

2.0 DESCRIPTION OF SYMBIOSIS SERVICES

Symbiosis shall provide services to perform the following tasks:

2.1 PROJECT MANAGEMENT

The objective of this task is to establish a framework for project communications, reporting, procedural and contractual activity. Symbiosis shall provide a Project Manager who shall have explicit responsibility for the administration and technical direction of Symbiosis efforts on this project.

2.1.1 SYMBIOSIS Responsibilities

Assign a Symbiosis Project Manager as a single point of contact for project communications. The Symbiosis Project Manager shall:

- 2.1.1.1 Prepare and maintain a project plan, roles and responsibility definition document, communications plan, risk management plan and issue management process
- 2.1.1.2 Measure and evaluate progress against the project plan
- 2.1.1.3 Track issues and monitor closure
- 2.1.1.4 Identify project risks and containment actions
- 2.1.1.5 Coordinate and manage the activities of Symbiosis project personnel
- 2.1.1.6 Coordinate and manage the activities of Symbiosis’s subcontractors
- 2.1.1.7 With the State VMS Project Manager, resolve deviations from the Project Plan
- 2.1.1.8 With the State VMS Project Manager, administer Project Change Control procedures
- 2.1.1.9 Prepare and submit weekly Status Reports

2.1.2 State Responsibilities

Prior to the start of this Statement of Work under the Agreement, the State shall designate a person, the State VMS Project Manager, to represent the DNR and manage the State’s responsibilities for this project. The State VMS Project Manager shall:



- 2.1.2.1 Serve as the interface between the Symbiosis Project Manager and all State departments participating in this project.
- 2.1.2.2 Gain the participation and commitment of all State personnel affected by the project, and escalate issues within the State as may be necessary to maintain timely progress of the project.
- 2.1.2.3 With the Symbiosis Project Manager, administer Project Change Control in accordance with the Agreement and this SOW.
- 2.1.2.4 Attend project status meetings.
- 2.1.2.5 Obtain and provide information, data, decisions and approvals, within three (3) or five (5) working days of Symbiosis's request unless a different response time is negotiated. Five (5) business days for major document approvals. Other approvals will be handled in three (3) days. Any deliverable requiring approval where formal written response has not been received from the State by the agreed approval deadline may result in delays in the schedule.
- 2.1.2.6 Resolve deviations from the project plan caused by State personnel or activities.
- 2.1.2.7 Provide subject matter experts as needed to achieve project goals and schedules.
- 2.1.2.8 Coordinate and manage the activities of the State VMS Project personnel.
- 2.1.2.9 With Symbiosis Project Manager, mutually agree on a method of communications for written information for this project.
- 2.1.2.10 Monitor and report project status on a regular basis to the State management.

2.1.3 Symbiosis Deliverables

- 2.1.3.1 Weekly Status Report
- 2.1.3.2 Project Plan Documents

2.1.4 Completion Criteria

This task is an ongoing activity that shall be performed throughout the project. It shall be considered complete on the date Symbiosis has completed and the State has accepted all of the Symbiosis task responsibilities in this Statement of Work.



2.2 VMS DEVELOPMENT

The objective of this task is to design, develop, test, and deploy a web-based VMS application that provides electronically delivered services and information to the DNR Timber section employees across the State of Michigan. This task consists of the following:

- Participate in Operational Review Design, Develop and Integrate VMS System Modules and Components
- Develop and Integrate VMS System
- Conduct Integration and System Test

2.3 OPERATIONAL REVIEW

Symbiosis shall assist in conducting a review with the State to further understand and validate the requirements for the VMS based upon the RFP and any clarifications made during presentations, discussions, and/or negotiations subsequent to the RFP. Based on information exchanged in the operational review, Symbiosis shall work with the State to finalize the content and schedule of each release of the VMS implementation. A validated Detailed Requirements Document shall be produced for the system along with any adjustments made to the Project Plans.

2.3.1 SYMBIOSIS Responsibilities

- 2.3.1.1 Assist in conducting the Operational Review discussions
- 2.3.1.2 Create a validated Detailed Requirements Document for the State
- 2.3.1.3 Review the validated Detailed Requirements Document with the State Project Manager and incorporate mutually agreed upon changes
- 2.3.1.4 Revise a System Software Schematic Document with the State Project Manager and assigned architects and incorporate mutually agreed upon changes

2.3.2 State Responsibilities

- 2.3.2.1 Provide subject matter experts to assist in the Operational Review discussions
- 2.3.2.2 Provide assistance in answering all technical questions on a timely basis
- 2.3.2.3 Provide conference room facilities as required
- 2.3.2.4 Review and approve Detailed Requirements Document
- 2.3.2.5 Review and approve System Schematic Document
- 2.3.2.6 Provide State and Agency subject matter experts as may be required



- 2.3.2.7 Provide required development software
- 2.3.2.8 Provide Source Safe Software or equivalent
- 2.3.2.9 Provide Planned VMS Module Inventory (Appendix D), Preliminary Module Skill Inventory (Appendix E), VMS Business Area Analysis document (Appendix F) and VMS Design Contractor's Final Reports (Appendix G) associated with the original RFP.

2.3.3 SYMBIOSIS Deliverables

- 2.3.1.1 Detailed Requirements Document
- 2.3.1.2 System Software Schematic Document

2.3.4 Completion Criteria

This task shall be considered complete when the Symbiosis Deliverables listed above have been delivered to the State Project Manager and approved in accordance with the Acceptance Plan described in this Statement of Work.

2.4 VMS DESIGN

Symbiosis shall design the integrated suite of the VMS system modules and components. A demonstration system shall be loaded with test data to show initial application design and proof of concept. Symbiosis shall provide a hard copy of sample screens and prototype software for review.

2.4.1 Symbiosis Responsibilities

- 2.4.1.1 Develop VMS flow diagrams and sample screens (wire frames) based on HTML templates.
- 2.4.1.2 Load test wire frames on the demo system and provide demonstration
- 2.4.1.3 Document report layouts for reports
- 2.4.1.4 Conduct Review Session

2.4.2 State Responsibilities

- 2.4.2.1 Attend system demonstration and Review Session
- 2.4.2.2 Review system design including VMS services and applications, and how it interfaces to the legacy host system
- 2.4.2.3 Provide Acceptance Sign-off Document approving of overall System and Application Design



2.4.3 Symbiosis Deliverables

- 2.4.3.1 VMS flow diagrams and sample screens
- 2.4.3.2 Demonstration of solution scalability
- 2.4.3.3 Demonstration of security capabilities
- 2.4.3.4 Report layouts
- 2.4.3.5 Prototype/demo system

2.4.4 Completion Criteria

This task shall be complete when Symbiosis Deliverables listed above have been delivered to the State VMS Project Manager and approved in accordance with the Acceptance Plan described in this Statement of Work.

2.5 VMS SOFTWARE DEVELOPMENT AND INTEGRATION

Symbiosis shall develop and test software for VMS modules and components. These modules and components will be integrated with any existing VMS modules already installed into production. The modules and components shall be unit tested.

2.5.1 SYMBIOSIS Responsibilities

- 2.5.1.1 Develop software and unit test the VMS modules and components

2.5.2 State Responsibilities

- 2.5.2.1 Development application and web hosting environment
- 2.5.2.2 Database Analyst

2.5.3 Symbiosis Deliverables

Walk-through with State subject matter experts to report the results of integration testing

2.5.4 Completion Criteria

This task shall be complete when the VMS modules and components have been developed and unit tested.

2.6 VMS SYSTEM TEST

Symbiosis shall conduct an integration and system test prior to the release of the system for acceptance testing. Integration testing shall be conducted by simulating how the system shall be used in the field. System test shall be an end-to-end test on the production system in test mode. Test procedures shall be executed to test the message flow and processing of the system according to the documented requirements.



2.6.1 Symbiosis Responsibilities

- 2.6.1.1 Install integrated VMS components and modules on test Develop and document test procedures to test the requirements
- 2.6.1.2 Assist in the coordination of activities with the State to set up test environment and test URLs
- 2.6.1.3 Conduct and coordinate testing
- 2.6.1.4 Track and resolve problems found in applications software
- 2.6.1.5 Coordinate activities with the State’s environment to install required VMS platform hardware and system software and to make the system available for testing.
- 2.6.1.6 Provide Staff versed in the use of Rational XDE testing and development tools

2.6.2 State Responsibilities

- 2.6.2.1 Support integration and system testing as needed
- 2.6.2.2 Provide test application and web hosting environment for use in testing
- 2.6.2.3 Provide Rational Software, including Rational XDE, for UML design and automated testing

2.6.3 Symbiosis Deliverables

Walk-through with State subject matter experts to report the results of integration testing

2.6.4 Completion Criteria

This task shall be complete when the system test procedures have been successfully executed.

2.7 SYSTEM ACCEPTANCE TEST

Symbiosis shall make the system available for the State to conduct an Acceptance Test. The State and Symbiosis shall work together to develop the System Acceptance Test Plan. The system will be available to the State for a minimum of three (3) business days prior its official “launch”

2.7.1 Symbiosis Responsibilities

- 2.7.1.1 Operate and maintain the system during the Acceptance Test
- 2.7.1.2 Assist the State in development of the Acceptance Test Plan
- 2.7.1.3 Provide reconciliation, transaction summary and usage reports



2.7.2 State Responsibilities

- 2.7.2.1 Develop Acceptance Test Plan
- 2.7.2.2 Review with the Symbiosis Project Manager and incorporate any mutually agreed upon changes
- 2.7.2.3 Provide test application and web hosting environment
- 2.7.2.4 Provide Symbiosis Acceptance Criteria Plan for acceptance testing
- 2.7.2.5 Provide Symbiosis Acceptance Sign-off Document approving acceptance tests
- 2.7.2.6 Conduct and coordinate testing
- 2.7.2.7 State shall operate and maintain their host systems
- 2.7.2.8 Coordinate the development of Acceptance Test Plan together with Symbiosis in support of acceptance testing
- 2.7.2.9 Provide signed Acceptance Sign-off Document

2.7.3 SYMBIOSIS Deliverables

Acceptance Test Report

2.7.4 Completion Criteria

This task shall be complete when defined acceptance test procedures have been successfully executed by the State and the acceptance document has been signed-off.

2.8 SYSTEM IMPLEMENTATION

Symbiosis shall make the system available for production use.

2.8.1 SYMBIOSIS Responsibilities

- 2.8.1.1 Provide install package and instructions for installation of VMS modules into production
- 2.8.1.2 Be present or on call to assist Web Services team when they install VMS modules into production.

2.8.2 State Responsibilities

- 2.8.2.1 Web Services team installs VMS modules into production using install package and instructions provided by Symbiosis
- 2.8.2.2 Provide SYMBIOSIS Sign-off Acceptance of Production System



2.8.3 SYMBIOSIS Deliverables

Integrated suite of VMS modules and components

2.8.4 Completion Criteria

This task shall be complete the day the system is operational in the production environment.

2.9 TRAINING

Symbiosis shall provide training for each VMS system release.

2.9.1 SYMBIOSIS Responsibilities

2.9.1.1 Develop a release-specific training kit for each VMS system release.

This is to include specific content to be negotiated, and may include a user quick-reference card, a formal user guide to be web-published, a training workbook and an instructor presentation kit.

2.9.1.2 Maintain an up-to-date comprehensive system user guide and reference manual to be web-published for user reference.

Release materials should be consistent in design and appearance, and accumulate to provide system users with both a quick desk-reference user guide available over the web and downloadable as a .pdf where printed copy is desired.

2.9.1.3 Deliver release-level on-site training program for each system release

Training program will consist of one or more instructor lead training sessions at each of three field locations plus a location at Lansing division headquarters. The schedule of this on-site training must coincide with the production release schedule. There are approximately 80 DNR staff to be trained for each training release. Actual staff trained may vary for 130 to 40 depending VMS Modules include in the system release. Experience may require training sessions at more or fewer locations as best serves the interest of the project and the user community.



2.9.1.4 Provide and support a portable training lab

If requested, contractor will purchase up to 13 laptops, digital projector, color printer, required software, network hub and network cabling to be used to create a portable training lab. All equipment must comply with state standards. Lab equipment and software will become property of the state.

If requested, maintain and configure the portable training lab and develop methods for updating the VMS application, loading “live” data where useful, keeping the operating system, system services and device drivers current, etc.

2.9.2 State Responsibilities

- 2.9.2.1 Determine number of staff to be trained per VMS system release
- 2.9.2.2 Determine actual training locations for each VMS system release
- 2.9.2.3 Provide subject matter experts to assist in developing training kits
- 2.9.2.4 Provide training lab laptops, digital projector, color printer, required software, network hub and network cabling if the State decides to purchase equipment rather than have Symbiosis purchase it.
- 2.9.2.5 Maintain and configure the portable training lab and develop methods for updating the VMS application, loading “live” data where useful, keeping the operating system, system service and devices current, etc, if the State decides not to request any of these functions from Symbiosis.
- 2.9.2.6 Approve release specific training kit for each system release

2.9.3 Symbiosis Deliverables

- 2.9.3.1 Release specific training kits for each system release
- 2.9.3.2 Web-published comprehensive system user guide and reference manual
- 2.9.3.3 Required number of instructor lead training sessions for each system release
- 2.9.3.4 If requested, portable training lab and/or training lab support specified in

2.9.4 Completion Criteria

This task is shall be complete after training is completed for the system release and revised comprehensive system user guide and reference manual has been posted to the Web.



2.10 MAINTENANCE

Symbiosis shall provide maintenance as needed.

Maintenance may be needed to account for platform and configuration changes, code changes needed to bring the system into compliance with published operating specification, code changes needed to account for changes in computation rules, code and configuration changes needed to modify the existing system to accommodate implementation of later modules, and the like.

The State may incorporate code and configuration changes needed to modify the existing system to accommodate implementation of later modules as part of the tasks required in 2.5 VMS SOFTWARE DEVELOPMENT & INTERGRATION of the later modules. Otherwise, maintenance will be considered as a time and materials item under the contract.

2.10.1 SYMBIOSIS Responsibilities

- 2.10.1.1 Work with State Project Manager to identify VMS maintenance needs
- 2.10.1.2 Work with State Business Analyst to determine changes needed
- 2.10.1.3 Code and test required changes
- 2.10.1.4 Create instructions on how to install changes to production.
- 2.10.1.5 Track and report hours spent on maintenance

2.10.2 State Responsibilities

- 2.10.2.1 Work with Symbiosis to identify VMS maintenance needs
- 2.10.2.2 Work with Symbiosis to determine changes needed
- 2.10.2.3 Approve initiation of maintenance changes
- 2.10.2.3 Review change test results
- 2.10.2.4 Accept change test results and approve move to production.
- 2.10.2.5 Web Services team or State Database Analyst makes changes to production system based on instructions provided by Symbiosis.

2.10.3 Symbiosis Deliverables

- 2.10.3.1 Description of Changes to be made
- 2.10.3.2 If needed, required code changes
- 2.10.3.3 Test Report of change test results
- 2.10.3.4 Install package and instructions for installation of changes into production.



2.10.4 Completion Criteria

This task is shall be complete three years from the date of final acceptance of the completed Vegetative Management System.

2.11 HELP DESK SERVICE

As an option, if the State directs, Symbiosis shall provide a help desk service

Help desk service to be provided will include taking bug reports and responding to user questions (level 1) using a pre-reviewed response and frequently asked questions (FAQ) prepared by contractor and approved by State IT Project Manager. Problems not resolved at level 1 are escalated to level 2. Level 2 problems will be initially assigned to the State IT project director or designated State representative who will prioritize the problem and assign the problem for resolution.

This service would start with the implementation and transfer to production of the first operable module and expands as the system expands with the implementation of subsequent modules.

2.11.1 SYMBIOSIS Responsibilities

- 2.11.1.1 Staff help desk position
- 2.11.1.2 Creation and maintenance of VMS Frequently Asked Question resource.
- 2.11.1.3 Send an initial response to the requestor providing the problem solution or providing information on when the problem will be resolved.
- 2.11.1.4 Resolve level 1 problems and escalate level 2 problems
- 2.11.1.5 Report hours spent on help desk activity
- 2.11.1.6 Report help desk activity in summary form

2.11.2 State Responsibilities

- 2.11.2.1 Negotiate with Symbiosis help desk response time expected for level 1 problems.
- 2.11.2.2 Assist Symbiosis with answers to FAQ questions that arise as VMS is being developed.
- 2.11.2.3 addressing problems relating to State functions, systems, legal issues, data-related questions and policies.
- 2.11.2.4 Negotiate with Symbiosis help desk reporting requirements
- 2.11.2.5 Resolve level 2 problems



2.11.3 Symbiosis Deliverables

- 2.11.3.1 VMS Frequently Asked Question Resource
- 2.11.3.2 Report hours spent on help desk activity
- 2.11.3.3 Report help desk activity in summary form

2.11.4 Completion Criteria

This task shall be complete three years following the final acceptance of the completed Vegetative Management System. Or when State IT project manager and Symbiosis project manager agree help desk call volume is too low support a help desk function.

2.12 SYSTEM ENHANCEMENTS

As an option, if the State directs, Symbiosis shall provide system enhancements

System enhancements include the construction of additional modules to provide additional user functionality, the establishment of new system linkages to additional external systems, screen modifications to improve customer understanding or accuracy, or any other system improvements outside the scope of the normal system “maintenance”. Enhancements will be treated as formal work orders and be subject to the module development standards adopted for the project.

This service period for this service extends for a period of up to three years following final acceptance of the completed Vegetative Management System.

2.12.1 Symbiosis Responsibilities

Symbiosis responsibilities outlined in 2.4 VMS DESIGN through 2.8 SYSTEM IMPLEMENTTION and 2.10 MAINTENANCE. If training is required Symbiosis responsibilities outlined in 2.9 TRAINING.

2.12.2 State Responsibilities

State responsibilities outlined in 2.4 VMS DESIGN through 2.8 SYSTEM IMPLEMENTTION and 2.10 MAINTENANCE. If training is required State responsibilities outlined in 2.9 TRAINING.

2.12.3 Symbiosis Deliverables

Symbiosis deliverables outlined in 2.4 VMS DESIGN through 2.8 SYSTEM IMPLEMENTTION and 2.10 MAINTENANCE. If training is required Symbiosis deliverables outlined in 2.9 TRAINING.



2.12.4 Completion Criteria

This task is considered complete for an enhancement when the requested enhancement is installed in production and if training was required, training is complete.

The requirement to offer the enhancement service expires three years after the final acceptance of the completed Vegetative Management System.

3.0 ADDITIONAL STATE RESPONSIBILITIES

The responsibilities listed below are in addition to the responsibilities identified elsewhere herein. All State responsibilities shall be provided at no charge to Symbiosis. Project success is predicated upon all assigned responsibilities being fulfilled by both parties.

3.1 DATABASE CONTENT AND SECURITY

The State shall be responsible for the content of the State databases, the definition of controls on its access and use, backup and recovery and the security of the stored data.

3.2 LAWS, REGULATIONS, AND STATUTES

The State will comply with applicable laws, regulations, and statutes that affect the application systems or programs.

3.3 AVAILABILITY OF KNOWLEDGEABLE PERSONNEL

The State shall provide knowledgeable personnel for the project team that shall work with Symbiosis throughout the duration of the project. Staff must be available on a timely basis so as not to delay implementation of the Project.

3.4 OFFICE FACILITIES

The State shall provide a conference room, office space, and appropriate equipment and supplies to support scheduled activities.

3.5 INTERFACE SPECIFICATIONS

For deliverables within the fixed price scope of the Contract, the State shall provide interface specifications needed between the State host systems and the VMS applications.

3.6 CALL CENTER NOTIFICATION

The State shall notify the call center to report and resolve any system or application problems.



3.7 GRAPHICS TO BE PROVIDED IN ELECTRONIC FORM

Graphics to be used on the Web pages, and other government information, shall be supplied to Symbiosis by the State in electronic form.

3.8 DATA IN SUPPORT OF TESTING

The State shall be responsible for providing suitable data for systems integration testing and the Acceptance Tests.

3.9 REQUIRED CONSENTS

The State shall promptly obtain and provide to Symbiosis all Required Consents necessary for Symbiosis to provide the services under this Agreement. A Required Consent means any consents or approvals required to give Contractor and Contractor's subcontractors the right or license to access, use and/or modify (including creating derivative works) the hardware, software, firmware and other products that the State uses (e.g. legacy systems), without infringing the ownership or license rights (including patent and copyright) of the providers or owners of such products. The State and Symbiosis will meet and discuss alternative performance measures if the State fails to obtain a required consent. However, Symbiosis shall be relieved of the performance of any obligations that may be affected by the State's failure to promptly obtain and provide any Required Consent if a mutual agreement on new performance measures cannot be reached.



4.0 ESTIMATED SCHEDULE

It is anticipated that the following estimated implementation schedule can be met based on a project start date of April 23, 2003, if all assumptions hold true and no additional delays outside of Symbiosis reasonable control, including delays caused by the State, occur. A mutually agreed implementation schedule including all key dependencies shall be developed as part of the initial project management start-up activity.

	Task Name	Delivery Date
	Project Start	4/23/03
	Project Phase1 Completion	12/23/03
1	Project Initiation	4/23/03
2	<u>Module 1:User Account Management</u>	
2.1	• Design	6/26/03
2.2	• Build	9/24/03
2.3	• Test & QA	10/9/03
2.4	• Go-Live	11/27/03
2.5	• Training	12/19/03
3	<u>Module 2:Bid Opening</u>	
3.1	• Design	7/25/03
3.2	• Build	11/3/03
3.3	• Test & QA	11/19/03
3.4	• Go-Live	11/27/03
3.5	• Training	12/19/03
4	<u>Module3:SaleConditions, Sale Condition Groups</u>	
4.1	• Design	8/22/03
4.2	• Build	11/3/03
4.3	• Test & QA	11/19/03
4.4	• Go-Live	11/27/03
4.5	• Training	12/19/03



5.0 DELIVERABLE MATERIALS

5.1 MANAGEMENT OF DELIVERABLES

A key element in our project management approach will be the detailed management of the deliverables to the State. These deliverables, submitted to the State throughout the project, will be in part the measure of the success of design, development, and implementation phases of the project’s life cycle. Through these deliverables, the State will be able to assess the adequacy and completeness of all components before implementation. Our approach to the management of deliverables consists of:

- An early agreement between the State and the Symbiosis Team on the content and format of each deliverable in advance of the scheduled start of the tasks that will produce the deliverable. This will result in an outline of the deliverable, sample format, general description of the type of information that will be contained in the deliverable and completion criteria. The approval process for the deliverable will also be specified.
- Assignment of deliverable preparation to the functional unit responsible for implementation of the deliverable. If appropriate, division of each deliverable into logical, manageable pieces.
- Interactive, iterative reviews with the State so that the final deliverable is understood, contains the expected information or result, and can be approved in a timely manner.

Each deliverable will be subject to one or more of the following reviews:

- **Self-Assessment.** Each project member will be responsible for reviewing his or her own work. To facilitate this process, the Symbiosis Project Manager will use Quality Assurance checklists for specific deliverables, to be completed and signed by the individual completing the deliverable. These checklists will cover the standards established for each component of the deliverable, prompt questions concerning the content of the deliverable, and generally serve as a memory aid so that all relevant information is considered.
- **Structured Team Walk-Through.** A structured team walk-through is a group review of any product, such as documentation, data flow diagrams, program code, test cases, test plans, or other elements of process or data modeling. The major purpose of the walk-through is to identify any defects in a deliverable, as early in the development cycle as possible. The earlier a defect is identified, the fewer the resources needed to correct the problem deficiency. The later in the life cycle a problem is encountered, the more resources will be required for correction, and the higher the risk of adversely affecting the schedule. Structured walk-through enable the Symbiosis project team to take necessary and timely corrective action. The Symbiosis Team member responsible for producing the deliverable presents the deliverable to the walk-through participants. Symbiosis Team leads responsible for the deliverable identify and assign the best participants qualified to evaluate the deliverable.



When appropriate, the Symbiosis Project Manager or the State Project Manager may request additional State staff participation. The results of walk-through are documented and forwarded to walk-through participants and to the State Project Manager. If follow-up action is needed, action items are documented, assigned to an individual, and given a specific due date.

- **Team Leader Reviews.** A project deliverable is ready for management review after being subjected to the individual review and QA checklist, and an optional structured walk-through. At the team lead level, the deliverable is reviewed for style, format, and content. If a QA checklist accompanies the deliverable, the team lead will fill in the appropriate item and sign-off on the deliverable. The team lead will confirm that all outstanding issues that affect this deliverable have been resolved and the solutions have been incorporated.
- **Deliverable Approval.** Each deliverable shall be subject to review by the State to verify that the deliverable satisfies the acceptance criteria defined in this SOW and during the project’s initial work planning period. The State will provide Symbiosis either a written notice of acceptance of the deliverable or a notice of non-acceptance citing the specifics of the non-acceptance. Symbiosis will first submit a draft of each deliverable to the State. The submission of the draft will be accompanied by a meeting with State staff to present the deliverable and answer any questions. Symbiosis has tentatively assigned up to a five working day turn around time for a draft deliverable. At the end of the five-day period we anticipate that State staff will provide us with recommendations that will enable us to update the deliverable and produce a final version that will meet the completion criteria. This correction period may be adjusted based on the type of the deliverable or the comments received. During the initiation of each phase Symbiosis anticipates validating the review period for each deliverable with the State. When the final product is presented to the State for review and approval, there should be no surprises in the detail and content, thus expediting the approval process. If Symbiosis does not receive any comments from the State within the agreed to approval time may result in delays in the schedule. Symbiosis shall deliver an electronic and one (1) hardcopy of each of the Deliverable Materials.



5.2 DELIVERABLES

5.2.1 Project Plan

This deliverable, due 5 days after contract start, includes the following work products:

- Project mission/goals/objectives
- Responsibility matrix
- Quality Plan
- Communication Plan
- Detailed work plan (WBS)
- Risk assessment and mitigation plan

5.2.2 Weekly Status Reports

During the first 80 days of the contract, Symbiosis shall provide weekly Status Reports advising the State’s VMS Project Manager of the progress and status of the Symbiosis activities. After the first 80 days, the frequency of these status reports may be revisited. The report shall outline Symbiosis activities and describe the status of tasks worked on during that period. The report shall consist of the following:

- Activities performed during the reporting period
- Activities planned for the next reporting period
- Project Change Control summary
- Problems, concerns, and recommendations

5.2.3 Detailed Requirements Document

Symbiosis shall provide a Detailed Requirements Document that shall contain the requirements for the VMS.

5.2.4 System Schematic Document

Symbiosis shall provide a System Schematic Document that shall provide a graphic portrayal of the proposed system architecture.

5.2.5 Internet Application Flowchart

Symbiosis shall provide VMS and Application Flowcharts. These charts shall graphically present the flow through the multiple pages of the web site.



5.2.6 Sample Screens

Symbiosis shall provide copies of sample screens (wire frames) that are contemplated for use on the web site.

5.2.7 Report Layouts

Symbiosis shall provide diagrams of sample reports produced by the system. Symbiosis shall produce the reports as specified in the proposal response.

5.2.8 Performance Measurement Tools Deployed

Proposed performance measurement tools installed and configured and reports generated

5.2.9 Release Acceptance Test Report

Report for State sign-off listing tests conducted, description of any problems found, and resolution of each problem

5.3 MODULE 1, 2 and 3 DESIGN & SOFTWARE DEVELOPMENT DELIVERABLES

Design Phase - User Account Management

Detailed Tasks

- Creation of Roles in SQL Server
- Design Security object model using Object oriented programming
- Design a method in Security object model that allows the application to examine User-Role tables to determine the geographic/organizational extent for each User-Role authorized for the given user.
- Design a method for checking credentials of the user
- Design object model for Security Setup front end. The object model should be defined for
 - Roles
 - Users
 - User-Role
 - Geographic/Organizational Extents
- Design object model for the following modules in such a way that "AppAdmin" Role alone can change entries
 - Roles
 - Geographic/Organization Extent
 - User tables



- Design object model for Application Role in such a way that "AppAdmin" alone can set or change the value of Restricted.
- By default, all Roles are to be Restricted and only unrestricted upon the AppAdmin changing the Restricted to "False"
- If Grantor column in Roles table is True, then that Role can grant userids, non-restricted roles but only within the geographic/organizational extent (or its subordinates) that matches the User's own geographical/organizational extent. If Grantor in Roles table is false then the role may not associate users to roles, nor change or set any Geographic/organizational extents
- Deletions to any rows in the tables are reflected logically by entering the date in the End Date.

Design Phase - Bid Opening

Detailed Tasks

- Design the object model for the following:
 - View Bid Opening,
 - Enter / Update Bid opening Detail information
 - Bid Opening Attendees
 - Sale Bid Status
 - Bidder Selection
 - Bid Entry
- Create the object model to create bid summary report for a prospectus that are at or passed bid opening date and no bid summary report has been created.
- Create object model in such a way that Bid Opening Window is restricted to only persons in the Bid Opener role for the Management Unit on which the bid-opening event is taking place.
- Viewing of existing bid summary reports is not restricted.
- Design the employee lookup function of the Bidder/Interested Party Use Case to select a sale Officer
- Design the Witness lookup function of the Bidder/Interested Party Use Case to select a Witness

Design Phase - (Sale Conditions, Sale Condition Groups)

Detailed Tasks - Sale Conditions

- Design the object model for the following
 - Sale Conditions
 - Select Additional Sale Condition
 - Edit Sale Condition
 - Add New Sale Specific Condition
- Design the object model in such a way that Sale conditions can only be modified when the sale status is prior to Prospectus or Awaiting Change.



- Design the object model in such a way that Sale conditions can only be modified by the person listed as Proposal Lead on the sale; the Unit Manager for the Unit in which the sale is assigned; or Timber Sale Specialist.
- Design the object model in such a way that the program will automatically calculate the RefNo field based on Condition Type to be unique for all conditions within a Condition Type. TSS will have option to renumber individual condition RefNo fields to specify exact order of conditions within a Condition Type. It will be used to control order the conditions associated with a sale are printed
- Available Sale Conditions in "Select Additional Sale Condition" module can be displayed by selection of one of the two criteria
 - Condition Group
 - Sale No

Design Phase -(Sale Conditions, Sale Condition Groups)

Detailed Tasks - Sale Conditions Groups

- Create the object model for the following modules.
 - Select Condition Groups
 - Condition Group Sale Condition
 - Select Additional Condition Group Sale Conditions
 - Add Sale Condition to Condition Group
 - Edit Condition Group Condition
- For Select Condition Groups, Create a method to Retrieve a condition group matching one of three selection criteria
- Create the object model in such a way that the Timber Sale Specialist can create, edit or delete statewide condition groups, those with no management unit designation.
- Create the object model in such a way that the Management Unit staff can create, edit or delete condition groups for only their own management unit.

Software Development Phase - (User Account Management)

Detailed Tasks

- To check for connection authority
- To activate necessary credentials
- To enable, disable the buttons or textboxes based on the user credentials
- Handle "Details" Frame coding in the front end for the User Module
 - If "Show" is clicked then display the "Role", "Role Geography/Organization" tabs
 - If "Hide" is clicked then hide the "Role", "Role Geography/Organization" tabs
- Handle "Mode" Frame coding in the front end for the User Module
 - If "Update" is clicked then allow the user to edit the contents
 - If "Query" is clicked then disable all the controls, enabling the user to view the information



- Design a user interface that will present all Georg's in the form of a Tree and allow manipulation of the data in the tree. This will be used to populate the initial Georg Table.
- Design the user interface for User and Roles
- Implement the Security object model for the four modules

Software Development Phase - (Bid Opening)

Detailed Tasks

- Create View Bid Opening front end that provides ability to view existing Bid Opening Summary Reports and create new Bid Summary Reports.
- Code in such a way that on modifying the Selection Criteria and on clicking the Find button. Display the Prospectus list based on Selection Criteria in View Bid Opening front end screen.
- Prospectus selected must have an existing Bid Summary Report for "View Bid Summary" button to succeed.
- Code in such a way that on Clicking the "Bid Opening" button, create Bid Summary Report.
- Prospectus must be at or past the bid opening date and Bid Summary report has not been created for "Bid Opening" button to succeed
- On Clicking the "Hide Criteria" button, The "Selection Criteria" will be hidden and the "Prospectus" List will be expanded
- The Bid Opening Location, Bid Opening Date, Bid Opening Time are set based on the Actual Bid Opening Location, Actual Bid Opening Date, Actual Bid Opening Time
- The Sale Officer and Witness from the Bid Opening window are added to the Bid Opening Attendees list in the "Bid Attendees" module
- Code front end calculation implementations for various controls in "Bid Entry" window
- Implement the object model for Bid Opening for all the modules

Software Development Phase-(Sale Conditions, Sale Condition Groups)

Detailed Tasks – Sale Conditions

- Code to transfer the data from Available Sale Conditions to Selected Sale Conditions based on the three selection buttons in "Selected Additional Sale Condition" module.
- Implement the object model for all the modules of the Sale Conditions.

Detailed Tasks – Condition Group

- Code to populate condition groups based on selection criteria
- In Conditional Group Detail, the Program should check for a valid Group Name when user click OK button
- Implement the object model for all the modules of the Condition Groups



5.4 MODULE 1,2,3 RELEASE TRAINING

5.4.1 Symbiosis Responsibilities:

Provide training for 120 State of Michigan employees at three (3) different locations within the State of Michigan, costs are detailed within the pricing proposal. The State of Michigan will be responsible for travel and living costs associated with attendance at these classes off-site. Symbiosis will conduct training at three (3) different locations (Two (2) to be located within the Upper Peninsula and one (1) to be located in the Lower Peninsula) Each DNR designated employee will be required to receive 1 eight hour training course at one of the State designated locations. The 120 students will be accommodated by offering 3 days of training in the Upper Peninsula and 3 days of training in the Lower Peninsula. Training shall be conducted December 1 through December 20, 2003.

Course Name VMS Modules 1,2 and 3	Course Duration	Sudents per Class	Delivery
User Account Management	1.0 hours	20	Classroom
Bid Opening	3.0 hours	20	Classroom
Sale Condition / Condition Groups	4.0 hours	20	Classroom

- Symbiosis will provide a professional instructor.
- All required training user manuals and quick reference cards for all training sessions.
- Travel costs to cover contractor’s instructor and other contractor staff while attending field-training sessions will be additional costs to be billed per the State of Michigan’s travel policy.
- The State reserves the right to provide additional training for additional personnel during the life of the Contract. Such training may be acquired through Symbiosis Contract as part of a Change Authorization Procedure or may be conducted by the State using a “train the trainer” approach.

5.4.2 State Responsibilities

- A portable training lab supporting a minimum of 10 student laptop work stations, an instructor laptop work station, a database laptop, and a web server laptop all connected in a standalone network for use in delivering the VMS training program. One student laptop will be configured as a database server, and another student laptop will be configured as a web server for use in case of failure of the database or web servers. Also, provided will be a suitable digital projector and printer.
- Maintain and configure the training lab and develop methods for updating the VMS application, loading “live” data where this is useful, keeping the operating system, system services and device drivers current, etc.



- Arrange and schedule training space in Escanaba, Newberry and Ralph A MacMullen Conference Center near Roscommon. No Lansing based training will be required for the first three modules.
- Handle student scheduling for training classes.

6.0 COMPLETION CRITERIA

6.1 COMPLETION CRITERIA:

Symbiosis shall have fulfilled its obligations under this Statement of Work when either of the following first occurs:

- Symbiosis completes the tasks described under Symbiosis Responsibilities in accordance with their completion criteria, including delivery of items listed in the Deliverable Materials section

or

- This Statement of Work is terminated in accordance with the provisions of the Agreement.

7.0 KEY ASSUMPTIONS

7.0 KEY ASSUMPTIONS:

Notwithstanding any other provision of the proposal, RFP, or terms, the following are basic assumptions of this SOW and Agreement:

7.1 BARRIERS TO IMPLEMENTATION

Any legislative, privacy, security or other policy or legal barriers that might prevent the use or funding of electronic service delivery channels for State government transactions as described herein shall be appropriately addressed by the State to remove the barrier, so that implementation can proceed.

7.4 COMMUNICATIONS

Symbiosis and the State shall decide on a mutually agreeable method of communications for written information required for this project. Communications options are: teleconferences, E-mail, fax, express mail.

7.5 WORK LOCATION

During the first 8 months of the Contract, VMS and application development work shall be performed exclusively on-site, State facilities. Beyond the first 8 months, this provision for development location is subject to change.



7.6 TRANSITION

Upon agreement to terminate the contract, Symbiosis shall assist in the development of a transition plan. The project change request process shall be used to price and initiate transition activities.

7.7 RESPONSE TIME

Any deliverable which requires written approval from the State under this Agreement shall be treated according to the following Acceptance Plan: Unless the subsequent paragraph applies, the State, within five (5) business days of delivery of the deliverable, unless Symbiosis agrees to a different response time, shall provide written concurrence that the deliverable meets the mutually agreed to documented requirements for such deliverable in accordance with this Agreement.

7.8 HANDLING OF DEFICIENCIES IN DELIVERABLES

If the deliverable does not meet the mutually agreed to documented requirements for such deliverable in accordance with this Agreement, the State shall have five (5) business days, unless the parties agree to a different response time, to provide, in writing, the specific reasons that the deliverable does not meet the stated specifications. In this instance, the deliverable shall be deemed approved on the date Symbiosis corrects the applicable deficiencies in the written communication from the State. Any deliverable requiring approval where formal written response has not been received from the State by the agreed to approval deadline may result in delays in the schedule.

7.9 ENGLISH LANGUAGE TO BE USED

The Internet channel shall be presented in American English and shall be validated for access through Netscape Navigator (4.x or higher), Microsoft Explorer (4.x or higher) and AOL (4.x or higher) browsers.

7.10 USE OF SYMBIOSIS PRODUCTS AND SERVICES

The State is responsible for the results obtained from the use of Symbiosis products and services.

7.11 PROVISION OF SPECIFIC REQUIREMENTS

Symbiosis understands that is it the State’s objective to have the VMS modules 1, 2, and 3 identified in the State Invitation to Bid (ITB) 071I3000039 available for use within Eight (8) months of project start. In addition Symbiosis will be required upon the State’s authority to start work on use cases for modules 4-19. Modules 4-19 will be treated as options to the contract and will be awarded to Symbiosis if the prior module releases are acceptable to the DNR staff and pricing and deliverables can be agreed upon by both parties. In order to meet the schedule for the first 3 modules the State must agree to specific requirements for each module. The State will agree to specific requirement for modules 1, 2 and 3 within five days after final design for each module is presented for acceptance. The State set will also agree to initial requirements for Module 4, 5, and 6



during development of Modules 1, 2, and 3, and will be paid under a separate change notice. The State acknowledges that detail requirements for Modules 1, 2, and 3 will serve to further define the specific deliverables identified in Section 5 of this Statement of Work

7.12 ON-SITE SYMBIOSIS PROJECT MANAGER

Symbiosis shall provide an on-site Project Manager located at the State’s site in Lansing, Michigan and shall travel to the site in accordance with the project plan. Symbiosis plans for travel of the Symbiosis Project Manager to other sites shall be coordinated with the State Project Manager prior to travel.

7.15 STATE PARTICIPATION IN INTERVIEWS AND WORK SESSIONS

The State Project Manager shall schedule and ensure participation of all State users, Subject Matter Experts and technical personnel for all required interviews and work sessions.

7.16 SKILLS OF ASSIGNED STATE PERSONNEL AND RESPONSE TIME

State personnel who shall be assigned to this project shall have the business and technical skills necessary to participate in this project and any questions asked of State subject matter experts shall be responded to within three business days.

7.17 STATE AND SYMBIOSIS COOPERATION

State and Symbiosis shall work together to contain scope and keep the SOW on schedule. Delays to the schedule shall be addressed in accordance with Section 8, Project Change Control Procedure. Neither party is responsible for the performance of the other’s employees. It is each party’s responsibility to ensure these resources perform the work expected of them under this SOW in a manner, which shall not adversely affect the estimated schedule. Symbiosis Project Manager shall advise the State of proposed staffing additions and intended movements off the team, where possible or practical, subject to the provision of Section I-O of the Contractual Services Terms and Conditions. Assignment.

7.18 WORK LOCATIONS FOR SYMBIOSIS PERSONNEL

All Symbiosis team members shall work at State’s Lansing, MI location facility under this Statement of Work except in cases where it may be more economically feasible to work at another location.

7.19 USE OF SUBCONTRACTORS

Symbiosis may use subcontractors to perform a portion of the activities described in this Statement of Work.



7.20 FORMAT FOR DELIVERABLES

Deliverables shall be provided in both hard copy and softcopy formats. Microsoft Office Suite of products (Word, Excel, PowerPoint, Project), Version 95 or later, Niku Workbench and Visio shall be the standard for project documentation unless otherwise noted.

7.21 DATA BACKUP PRIOR TO INSTALLATION ACTIVITIES

Backup of data shall be performed by State in advance of the installation activities.

7.22 WORK FACILITIES

The State shall provide adequate workspace, computers w/correct software, phones, dial-up lines, copiers, fax machines and supplies to support the Symbiosis Staff.

7.23 APPLICATION UPDATES

The State and Symbiosis shall be responsible for content and application updates, patches and fixes.

7.24 HARDWARE REFRESH

This shall be a 72-month term with 1 State hardware refresh.

7.25 TECHNICAL REVIEW

Symbiosis and the State shall perform a technical review and a design validation.

7.26 STATE URL's

The State provides URL's and obtains their own.

7.27 SSL ENABLEMENT

Secure Socket Layer (SSL) shall be enabled.

7.28 INTERNET PROTOCOL

All Internet traffic is HTTP/HTTPS.



8.0 PROJECT CHANGE CONTROL PROCEDURE

The following change control process shall be followed if a change to this Statement of Work is required.

- A Project Change Request (PCR) shall be the vehicle for communicating change. The PCR must describe the change; the rationale for the change and the effect the change will have on the project.
- The designated Project Manager of the requesting party shall review the proposed change and determine whether to submit the request to the other party.
- Both Project Managers and Project Administrators shall review the proposed change and mutually approve it for further investigation or reject it.
- Depending on the extent and complexity of the requested changes, Symbiosis may charge for the effort required to analyze the changes. When charges are necessary in order to analyze a change, Symbiosis shall provide a written estimate and begin the analysis upon written authorization.
- The investigation shall determine the effect that the implementation of the PCR will have on price, schedule and other terms and conditions of the Statement of Work.
- A written Change Authorization and/or Project Change Request (PCR) must be signed by both parties to authorize implementation of the investigated changes.

9.0 STAFFING

The State reserves the right to approve the Contractor’s assignment of Key Personnel to this project and to recommend reassignment of personnel deemed unsatisfactory by the State.

- The Contractor shall not remove or reassign, without the State’s prior written approval, any of the Key Personnel until such time as the Key Personnel have completed all of their planned and assigned responsibilities in connection with performance of the Contractor’s obligations under this Contract. Approval for removal or reassignment of Contractor Key Personnel shall not be unreasonably withheld by the State.
- The Contractor agrees that the continuity of Key Personnel is critical and agrees to the continuity of Key Personnel. Removal of Key Personnel without the written consent of the State may be considered by the State to be a breach of this Contract. The prohibition against removal or reassignment shall not apply where Key Personnel must be replaced for reasons beyond the reasonable control of the Contractor including but not limited to illness, disability, resignation or termination of the Key Personnel’s employment.
- The State reserves the right to interview and approve of the Contractor’s additional assignment of any Key Personnel to the Project team after Contract initiation.



- The State and the Contractor agree that the following positions (and individuals) are Key Personnel for purposes of this Contract:

Full-time Project Manager (Stanley Samuel, PMP)
SME (Nemah Hussain)
Business Analyst (G. Umakanth)

- The State and the Contractor agree that the following positions (and individuals) are Non-Key Personnel for purposes of this Contract. Contractor agrees to make best efforts to the continuity of Non-Key Personnel. State agrees that due to the dynamic nature of the labor market, these Non-Key Personnel may change at a short notice. The State reserves the right to interview and approve of the Contractor’s additional assignment of any Non-Key Personnel to the Project team.

Graphic Designer(Guna Sekaran)
System Designer (Suresh Srivastava)
Developer 1 (Karthikeyan Narayanan)
Developer 2 (Murugappan Ramanathan)
QA Tester (Ranadheer K)
Production Coordinator (Sherry White)
Training Specialist (Scott Ethan Pettit)

10.0 SYSTEM WARRANTY

10.1 WARRANTY PERIOD

120 days of warranty support for each module, starting when system release containing the module is implemented in production.



APPENDIX A

Contractors Not to Exceed Pricing



Section 1 - Hourly Rates for Services

Component 1 - Project Initiation

Role	Billing Rate	Hours	Price (rate*hours)
Project Manager		90	184 \$ 16,560.00
Timber Sale Expert		75	124 \$ 9,300.00
Analyst		90	184 \$ 16,560.00
Contractor Admin		75	72 \$ 5,400.00
Office Developer		35	72 \$ 2,520.00
Production Coordinator		40	92 \$ 3,680.00
System Designer		60	32 \$ 1,920.00
Developer 1		60	52 \$ 3,120.00
Developer 2		60	44 \$ 2,640.00
QA Tester		60	16 \$ 960.00

Project Initiation Total Price **\$ 62,660.00**

Note

1. Above pricing covers tasks 3 through 40 in Project Schedule
2. Above pricing is based on actual in Project Schedule without any correction/leveling done

Component 2 - Analysis, Design, Construction and Implementation of the First Three VMS Modules

Role	Billing Rate Year One	Hours (3 module release events)	Price (year 1 rate*hours)	Billing Rate Year Two
Project Manager		90	1200 \$ 108,000.00	90
Timber Sale Expert		75	304 \$ 22,800.00	75
Analyst		90	976 \$ 87,840.00	90
Contractor Admin		75	8 \$ 600.00	75
Office Developer		35	32 \$ 1,120.00	35
Production Coordinator		40	34 \$ 1,360.00	40
System Designer		60	176 \$ 10,560.00	60
Developer 1		60	644 \$ 38,640.00	60
Developer 2		60	664 \$ 39,840.00	60
QA Tester		60	304 \$ 18,240.00	60
Graphic Designer		60	120 \$ 7,200.00	60
GIS/GPS Developer		60	0 \$ -	60
PDA Developer		60	0 \$ -	60
Statistician		60	0 \$ -	60



Construction Total Price

\$ 336,200.00

Note

1. Above pricing covers all tasks in Project Schedule excluding that of Project Initiation and Tasks for Future modules and Training
2. Above pricing is based on actuals in Project Schedule without any correction/leveling done

Component 3 - Release Training for the First Three VMS Modules

Role	Billing Rate Year One	Hours (3 module release events)	Price (year 1 rate*hours)	Billing Rate Year Two
Project Manager	90	136	\$ 12,240.00	90
Timber Sale Expert Analyst	75	88	\$ 6,600.00	75
Contractor Admin	90	132	\$ 11,880.00	90
Office Developer	75	0	\$ -	75
Production Coordinator	35	56	\$ 1,960.00	35
System Designer	40	240	\$ 9,600.00	40
Developer 1	60	0	\$ -	60
Developer 2	60	80	\$ 4,800.00	60
QA Tester	60	40	\$ 2,400.00	60
Graphic Designer	60	0	\$ -	60
Training Specialist	75	152	\$ 11,400.00	75

Training Total

\$ 60,880.00

Note

1. No additional roles are needed for training for Modules 4-19
2. Above pricing covers direct time of the mentioned resources.
- 3. Above pricing is based on a total of 8 training sessions of one day duration for all 3 modules combined**
4. Training material development costs are covered in Section Two

Component 4 - Help Desk, Bug Fixing, Maintenance and Enhancements

Role	Billing Rate Year One	Billing Rate Year Two	Billing Rate Year Three
Analyst	90	90	90
Office Developer	35	35	35
Production Coordinator	40	40	40
System Designer	60	60	60
Developer	60	60	60
Help Desk Level 1 onsite	35	35	35



Help Desk Level 1 offsite	20	20	20
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Note

1. Identified roles form a team and could overlap with the tasks of the first three modules
2. No overloading of any resources are assured
3. Helpdesk level 1 onsite and Helpdesk level 1 offsite are given as alternative options.
4. DNR can choose whichever option they deem beneficial

Services Price Total

Price Component	Price
Component 1 - Project Initiation	\$ 62,660.00
Component 2 - Analysis, Design, Construction and Implementation of the First Three VMS Modules	\$ 336,200.00
Component 3 - Release Training for the First Three VMS Modules	\$ 60,880.00

Services Bid Total	\$ 459,740.00
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Section 2 - Monthly Price for Materials and Expenses

Expense Item	Base cost	Qty	Project Total	Monthly Price (Project Total/8)
Custom Delivery Training Session	\$1,150.00	8	\$9,200.00	
Student workbook, quick reference card and online user guide	\$2,250.00	3	\$6,750.00	\$843.75

Travel expenses for Quarterly Manager Meetings	Will be billed as per State of Michigan travel expense policy
Travel expenses for Requirements Meetings	
Travel expenses for Training sessions other than Lansing	

Total Project and Monthly Expense Price	\$15,950.00	\$1,993.75
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Final Total (Services + Materials & Expenses)	\$475,690.00
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Summary of Changes

PRICE COMPONENT	ORIGINAL PRICE	DISCOUNTED PRICE	SAVINGS
Component 1 - Project Initiation	\$ 62,660.00	\$ 62,660.00	\$ -
Component 2 - Analysis, Design, Construction and Implementation of the First Three VMS Modules	\$ 336,200.00	\$ 336,200.00	\$ -
Component 3 - Release Training for the First Three VMS Modules	\$ 71,680.00	\$ 60,880.00	\$ 10,800.00
Component 4 - Help Desk Bug Fixing	Unit rate	Unit rate	
Section 2 - Monthly Price for Materials and Expenses	\$ 72,350.00	\$ 15,950.00	\$ 56,400.00
Total (Services, Materials & Expenses)	\$ 542,890.00	\$ 475,690.00	\$ 67,200.00
Additional Discount on New Price @ 3% on each Invoice		\$ 14,270.70	
FINAL TOTAL		\$ 461,419.30	\$ 81,470.70