STATE OF MICHIGAN
ENTERPRISE PROCUREMENT

Department of Technology, Management, and Budget
320 S. Walnut Street 2nd Floor Lansing, MI 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **12**
to
Contract Number **MA071B5500119C**

CONTRACTOR	
	XRIVER TECHNOLOGIES LLC
	8522 Six Forks Road Suite 102
	Raleigh NC 27615
	Robert Cooney
	919-605-1590
	rcooney@xrivertech.com
	CV0050645

STATE			
	Program Manager	Various	Various
	Contract Administrator	Robin Lampert	DTMB
		517-582-2746	
		LampertR1@michigan.gov	

CONTRACT SUMMARY			
Program and Project Management (P/PPM) System			
INITIAL EFFECTIVE DATE	**INITIAL EXPIRATION DATE**	**INITIAL AVAILABLE OPTIONS**	**EXPIRATION DATE BEFORE**
July 15, 2015	June 30, 2020	3 - 3 Months	December 31, 2024
PAYMENT TERMS		**DELIVERY TIMEFRAME**	
ALTERNATE PAYMENT OPTIONS		**EXTENDED PURCHASING**	
☐ P-Card ☐ Direct Voucher (PRC) ☐ Other		☒ Yes ☐ No	
MINIMUM DELIVERY REQUIREMENTS			

DESCRIPTION OF CHANGE NOTICE				
OPTION	**LENGTH OF OPTION**	**EXTENSION**	**LENGTH OF EXTENSION**	**REVISED EXP. DATE**
☒	3 Months	☐		March 31, 2025
CURRENT VALUE	**VALUE OF CHANGE NOTICE**		**ESTIMATED AGGREGATE CONTRACT VALUE**	
$4,968,288.03	$0.00		$4,968,288.03	

DESCRIPTION

Effective December 20, 2024, the State is exercising the third option quarter. The revised contract expiration date is March 31, 2025.

All other terms, conditions, specifications and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval

Program Managers

for

Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Jeffrey LaBean	517-243-1743	labeanj@michigan.gov
MDOT	Eric Kastelic	517-614-0689	kastelice1@michigan.gov

STATE OF MICHIGAN
ENTERPRISE PROCUREMENT

Department of Technology, Management, and Budget
320 S. Walnut Street 2nd Floor Lansing, MI 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **11**
to
Contract Number **MA071B5500119C**

CONTRACTOR	
	XRIVER TECHNOLOGIES LLC
	8522 Six Forks Road Suite 102
	Raleigh NC 27615
	Robert Cooney
	919-605-1590
	rcooney@xrivertech.com

STATE			
	Program Manager	Various	Various
	Contract Administrator	Robin Lampert	
		517-582-2746	
		LampertR1@michigan.gov	

CONTRACT SUMMARY			
Program and Project Management (P/PPM) System			
INITIAL EFFECTIVE DATE	**INITIAL EXPIRATION DATE**	**INITIAL AVAILABLE OPTIONS**	**EXPIRATION DATE BEFORE**
July 15, 2015	June 30, 2020	3 - 3 Months	September 30, 2024
PAYMENT TERMS		**DELIVERY TIMEFRAME**	
ALTERNATE PAYMENT OPTIONS		**EXTENDED PURCHASING**	
☐ P-Card ☐ Direct Voucher (PRC) ☐ Other		☐ Yes ☒ No	
MINIMUM DELIVERY REQUIREMENTS			

DESCRIPTION OF CHANGE NOTICE				
OPTION	**LENGTH OF OPTION**	**EXTENSION**	**LENGTH OF EXTENSION**	**REVISED EXP. DATE**
☒	3 Months	☐		December 31, 2024
CURRENT VALUE	**VALUE OF CHANGE NOTICE**	**ESTIMATED AGGREGATE CONTRACT VALUE**		
$4,968,288.03	$0.00	$4,968,288.03		

DESCRIPTION

Effective September 30, 2024, the State is exercising the second option quarter. The revised contract expiration date is December 31, 2024.

All other terms, conditions, specifications and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

Program Managers

for

Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Jeffrey LaBean	517-243-1743	labeanj@michigan.gov
MDOT	Eric Kastelic	517-614-0689	kastelice1@michigan.gov

STATE OF MICHIGAN
ENTERPRISE PROCUREMENT

Department of Technology, Management, and Budget

525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **10**
to
Contract Number **MA071B5500119C**

CONTRACTOR	
	XRIVER TECHNOLOGIES LLC
	8522 Six Forks Road Suite 102
	Raleigh NC 27615
	Robert Cooney
	919-605-1590
	rcooney@xrivertech.com
	CV0050645

STATE			
	Program Manager	Various	Various
	Contract Administrator	Robin Lampert	DTMB
		517-582-2746	
		LampertR1@michigan.gov	

CONTRACT SUMMARY			
Program and Project Management (P/PPM) System			
INITIAL EFFECTIVE DATE	**INITIAL EXPIRATION DATE**	**INITIAL AVAILABLE OPTIONS**	**EXPIRATION DATE BEFORE**
July 15, 2015	June 30, 2020	3 - 3 Months	June 30, 2024
PAYMENT TERMS		**DELIVERY TIMEFRAME**	
ALTERNATE PAYMENT OPTIONS		**EXTENDED PURCHASING**	
☐ P-Card ☐ Direct Voucher (PRC) ☐ Other		☒ Yes ☐ No	
MINIMUM DELIVERY REQUIREMENTS			

DESCRIPTION OF CHANGE NOTICE				
OPTION	**LENGTH OF OPTION**	**EXTENSION**	**LENGTH OF EXTENSION**	**REVISED EXP. DATE**
☒	3 Months	☐		September 30, 2024
CURRENT VALUE	**VALUE OF CHANGE NOTICE**	**ESTIMATED AGGREGATE CONTRACT VALUE**		
$4,968,288.03	$0.00	$4,968,288.03		

DESCRIPTION

Effective July 1, the State is exercising the first option quarter. The revised contract expiration date is September 30, 2024.

All other terms, conditions, specifications and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

Program Managers

for

Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Jeffrey LaBean	517-243-1743	labeanj@michigan.gov
MDOT	Eric Kastelic	517-614-0689	kastelice1@michigan.gov

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
320 S. WALNUT ST., LANSING, MICHIGAN 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **9**

to

Contract Number **071B5500119**

CONTRACTOR	
	XRIVER TECHNOLOGIES LLC
	8522 Six Forks Road , Suite 102
	Raleigh, NC 27615
	Robert Cooney
	919-605-1590
	rcooney@xrivertech.com
	CV0050645

STATE			
	Program Manager	Various	MDOT
	Contract Administrator	Robin Lampert	DTMB
		(517) 582-2746	
		lampertr1@michigan.gov	

CONTRACT SUMMARY			
PROGRAM AND PROJECT MANAGEMENT (P/PPM) SYSTEM			
INITIAL EFFECTIVE DATE	**INITIAL EXPIRATION DATE**	**INITIAL AVAILABLE OPTIONS**	**EXPIRATION DATE BEFORE**
July 15, 2015	June 30, 2020	3 - 1 Year	March 31, 2024
PAYMENT TERMS		**DELIVERY TIMEFRAME**	
NET 45			
ALTERNATE PAYMENT OPTIONS			**EXTENDED PURCHASING**
☐ P-Card	☐ PRC	☐ Other	☒ Yes ☐ No
MINIMUM DELIVERY REQUIREMENTS			

DESCRIPTION OF CHANGE NOTICE				
OPTION	**LENGTH OF OPTION**	**EXTENSION**	**LENGTH OF EXTENSION**	**REVISED EXP. DATE**
☒	3 3-months	☒	3 months	June 30, 2024
CURRENT VALUE	**VALUE OF CHANGE NOTICE**		**ESTIMATED AGGREGATE CONTRACT VALUE**	
$4,788,288.03	$180,000.00		$4,968,288.03	

DESCRIPTION

Effective March 26, 2024, this Contract is hereby extended 3 months with options for 3 additional quarters, and is increased by $180,000.00 for the year. This extension allows for the completion of a new contract with XRiver. Funding for the unused quarters will be credited to the new contract. The revised contract expiration date is June 30, 2024.

Please note the Contract Administrator has been changed to Robin Lampert.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, DTMB Central Procurement Services approval, and State Administrative Board approval on March 26, 2024.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Jeffrey LaBean	517-243-1743	labeanj@michigan.gov
MDOT	Eric Kastelic	517-614-0689	kastelice1@michigan.gov

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
320 S. WALNUT ST., LANSING, MICHIGAN 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **8**

to

Contract Number **071B5500119**

CONTRACTOR	
	XRIVER TECHNOLOGIES LLC
	8522 Six Forks Road , Suite 102
	Raleigh, NC 27615
	Robert Cooney
	919-605-1590
	rcooney@xrivertech.com
	CV0050645

STATE			
	Program Manager	Various	MDOT
	Contract Administrator	Christopher Martin	DTMB
		(517) 643-2833	
		martinc20@michigan.gov	

CONTRACT SUMMARY

PROGRAM AND PROJECT MANAGEMENT (P/PPM) SYSTEM

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
July 15, 2015	June 30, 2020	3 - 1 Year	June 30, 2023

PAYMENT TERMS	DELIVERY TIMEFRAME
NET 45	N/A

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

N/A

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☒	9 months	March 31, 2024

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$4,658,288.03	$130,000.00	$4,788,288.03

DESCRIPTION

Effective 7/1/2023, this Contract is extended 9 months, and is increased by $130,000.00. The revised contract expiration date is 3/31/2024.

This change includes an extension to allow for the completion of the software version upgrade included in CN 7.

Please note the Program Manager has been changed to Eric Kastelic.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, DTMB Central Procurement Services approval, and State Administrative Board approval on 5/23/2023.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Jeffrey LaBean	517-243-1743	labeanj@michigan.gov
MDOT	Eric Kastelic	517-614-0689	kastelice1@michigan.gov

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
320 S. WALNUT ST., LANSING, MICHIGAN 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **7**

to

Contract Number **071B5500119**

CONTRACTOR	
	XRIVER TECHNOLOGIES LLC
	8522 Six Forks Road , Suite 102
	Raleigh, NC 27615
	Robert Cooney
	919-605-1590
	rcooney@xrivertech.com
	CV0050645

STATE			
	Program Manager	Various	MDOT
	Contract Administrator	Christopher Martin	DTMB
		(517) 643-2833	
		martinc20@michigan.gov	

CONTRACT SUMMARY

PROGRAM AND PROJECT MANAGEMENT (P/PPM) SYSTEM

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
July 15, 2015	June 30, 2020	3 - 1 Year	June 30, 2023

PAYMENT TERMS	DELIVERY TIMEFRAME
NET 45	

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		June 30, 2023

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$4,325,447.03	$332,841.00	$4,658,288.03

DESCRIPTION

Effective 8/2/2022, the following amendments are incorporated into this Contract per the attached Statement of Work. This change includes the following:

1. Upgrade of Planisware from v6.3.5 to v7
2. Bring software into compliance with ADA standards as outlined
3. Ongoing Maintenance and Support of v7

This Contract is increased by $332,841.00 for MDOT use.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, DTMB Central Procurement Services approval, and State Administrative Board approval on 8/2/2022.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Jeffrey LaBean	517-243-1743	labeanj@michigan.gov
MDOT	Jan Karttunen	517-335-2227	KarttunenJ1@michigan.gov

MICHIGAN DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
IT SERVICES
STATEMENT OF WORK

Project Title: **XRiver – Planisware v7.0 Upgrade**	**Period of Coverage:** **June 2022 – June 2023**
Requesting Department: **Michigan Department of Transportation**	**Date:** **5/17/2022**
Agency Project Manager: **Jan Karttunen**	**Phone:** **231-342-4636**
DTMB IT ManagerContract Owner : **Jeffrey LaBean**	**Phone:** **517-243-1743**

Brief Description of Services to be provided:

BACKGROUND:

The current DTMB contract with XRiver Technologies, LLC, provides licensing and consulting support of the Planisware software to MDOT, who uses it for the scheduling and management of pre-construction design projects. Extended support for the current version of Planisware MDOT is using, v6.3.5, will end on December 31, 2022. The previous upgrade effort to v6.3.5 focused heavily on making Planisware ADA compliant according to the State of Michigan standards; this upgrade will as well.

PROJECT OBJECTIVE:

This Statement of Work is for the Contractor(s) to facilitate the activities needed to upgrade Planisware from v.6.3.5 to the latest supported and available version (v7.04 as of the date noted above; labeled simply as "v7" throughout this document), while maintaining, at a minimum, the level of ADA compliance obtained through the v6.3.5 upgrade effort following State of Michigan Applications Standards found at https://www.michigan.gov/som/footer/policies/som-applications-and-site-standards.

Contractor(s) have advised that Planisware v7 will be ADA compliant at Level A of the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines 2.0 when using the MDOT system ADA user profile. In addition to this, several features will be higher than level A compliance but Contractor(s) do not commit that Planisware v7 meets full conformance past level A of the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines 2.0. Planisware will make best effort to work towards compliance at Level AA. However, there are architectural and software design elements that are not able to be met by the current version.

ADA compliance must apply across all MDOT system user profiles within the system, not just the ADA user profile or other unique profiles established for testing purposes.

SCOPE OF WORK:

Contractor(s) must identify, document, and fix any current MDOT configuration items in Planisware v6.3.5 that will not work within the latest available version to be used for the upgrade. They will also ensure ADA compliance, at a minimum, at Level A of the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines 2.0 across all MDOT system user profiles, with best effort to work towards Level AA compliance, as noted above. Contractor(s) will then install or assist DTMB with installing the newly configured version of Planisware on the existing production servers. Contractor(s) will provide production support for 30 days beyond completion of the production installation to ensure the new version is working correctly in the DTMB/MDOT environment.

TASKS:

Technical support is required to assist with the following tasks:

Phase 1 - Assessment

- Contractor(s) will develop and provide a Master List of all configuration items (in Excel) to MDOT/DTMB for review and revision as required (the final Master List from the previous Planisware v6.3.5 upgrade effort can be considered the starting point for reference). This Master List will guide the entire upgrade effort. During the upgrade, if additional discoveries are made outside of the Master List that need configuration, those items will be identified and added to the finalized Master List for mitigation during Phase 2 - Mitigation.
- Using the Master List, Contractor(s) will document the discrete tests required for each Master List configuration item (many would require multiple checks), also in Excel. Test notes driven down to the step level are not deemed necessary given our collective familiarization with the system.
- Contractor(s) will perform the upgrade v7 conversion initially on their local development environment to work through and finalize the script and upgrade steps, and then perform the upgrade v7 conversion on the MDOT/DTMB DEV environment.
- Once DEV is upgraded, Contractor(s) will then conduct testing on all Master List items. MDOT/DTMB will also test some of these items to verify data accuracy.
- Contractor(s) must complete a Voluntary Product Accessibility Template (VPAT) found at https://www.michigan.gov/som/footer/policies/michigan-voluntary-product-accessibility-template-vpat to self-assess Planisware's accessibility.
- Contractor(s) will collaborate with MDOT/DTMB, who will coordinate with the DTMB testing team, to complete the SOM Digital Standards Review (includes ADA and accessibility review) using the appropriate testing tools and methods, as needed through this phase.
- Contractor(s) will separately conduct random sample testing on Algorithms to verify consistent results.
- Contractor(s) will support MDOT/DTMB with validating interfaces to verify consistent results.
- Upon completion of the assessment, Contractor(s) will update the Master List to identify the items that need to be addressed. This would include a basic description of the mitigation required, a level of complexity designation, an assignment as to who would be responsible for the mitigation, and an updated estimate to migrate the configuration item.
- Contractor(s) will prepare a revised estimate, timeline and assumptions for the subsequent mitigation based on the Phase 1 outcomes, including the results of the ADA and accessibility review, and submit the revised estimate to MDOT/DTMB for review and approval.

Phase 2 - Mitigation:

Based on the results of the Assessment phase, the Mitigation phase will consist of the following tasks:

- As determined during Phase 1 - Assessment, Contractor(s) will perform all Level 1 and Level 2 fixes as appropriate.
- Contractor(s) will conduct re-testing and verification of all identified fixes and work iterations as needed with Planisware within the MDOT/DTMB DEV environment.
- ADA compliance at Level A of the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines 2.0 must be met across all MDOT system user profiles, with a best effort to work towards compliance at Level AA. Testing and mitigation will continue on an iterative approach, including additional testing requests to the DTMB testing team, as needed.
- Upon successful completion of all remediation testing within the MDOT/DTMB DEV environment, Contractor(s) will support MDOT/DTMB with completing installation within the MDOT/DTMB TEST/QA environment, where User Acceptance Testing will be conducted for ALL upgrade configuration items.
- Contractor(s) will troubleshoot and address any configuration items discovered during UAT.
- Final determination and approval to accept and/or roll-over any open non-critical upgrade configuration items discovered during UAT to the current configuration support process as new support issues will be made by MDOT/DTMB.

Phase 3 - Go-Live Support:

Upon successfully completing UAT, the Go-Live of the Planisware v7 Upgrade will consist of the following tasks:

- Contractor(s) will develop a new features overview for dissemination.

- Contractor(s) will support migration of the accepted version to the MDOT/DTMB PROD environment as needed.
- Contractor(s) will conduct checks to verify the upgrade is working properly.

DELIVERABLES:

Deliverables will not be considered complete until the Agency Project Manager has formally accepted them. Deliverables for this project include:

1. Phase 1 - Assessment
    a. Final Master List of Cnonfiguration Items with mitigation status/requirements
    b. Revised Phase 2 – Mitigation work plan and estimate for review/approval
2. Phase 2 – Mitigation
    a. Interim v7 Confiiguration on TEST/QA ready for UAT
    b. Final v7 Configuration on TEST/QA ready for migration to PROD
        i. Final v7 Configuration has all identified issues or defects resolved, as well as, at a minimum, compliance at Level A of the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines 2.0 across all MDOT system user profiles.
3. Phase 3 - Go-Live support
    a. New Features Overview document
    b. Upgraded v7 Configuration on PROD ready for Go-Live

ACCEPTANCE CRITERIA:

Acceptance criteria for each Phase are as follows:

- Successful completion of all noted tasks and deliverables with approval from MDOT/DTMB to consider the Phase complete and to move onto the next Phase.

ADA compliance at Level A of the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines 2.0 must be met across all MDOT system user profiles, with a best effort to work towards compliance at Level AA. Testing and mitigation will continue on an iterative approach, including additional testing requests to the DTMB testing team during the Assessment and Mitigation phases, as needed. If Level A compliance is not met, MDOT/DTMB has the right to pause the upgrade until Level A compliance is met without any additional costs to the Agency regardless of contractual upgrade agreements.

PROJECT CONTROL AND REPORTS:

A weekly progress report must be submitted to the Agency and DTMB Project Managers throughout the life of this project. Each weekly progress report must contain the following:

- **Accomplishments**: Contractor(s) must indicate what was worked on and what was completed during the current reporting period.

- **Hours**: Indicate the number of hours expended during the reporting period and the cumulative total to date for each accomplishment for the project. Also, contractor(s) must state whether the remaining hours are sufficient to complete the project.

- **Funds**: Indicate the amount of funds expended during the current reporting period and the cumulative total to date for each accomplishment for the project. Also, contractor(s) must state whether the remaining funds are sufficient to complete the project.

SPECIFIC DEPARTMENT STANDARDS:

Agency standards, if any, in addition to DTMB standards.

PAYMENT SCHEDULE:

Payment will be made upon satisfactory acceptance of each deliverable (completion of each phase). DTMB will pay Contractor upon receipt of the final approved properly completed invoice(s) which must be submitted to the billing address on the State issued purchase order not more often than monthly. DTMB Accounts Payable

area will coordinate obtaining Agency and DTMB Project Manager approvals. All invoices must reflect actual work completed by payment date, and must be approved by the Agency and DTMB Project Manager prior to payment. The invoices must describe and document to the State's satisfaction a description of the work performed, the progress of the project, and associated project fees. When expenses are invoiced, receipts will need to be provided along with a detailed breakdown of each type of expense.

Payment will be considered timely if made by the DTMB within forty-five (45) days after receipt of properly completed invoices.

EXPENSES:

The State will NOT pay for any travel expenses, including hotel, mileage, meals, parking, etc.

PROJECT CONTACTS:

The designated Agency Project Manager is:

Jan Karttunen
Michigan Department of Transportation
Bureau of Design - Project Management Specialist
Van Wagoner/2nd Floor
425 W. Ottawa St
Lansing, MI 48933
231-342-4636
Karttunenj1@michigan.gov

The designated DTMB Project Manager is:

Jeffrey LaBean
Department of Technology, Management and Budget
Agency Services supporting MDOT – Project Planning and Delivery Section
Van Wagoner/3rd Floor
425 W. Ottawa St
Lansing, MI 48933
517-243-1743
Labeanj@michigan.gov

AGENCY RESPONSIBILITIES:
Review and approval of all deliverables and submitted invoices.

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:

All work expected to be completed by the vendor(s) will be done remotely at their designated work locations.

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:

Work hours are not to exceed eight (8) hours a day, forty (40) hours a week. Normal working hours of 8:00 am to 5:00 pm are to be observed unless otherwise agreed to in writing.

No overtime will be permitted.

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **6**

to

Contract Number **071B5500119**

CONTRACTOR	
	XRIVER TECHNOLOGIES LLC
	8522 Six Forks Road, Suite 102
	Raleigh, NC 27615
	Robert Cooney
	919-605-1590
	rcooney@xrivertech.com
	CV0050645

STATE			
	Program Manager	Various	MDOT
	Contract Administrator	Christopher Martin	DTMB
		(517) 643-2833	
		martinc20@michigan.gov	

CONTRACT SUMMARY

PROJECT MANAGEMENT COTS LICENSES USED FOR SCHEDULING, REPORTING PROGRESS, AND TRACKING THE STATUS OF TRUNKLINE JOBS AND TASKS. ADDITIONAL SERVCIES ALSO INCLUDED.

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
July 15, 2015	June 30, 2020	3 - 1 Year	June 30, 2023

PAYMENT TERMS	DELIVERY TIMEFRAME
NET 45	

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		June 30, 2023

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$4,322,597.03	$2,850.00	$4,325,447.03

DESCRIPTION

Effective 6/18/2021, the following amendment is incorporated into this Contract per the attached SOW. The addition of MILogin for Single Sign On. The work for this change is estimated at 12 hours of work by Xriver at $187.50 per hour for a total of $2,250.00 and 2 hours by Planisware at $300.00 per hour for a total of $600.00. The not to exceed amount for this work is $2,850.00. This Contract is increased by $2,850.00 for MDOT use.

All other terms, conditions, specifications and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Jeffrey LaBean	517-243-1743	labeanj@michigan.gov
MDOT	Melissa Craigmile	248-653-4744	CraigmileM@michigan.gov

MICHIGAN DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
IT SERVICES
STATEMENT OF WORK

Project Title: **Planisware – MILogin Single Sign-On (SSO)**	**Period of Coverage:** **March 2021 – June 2021**
Requesting Department: **MDOT Bureau of Development**	**Date:** **3/25/2021**
Agency Project Manager: **Melissa Craigmile**	**Phone:** **248-653-4744**
DTMB IT ManagerContract Owner : **Jeffrey LaBean**	**Phone:** **517-243-1743**

Brief Description of Services to be provided:

To integrate Planisware with the MILogin for Worker (External and Internal) enterprise portal using the SAML 2.0 Federation-based integration SSO mechanism.

BACKGROUND:

Before Planisware at MDOT went live in Jan 2017, LDAP and SSO integration options were discussed, though a MILogin integration solution was not available or implemented at that time. Now, MDOT has submitted a Call for Projects request to integrate MILogin with various existing systems, including Planisware as a top priority.

PROJECT OBJECTIVE:

The purpose of this Statement of Work (SOW) is to solicit XRiver to assist with and complete the necessary activities to integrate Planisware with the MILogin for Worker (External and Internal) DTMB Enterprise portal using the SAML 2.0 Federation-based integration SSO mechanism.

SCOPE OF WORK:

XRiver will review the State of Michigan-MILogin Design Document for Pre-built Integrations and provide an effort estimate in hours along with costs to complete the Planisware MILogin integration. XRiver will then assist the State with integrating MILogin into the Planisware Development, QA, and Production environments.

TASKS:

Technical support is required to assist with the following tasks:

- Update scripts to support Identity Provider initiated SAML 2.0 integration
- Make sure the scripts support multiple IDP meta data files
- Retrieve user information from SAML Token (user id, first name, last name, email, phone number etc.)
- MILogin and Planisware need to exchange metadata files. Provide information on how to generate the meta data file once it is deployed in our environments and where to add the MILogin metadata file(s).

DELIVERABLES:

Deliverables will not be considered complete until the Agency Project Manager has formally accepted them.

- Planisware Development environment fully integrated with MILogin
- Planisware QA environment fully integrated with MILogin
- Planisware Production environment fully integrated with MILogin

ACCEPTANCE CRITERIA:

The Planisware MILogin integration has been successfully setup and tested in the development and QA environments and production implementation has been completed.

PROJECT CONTROL AND REPORTS:

A weekly progress report must be submitted to the MDOT/ DTMB Project Managers throughout the life of this project. Each weekly progress report must contain the following:

1. **Hours**: Indicate the number of hours expended during the past two weeks, and the cumulative total to date for the project. Also vendor(s) must state whether the remaining hours are sufficient to complete the project.

2. **Accomplishments**: Vendor(s) must indicate what was worked on and what was completed during the current reporting period.

3. **Funds**: Indicate the amount of funds expended during the current reporting period, and the cumulative total to date for the project.

SPECIFIC DEPARTMENT STANDARDS:

Agency standards, if any, in addition to DTMB standards.

PAYMENT SCHEDULE:

Payment will be made upon satisfactory acceptance of all deliverables and DTMB will pay CONTRACTOR upon receipt of the final approved properly completed invoice(s) which must be submitted to the billing address on the State issued purchase order not more often than monthly. DTMB Accounts Payable area will coordinate obtaining Agency and DTMB Project Manager approvals. All invoices must reflect actual work completed by payment date, and must be approved by the Agency and DTMB Project Manager prior to payment. The invoices must describe and document to the State's satisfaction a description of the work performed, the progress of the project, and associated project fees. When expenses are invoiced, receipts will need to be provided along with a detailed breakdown of each type of expense.

Payment will be considered timely if made by the DTMB within forty-five (45) days after receipt of properly completed invoices.

EXPENSES:

The State will NOT pay for any travel expenses, including hotel, mileage, meals, parking, etc. These expenses will be covered by the corresponding XRiver and/or Planisware companies.

PROJECT CONTACTS:

The designated Agency Project Manager is:

Melissa Craigmile
MDOT-Bureau of Development, Design Division
Van Wagoner/2nd Floor
425 W. Ottawa St
Lansing, MI 48933
248-653-4744
CraigmileM@michigan.gov

The designated DTMB Project Manager is:

Jeffrey LaBean

DTMB-Agency Services supporting MDOT
Van Wagoner/3rd Floor
425 W. Ottawa St
Lansing, MI 48933
517-243-1743
LaBeanJ@michigan.gov

AGENCY RESPONSIBILITIES:
Review and approval of the deliverables and submitted invoice(s).

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:

All work completed by Xriver and/or Planisware staff will be done off-site.

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:

Work hours are not to exceed eight (8) hours a day, forty (40) hours a week. Normal working hours of 8:00 am to 5:00 pm are to be observed unless otherwise agreed to in writing.

No overtime will be permitted.

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget

525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **5**

to

Contract Number **071B5500119**

CONTRACTOR	
	XRIVER TECHNOLOGIES LLC
	8522 Six Forks Road, Suite 102
	Raleigh, NC 27615
	Robert Cooney
	919-615-1590
	rcooney@xrivertech.com
	CV0050645

STATE			
	Program Manager	Various	MDOT
	Contract Administrator	Christopher Martin	DTMB
		(517) 643-2833	
		martinc20@michigan.gov	

CONTRACT SUMMARY

PROJECT MANAGEMENT COTS LICENSES USED FOR SCHEDULING, REPORTING PROGRESS, AND TRACKING THE STATUS OF TRUNKLINE JOBS AND TASKS. ADDITIONAL SERVCIES ALSO INCLUDED.

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
July 15, 2015	June 30, 2020	3 - 1 Year	June 30, 2023

PAYMENT TERMS	DELIVERY TIMEFRAME
NET 45	

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		June 30, 2023

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$4,322,597.03	$0.00	$4,322,597.03

DESCRIPTION

Effective 12/4/2020, the authroized signer and contact information for Xriver Technologies has been updated to Robert Cooney.

Please note the Program Manager for MDOT has been changed to Melissa Craigmile.

All other terms, conditions, specifications and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Jeffrey LaBean	517-243-1743	labeanj@michigan.gov
MDOT	Melissa Craigmile	810-653-7470	CraigmileM@michigan.gov

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **4**

to

Contract Number **071B5500119**

CONTRACTOR	
	XRIVER TECHNOLOGIES LLC
	14150 Parkeast Circle , Suite 280
	Chantilly, VA 20151
	Edward Maddox
	703-674-4886
	emaddox@xrivertech.com
	CV0050645

STATE			
	Program Manager	Various	MDOT
	Contract Administrator	Christopher Martin	DTMB
		(517) 643-2833	
		martinc20@michigan.gov	

CONTRACT SUMMARY

PROJECT MANAGEMENT COTS LICENSES (AND HOSTED BY THE STATE) USED FOR SCHEDULING, REPORTING PROGRESS, AND TRACKING THE STATUS OF TRUNKLINE JOBS AND TASKS. ADDITIONAL SERVCIES ALSO INCLUDED.

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
July 15, 2015	June 30, 2020	3 - 1 Year	June 30, 2020

PAYMENT TERMS	DELIVERY TIMEFRAME
Net 45	

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☐ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☒	3, 1-year	☐		June 30, 2023

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$3,850,688.00	$471,909.03	$4,322,597.03

DESCRIPTION

Effective 2/25/2020, this Contract is exercising all three option years and will be billed on an annual basis. The amount for the first year is $152,676.90, year two is $157,257.21, and year three is $161,974.92 and Contract is increased by a total of $471,909.03. The revised contract expiration date is 6/30/2023.

See attachment for revised Supplemental Services Rates for the Option Years.

All other terms, conditions, specifications, and pricing remain the same. Per contractor and agency agreement, DTMB Central Procurement Services approval, and State Administrative Board approval on 2/25/2020.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Jeffrey LaBean	517-243-1743	labeanj@michigan.gov
MDOT	Jan Karttunen	231-342-4636	karttunenj1@michigan.gov

Updated Supplemental Service Rates for Option Years 1 through 3

Labor Category	Not-to-Exceed Hourly Rate (Off Site)	Not-to-Exceed Hourly Rate (On Site)
XRiver Technologies		
Principal-in-Charge III	$225.00	$290.00
Principal-in-Charge II	$200.00	$265.00
Principal-in-Charge I	$187.50	$252.50
Managing Consultant - III	$165.00	$230.00
Managing Consultant - II	$150.00	$215.00
Managing Consultant - I	$135.00	$200.00
Principal Consultant - III	$125.00	$190.00
Principal Consultant - II	$115.00	$180.00
Principal Consultant - I	$105.00	$170.00
Planisware USA		
Executive Consultant	$355.00	$440.00
Principal Consultant	$325.00	$410.00
Sr Consultant	$300.00	$385.00
Consultant - II	$275.00	$360.00
Consultant - I	$230.00	$315.00
Associate Consultant	$195.00	$280.00

STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **3**

to

Contract Number **071B5500119**

CONTRACTOR	
	XRIVER TECHNOLOGIES LLC
	14150 Parkeast Circle , Suite 280
	Chantilly, VA 20151
	Edward Maddox
	703-674-4886
	emaddox@xrivertech.com
	CV0050645

STATE			
	Program Manager	multi	MULTI
		multi	
		multi	
	Contract Administrator	Christopher Martin	DTMB
		(517) 643-2833	
		martinc20@michigan.gov	

CONTRACT SUMMARY

PROJECT MANAGEMENT COTS LICENSES (AND HOSTED BY THE STATE) USED FOR SCHEDULING, REPORTING PROGRESS, AND TRACKING THE STATUS OF TRUNKLINE JOBS AND TASKS. ADDITIONAL SERVCIES ALSO INCLUDED.

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
July 15, 2015	June 30, 2020	3 - 1 Year	June 30, 2020

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ PRC	☒ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		June 30, 2020

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$3,564,048.00	$286,640.00	$3,850,688.00

DESCRIPTION

Effective 3/12/2019, the following amendment are incorporated into this Contract per attached SOW. The not to exceed value of the increase for the proposed work is $286,640.00.

Please note the Contract Administrator has been changed to Christopher Martin. Please note the Program Manager has been changed to Jan Karttunen for MDOT and Jeffrey LaBean for DTMB Agency Services.

All other terms, conditions, specifications and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Jeffrey LaBean	517-243-1743	labeanj@michigan.gov
MDOT	Jan Karttunen	231-342-4636	karttunenj1@michigan.gove

MICHIGAN DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
IT SERVICES
STATEMENT OF WORK

Project Title: **Planisware**	**Period of Coverage:** **2/11/19-6/30/19**
Requesting Department: **DTMB**	**Date:** **2/7/2019**
Agency Project Manager: **Jan Karttunen**	**Phone:** **231-342-4636**
DTMB IT ManagerContract Owner : **Jeffrey LaBean**	**Phone:** **517-243-1743**

Brief Description of Services to be provided:

This change will Upgrade the Planisware software from v6.1 to v6.3. The upgrade will be done by the vendor in 3 phases: Assessment, Mitigation, and Go-Live Support

Phase 1 Assessment: determine which configured items need to be adjusted to work with the new version of the software in MDOT/DTMB Development (DEV) environment.

Phase 2 Mitigation: troubleshoot and fix any configured items identified in the Assessment phase (Phase 1) in the MDOT/DTMB Development and UAT in Quality Assurance (QA) environment as applicable.

Phase 3 Go-Live Support: install the the newly configured and functioning Planisware v6.3 software in the Production (PROD) environment.

BACKGROUND:

Before Planisware at MDOT went live in Jan 2017, an ADA review was conducted that revealed several areas in the software which were not compliant according to State of Michigan standards. Subsequently, a report was received from the vendor detailing when and in what software version the ADA non-compliance issues would be corrected. At go-live, DTMB issued an Acceptance of Planisware ADA Compliance Plan with set maintenance and transition parameters for upgrading in the future to a Planisware version that was ADA compliant.

PROJECT OBJECTIVE:

The purpose of this Statement of Work (SOW) is to solicit XRiver to facilitate the upgrading activities needed to go from Planisware v6.1 to v6.3. This upgrade is required primarily to make Planisware ADA compliant with State of Michigan standards, but also to keep installations and configurations up to date with the Planisware maintenance schedule and to address numerous core bugs that have been fixed in v6.3, but were unable to be backported to the v6.1 version of the software.

SCOPE OF WORK:

XRiver will identify, document, and fix any current MDOT configured items in Planisware v6.1 that won't work within Planisware v6.3. The vendor(s) will then install the newly configured version of Planisware v6.3 on the Production servers. XRiver will provide production support for 30 days beyond installation completion to ensure v6.3 is working in the MDOT environment.

TASKS:

Technical support is required to assist with the following tasks:

Phase 1 Assessment:

1. The vendor(s) will collaborate with MDOT/DTMB to offer preliminary ADA testing (JAWS Program evaluation) at various stages of Phase 1, including, but not limited to:
    a. Vendor(s) to provide a web-accesssible environment for ADA compliance testing on the standard version of v6.3 (without MDOT configurations)

2. The vendor(s) will develop and provide a Master List of all configured items to MDOT/DTMB for review/augmentation. This list will guide the entire conversion effort. During the update, if additional discoveries are made outside of the Master List that need configuration, those items will be identified and added to the finalized Master List and also modified to work in the updated environment

3. Using the final Master List, the vendor(s) would document the discrete test cases required for each Master List configuration item (many would require multiple tests)

4. The vendor(s) would perform the initial installation of v6.3 which incorporates all items from the MDOT Master List on the MDOT DEV environment

5. Once the DEV environment is upgraded, the vendor(s) would then exercise test cases on all finalized Master List items and document any discovered defects within the Master List (to be addressed in Phase 2 Mitigation). This includes algorithms and interfaces. The Master List must have a basic description of the mitigation required, a level of complexity designation, an assignment as to who would be responsible for the mitigation (L1 and L2 classification) and an updated estimate to migrate the configuration item.

6. The vendor would prepare a revised estimate, timeline, and assumptions for the subsequent mitigation at this time and submit it to MDOT/DTMB for review and approval

Phase 2 Mitigation:

1. As determined during the Phase 1 Assessment , the vendor(s) would perform all Level 1 and Level 2 fixes as appropriate.

2. The vendor(s) would conduct re-testing and verification of all identified fixes and work iterations as needed in the MDOT DEV environment to ensure successful functioning.

3. The vendor(s) would perform the updated installation of v6.3 which incorporates all fixed items from the MDOT Master List on the MDOT QA environment.

4. Upon successful completion of the testing, the vendor would facilitate an on-site User Acceptance Test (UAT) with the MDOT/DTMB team on the MDOT QA environment for ALL upgrade configuration items.

5. The vendor(s) will troubleshoot and address any configuration issues discovered by the MDOT/DTMB team during UAT.

6. The vendor(s) will update the MDOT QA environment with the newly revised v6.3 configuration.

Phase 3 Go-Live Support:

1. The vendor(s) would perform the installation of v6.3 configuration to MDOT's PROD environment.

2. The vendor(s) would conduct spot checks to verify the v6.3 upgrade is working properly and notify the MDOT/DTMB team of any discoveries of non-functioning areas or features in the MDOT environment.

DELIVERABLES:

Deliverables will not be considered complete until the Agency Project Manager has formally accepted them. Final payment will not be issued until the v6.3 has been completed to the satisfaction of the MDOT/DTMB team. Deliverables for this project include:

Phase 1 Assessment:

1. The vendor(s) will supply a web-based standard version of v6.3 (without MDOT configurations) for State of Michigan ADA compliance testing.

2. MDOT/DTMB will perform JAWS compliance evalutions on the web-based standard version of v6.3 (without MDOT configurations) to ensure State of Michigan ADA compliance.

3. MDOT/DTMB will sync the current DEV and test environments with PROD environment.

4. MDOT/DTMB will assist with testing on agreed upon items with vendor(s).

5. The vendor(s) will create and supply a final Master List of Configuration Items with mitigation status/requirements and details/descriptions as outlined in the Phase 1 Assessment section.

6. The vendor(s) will review and submit a revised Phase 2 Mitigation SOW and Estimate to MDOT/DTMB for review/approval.

Phase 2 Mitigation:

1. The vendor(s) will install the updated v6.3 Configuration on the MDOT QA environment in preparation for UAT.

2. MDOT/DTMB will collaborate with vendor(s) to conduct UAT.

3. After UAT fixes have been incorporated, the vendor(s) will install the Final v6.3 Configuration on the MDOT QA environment, ready to post to the MDOT PROD environment.

Phase 3 Go-Live Support:

1. The MDOT/DTMB team will backup the current version of the MDOT PROD environment.

2. The vendor(s) will install Planisware v6.3 configuration on MDOT's PROD environment ready for Go-Live.

3. The MDOT/DTMB team will conduct final JAWS testing to ensure State of Michigan ADA requirements are met.

PROJECT CONTROL AND REPORTS:

A weekly progress report must be submitted to the MDOT/ DTMB Project Managers throughout the life of this project. Each weekly progress report must contain the following:

1. **Hours**: Indicate the number of hours expended during the past two weeks, and the cumulative total to date for the project. Also vendor(s) must state whether the remaining hours are sufficient to complete the project.

2. **Accomplishments**: Vendor(s) must indicate what was worked on and what was completed during the current reporting period.

3. **Funds**: Indicate the amount of funds expended during the current reporting period, and the cumulative total to date for the project.

SPECIFIC DEPARTMENT STANDARDS:

Agency standards, if any, in addition to DTMB standards.

State of Michigan ADA compliance must be met with this upgrade. Preliminary ADA testing will be conducted in a web-accessible "standard" Planisware v6.3 configuration set up and hosted by the vendor. The v6.3 upgrade will not continue if State of Michigan ADA compliance is not met in preliminary testing utilizing the Agency approved internet browser. If any ADA issues are found, the vendor will have the opportunity to address those issues. If ADA compliance is still not met , the v6.3 upgrade will cease without any additional costs to the Agency regardless of contractual upgrade agreements.

PAYMENT SCHEDULE:

Payment will be made upon satisfactory acceptance of each deliverable (completion of each phase). DTMB will pay CONTRACTOR upon receipt of the final approved properly completed invoice(s) which must be submitted to the billing address on the State issued purchase order not more often than monthly. DTMB Accounts Payable area will coordinate obtaining Agency and DTMB Project Manager approvals. All invoices must reflect actual work completed by payment date, and must be approved by the Agency and DTMB Project Manager prior to payment. The invoices must describe and document to the State's satisfaction a description of the work performed, the progress of the project, and associated project fees. When expenses are invoiced, receipts will need to be provided along with a detailed breakdown of each type of expense.

Payment will be considered timely if made by the DTMB within forty-five (45) days after receipt of properly completed invoices.

EXPENSES:

The State will NOT pay for any travel expenses, including hotel, mileage, meals, parking, etc. These expenses will be covered by the corresponding XRiver and/or Planisware companies.

PROJECT CONTACTS:

The designated Agency Project Manager is:

Jan Karttunen
MDOT
BOD – Project Management Specialist
Van Wagoner/2nd Floor
425 W. Ottawa St
Lansing, MI 48933
231-342-4636
Karttunenj1@michigan.gov

The designated DTMB Project Manager is:

Jeffrey LaBean
DTMB-Agency Services - Project Planning & Delivery Section
Van Wagoner/3rd Floor
425 W. Ottawa St
Lansing, MI 48933
517-243-1743
LaBeanJ@michigan.gov

AGENCY RESPONSIBILITIES:
Review and approval of submitted invoices.

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:

The majority of the work will be done off-site.

When on-site, consultants will work at the Van Wagoner Building in Lansing, Michigan at a designated temporary area. Consultant representatives will be expected to follow building security protocols and will not be allowed in areas beyond their approved building sections.

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:

Work hours are not to exceed eight (8) hours a day, forty (40) hours a week. Normal working hours of 8:00 am to 5:00 pm are to be observed unless otherwise agreed to in writing.

No overtime will be permitted.

Planisware 6.3 Upgrade Assessment SOW

Scope

For the Planisware v6.3 upgrade, XRiver has identified approximately 150 touchpoints in the current MDOT configuration that must be reviewed, retested and mitigated if issues are found. Based on upgrades for other clients, Planisware estimates that approximately 10-15% of these items will require some form of rework as part of the upgrade. XRiver recommends the Planisware v6.3 upgrade be done in the following four stages to identify, mitigate, and re-verify the system is working properly:

Step 1 Assessment

The Assessment for Planisware v6.3 Upgrade would consist of the following tasks:

- MDOT would sync the current DEV/TEST environments with your PROD environment. Both DEV and TEST will be needed for assessment, testing, and comparison.
- XRiver will develop and provide a Master List of all configuration items (in Excel) to MDOT for review/augmentation. This list will guide the entire conversion effort.
- Using the Master List, XRiver would document the discrete tests required for each Master List configuration item (many would require multiple checks), also in Excel. Note tests notes driven down to the step level are not deemed necessary given our collective familiarization with the system.
- XRiver/Planisware would perform the initial v6.3 conversion on the MDOT DEV environment
- Once DEV is upgraded, XRiver would then conduct testing on all Master List items.
- XRiver will request that some items also be tested by the MDOT PMO team to verify data accuracy.
- XRiver will separately conduct random sample testing on Algorithms to verify consistent results
- XRiver, with MDOT support, will also test the interfaces to verify consistent results.
- Upon completion, XRiver/Planisware will update the Master List to identify the items that need to be addressed. This would include a basic description of the mitigation required, a level of complexity designation, an assignment as to who would be responsible for the mitigation and an updated estimate to migrate the configuration item.
- XRiver would prepare a revised estimate, timeline and assumptions for the subsequent mitigation at this time and submit it to MDOT for review and approval.

Assumptions

- MDOT would setup/provide DEV/TEST environments to support the effort
- Other than the initial migration, all work would be performed remotely. MDOT would support remote access to both the DEV/TEST environments to support the effort
- MDOT would provide approximately 40 hours of unit testing support on an as-needed basis

Deliverables

- Final Master List of Configuration Items with mitigation status/requirements
- Revised Step 2 Mitigation SOW and Estimate for review/approval

Step 2 Mitigation

Based on the Assessment results, the mitigation of the Planisware v6.3 Upgrade would consist of the following tasks:

- As determined during the Assessment assignments, XRiver would perform designated Level 1 fixes (and Level 2 fixes assigned by Planisware to XRiver) as appropriate.
- As determined during the Assessment assignments, Planisware would perform designated Level 1 and all Level 2 fixes as appropriate
- XRiver would conduct re-testing and verification of all identified fixes and work iterations as needed with Planisware.
- Upon successful completion of the testing, XRiver would facilitate an on-site User Acceptance Test with the MDOT PMO team for ALL upgrade configuration items.
- At the completion of the UAT, any open non-critical upgrade configuration items would roll-over to the current configuration support process as new support issues.

Assumptions

- TBD based on Assessment Results

Deliverables

- Interim v6.3 Configuration on TEST ready for UAT
- Final v6.3 Configuration on TEST ready for to post to PROD

Step 3 Go-Live Support

Upon a successful UAT, the Go-Live of the Planisware v6.3 Upgrade would consist of the following tasks:

- MDOT will back-up your current PROD environment
- XRiver will develop a new features overview for dissemination
- XRiver/Planisware would support migration to TEST/PROD of the accepted version as needed
- XRiver would conduct spot checks to verify the upgrade is working properly

Assumptions

- TBD based on Assessment Results

Deliverables

- New Features Overview document
- Upgraded v6.3 Configuration on PROD ready for Go-Live

Post Mitigation Support

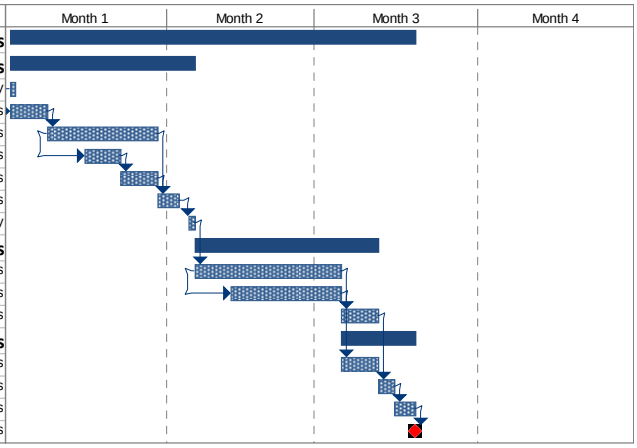
XRiver/Planisware is not offering a “warranty” on the Planisware v6.3 upgraded configuration. As such, any and all post upgrade support of the MDOT Planisware v6.3 configuration would be performed using

our current support model and process. MDOT would continue to have a warranty on the core Planisware software as per the terms of the current maintenance agreement.

Schedule

Following is an anticipated schedule for the upgrade effort:

ID	SOW	Task Name	Duration
1	**Stage**	**Planisware v6.3 Configuration Upgrade**	**55 days**
2	**1**	**Assessment**	**25 days**
3	**1B**	Development of Master List & Tests	1 day
4	**1C**	DEV Upgrade to v6.3	5 days
5	**1D**	Unit Testing of all Master List Items	15 days
6	**1E**	Comparison Testing of Algorithms	5 days
7	**1F**	Unit Testing of all Interfaces	5 days
8	**1G**	Assessment and documentation of Failed Items	4 days
9	**1E**	Prep and submission of revised Estimate	1 day
10	**2**	**Mitigation**	**25 days**
11	**2B**	Level 1 & 2 Configuration Mitigation Support	20 days
12	**2C**	XRiver Retesting Support	15 days
13	**2D**	XRiver / MDOT UAT	5 days
14	**3**	**Go-Live Support**	**10 days**
15	**3B**	Development of New Features Document	5 days
16	**3C**	Migration to TEST/PROD Support	3 days
17	**3D**	Verifcation and checkout - Go Live	2 days
18		Go-Live Planisw are v6.3 Configuration	0 days



Estimate

The following good-faith estimate is based on a purely technical upgrade SOW. That is, XRiver/Planisware will be migrating the existing functional configuration from the current version to the v6.3 release. This upgrade will not include the modification of existing features or the addition of new features (including new process driven changes). Any required changes in functionality would alter this approach and estimate (note it's possible that a change might decrease the mitigation – for example, it may be determined during the Assessment that an OOB feature can replace a configured feature at less cost to MDOT.

The estimate is based on the historical trends Planisware has generally experienced with upgrades. This experience has shown that while the vast majority of the configuration update is clean, every configuration is different and there tends to be about 10-15% of configured items that need to be addressed in some fashion. Some of these are easy, some not. As such, XRiver/Planisware is very comfortable in our ability to deliver the Stage 1 Assessment at our estimated pricing.

However, Stage 2 Mitigation is subject to change (higher or lower) depending on the Stage 1 assessment results given the expected variability of rework required by the 6.3 upgrade. The Stage 2 Mitigation estimate provided represents our anticipated worst-case scenario (which includes a 25-to-30% contingency). As such, XRiver needs to reserve the right to submit a scope change for Stage 2 based upon the Stage 1 Assessment results. XRiver/Planisware is comfortable committing to the Stage 2 Migration at our estimated pricing on a NTE basis.

The Stage 3 Go-Live Support estimate, like Stage 1, has a relatively fixed scope. As such, XRiver/Planisware is very comfortable in our ability to deliver the Stage 3 Go-Live support for our estimated pricing.

Following is the summary pricing estimate for the v6.3 upgrade.

Stage	Description	Total
1	**Assessment**	$ 82,690
2	**Mitigation**	$ 165,400
3	**Go-Live Support**	$ 38,550
	Total Services	**$ 286,640**

Following is the detailed pricing estimate for each subtask.

Task	Description	Sub Task	Milestone Deliverable(s)	Total
1	**Assessment**	1A	Project Management	**$ 12,300**
		1B	Development of Master List & Tests	**$ 1,500**
		1C	DEV Upgrade to v6.3	**$ 14,700**
		1D	Unit Testing of all Master List Items	**$ 26,900**
		1E	Comparison Testing of Algorithms	**$ 4,840**
		1F	Unit Testing of all Interfaces	**$ 5,200**
		1G	Assessment and documentation of Failed Items	**$ 12,600**
		1E	Prep and submission of revised Estimate	**$ 4,650**
2	**Mitigation**	2A	Project Management	**$ 16,400**
		2B	Level 1 & 2 Configuration Mitigation Support	**$ 96,200**
		2C	XRiver Retesting Support	**$ 30,000**
		2D	XRiver / MDOT UAT	**$ 22,800**
3	**Go-Live Support**	3A	Project Management	**$ 4,100**
		3B	Development of New Features Document	**$ 3,000**
		3C	Migration to TEST/PROD Support	**$ 19,600**
		3D	Verifcation and checkout - Go Live	**$ 11,850**
			Total Services	**$ 286,640**

Following is the detailed labor estimates for each Stage and subtask by resource. Where applicable, on site hours have been specified. Both on and off-site rates are based on the Supplemental Services Rates specified in the contract.

Task	Description	Sub Task	XT-DE	XT-DE-ON	XT-DR	XT-DR-ON	XT-JR	XR TOTAL	PLW-EX	PLW-SC	PLW-SC-ON	PLW-C1	PLW TOTAL
1	Assessment	1A	24.0					$ 4,500	24.0				$ 7,800
		1B			8.0			$ 1,500					$ -
		1C				24.0		$ 6,060			24.0		$ 8,640
		1D	40.0		80.0			$ 22,500		16.0			$ 4,400
		1E					16.0	$ 2,640		8.0			$ 2,200
		1F			16.0			$ 3,000		8.0			$ 2,200
		1G	8.0		24.0			$ 6,000		24.0			$ 6,600
		1E	8.0		4.0			$ 2,250	4.0	4.0			$ 2,400
2	Mitigation	2A	32.0					$ 6,000	32.0				$ 10,400
		2B			80.0		40.0	$ 21,600		152.0		160.0	$ 74,600
		2C	80.0		80.0			$ 30,000					$ -
		2D		24.0		24.0		$ 12,120			16.0	24.0	$ 10,680
3	Go-Live Support	3A	8.0					$ 1,500	8.0				$ 2,600
		3B	16.0					$ 3,000					$ -
		3C				32.0		$ 8,080			32.0		$ 11,520
		3D	4.0		24.0			$ 5,250		24.0			$ 6,600
			220.0	24.0	316.0	80.0	56.0	$ 136,000	68.0	236.0	72.0	184.0	$ 150,640

Both on and off site rates are based on the Supplemental Services Rates specified in the contract.

Code	Project Role	Resource	Hourly Rate
		OFF SITE	
XT-DE	Project Manager	Diane East	$ 187.50
XT-DR	Technical Lead	Dave Reinmuth	$ 187.50
XT-JR	Senior Developer	Jo An Reel	$ 165.00
PLW-EX	Executive Consultant	TBD Staff	$ 325.00
PLW-SC	Senior Consultant	TBD Staff	$ 275.00
PLW-C1	Consultant 1	TBD Staff	$ 205.00
		ON SITE	
XT-DE-ON	Project Manager	Diane East	$ 252.50
XT-DR-ON	Technical Lead	Dave Reinmuth	$ 252.50
PLW-EX-ON	Executive Consultant	Greg Chrzastek	$ 410.00
PLW-SC-ON	Senior Consultant	TBD Staff	$ 360.00
PLW-C1-ON	Consultant 1	TBD Staff	$ 290.00

Preliminary Master List of Configuration Items

Module	Page / Item	Description	XRT Unit Test Hrs	Preliminary Comments
Home				Assume same PROD db is used for XRT 6.1 and 6.3
	Review Profile setups / defaults			Step through all pages, filters, styles, defaults comparing 6.1 to 6.3
		ADM	1.00	
		PGM	1.00	
		PM	1.00	
		RESP	1.00	
		RO	1.00	
		RESP2 (New role discussed 10/18)	1.00	
Projects				
	Portfolio Filters			
		Top (All / Closed / Late / My / Bridge Leader)	1.00	Test results set 6.1 / 6.3
		Job Group	2.00	
		Region	1.00	
		TSC	2.00	
	Shortcuts-Listing			
		All Projects / Versions	0.50	Test results set 6.1 / 6.3
		Submitted Projects / Versions	1.50	
		Change Requests	1.50	
		My Projects / Versions	0.50	
	Styles			
		PGM 4 (All Active, Late, Non-Active, Division interest)	3.00	Test results set 6.1 / 6.3
		PM 8 (All Jobs, Pkg ID, Financials, Job Versions, My Active Jobs, My Late Jobs, My Non Active Jobs, My Projects)\	4.00	
		QA Check	2.00	
	New Project process			
		Definition popup	1.00	Test layout and field function (vis a vis configured behaviours)
		Wizard	2.00	Verify results under 6.1 / 6.3
		Algorithms	16.00	Separate Subtask
		Scripts	1.00	Verify results under 6.1 / 6.3
		Routines (OBS, Links)	2.00	Verify results under 6.1 / 6.3
	Toolbars		2.00	
		MDOT_TB_PM_HOME config		Verify tool presence, modifiability
		MDOT_TB_PM_GANTT config		Verify tool presence, modifiability
		MDOT_TB_PM_PROJECT_DATA config		Verify tool presence, modifiability
	Toolbar transform menu			
		Submit to PMO	0.25	Run through submission / recall

Module	Page / Item	Description	XRT Unit Test Hrs	Preliminary Comments
				process for PMO and JobNet
		Retract from PMO	0.25	
		Submit to JobNet	0.25	
		Recall from Jobnet	0.25	
		Reestablish Master Template Links	0.75	Both initial and subsequent run differences (Cleanup per template, cleanup per Global)
		Update OBS / RBS codes	0.75	Test results set 6.1 / 6.3
		Baseline Job	1.00	Test version operability as well as Core
		Map Synchronized Activities	1.00	Test results set 6.1 / 6.3
		Synchronize Activity Dates	1.00	Test results set 6.1 / 6.3
		Close job	0.75	
		Update delegated to field (Data and Gantt pages)	0.75	
	Data page			
		Header with job status	0.50	
	- ***Shortcuts***			
		- Activities Shortcut		
		Style: Activity Listing	0.25	Test results set 6.1 / 6.3
		Style: Late Activities	0.25	Test results set 6.1 / 6.3
		Style: Require Update	0.25	Test results set 6.1 / 6.3
		Style: Payroll Data	0.25	Test results set 6.1 / 6.3
		Style: Actual Hours	0.25	Test results set 6.1 / 6.3
		Style: PH - Work Plans 20 days	0.50	Test results set 6.1 / 6.3
		Style: PH - Work Plans 60 days	0.50	Test results set 6.1 / 6.3
		Style: PH - Work Plans Sorted by Date	0.25	Test results set 6.1 / 6.3
		- Snapshots Shortcut		
		Style: Default	0.25	Test results set 6.1 / 6.3
		-Payroll Data Shortcut		
		Style: For this calendar year	0.50	Test results set 6.1 / 6.3
		Style: Grouped by Year	0.50	Test results set 6.1 / 6.3
	Gantt page (Header with job status)		2.00	
	- ***Shortcuts***			
		Style: Gantt	0.75	Test results set 6.1 / 6.3
		Style: Gantt Status	0.75	Test results set 6.1 / 6.3
		Style: Gantt Late	0.75	Test results set 6.1 / 6.3
		Style: MDOT Synch Info	0.75	Test results set 6.1 / 6.3
WP				
	Data / Listing Page			
		Style: My Activities	1.00	Test results set 6.1 / 6.3 for both pages
		Style: My Late Activities	1.00	Test results set 6.1 / 6.3 for both pages
		Style: My Activities Needing Update	1.00	Test results set 6.1 / 6.3 for both pages
	Toolbars (All are OOB toolbars))		1.00	Test results set 6.1 / 6.3 for

Module	Page / Item	Description	XRT Unit Test Hrs	Preliminary Comments
				both pages
	Gantt Page			
		Style: WP Gantt Next 3 months	0.50	
Resources				
	Data Page			
		Workplans sorted by date	0.50	
Portfolio				
	PEX Reports			Test results set 6.1 / 6.3
		Landing Page	0.25	
		Job Status Report	0.25	
		Project Status Report	0.50	
		Historical Project Status Report	0.75	
		Program Status Report	0.75	
		Historical Program Status Report	0.75	
		Project Status Changes - Added Jobs	0.75	
		Project Status Changes - Removed Jobs	0.75	
		Project Status Changes - Construction Costs	0.75	
		Project Status Changes - Plan Comp and Lets	0.75	
		Project Status Changes - Summary	0.75	
		Task Status Report	0.50	
		Milestone Status Report	0.50	
		Late Tasks Report	0.50	
		Late Milestones Report	0.50	
		Completed Tasks Report	0.50	
		Completed Milestones Report	0.50	
		Milestone Summary Report	0.50	
		Projected Lettings Roll-up Report	0.50	
		Projected Lettings Detail Report	0.50	
		Tons and Squares Report	0.50	
		Significant Projects Report	0.50	
Administration				(Test as profile ADM)
	Interfaces/Batches			
		DCDS	4.00	Need client assistance for planning, execution
		ProjectWise	4.00	Need client assistance for planning, execution
		JobNet	8.00	Need client assistance for planning, execution
	Configuration			
		Project Alerts	10.00	13 alerts with multiple business cases for each
		Project DMR	2.00	3 DMR with business case, explanations
		Project Locks	4.00	6 Locks with multiple business cases
		Activity Alerts	5.00	10 alerts with multiple use cases
		Activity DMR	1.00	1 DMR

Module	Page / Item	Description	XRT Unit Test Hrs	Preliminary Comments
		Activity Locks	1.00	1 Lock
	Data pages			Check data visibility on Shortcut, Style format & results
		Resource Code Mapping	0.50	
		Contract Type	0.25	
		Design Unit	0.25	
		Development Class	0.25	
		Project Development Unit	0.25	
		Environmental Type	0.25	
		Equations - Bulk Loading	0.25	
		MDOT Functionalities	0.25	
		Funding Template	0.25	
		Historic Region	0.25	
		Interface Logs	0.25	
		JobNet State	0.25	
		Job Numbers	0.25	
		Job Type	0.25	
		Lateness Definition	0.25	
		Mapping Table Project to Job Number	0.25	Field Locking definitions
		Payroll Data	0.25	
		PDP Unit	0.25	
		PM Unit	0.25	
		Road Class	0.25	
		Program Snapshot	0.75	
		Program Snapshot mapping	0.75	
		Structure Design Unit	0.25	
		Survey Unit	0.25	
		Traffic Unit	0.25	
		TSC	0.25	
		Work Group	0.25	
		Planisware Scripts (Needs Fixing)	0.75	Current definition points to wrong object so grid is blank
		Profile to Functionality Map	0.75	
		WBS Type Administration	0.75	
OTD Bugs Fixed				
	435	0BS table sorting on PM field	0.50	
	392	High level "Ignore Context dependency" boolean not getting copied when copying a style	0.25	
	376	Equation Syntax error message	0.75	
	357	Snapshot toolbar disappears for certain Nav options	0.50	
	352	Read only access to Query still allows query reset	0.75	
	348	Alert Cancel Message works differently on Gantt v Data pages	0.50	
	Miscellaneous		16.00	
Totals			152.00	

STATE OF MICHIGAN
ENTERPRISE PROCUREMENT

Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **2**
to
Contract Number **071B5500119**

CONTRACTOR	
	XRiver Technologies LLC
	14150 Parkeast Circle
	Chantilly, VA 20151
	Edward Maddox
	703-674-4886
	emaddox@xrivertech.com
	*******3373

STATE			
	Program Manager	Chuck Baird	DTMB
		517-243-2873	
		BairdC@michigan.gov	
	Contract Administrator	James Topping	DTMB
		(517) 284-7032	
		ToppingJ@michigan.gov	

CONTRACT SUMMARY

DESCRIPTION: MDOT COTS PPM Solution

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
July 15, 2015	June 30, 2020	3 - 1 Year	June 30, 2020

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-card	☐ Direct Voucher (DV)	☐ Other	☒ Yes	☐ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$3,564,048.00	$ 0.00	$3,564,048.00

DESCRIPTION: Effective October 6, 2016 MDOT is requesting to have the following changes made to the contact.

1. Extend the project schedule to be completed in 02/2017. To support this change, the Implementation plan was updated to add a Soft Launch on November 17-18, 2016 and Go Live on January 30, 2017. The Production environment installation and Soft Launch milestones will be conducted on November 17-18, 2016. The delay dates are counted from original implementation date, October 31, 2016 to the new Implementation date 01/30/2017. The delay period is from November 01, 2016 – January 30, 2017. Excluding holidays it is 58 business days.

2. Update Cost table per Appendix F Cost Tables.

3. Update Program Manager to Chuck Baird and update Buyer to James Topping.

All other terms, conditions, specifications and pricing remain the same. Per (DTMB) contractor (request/ proposal) and agency (request) agreement, and DTMB Procurement approval

SUPPLEMENTAL SERVICES

STATEMENT-OF-WORK

TO THE

STATE OF MICHIGAN

DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET

PROGRAM AND PROJECT MANAGEMENT SOFTWARE SOLUTION

Submitted By:

Submitted: 08/25/2016

TABLE OF CONTENTS

SUMMARY

As per request, XRiver is proposing the following Supplemental Services Statement-of-Work and Pricing for Change Request #1 on Contract 071B5500119, for the Michigan Department of Transportation (MDOT) Program and Project Management (PPM) Solution. This request was made by the State to support the State's decision to delay the current Go-Live of the system, to be coordinated with the State's JobNet rollout, until 01/30/2017. To support the new PPMS implementation date of 01/30/2017 State is requesting the following changes:

- The State decided to go forward with a Soft Launch approach in November, to install the system in production on 11/17/16 - 11/18/2016, but not roll out to the users or use in production to conduct business until 01/30/2017, which is the date for the actual system Go Live. During the period from 11/17/16 – 01/30/2017 the system in production will be used by small number of users for pre-production testing to allow us to identify/fix any issues prior to production use.
- The current Project Management processes and procedures provided by XRiver are to be extended to cover the schedule delay period. The State agrees to pay additional Project Management monthly payments for November 2016, December 2016 and January 2017 invoiced by XRiver at the end of each for each month's progress payment (from November 2016 through January 2017). The amount of each monthly payment to not exceed $15,150 and will be prorated using the daily rate ($783.62) if XRiver misses the November 18, 2016 *G11- (Soft Launch) Go-Live Production* milestone. The extended Project Management progress payment will not be prorated by delays caused by the State.
- The Soft Launch production environment will not be used for training purposes due to difficulties in aligning the training schedule to new Go Live date and JobNet interface not fully functional in production during the months of November – January.
- A new Go-Live task is required with on-site vendor assistance to do final migration of the live legacy data into the PPMS at the new Go-Live target date (January 30, 2017).
- Training Schedule adjustments are needed to accommodate the implementation delay. All end-user training would need to be moved to be closer to the new Go-Live release on January 30, 2017.
- The delay in implementation date does not require adjustments to current development and UAT schedule.

The following sections provide the relevant proposed changes and pricing for all remaining contract deliverables. All questions or comments concerning this document should be directed to:

Ed Maddox
XRiver Technologies LLC
14150 Parkeast Circle, Suite 280
Chantilly VA 20151-2235
Phone: (703) 674-4886
emaddox@xrivertech.com

CHANGE DESCRIPTION

Following provides a detailed description of the scope, pricing/payment and changes for this CR#1. If not listed below, the existing SOW, Pricing/Payment Criteria and Schedule for a Task 2 section or sub-section remains as-is.

SECTION B-PROJECT MONITORING AND CONTROL SERVICES SOW

Revised SOW

The description of services, assumptions and MDOT responsibilities to be provided in the Project Monitoring and Control section remain the same. The change for these services for this CR#1 is to include 3 additional months (58 business days) of Project Management Support.

Revised Payment Milestone Criteria

- Milestone #B13-B15 – Progress Payments: XRiver would invoice for 3 additional separate monthly payments for Project Monitoring and Control each consisting of $15,150 for a total of $45,450. XRiver would invoice at the end of each for the each month's progress payment as follows:
  - Task 2-B13: Progress Payment – November 2016
  - Task 2-B14: Progress Payment – December 2016
  - Task 2-B15: Progress Payment – January 2017
- In the event that XRiver is unable to complete the *G9-(Soft Launch) Go-Live Production* by its scheduled completion, the Progress Payments are to be prorated (reduced) starting the next scheduled business day based on a daily rate of ($783.62), which represents the total price divided by 58 business days, for each day the Soft Launch is delayed. XRiver's payment will not be reduced based on delays caused by the State or by the unavailability of State resources.

Revised Schedule

- All Project Monitoring and Control services will extend until the new Go Live date.

SECTION E-INSTALLATION OF "OUT-OF-THE-BOX" COTS

Revised Schedule

Task 2-E3: Support Installation on Production

- State requests the *Task 2-E3: Support Installation on Production* and *Task 2-G9: (Soft Launch) Production Go-Live* to be conducted on the same dates identified for Soft Launch, November 17th – November 18th, at no additional costs.

SECTION G-IMPLEMENTATION SERVICES SOW

Revised SOW

Task 2-G9: (Soft Launch) Production Go-Live

The existing "Go-Live Production" services SOW remains as currently described however this activity is being re-designated as a "Soft Launch" as the State will not be using the system in a production mode.

Task 2-G11: (Hard) Production Go-Live

A new Hard Go-Live task is required (designated as Task 2-G11) to perform the project data conversion for a final time, and designate the system the fully Production Ready. This task will consist of the following activities:

- Deletion of all project data.
- Conduct data re-load of historical and snapshot data on the State production environment.
- Conduct data re-load/data migration routines on the State production environment.
- Perform checkout/validation of data loaded
- Final system acceptance/signoff.
- Given the technical complexity involved, this task must be performed by Planisware resources. XRiver would work with the State to schedule this support to occur in coordination with the JobNet Go-Live in late January/early February.

Revised Pricing/Payment Milestone Criteria

- Milestone #G9 – (Soft Launch) Production Go-Live: This milestone will be achieved at the completion of the following activities:
  - Completion and verification of the Configuration Build and available Interface set up, and the initial data migration in the production environment.

- Milestone #G11: (Hard) Production Go-Live: At the completion and verification of the final data migration on the production environment, XRiver will invoice the State for a sum of $18,200 for this new task.

Revised Schedule

Task 2-G9: (Soft Launch) Production Go-Live

- The Soft Launch installation and completion is scheduled to occur from 11/17/16 to 11/18/16 with onsite support from XRiver and Planisware resources.

Task 2-G10: Performance Warranty Period

- The 90-day Performance Warranty will remain tied to completion of the *Task G9: (Soft Launch) Production Go-Live* task and will begin the next business day.
- Delays caused by XRiver's inability to substantially complete the Soft Launch installation on a properly configured production environment would automatically slip the start of the Performance Warranty Period.
- Delays in the completion of the Soft Launch caused by technical issues with the new production environment that fall within the States domain of responsibility, such as lacking server software (libraries, packages, etc.), access rights (user setup and access to files), or resources (server specifications), and/or the lack of access to needed support from State resources to resolve these issues, will not impact the start of the Performance Warranty Period which will then start no later than 11/21/2016.

SECTION H-TRAINING SERVICES SOW

Revised SOW

Task 2-H5: Regional Training Support

As an optional Supplemental Service, performed with written notice to proceed, XRiver will provide supplemental Regional Training Support to the States PMO staff, under the following parameters.

- The PMO staff would continue to be the Lead Trainers for all regional classes.
- XRiver will provide up to 2 senior project resources (Diane East and Dave Reinmuth) to act as training assistants during the training sessions.
- XRiver's role in the training session is to provide "hands-on" one-on-one assistance to class participants and Q&A clarification, as needed during the training session.
- XRiver will provide support on a weekly basis, up to an anticipated maximum 4 weeks each.

- XRiver would require two-week's notice for each weekly session where support is requested.

Revised Pricing/Payment Milestone Criteria

- Milestone #H5: Regional Training Support: At the completion of the Regional Training, XRiver will invoice the State for all Regional training support provided.
  - XRiver would charge $8,000 per week per resource provided
  - Maximum billable amount for this task would be $64,000.

Revised Schedule

Task 2-H1: Configuration Train-the-Trainer

- The services for this task have been realigned to support the delayed Task G11-(Hard) Production Go-Live.

Task 2-H2: Planisware Core Training

- The services for this task have been realigned to support the delayed *Task G11-(Hard) Production Go-Live*.

Task 2-H5: Optional Regional Training Support

- Schedule would be coordinated with PMO staff on an as requested basis.

SECTION I-ADDITIONAL DOCUMENTATION SERVICES SOW

Revised Schedule

Task 2-I: All Tasks

- The services for this task have been realigned to support the delayed *Task G11-(Hard) Production Go-Live*.

SECTION K-KNOWLEDGE TRANSFER SERVICES

Revised Schedule

Task 2-K: All Tasks

- The services for this task have been realigned to support the delayed *Task G11-(Hard) Production Go-Live*.

- The *Task K3-Advanced PEX Session training* is anticipated to occur post the new *Task G11-(Hard) Production Go-Live* completion, however no schedule date is confirmed at this time. XRiver requires a minimum of 30-days' notice to schedule this session, which is subject to available instruction resources at the time of the request. This session must be scheduled prior to the end of March, 2017.

CHANGE REQUEST PRICING

SUPPLEMENTAL SERVICES PRICING

The following provides a summary of the total CR#1 pricing for the requested services.

MS	Milestone Deliverable(s)	Contract Cost ($)
SECTION B-PROJECT MONITORING AND CONTROL SERVICES		
B13	Progress Payment - November 2016	**$ 15,150.00**
B14	Progress Payment - December 2016	**$ 15,150.00**
B15	Progress Payment - January 2016	**$ 15,150.00**
SECTION G-IMPLEMENTATION SERVICES		
G11	(Hard) Production Go?Live	**$ 18,200.00**
	Total New Services	**$ 63,650.00**

OPTIONAL SUPPLEMENTAL SERVICES PRICING

The following provides a summary of the total CR#1 pricing for optional requested services.

MS	Optional Services	Max Quantity	Weekly Cost per Resource	Contract Cost ($)
SECTION H-TRAINING SERVICES				
H5	Weekly Regional Training Support (1 Resource)	**8**	**$ 8,000.00**	**$64,000.00**

Updated Project Schedule:

DTMB COTS PPM Solution
Revised Project Schedule: JobNet Delay CR

ID	MS	Task Name	Duration	Start	Finish
108		**MDOT Configuration Training**	**94 days**	**Fri 9/23/16**	**Fri 2/10/17**
109		Configuration Train-the-Trainer Development	35 days	Fri 9/23/16	Mon 11/14/16
110		Configuration Training Review/Adjustments	4 days	Tue 11/15/16	Fri 11/18/16
111		Conduct Configuration Train-the-Trainer Sessions	10 days	Mon 11/28/16	Fri 12/9/16
112		Configuration Training System Setup Adjustments	10 days	Mon 12/12/16	Tue 12/27/16
113		Support Pilot HQ Configuration Training	5 days	Mon 1/9/17	Fri 1/13/17
114	H1	XRiver Configuration Training Complete	0 days	Fri 1/13/17	Fri 1/13/17
115	H5	MDOT Regional Training (optional XRiver support)	20 days	Mon 1/16/17	Fri 2/10/17
116	G	**Implementation Services**	**315 days**	**Mon 11/16/15**	**Tue 2/21/17**
117		Finalize Implementation Plan	4 days	Fri 9/16/16	Wed 9/21/16
118		**Data Conversion/Migration**	**265 days**	**Mon 11/16/15**	**Thu 12/8/16**
119		Common Data & MDOT Configuration Data Development	150 days	Mon 11/16/15	Wed 6/22/16
120		State Review and Approval	5 days	Thu 6/23/16	Wed 6/29/16
121	G1B	Common Data & MDOT Configuration Data Complete	0 days	Thu 6/30/16	Thu 6/30/16
122		MDOT Template & Library Development	90 days	Mon 11/23/15	Tue 4/5/16
123		State Review and Approval	5 days	Wed 4/6/16	Tue 4/12/16
124	G1C	MDOT Template & Library Data Complete	0 days	Thu 4/21/16	Thu 4/21/16
125		Current Project Data Conversion Testing	9 days	Thu 11/17/16	Thu 12/1/16
126		State Review and Approval	5 days	Fri 12/2/16	Thu 12/8/16
127	G1E	Current Project Data Conversion Testing Complete	0 days	Thu 12/8/16	Thu 12/8/16
128		**Algorithm Development**	**145 days**	**Wed 3/9/16**	**Fri 9/30/16**
129		MDOT Rule Conversion	90 days	Wed 3/9/16	Thu 7/14/16
130		Algorithm Testing	36 days	Fri 7/15/16	Fri 9/2/16
131		Algorithm Maintenance MDOT Re	19 days	Tue 9/6/16	Fri 9/30/16
132	G2	Algorithm Development Complete	0 days	Fri 9/30/16	Fri 9/30/16
133		**Testing**	**49 days**	**Mon 8/15/16**	**Fri 10/21/16**
134		Conduct System Testing Prep	30 days	Mon 8/15/16	Mon 9/26/16
135		Conduct System Testing	17 days	Thu 9/15/16	Fri 10/7/16
136	G7	System Testing Complete	0 days	Fri 10/7/16	Fri 10/7/16
137		Conduct UAT	10 days	Mon 10/10/16	Fri 10/21/16
138	G8	UAT Complete	0 days	Fri 10/21/16	Fri 10/21/16
139		JOBNET UAT COMPLETE	0 days	Mon 11/14/16	Mon 11/14/16
140		**Soft Go Live Production**	**80 days**	**Mon 10/24/16**	**Tue 2/21/17**
141		Configuration Build Prep & Load	10 days	Mon 10/24/16	Fri 11/4/16
142		Interface Load/Connectivity	1 day	Mon 11/7/16	Mon 11/7/16
143		Pilot Production Data Conversion/Migration	5 days	Wed 11/9/16	Wed 11/16/16
144		Installation Checkout	1 day	Thu 11/17/16	Thu 11/17/16
145	G9	Soft Go Live Production	0 days	Thu 11/17/16	Thu 11/17/16
146	G10	Performance Warranty Period	62 days	Mon 11/21/16	Tue 2/21/17
147		**New Go Live Production**	**5 days**	**Mon 1/23/17**	**Mon 1/30/17**
148		Pilot Production Data Conversion/Migration	2 days	Mon 1/23/17	Tue 1/24/17
149		Installation Checkout	1 day	Thu 1/26/17	Thu 1/26/17
150	G11	Go Live Production	0 days	Mon 1/30/17	Mon 1/30/17
151	I	**Additional Documentation**	**25 days**	**Mon 11/28/16**	**Wed 1/4/17**
152		Supplemental User Guide Development	10 days	Mon 11/28/16	Fri 12/9/16
153		State Review and Approval	5 days	Mon 12/12/16	Fri 12/16/16
154	I1	Supplemental User Guide Complete	0 days	Fri 12/16/16	Fri 12/16/16
155		Technical Manual Development	20 days	Mon 11/28/16	Tue 12/27/16
156		State Review and Approval	5 days	Wed 12/28/16	Wed 1/4/17
157	I2	Technical Manual Complete	0 days	Wed 1/4/17	Wed 1/4/17
158	K	**Knowledge Transfer/Transition**	**106 days**	**Mon 11/28/16**	**Fri 4/28/17**
159		Soultion Transfer Plan Development	20 days	Mon 11/28/16	Tue 12/27/16
160		State Review and Approval	5 days	Wed 12/28/16	Wed 1/4/17
161	K1	Solution Transition Plan Complete	0 days	Wed 1/4/17	Wed 1/4/17
162		Technical Review Session	5 days	Mon 2/13/17	Fri 2/17/17
163	K2	Technical Review Session Complete	0 days	Fri 2/17/17	Fri 2/17/17
164		PEX Training	20 days	Mon 3/6/17	Fri 3/31/17
165	K3	PEX Training Complete	0 days	Fri 4/28/17	Fri 4/28/17
166	MPLE	Project Completion	0 days	Tue 2/21/17	Tue 2/21/17

To support the new PPMS implementation date of 01/30/2016 the Change Request would include the following:

1. Change original implementation plan to include Soft Launch on November 17 – 18 2016, and a Go Live on January 30, 2017. The system will be installed in production on 11/17/16 - 11/18/2016, but not rolled out to the users or use in production to conduct business until 01/30/2017, which is the date for the actual system Go Live. During the period from 11/18/16 – 01/30/2017 the system in production will be used by small number of users for pre-production testing to allow identify/fix any issues prior to production use.

This is a $0 change

2. With implementation plan changes to include Soft Launch the Task 2-E3: Production Installation and Task 2-G9: (Soft Launch) Production Go-Live to be conducted on the same dates identified for Soft Launch, November 17 - 18 2016.

This is a $0 change

3.The 90-day Performance Warranty (Task 2 – G10 Performance Warranty Period) will remain tied to completion of the Task G9: (Soft Launch) Production Go-Live task and will begin the next business day.

This is a $0 change.

4. MDOT User Training schedule adjustments are needed for the following training tasks to be scheduled closer to the new Go-Live release on January 30, 2017. The appropriate schedule for these tasks to be finalized.

Task 2-H1: MDOT Configuration Training

Task 2-H2: MDOT Core Training

This is a $0 change

5. The following documentation and Knowledge transfer tasks to be conducted during the delay period to ensure availability of staff and realign schedule to the new Go Live date on 01/30/2017:

Task 2-I: Additional Documentation

Task 2-K: Knowledge Transfer

This is $0 change

6. Add training assistance in support of the Regional Staff training proposed by XRiver as optional Supplemental Service, performed with written notice to proceed. If State decides to use the Optional Regional Training Support, the contract has Supplemental Services funds build in to cover the costs.

Add Milestone #H5: Regional Training Support: At the completion of the Regional Training, XRiver will invoice the State for all Regional training support provided.

• XRiver would charge $8,000 per week per resource provided

• Maximum billable amount for this task would be $64,000.

This is optional service with maximum additional cost of $64, 000.

7. New task for Go-Live on 01/30/2017 is required with on-site vendor assistance to do final migration of the live legacy data into the PPMS at the new Go-Live target date (January 30, 2017).

Add Milestone #G11 – Hard Go-Live Production: This milestone will be achieved at the completion and verification of the final data migration on the production environment.

This is additional cost of $18,200

8. The current Project Management processes and procedures provided by XRiver are to be extended to cover the schedule delay period. The State agrees to pay additional Project Management monthly payments for November 2016, December 2016 and January 2017 each consisting of $15,150 for a total of $45,450. In the even that XRiver misses the November 17 - 18, 2016 G9-(Soft Launch) Go-Live Production milestone, the Progress Payments are to be prorated (reduced) starting the next scheduled business day based on a daily rate of ($783.62). XRiver's payment will not be reduced based on delays caused by the State or by the unavailability of State resources.

Prorated rate calculations:

November : 18 business days

December: 19 business days

January: 21 business days

Form No. DTMB-3521 (Rev. 7/2015)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
525 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 1

to

CONTRACT NO. 071B5500119

between

THE STATE OF MICHIGAN

and

NAME & ADDRESS OF CONTRACTOR	PRIMARY CONTACT	EMAIL
XRiver Technologies Llc	Edward Maddox	emaddox@xrivertech.com
14150 Parkeast Circle	**PHONE**	**CONTRACTOR'S TAX ID NO. (LAST FOUR DIGITS ONLY)**
Chantilly VA, 20151	703-674-4886	*****3373

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
PROGRAM MANAGER / CCI	MDOT	Zakrzewski, Brian	517-335-2227	ZakrzewskiB@michigan.gov
CONTRACT ADMINISTRATOR	DTMB	Jarrod Barron	517-284-7045	Barronj1@michigan.gov

CONTRACT SUMMARY

DESCRIPTION: MDOT COTS PPM Solution

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
July 15, 2015	June 30, 2020	Unlimited options. May exercise no more than 3 years at a time.	June 30, 2020

PAYMENT TERMS	DELIVERY TIMEFRAME
45 DAYS	N/A

ALTERNATE PAYMENT OPTIONS	EXTENDED PURCHASING
☐ P-card ☐ Direct Voucher (DV) ☐ Other	☒ Yes ☐ No

MINIMUM DELIVERY REQUIREMENTS

N/A

DESCRIPTION OF CHANGE NOTICE

EXERCISE OPTION?	LENGTH OF OPTION	EXERCISE EXTENSION?	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$3,564,048.00	$ 0	$3,564,048.00

DESCRIPTION: Effective November 5, 2015, the parties revise Task Order #2 of the original contract following requirements validation to reflect a modified work and payment schedule and slight changes to the work and deliverables. This is a zero-dollar change notice. The attached Revised Statement of Work and associated documentation amends and fully restates Task Order #2 and associated schedule and cost tables. All other terms, conditions, specifications, and pricing remain the same. Per Contractor, Agency and DTMB Procurement agreement.

TASK ORDER #2: CONFIGURATION IMPLEMENTATION

REVISED STATEMENT-OF-WORK

TO THE

STATE OF MICHIGAN

DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET

CONTRACT # 071B5500119

CHANGE REQUEST #1

COMMERCIAL OFF-THE-SHELF (COTS)

PROGRAM AND PROJECT MANAGEMENT SOFTWARE SOLUTION

Submitted By:

xriver technologies

Planisware

Submitted: 11/12/2015

TABLE OF CONTENTS

SUMMARY

▪ As per request, XRiver is proposing Change Request #1 for a revised Task Order #2: Configuration Implementation (TO #2) Statement-of-Work and Pricing for Contract 071B5500119, for the Michigan Department of Transportation (MDOT) Program and Project Management (PPM) Solution. The following information is provided to support the Change Request:

▪

- This document provides the narrative and cost detail for the revised Task 02 SOW, deliverables, costs and schedule.
- A supplemental XRiver Task 02 Detailed Task Schedule.pdf document which provides the updated detailed schedule for Task 02.
- A supplemental XRiver Task 02 Detailed RTM Build Estimates.pdf document which provides the updated detailed build estimates at the RTM line item level.
- A supplemental XRiver Task 02 Detailed Task Resource Estimates.pdf document which provides the updated resource breakout for all services for Task 02.

▪

▪ This Change Request is driven by the results of Task Order #1: Configuration Scoping where XRiver and the State conducted detailed requirements assessments and design reviews in order to fully define the needed scope for the configuration and implementation. Specifically this includes the following deliverable documents approved by the State:

- The Requirement Traceability Matrix (XRiver PPMS MDOT FINAL RTM 2015.09.25.xlsx)
- The PPMS Final Configuration Design (XRiver PPMS Final Configuration Design 10.21.2015.docx)
- The PPM Final Reports Design (XRiver PPMS Final Reports Design 10.21.2015.docx)
- The Preliminary PPMS Interface Design (XRiver PPMS Interface Design 10.21.2015.docx)
- The Final Implementation Plan (XRiver PPMS Final Implementation Plan 2015.10.21.docx)
- The Final Training Plan (XRiver PPMS Training Plan 2015.10.28.docx)

Where not addressed as a configuration item, the existing Planisware out-of-the box functionality will remain as-is.

Both parties have worked to ensure consistency between the above referenced documents and the Statement-of-Work (SOW) contained herein, however, where inconsistencies exist, the SOW will be the controlling terms.

The State has notified XRiver that it may decide to opt out of the remaining contract after the initial COTS license purchase (Milestone A1), after the State's internal assessment of the software, and prior to the commitment to the second license purchase (Milestone A2).

The State's plan is to install the COTS software in the DTMB development environment during the week of November 16-20th, 2015. If installed during this period, the State will commit to making the opt-out decision no later than December 15th, 2015, which is designated as the automatic acceptance of the second COTS software delivery (Milestone A2). In the event that development environment is not ready in time, the State will install the COTS software in the DTMB development environment during the week of December 14-18th, 2015. In this event, the State will determine the opt-out decision no later than December 22nd, 2015. XRiver would delay the automatic acceptance of the second COTS software delivery (Milestone A2) until this date, in this event.

The termination would be executed using the Termination for Convenience contract clause. As XRiver will have made software and services deliverables and will be performing on-going services during this period, for clarification the following milestones would be deemed complete or partially complete as specified, and would be due to XRiver upon termination.

MS	Milestone Deliverable(s)	Contract Cost ($)	% Complete	Amount Due XRiver
A1	Initial COTS Software License(s) and Costs	**$ 255,000.00**	100%	**$ 255,000.00**
B4	Project Monitoring and Control (11/16 to 12/15)	**$ 15,431.67**	100%	**$ 15,431.67**
E1	Support Installation of COTS on Development	**$ 9,630.00**	100%	**$ 9,630.00**
G1b	Global Common & MDOT Config Data	**$ 33,320.00**	33%	**$ 10,995.60**
	Total Services Completed upon Termination	**$ 313,381.67**		**$ 291,057.27**

The following sections provide the relevant proposed changes and pricing for all remaining contract deliverables. All questions or comments concerning this document should be directed to:

Ed Maddox
XRiver Technologies LLC
14150 Parkeast Circle, Suite 280
Chantilly VA 20151-2235
Phone: (703) 674-4886
emaddox@xrivertech.com

SUMMARY SCOPE CHANGES

Following provides a summary of the primary scope changes that affect the pricing. Price variations at the Section summary level are presented in the Table 1: Project Cost Summary below.

SECTION B-PROJECT MONITORING AND CONTROL SERVICES SOW

- The section is unchanged from the original contract.

SECTION D-REQUIREMENTS AND SOLUTION ARCHITECTURE VALIDATION SERVICES SOW

- The Task 01 SOW section is unchanged from the original contract.
- A detailed re-estimate of original task resource estimates is provided in the supplemental XRiver Task 02 Detailed Task Resource Estimates.pdf document.

SECTION E-INSTALLATION OF "OUT-OF-THE-BOX" COTS

- The initial contract stated a single trip to install all 3 COTS environments. DTMB has requested three separate installations, each with on-site support.
- A detailed re-estimate of original task resource estimates is provided in the supplemental XRiver Task 02 Detailed Task Resource Estimates.pdf document.

SECTION F-CONFIGURATION/CUSTOMIZATION SERVICES SOW

- The configuration requirements were clarified during the Task 01 – Section D: Requirements and Solution Architecture Validation Services. Based on input received, documented and approved by the State, this section has been re-priced based on a requirement line item by line item basis.
- A detailed re-estimate of original RTM requirements (FRP Appendix C) is provided in the supplemental XRiver Task 02 Detailed RTM Build Estimates.pdf document.
- A detailed re-estimate of original task resource estimates is provided in the supplemental XRiver Task 02 Detailed Task Resource Estimates.pdf document.

SECTION G-IMPLEMENTATION SERVICES SOW

- The Data Migration activities have been clarified. The data to be migrated, and the approach to be used, is delineated in the Implementation Plan submitted as part of Task 01. For the initial setup this includes:
    - Global Common data
    - MDOT Configuration data

- Templates and Library data
- Closed Project and Job Number data
- Closed Snapshot data
- Historical DCDS data

For the Go-Live, this will include all current Production Project, Job Number, Snapshot and DCDS data.

- The initial Algorithm Development assumed that no current algorithms existed, however MDOT has an extensive rule base designed to work with the existing templates. The revised scope will convert this existing rule base to work within the Planisware environment rather than develop a new algorithm base from scratch.
- The Data Migration activities have been clarified as part of the D1 Interface Design development. These include:
  - Development of a generic log & notification features to be used by all interfaces
  - DCDS
    - Significant variation from standard Planisware cost conversion model required for converting actual hours to $.
    - Nuance in the scheduling of the batch requires using advanced shell scripting functionality.
  - Map/Jobnet
    - Significant process oriented integration regarding the MDOT change request export and fitting it in with the project execution process.
    - Need for enhanced project version restoration to support new project change request process.
  - ProjectWise
    - Import of actual start dates involves additional logic.
- Additional detail and clarifications for System Testing, UAT and Go-Live
- A detailed re-estimate of original task resource estimates is provided in the supplemental XRiver Task 02 Detailed Task Resource Estimates.pdf document.

SECTION H-TRAINING SERVICES SOW

- Reduced the System Administration training from 2 sessions to 1.

- Breakout of Planisware Core training as a webinar to streamline bulk user training.
- Clarification on the types of user training adds three additional user roles and courses.
- A detailed re-estimate of original task resource estimates is provided in the supplemental XRiver Task 02 Detailed Task Resource Estimates.pdf document.

SECTION I-ADDITIONAL DOCUMENTATION SERVICES SOW

- Additional detail and clarifications for documentation
- The Task 01 SOW section is unchanged from the original contract.

SECTION K-KNOWLEDGE TRANSFER SERVICES

- The deliverable for the Solution Transition Plan has been clarified.
- Otherwise, the Task 01 SOW section is unchanged from the original contract.

REVISED PRICING

SUMMARY COST CHANGES

The following provides a summary of the revised total contract pricing.

Summary Area	Total Cost ($)	Comment
Software		
Revised Planisware Licensing	$ 823,500	See Table 2
Revised Planisware Maintenance	$ 592,920	See Table 4
Services		
Task 1 (Complete)	$ 336,425	Refer to contract
Revised Task 2 Services	$ 1,515,120	See Table 3 (includes 5)
Revised Supplimental Services (reserve)	$ 296,083	See note
Contract Total	$ 3,564,048	See Table 1

Rather than alter the contract value, the pricing difference caused by this CR is accounted for as an increase in the Supplemental Services reserve (Section L). This is uncommitted funding for potential future services.

The following provides updated Cost Tables to reflect the CR changes. Note for consistency the tables follow the original RFP/Contract pricing format as provided by the State.

TABLE 1: PROJECT COST SUMMARY

The following provides the revised overall Contract pricing by Section based upon revised requirements as determined by the State.

No.	Project Cost(s)	Conctract Total Cost($)	Revised Total Cost ($)	Change Amount ($)
A.	**COTS PPM Software Acquisition– including Third Party Software** Give breakdown in Table 2.	$ 915,000	$ 823,500	$ (91,500)
B.	**Project Monitoring and Control** Give breakdown in Table 3	$ 185,180	$ 185,180	$ -
C.	**Project Initiation Services** Give breakdown in Table 3	$ 18,680	$ 18,680	$ -
D.	**Requirements and Solution Architecture Validation Services** Give breakdown in Table 3	$ 329,320	$ 323,620	$ (5,700)
E.	**Installation of "out of the box" COTS** Give breakdown in Table 3	$ 15,480	$ 27,240	$ 11,760
F.	**Configuration/ Customization Services** Give breakdown in Table 3	$ 544,425	$ 448,170	$ (96,255)
G.	**Implementation Services** Give breakdown in Table 3	$ 565,720	$ 615,715	$ 49,995
H.	**Training Services** Give breakdown in Table 3	$ 151,370	$ 143,480	$ (7,890)
I.	**Additional Documentation** Give breakdown in Table 3	$ 45,020	$ 40,650	$ (4,370)
J.	**Recurring Annual Costs - Including Software License(s) and Maintenance and Support** Give breakdown in Table 4	$ 658,800	$ 592,920	$ (65,880)
K.	**Knowledge Transfer/Transition** Give breakdown in Table 5	$ 50,840	$ 48,810	$ (2,030)
	Total Software and Services	**$ 3,479,835**	**$ 3,267,965**	**$ (211,870)**
L.	**Supplimental Services** Give breakdown in Table 6	$ 84,213	$ 296,083	
	Total Project Cost	**$ 3,564,048**	**$ 3,564,048**	

Note the total contract value remains the same. Section L – Supplemental Services was increased to balance the contract total.

TABLE 2: COTS PPM SOFTWARE ACQUISITION

The following provides the revised licensing cost based upon revised requirements as determined by the State. The pricing also reflects a discount for the purchase of the software in its entirety in December 2015.

No.	MS	Software License(s) Cost	Product Name and Version	Type (Enterprise or Individual)	Unit Cost ($)	Number of License(s)	Total Cost ($)
A.		**Commercial Off The Shelf (COTS)**					
	A1	**COTS Licenses Required**					
		MDOT Roles	***Planisware Price List***				
			Planisware V6 – Application Server Unlimited-CPU license	Server Fee	$225,000	1	$ 225,000
		PMO-System Administrators	*Planisware V6 PM Office*	Named User	$ 5,250	5	$ 26,250
		Transportation System Managers & Program Managers					
		Project Managers/Schedule Assistants	*Planisware V6 Intranet (Read Write)*	Named User	$ 1,275	1	$ 1,275
		Responsible Unit Users					
		Reporting Users	*Planisware V6 Intranet (Read Only)*	Named User	$ 750	4	$ 3,000
		Not Required	*Planisware V6 Time Card*	Named User	$ 150	0	$ -
		Configuration/Support Users	*Planisware V6 ProWeb - Authoring Tool*	Named User	$ 7,500	0	$ -
		Total Initial # of COTS Software License(s) and Costs					**$ 255,525**
	A2	***MDOT Roles***	***Planisware Price List***				
		PMO-System Administrators	*Planisware V6 PM Office*	Named User	$ 5,250	30	$ 157,500
		Transportation System Managers & Program Managers					
		Project Managers/Schedule Assistants	*Planisware V6 Intranet (Read Write)*	Named User	$ 1,275	339	$ 432,225
		Responsible Unit Users					
		Reporting Users	*Planisware V6 Intranet (Read Only)*	Named User	$ 750	73	$ 54,750
		Not Required	*Planisware V6 Time Card*	Named User	$ 150	0	$ -
		Configuration/Support Users	*Planisware V6 ProWeb - Authoring Tool*	Named User	$ 7,500	2	$ 15,000
		Total Remaining Number of COTS Software License(s) and Costs					**$ 659,475**
		Total COTS Software License Cost					**$ 915,000**
		Less 10% Discount					**$ 91,500**
		Total Remaining Cost of COTS Software License(s) Less Discount					**$ 567,975**
		Total Cost of COTS Software License(s) with Discount					**$ 823,500**

* No additional 3rd Party software is required to run Planisware; however the State may need to procure additional software to incorporate SSO capabilities with MILogin.

TABLE 4: RECURRING ANNUAL COSTS- SOFTWARE LICENSE(S), MAINTENANCE & SUPPORT

The following provides the revised maintenance cost based upon the discounted license pricing.

▪

Discounted Offer: Software + Annual Costs (July 1, 2016 Maintenance Start Date)	Annual Cost ($)					Total Cost ($)	Comments
	Year 1	Year 2	Year 3	Year 4	Year 5		
COTS Software License Costs							
Initial Software License Purchase	$ 823,500					$ 823,500	
Remaining Software License Purchase						$ -	
Annual Software Purchases	$ 823,500					$ 823,500	
COTS Software Maintenance & Support Costs	18%	18%	18%	18%	18%		
Initial Software License Purchase	$ 74,115	$148,230	$148,230	$148,230	$ 74,115	$ 592,920	Prorated 6-months Year 2 & Year 5 (contract end date)
Remaining Software License Purchase							
Annual Maintenance	$ 74,115	$148,230	$148,230	$148,230	$ 74,115	$ 592,920	

TABLE 3 & 5: COTS PPM SOLUTION SERVICES AND DELIVERABLES COSTS

- The original Tables 3 & 5 have been combined as they represent all services. Only Task 02 services effort is shown in this table. The detailed SOW and deliverables for each listed item are delineated in the Revised Services section of this document.

Project Milestone Deliverables Summary for Task 02

No.	Milestone Event	MS	Milestone Deliverable(s)	Revised Hours	Revised Cost
B.	**Project Monitoring and Control**	B4-B12	9 Monthly Progress Payments	**609**	**138,885**
D.	**Requirements and Solution Architecture Validation Services**	D3	Final COTS PPM Solution Screen Configuration/Customization Plan	**292**	**74,240**
E.	**Installation of "out of the box" COTS**	E1	Support Installation of COTS on Development	**36**	**9,630**
		E2	Support Installation of COTS on QA/Training	**33**	**8,805**
		E3	Support Installation of COTS on Production	**33**	**8,805**
F.	**Configuration/ Customization Services**	F1	Build 1: ½ Scheduling	**375**	**80,085**
		F2	Build 2: Cost/Resource Mgmt and ½ Scheduling	**391**	**85,015**
		F3	Build 3: Program Mgmt and ½ Reporting	**517**	**113,075**
		F4	Build 4: ½ Reporting	**358**	**84,290**
		F5	Build 5: Final Build	**385**	**85,705**
G.	**Implementation Services**	G1	**Data Conversion /Migration**		
		G1b	*Global Common & MDOT Config Data*	**200**	**33,320**
		G1c	*Template & Library Data*	**178**	**28,250**
		G1d	*Closed Project, JobNet, Payroll & Snapshot Data*	**269**	**58,095**
		G1e	*Current Project, JobNet, Payroll & Snapshot Data*	**40**	**8,120**
			Algorithm Development		
		G2	*Algorithm Develop, Testiing and SA Review*	**390**	**70,250**
			Interfaces		
		G4	*ProjectWise Interface*	**81**	**16,495**
		G5	*DCDS Interface*	**141**	**35,345**
		G6	*JobNet Interfaces*	**280**	**64,380**
			Testing		
		G7	*System Testing*	**538**	**129,990**
		G8	*UAT Testing*	**340**	**81,640**
		G9	**Production Go-Live**	**296**	**77,920**
		G10	**Performance Warranty Period**		
H.	**Training Services**		**Train-the-Trainer training**		
		H1	*Configuration Train-the-Trainer*	**476**	**74,680**
		H2	*Planisware Core Training*	**260**	**42,880**
			System administration training		
		H3	*System Admin Training*	**64**	**15,760**
			Online access to training		
			Training Documentation		
I.	**Additional Documentation**	I1	**User manuals**	**208**	**21,800**
		I2	**Technical manuals**	**94**	**18,850**
K.	**Knowledge Transfer/Transition**	K1	**Knowledge Transfer Plan**	**46**	**10,710**
		K2	**Advanced ProWeb & Code Walkthrough Session**	**116**	**27,100**
		K3	**Advanced PEX Session**	**54**	**11,000**
			Total Task 02 Services	**7100**	**1,515,120**

TABLE: CHRONOLOGICAL DELIVERY MILESTONES

The following table provides a chronological listing of all software delivery and services milestone deliverables and planned delivery dates for Task 02.

Milestone Deliverable(s)	Revised Total Cost ($)	Planned Start	Milestone Deliverable Date
Planisware Software License Initial Purchase	$ 255,525.00	11/16/2015	11/16/2015
Support Installation on Development	$ 9,630.00	11/18/2015	11/20/2015
Planisware Software Full License Purchase	$ 567,975.00	12/15/2016	12/15/2015
Progress Payment - Nov/Dec 2015	$ 15,431.66	11/1/2015	12/31/2015
Final COTS PPM Solution Screen Configuration/Customization Plan	$ 74,240.00	12/14/2015	1/15/2016
System Admin Training - Session 1	$ 15,760.00	1/19/2016	1/22/2016
Progress Payment - January 2016	$ 15,431.66	1/1/2016	2/1/2016
Support Installation on QA/Training	$ 8,805.00	2/3/2016	2/5/2016
Build 1: ½ Scheduling	$ 80,085.00	1/13/2016	2/15/2016
Progress Payment - February 2016	$ 15,431.66	2/1/2016	2/29/2016
Data Conversion /Migration - Global Common & MDOT Config Data	$ 33,320.00	11/23/2015	3/2/2016
Build 2: Cost/Resource management and ½ Scheduling	$ 85,015.00	2/11/2016	3/15/2016
Interface - DCDS	$ 35,345.00	3/11/2016	3/29/2016
Progress Payment - March 2016	$ 15,431.67	3/1/2016	3/31/2016
Interface - ProjectWise	$ 16,495.00	3/25/2016	4/12/2016
Data Conversion /Migration - Template & Library Data	$ 28,250.00	1/11/2016	4/13/2016
Data Conversion /Migration - Closed Project, JOBNET, Payroll & Snapshot Data	$ 58,095.00	3/11/2016	4/22/2016
Progress Payment - April 2016	$ 15,431.67	4/1/2016	5/1/2016
Interface - JobNet interfaces	$ 64,380.00	4/8/2016	5/10/2016
Progress Payment - May 2016	$ 15,431.67	5/2/2016	5/31/2016
Plansiware Annual Software Maintenance: 7/1/16-12/31/16	$ 74,115.00	7/1/2016	6/1/2016
Build 3: Program management and ½ reporting	$ 113,075.00	5/6/2016	6/21/2016
Progress Payment - June 2016	$ 15,431.67	6/1/2016	6/30/2016
Algorithm Development-Procedures & Data Review	$ 70,250.00	4/13/2016	7/17/2016
Build 4: ½ reporting	$ 84,290.00	6/17/2016	7/19/2016
Progress Payment - July 2016	$ 15,431.67	7/1/2016	7/31/2016
Advanced PEX Session	$ 11,000.00	7/11/2016	8/6/2016
Knowledge Transfer Plan	$ 10,710.00	7/11/2016	8/13/2016
Build 5: Final build for delivery/test	$ 85,705.00	7/15/2016	8/17/2016
Planisware Core Training	$ 42,880.00	7/5/2016	8/30/2016
Progress Payment - August 2016	$ 15,431.67	8/1/2016	8/31/2016
Support Installation on Production	$ 8,805.00	9/1/2016	9/3/2016
Testing - System Testing	$ 129,990.00	8/16/2016	9/6/2016
User manuals	$ 21,800.00	7/11/2016	9/17/2016
Data Conversion /Migration - Current Project, NobNet, Payroll & Snapshot	$ 8,120.00	9/6/2016	9/20/2016
Testing - UAT Testing	$ 81,640.00	9/6/2016	9/20/2016
Production Go-Live	$ 77,920.00	10/11/2016	11/1/2016
Configuration Train-the-Trainer	$ 74,680.00	5/30/2016	11/1/2016
Plansiware Annual Software Maintenance: 1/1/17-12/31/17	$ 148,230.00	1/1/2017	12/1/2016
Advanced ProWeb & Code Walkthrough Session	$ 27,100.00	12/6/2016	12/13/2016

REVISED SOFTWARE

REVISED SOFTWARE LICENSE

To support the State's ability to load and test the software in the State environment, the software delivery has been broken into two deliveries. The initial deliver will occur immediately upon receipt of the Task 02 Purchase Order (which is anticipated to occur no later than November 18, 2015). The second delivery will occur automatically in December 2015.

SOFTWARE PAYMENT MILESTONE CRITERIA

The COTS PPM Software Acquisition payment milestones are:

- Milestone #A1 - Initial License Purchase:
  - Delivery will occur automatically upon receipt of the Task 02 Purchase Order.
  - Delivery will consist of providing the state with a download link and the license key for the Planisware software via email.
- Milestone #A2 - Remaining License Purchase:

  If the initial install occurs the week of November 16th, 2015, delivery of this milestone will occur automatically post receipt of the Task 02 Purchase Order on December 15th, 2015. If the initial install occurs after this period, automatic delivery of this milestone will occur on December 22nd, 2015
  - Delivery consists of providing the state with an updated license key via email for the Planisware software which increases the license counts as specified.

REVISED SOFTWARE MAINTENANCE

MAINTENANCE PAYMENT MILESTONE CRITERIA

Planisware Maintenance and Support (M&S) is currently charged at 18% of the license fee.

Unless otherwise specified, all Planisware software M&S periods are based on calendar years with an annual January 1 start date and ending December 31. All fees are due at the start of the maintenance period. The tables reflect the following Annual Maintenance Periods for the specified Year:

Year	Maintenance Period
1	**7/1/16-12/31/16**
2	**1/1/17-12/31/17**
3	**1/1/18-12/31/18**
4	**1/1/19-12/31/19**
5	**1/1/20-6/31/20**

Milestone J1– Planisware License M&S (Year 1 in the table): pricing reflects the M&S period for the calendar year 2016. This includes the M&S fees for the entire Planisware license for the prorated period from July 1, 2016 until December 31, 2016. This milestone is to be invoiced on or about May 1, 2016.

Milestone J2 – Planisware License M&S (Year 2 in the table): pricing reflects the M&S period for the calendar years 2017. This includes the M&S fees for the entire Planisware license for the full year. This milestone is to be invoiced on or about November 1, 2016.

Milestone J3 – Planisware License M&S (Year 3 in the table): pricing reflects the M&S period for the calendar years 2018. This includes the M&S fees for the entire Planisware license for the full year. This milestone is to be invoiced on or about November 1, 2017.

Milestone J4 – Planisware License M&S (Year 4 in the table): pricing reflects the M&S period for the calendar years 2019. This includes the M&S fees for the entire Planisware license for the full year. This milestone is to be invoiced on or about November 1, 2018.

Milestone J5 – Planisware License M&S (Year 5 in the table): pricing reflects the M&S for a prorated period from January 1, 2020 until June 30, 2020, which corresponds to the contract end date. This includes the M&S fees for the entire Planisware license for the prorated year. This milestone is to be invoiced on or about November 1, 2019.

Should the State choose to extend the original contract in the future, Planisware reserves the right to adjust the Planisware Maintenance and Support fee to the then current commercially available rate charged by Planisware, at the time of the extension, the greater of 3% or the previous year's US Annual Inflation rate based on the CPI.

REVISED SERVICES

REVISED STATEMENT OF WORK

The following sections provide the revised detailed TO #2 work plan in its entirety. This plan is broken out by the Section delineation used in the Contract. For each Section, the detailed proposed Statement-of-Work (SOW), assumptions, all Section deliverables, and payment milestones are stated.

SECTION B-PROJECT MONITORING AND CONTROL SERVICES SOW

This section consists of the Project Monitoring and Control activities required to effectively manage and control the entire effort. This section includes the following activities:

Perform Project Control Process:

Conduct bi-weekly status reporting - develop and submit the following Status Reports:

Updated project plan

Updated project schedule

Updated deliverable status

Updated Issue status (if necessary)

Updated Risk management status (if necessary)

Conduct a bi-weekly project review of the submitted status report.

Perform Issue Management Process.

Perform Risk Management Process.

Perform Change Management:

Change Management will be based on the proposed RFP feature responses and approved Plans.

The Change Management process will assess potential project scope/budget/schedule changes and submit updates/CRs.

Assumptions:

No travel will be required specifically to support the review meetings. Reviews will be done via teleconference unless review can be coordinated with on-site travel for other activities.

Planisware will be providing input to XRiver but will not be required to participate in status meetings with the State.

MDOT Responsibilities:

Participate in bi-weekly status meetings, provide oversight and input on progress, issues and risks.

Support the timely resolution of State assigned Issues as they arise.

Propose and/or evaluate change request items as they arise.

Provide on-site work space/internet access for XRiver resources.

Deliverables:

1) Bi-weekly status reports
2) Bi-weekly status briefing (teleconference)
3) Issue management reports (as per the agreed upon plan)
4) Risk management reports (as per the agreed upon plan)
5) Change management (as needed)

SECTION D-REQUIREMENTS AND SOLUTION ARCHITECTURE VALIDATION SERVICES SOW

This section consists of the activities required to complete the Requirements and Solution Architecture Validation Services. This section includes the following activities:

Develop System Design:

Develop preliminary system design documents:

COTS PPM Solution Screen Configuration/Customization Plan

Conduct a design review with the State Core Team

Develop final system design documents:

COTS PPM Solution Screen Configuration/Customization Plan

Interface Functional Design (Data Mapping/Approach)

Conduct a design review with the State Core Team

Update system design review based on feedback

Submit system designs for review and approval.

Assumptions:

The COTS PPM Solution Screen Configuration/Customization Plan will be driven by the approved COTS PPM Solution Configuration/Customization Plan delivered in Task 01.

The final Interface Functional Design will build upon the preliminary Interface Functional Design delivered in Task 01. Primary emphasis will be in finalizing database entity/field level definitions.

XRiver will conduct/lead all demonstrations and workshops on site.

MDOT Responsibilities:

Provide ad-hoc feedback/clarifications as required in support of the design process.

Provide additional interface database definition as required.

Coordinate logistics/provide facilities for the design reviews.

Upon delivery, provide a timely review, comments, and approval of the submitted System Design documents.

Deliverables:

1) System design documents:
    a) Final Planisware V6 Screen Configuration/Customization Plan.
    b) Final Planisware V6 Interface Design Document.

SECTION E-INSTALLATION SERVICES SOW

This section consists of the activities required to support the Installation Services for the "out-of-the-box" Planisware V6 software. This section includes the following activities:

Provide the State with all pre-installation technical environment information as needed.

Provide the State with the standard Planisware V6 installation instructions for review.

Conduct a webinar review of the installation instructions with the State staff if needed.

Provide the license keys needed for the software installations.

Support the on-site installation and checkout for each MDOT instance (anticipated to be three 2-day sessions).

- Development Instance
- QA/Training Instance
- Production Instance

Assumptions:

As per DTMB request, each instance will be installed separately at different phases of the project.

As per DTMB request, XRiver will provide on-site support for each installation.

MDOT Responsibilities:

Coordinate schedule for staff for installation.

The State will designate one or more technical resources to participate in (or perform) the installation effort.

The State will provide the appropriate access and permissions needed to perform the installation.

Deliverables:

1) Planisware V6 development instance installed within the MDOT environment.
2) Planisware V6 QA/training instances installed within the MDOT environment.
3) Planisware V6 production instances installed within the MDOT environment.

SECTION F-CONFIGURATION/CUSTOMIZATION SERVICES SOW

This section consists of the activities required to support the Configuration/Customization Services. This section includes the following activities:

Development of all Planisware V6 Configuration elements:

Build 1: ½ Scheduling

Build 2: Cost/Resource management and ½ Scheduling

Build 3: Program management and ½ reporting

Build 4: ½ reporting

Build 5: Final build for delivery/test

Distribution of the build items are identified in the attached XRiver Task 02 Detailed RTM Build Estimates.pdf document.

For each build;

Develop the Build.

Conducting Unit Testing of all developed elements.

Upon completion, conduct demonstration/walkthrough with the State.

The revised items delineated for each build which are to be demonstrated for completion is included in the CR attachment XRiver Task 02 Detailed RTM Build Estimates.pdf document.

Assumptions:

Sample data MDOT will be made available for use in development.

Each interim build may be unstable and until the final build, changes to previously configured items may occur.

XRiver will document all items identified during the build effort, during the demonstration of configured features or during testing which are requested by the State that do not correspond to

the approved design scope. All additional items are to be handled through the specified change order process.

MDOT Responsibilities:

Provide sample data as requested for use in development.

Provide ad-hoc feedback/clarifications as required in support of the build process.

Coordinate and support the timely scheduling and reviews of walkthroughs upon request.

Deliverables:

1) Webinar based walkthrough/demonstrations for:
   a) Build 1: ½ Scheduling
   b) Build 2: Cost/Resource management and ½ Scheduling
   c) Build 3: Program management and ½ reporting
   d) Build 4: ½ reporting
   e) Build 5: Final build for ready for System Testing

SECTION G-IMPLEMENTATION SERVICES SOW

This section consists of the activities required to support the Implementation Services. This section includes the following activities:

Review and finalize the Task 01 Implementation Plan to determine if any changes need to be incorporated.

Algorithm Development:

Conversion of existing MDOT rules into algorithms.

Conduct testing of MDOT algorithms using MDOT project attributes and template data.

Conduct algorithm maintenance and testing review sessions with System Admins.

Data Conversion/Migration:

Global Common & MDOT Configuration Data:

- Define, collect, load and test/verify all data.
- Provide detailed instructions for accomplishing data loads on test and production environments.
- Provide webinar walkthrough/demonstration of loaded data on XRiver test environment.

MDOT Schedule Templates and Libraries:

- Conduct a review session to cover Global Master schedule template.
- Conduct a review to identify all required library sub/frag nets.
- Collect Work Type/Template mapping.
- Collect, load, test/verify all templates and library data.
- Provide detailed instructions for accomplishing data loads on test and production environments.
- Provide webinar walkthrough/demonstration of loaded data on XRiver test environment.

MDOT Closed Project Data:

- Establish Closed/Current cut-off dates.
- Obtain sample Closed Project Schedule Data files, Payroll Data files and Snapshot files from MDOT.
- Develop mapping between source MDOT files and Planisware core objects and admin tables.
- Develop data loading routines.
- Obtain final Closed data files from MDOT.
- Conduct data load routine testing.
- Provide webinar walkthrough/demonstration of loaded data on XRiver test environment.

MDOT Current Project Data:

- Obtain sample Current Project Schedule Data files, Payroll Data files and Snapshot files from MDOT.
- Conduct data load routine testing.
- Provide detailed instructions for accomplishing data loads on test and production environments.
- Provide webinar walkthrough/demonstration of loaded data on State test environment during UAT.

LDAP/SSO Integration:

The End User password should not be stored in the PPM database schema for any reason.

The Planisware software will support LDAP authentication which would be require Planisware users to re-logon to the application using their standard logon. LDAP authentication is required to be done through the Apache web server. LDAP integration is targeted for the initial implementation of the Planisware application security.

The Planisware software can also support SSO either through Apache or IIS web server which is running the HTTP protocol. This capability must be integrated through an Apache web server (on Linux) using add-on tools. Different tools have different integration capabilities so this will solely depend on the plugin and integration capabilities of the SSO tool (i.e. MICAM MiLogin) selected and incorporated by the State. When the State provides this capability, SSO will be implemented for application security.

For both approaches, the State will be primarily responsible for implementing and ensuring the base functionality is working through the Apache web server. XRiver is not responsible for providing technical guidance in getting MILogin to work properly with the Apache web server.

XRiver will be establishing all User IDs and Roles as part of the MDOT Configuration data development. In addition, for both LDAP and SSO, XRiver will provide technical guidance and consultation as it pertains to Planisware, and will make any needed configuration/setup file changes needed for the Planisware software to work properly.

If the MiLogin SSO solution is ready for use before the end of the UAT, XRiver will integrate the state standard SSO solution with the PPM software at no additional cost.

Interface Development:

Develop data mapping and logical/business rules for each interface as specified in the Interface Design document:

Project Wise Interface - Milestone dates transferred from Project Wise to Planisware.

DCDS Interface – Resource hours and cost dates transferred from DCDS flat files to Planisware.

MAP PLW Job Details Import Interface – transfer of data from MAP to create projects in Planisware.

MAP PLW Milestone Export Interface - transfer of milestone dates from Planisware into MAP.

MAP PLW Baseline Export Interface – transfer of milestone/task dates from Planisware to MAP.

MAP PLW Milestone Import Interface - transfer of milestone/task dates from MAP into Planisware.

Develop & unit test each interface.

Upon completion of each interface, XRiver will conduct a webinar walkthrough/ demonstration with the State on XRiver's test environment. The objective is to coordinate this with the Build demonstration/walkthroughs.

- System Testing:

Load configuration build on the State test environment.

Test load of Closed Project Data on the State test environment using data migration scripts/ routines.

Test load of Open Project Data on the State test environment using data migration scripts/ routines.

Development of manual Test Cases for all components (validation against RTM).

Conduct preliminary testing of all components using developed test cases.

Conduct iterative testing, resolution, and retesting until all configuration issues resolved.

- User Acceptance Testing:

Prep the final build for loading:

  - Conduct load / validation of Common Global and MDOT Configuration data.
  - Conduct load / validation of final Schedule Template/Library data.
  - Conduct load / validation of final Algorithm data.
  - Conduct load / validation of Closed Project Data.
  - Save prep build for go-live use.

Conduct load test/ validation of Current Project Data (for a specified region).

Configure/test LDAP/SSO (whichever available) for testing on QA/Training environment.

Provide facilitation support for the State User Acceptance Testing (UAT).

Conduct iterative testing, resolution, and retesting until all configuration issues resolved.

- Go-Live Production:

Load final UAT prep and configuration build on the State production environment.

Setup/install all interface components on the State production environment.

Configure/test LDAP/SSO in Production Environment.

Conduct load / validation of Current Project Data (for all regions).

Perform checkout/validation of installations.

Final system acceptance/signoff.

Performance Warranty Period:

Address any functional or technical deficiencies with the system.

Address any functional or technical questions on system operations.

Assumptions:

Test Cases are to be developed in Excel and will have a checklist oriented format.

The State will provide XRiver direct access to the Planisware Test Environment for setup, loading, data migration testing and system testing of the Planisware configuration build and interfaces.

The State will NOT provide XRiver direct access to the Planisware Production Environment for setup, loading.

The project schedule data, templates and rule conversions will not "exactly" replicate the functionality of the current State software. All scheduling software applications, even those based on the standard Critical Path Method (CPM) algorithm, may perform schedule calculations slightly differently due to the inherent features and functions embedded within the software.

Inconsistencies between the Planisware scheduling engine and the MDOT legacy system would not be considered defects. Planisware would not be "fixed" in that the base Planisware product would not be altered to replicate the functionality of the legacy system. XRiver's review sessions for the migration of the MDOT Templates and Libraries will be used to identify potential issues, if any, and agreed upon mitigation approaches. It is anticipated that if any inconsistencies are found, they would be relatively subtle/insignificant in nature, and that suitable workarounds could be incorporated by XRiver for the migration.

MDOT Responsibilities:

Algorithm Development

The State will provide current/updated existing rule data on request and guidance/explanation as to how they currently function in the existing environment.

The State will designate one or more State resources to take "ownership" of the rule base and to actively participate in the algorithm development exercise.

Data Conversion

The State is responsible for creating all file exports to be used to import all current MDOT data into the new system.

The State will provide documentation as to the format (field structure) in all provided data files. Note this should include a simple description of field contents (as database field names are inconsistent and not always intuitive).

The State will provide current/updated existing Global Common and MDOT configuration data upon request using spreadsheets and rules provided by XRiver.

The State will be responsible for any data validation and clean-up required.

Interface Development:

The state will provide the final database schema information and files with sample data as required to support Interface development.

The state will be responsible for all changes required to the existing state systems and database for the new interfaces.

System Testing:

Provide access/loading/setup support as agreed to in the Implementation Plan.

Provide access to Test environment for XRiver system testing.

UAT Testing:

State personnel will be responsible for conducting the final UAT using XRiver supplied Test Cases (which can be augmented by MDOT developed test scripts).

The state will agree to commit to providing the resources necessary during the designated UAT period.

XRiver would recommend that MDOT plan on having at least 4 functional resources dedicated to support the initial UAT week long session, and as needed for ad-hoc retesting support afterwards.

LDAP/SSO Integration:

For both LDAP and SSO integration, the State will be responsible for implementing and ensuring the base LDAP and SSO functionality is working through the Apache web server. XRiver is not responsible for providing technical guidance in getting MILogin to work properly with the Apache web server.

Performance/Load Testing:

Support for load testing is limited to brief technical guidance for access to the Planisware application. The State bears the full responsibility for configuring the environment and performing the load testing. Any errors that result from the load testing or require resolution in order to proceed with load testing are not included in XRiver support effort.

Go-Live Production:

Provide access/loading/setup support as agreed to in the Implementation Plan.

Provide sufficient access to Production environment to enable XRiver's verification testing.

Performance Warranty Period:

Designate a primary and secondary Support contact for reporting system problems to XRiver.

Provide resolution support as agreed to in Appendix I. Schedule C - Maintenance and Support of the contract.

Deliverables:

1) Revised Implementation Plan (if necessary).
2) Webinar based walkthrough/demonstrations for data migration: .
    a) Global Common & MDOT Configuration Data
    b) MDOT Schedule Templates and Library Data
    c) MDOT Closed Project Data

3) Webinar based walkthrough/demonstrations for System Interfaces.
    a) Project Wise Interface
    b) DCDS Interface
    c) JobNet/MAP - 4 Interfaces
4) System Test configuration build deemed ready for UAT.
5) Demonstrate MDOT Current Project Data transferred in UAT environment.
6) UAT configuration build deemed ready for Go-Live. Demonstrate all found configuration bugs addressed or mitigated.
7) Go-Live Tested/approved Planisware V6 Configuration Build loaded with all Current Project data ready for implementation.
8) Performance Warranty Period support.

SECTION H-TRAINING SERVICES SOW

This section consists of the activities required to support the Training Services. This section includes the following activities:

Review the Task 01 Training Plan to determine if any changes need to be made.

Training is to consist of the following types of courses:

An on-site standard Planisware System Administrator training class.

End-User webinars for Planisware Core training.

Configuration End user training which can be broken down by the State to address the following groups:

- Project Manager/Scheduling Assistant Users
- Program Manager/System Transportation Manager Users
- Responsible Unit Users
- Reports User/Read Only Users

Training system setup:

Support establishment of a V6 training instance.

Setup/load training all developed training data, establish procedure to reload for repeatability.

Planisware Core Training

This course covers general Planisware V6 topics such as application navigation and basic scheduling features and functions.

This course/webinar is intended to last approximately 4 hours or less per session for participants.

It is anticipated that approximate 30-35 MDOT end users will participate in each session.

XRiver will develop a core training outline to fit MDOT requirements.

XRiver will conduct an initial webinar session with the MDOT PMO team to obtain input on course content and flow.

XRiver to conduct 10 (ten) 4-hour webinar sessions with MDOT end-users. No more than 1 webinar per day will be conducted. This is anticipated to take approximately 2 weeks.

Configuration Training Development:

Support establishment of courses to be taught and curriculum for each course.

Support development of training material and data to support classes.

Conduct train-the-trainer sessions (to support up to 15 total State trainers).

Provide support and feedback to State trainers for the initial pilot training sessions.

System Administration Training:

Conduct a single in-house standard Planisware System Administrator course for State resources (for up to 10 participants) using standard Planisware System Administrator course materials on an OOB configuration.

Online Training & Training Documentation:

XRiver is not providing online (defined as computer based) training other than the training material documentation developed for the Train-the-Trainer sessions.

XRiver will provide source and PDF copies of all training materials to allow the State to load on an in-house designated website. This is bundled with the Train-the-Trainer training.

Additional Training is offered as a Supplemental Service and is not included in the proposed scope.

Assumptions:

The State will provide all needed facilities on-site in the greater Lansing, MI area, and access to the MDOT's training instance, and system access for the training participants.

State personnel will be responsible for "relevant content" training material development.

Existing State production data can be used to familiarize material developed.

All End User training materials deliverables will be in electronic format. MDOT will be allowed to update and reuse all materials for unlimited internal use.

Note that materials provided for standard Planisware Training courses, such as the System Administrator or Planisware Explorer(PEX) courses, will available in electronic format, but will remain the property of Planisware. Any distribution of these materials beyond the class participants is subject to Planisware authorization and approval.

MDOT Responsibilities:

Participation in the review of the Training Plan.

Provide sample data to support training data development.

Provide context input for core and configuration workshop exercises.

Provide access/technical support if need in setup/loading of training system.

Assign designated power-user trainers for the train-the-trainer sessions.

Responsible for all final End User configuration training.

Participate in System Administrator training.

State to provide webinar software for use for Planisware Core training. This should accommodate up to 35 participants.

State to coordinate scheduling of all Planisware Core training webinar participants.

Deliverables:

1) Revised Training Plan (if necessary).
2) Planisware V6 Training Environment Setup.
3) Planisware Core training materials.
4) Up to 10 Planisware Core training webinar sessions.
5) Configuration End User Training Materials (in electronic format).
6) Completed Configuration End User Trainer-the-Trainer sessions.
7) Support for Initial Pilot Configuration End User Training Sessions.
8) One Planisware System Administrator Training Session.

SECTION I-ADDITIONAL DOCUMENTATION SERVICES SOW

This section consists of the activities required to support the Additional Documentation Services. This section includes the following activities:

Development of a supplemental user guide:

Work with the State to define format and content.

Develop the supplemental user guide.

Provide access to Planisware Customer Portal for standard Planisware documentation.

All Planisware end user documentation for out of the box functionality is now provided in the form of modular based eLearning materials which can be found in the Planisware software as well as the Planisware User Portal. These training materials include Whitepapers, PowerPoint

Presentations and Recorded Videos, the sum of which have been determined to be more effective training material than the traditional User Guide.

The Planisware Data Dictionary is documented within the Oracle database. Planisware provides a standalone HTML output of this information.

Develop procedure for delivery of all project documentation.

Assumptions:

State personnel will be responsible for "relevant content" user guide material development.

XRiver personnel will be responsible for "how to" functional user guide material and compilation of the user guide.

Final deliverables will be in electronic format.

MDOT Responsibilities:

Participation in the development of the Supplemental User Guide format.

Participation in the development of the Supplemental User Guide context content.

Deliverables:

9) Standard Planisware Documentation

10) Project Documentation (all work product developed for other tasks)

11) Supplemental User Guide

SECTION K-KNOWLEDGE TRANSFER SERVICES

This section consists of the activities required to support the Knowledge Transfer Services. This section includes the following activities:

Develop a Solution Transition Plan:

Work with the State to develop a Solution Transition Plan which will primarily address post go-live support Planisware maintenance procedures.

Submit plan for review and approval.

Provide supplemental advance technical training sessions.

Provide up to 4-days of on-site Planisware ProWeb technical review session for up to 6 State technical staff. Session(s) would include code walkthroughs of relevant configuration build elements.

Provide Planisware PEX webinar training. This consists of 4 hours/week consisting of a 2 hour online session and 2 hours of a homework assignment per week, over a 4 week period, for up to 10 State users.

Assumptions:

The State will provide all training facilities for on-site sessions.

Participation will include up to 6 State technical resources.

Deliverables:

Solution Transition Plan

4 total days ProWeb technical session(s) for up to 6 participants

1 PEX Webinar training session (spread over 4 sessions) for up to 10 participants

MDOT Responsibilities:

1) Participate in the development of the Solution Transition Plan.
2) Participate in the ProWeb Technical Sessions.
3) Participate in the PEX Webinar training sessions.

REVISED PAYMENT MILESTONE CRITERIA

The following sections provide the detailed Task Order (TO) #2 payment milestones associated with the revised SOW.

SECTION B: PROJECT MONITORING & CONTROL

Milestone #B4-B12 – Progress Payments: XRiver would invoice for 9 separate monthly payments each consisting of 1/12 of the proposed total Project Monitoring and Control pricing. XRiver would invoice at the end of each for the each month's progress payment.

SECTION D: REQUIREMENTS AND SOLUTION ARCHITECTURE VALIDATION SERVICES

Milestone D3 - Final COTS PPM Solution Screen Configuration/Customization Plan Submitted and Approved. This milestone will be achieved at the completion of the following activities.

Final Interface Design developed, submitted, reviewed and approved.

COTS PPM Solution Screen Configuration/Customization Plan developed, submitted, reviewed and approved.

SECTION E: INSTALLATION OF "OUT-OF-THE-BOX" COTS

Milestone E1 –Installation of Planisware V6 on the State development environment. This milestone will be achieved at the completion of the following activity.

- Conclusion of the out-of-the-box Planisware V6 installation in the state development environment.

Milestone E2 – Installation of Planisware V6 on the State QA/testing environment. This milestone will be achieved at the completion of the following activity.

- Conclusion of the out-of-the-box Planisware V6 installation in the state QA/testing environment.

Milestone E3 – Installation of Planisware V6 on the State production environment. This milestone will be achieved at the completion of the following activity.

- Conclusion of the out-of-the-box Planisware V6 installation in the state production environment.

SECTION F: CONFIGURATION/ CUSTOMIZATION SERVICES

Configuration/Customization milestones will be for completed functional groupings. Each build grouping will be deemed complete upon successful final Unit Testing and a webinar based walkthrough /demonstrations to the State of all designated Build Configuration/ Customization Plan items.

Milestone F1 - Build 1-½ Scheduling Completion: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of all designated Build Configuration /Customization Plan items in the XRiver development environment.

Milestone F2 - Build 2-Cost/Resource management and ½ Scheduling Completion: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of all designated Build Configuration/Customization Plan items in the XRiver development environment.

Milestone F3 - Build 3-Program Management & ½ Report Completion: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of all designate Program Management and designated Build Configuration/Customization Plan items in the development XRiver environment.

Milestone F4 - Build 4- ½ Reporting Build Completion: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of designated Build Configuration /Customization Plan items in the XRiver development environment.

Milestone F5 - Final Build Completion: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of final Build Configuration/ Customization Plan items in the XRiver development environment. Focus will be on build items updated/integrated from previous webinars.

SECTION G: IMPLEMENTATION SERVICES

Data Conversion/Migration

Milestone G1B - Data Conversion/Migration – Global Common and MDOT Configuration Data: This milestone will be achieved at the completion of a webinar based walkthrough/ demonstration of all data items in the XRiver development environment.

Milestone G1C - Data Conversion/Migration –MDOT Schedule Templates and Library Data: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of all data items in the XRiver development environment.

Milestone G1D - Data Conversion/Migration –MDOT Closed Project Data: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of all data items in the XRiver development environment.

Milestone G1E - Data Conversion/Migration –MDOT Current Project Data: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of all data items in the UAT environment.

Algorithm Development

Milestone G2 – Algorithm Development Procedures & Prioritization: This milestone will be achieved at the completion of the following activities:

Completion of a webinar based walkthrough/demonstration of all algorithm data items in the XRiver development environment.

The Algorithm Development/Maintenance Procedures have been developed, reviewed and approved.

Interfaces

Milestone G4 – Project Wise Interface: This milestone will be achieved at the completion of the following activities:

This milestone will be achieved at the completion of a webinar based walkthrough/ demonstration, in the XRiver development environment, of the Project Wise Interface functional capabilities as specified in the Project Wise Interface Design.

Milestone G5 – DCDS Interface: This milestone will be achieved at the completion of the following activities:

This milestone will be achieved at the completion of a webinar based walkthrough/ demonstration, in the XRiver development environment, of the DCDS Interface as specified in the DCDS Interface Design.

Milestone G6 – MAPS Interfaces: This milestone will be achieved at the completion of the following activities:

This milestone will be achieved at the completion of a webinar based walkthrough/ demonstration, in the XRiver development, of the MAPS Interface environment as specified in the MAPS Interface Design.

Testing

Milestone G7 – System Testing: This milestone will be achieved at the completion of the following activities:

The completion of Data Migration Tests/Loads in the State test environment.

The completion of the Configuration Build and Interface System Testing in the State test environment.

Milestone G8 – UAT Testing: This milestone will be achieved at the completion of the following activities:

The completion of the Configuration Build and Interface UAT in the State test environment.

Go-Live Production

Milestone G9 – Go-Live Production: This milestone will be achieved at the completion of the following activities:

Completion and verification of the Configuration Build and Interface set up, and the final data migration in the production environment.

Performance Warranty Period

Milestone G10 – Performance Warranty Period: This milestone will be achieved at the completion of the following activities:

The Performance Warranty Period is deemed complete 90-days after the end of the Go- Live product period and when there are no Level 1, 2, or 3 severity level problems outstanding.

SECTION H: TRAINING SERVICES

Milestone H1 – Configuration End User Train-the-Trainer Training: This milestone will be achieved at the completion of the following activities:

Completion of the initial pilot Configuration End User Training session.

Milestone H2 – Planisware Core Training: This milestone will be achieved at the completion of the following activities:

Completion of the up-to 10 Planisware Core-webinar training sessions.

Milestone H3 – System Administration Training session: This milestone will be achieved at the completion of the following activities:

Completion of the System Administration Training session.

SECTION I: ADDITIONAL DOCUMENTATION

Milestone I1 – User Manuals: This milestone will be achieved at the completion of the following activities:

Delivery of the standard Planisware eLearning User Materials.

Delivery of the configuration build Supplemental User Manual.

Milestone I2 – Technical Manuals: This milestone will be achieved at the completion of the following activities:

Provide the State with an access account to the Planisware web portal for direct access all standard Planisware technical documentation.

Delivery of a Planisware Data Dictionary.

SECTION K: KNOWLEDGE TRANSFER/TRANSITION

Milestone K1 - Knowledge Transfer Plan: This milestone will be achieved at the completion of the following activities.

Knowledge Transfer Plan developed, submitted, reviewed and approved.

Milestone K2 - Advanced ProWeb & Code Walkthrough Session: This milestone will be achieved at the completion of the following activities.

Completion of the Advanced ProWeb & Code Walkthrough Session.

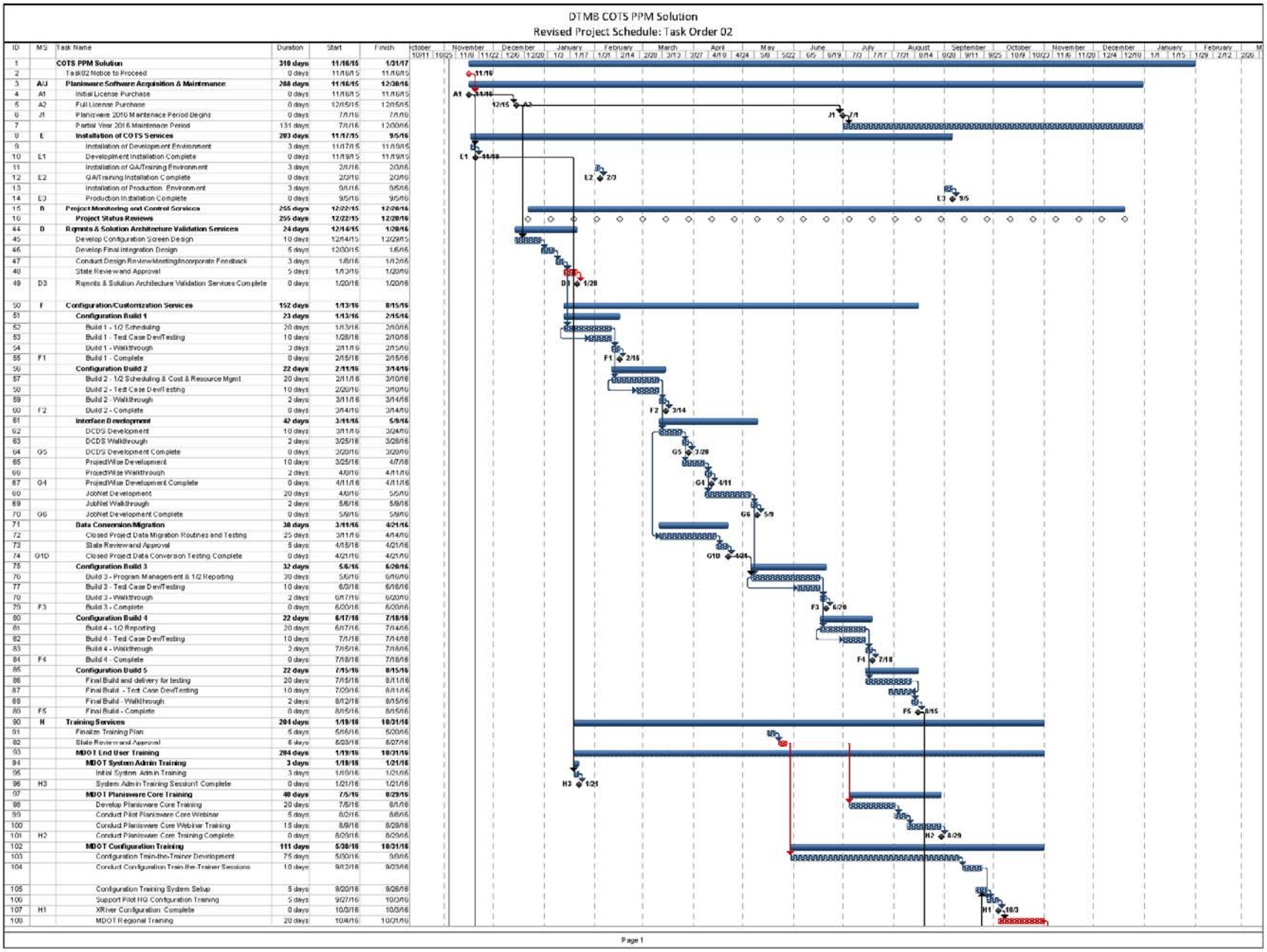
Milestone K3 - Advanced PEX Session: This milestone will be achieved at the completion of the following activities.

Completion of the Advanced PEX Session.

REVISED SCHEDULE

TO #2 would take approximately 11 to12 months to complete based on the preliminary Task 02 Project Schedule. Key highlights:

- Task 02 start is targeted for November 18 to support State procurement request.
- Schedule is driven by a target Go-Live date of October 31, 2015. This date was requested by the State to coordinate the Planisware implementation with the anticipated rollout of the JobNet system.
- The schedule was expanded to a greater level of detail to highlight all milestone deliverables.
- The schedule includes State document review periods where deemed necessary.
- The detailed schedule is provided as the attached XRiver Task 02 Detailed Task Schedule.pdf document for improved readability.
- This schedule provides the baseline schedule for Task 02. It will be progressed and updates throughout Task 02 subject to the processes specified in the Project Management Plan approved in Task 01.

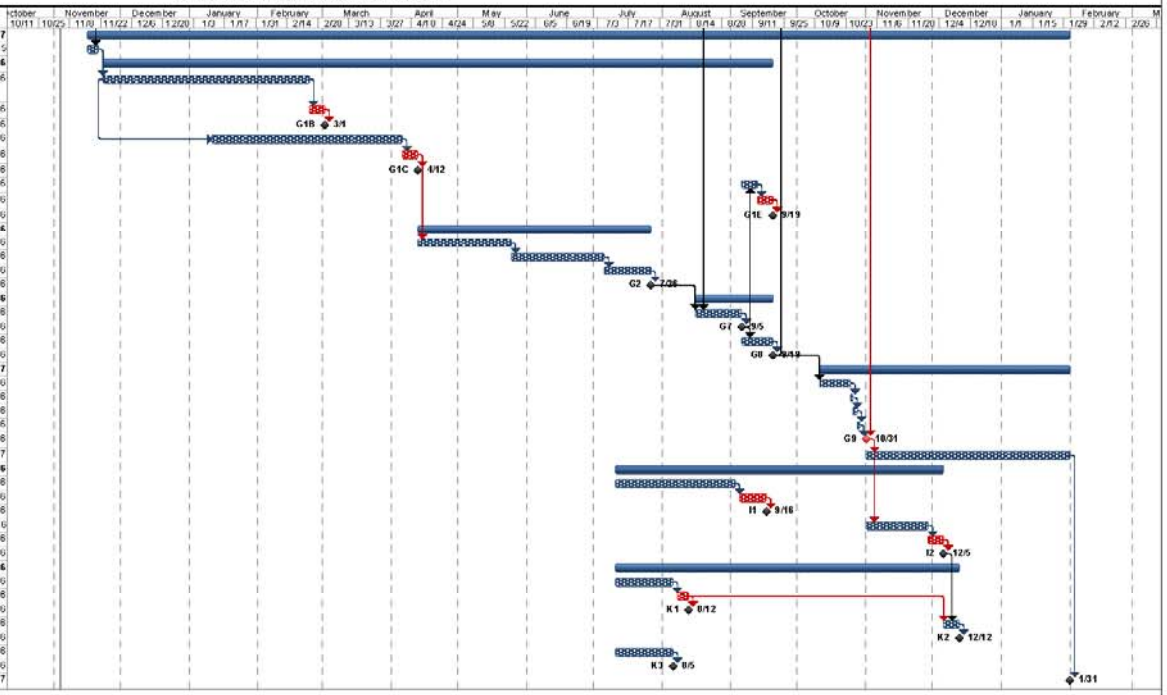


ID	MS	Task Name	Duration	Start	Finish
1		**COTS PPM Solution**	**310 days**	**11/16/15**	**1/31/17**
2		Task02 Notice to Proceed	0 days	11/16/15	11/16/15
3	A/J	**Planisware Software Acquisition & Maintenance**	**288 days**	**11/16/15**	**12/30/16**
4	A1	Initial License Purchase	0 days	11/16/15	11/16/15
5	A2	Full License Purchase	0 days	12/15/15	12/15/15
6	J1	Planisware 2016 Maintenace Period Begins	0 days	7/1/16	7/1/16
7		Partial Year 2016 Maintenace Period	131 days	7/1/16	12/30/16
8	E	**Installation of COTS Services**	**203 days**	**11/17/15**	**9/5/16**
9		Installation of Development Environment	3 days	11/17/15	11/19/15
10	E1	Development Installation Complete	0 days	11/19/15	11/19/15
11		Installation of QA/Training Environment	3 days	2/1/16	2/3/16
12	E2	QA/Training Installation Complete	0 days	2/3/16	2/3/16
13		Installation of Production Environment	3 days	9/1/16	9/5/16
14	E3	Production Installation Complete	0 days	9/5/16	9/5/16
15	B	**Project Monitoring and Control Services**	**255 days**	**12/22/15**	**12/28/16**
16		**Project Status Reviews**	**255 days**	**12/22/15**	**12/28/16**
44	D	**Reqmnts & Solution Architecture Validation Services**	**24 days**	**12/14/15**	**1/20/16**
45		Develop Configuration Screen Design	10 days	12/14/15	12/29/15
46		Develop Final Integration Design	5 days	12/30/15	1/6/16
47		Conduct Design Review Meeting & Incorporate Feedback	3 days	1/6/16	1/12/16
48		State Review and Approval	5 days	1/13/16	1/20/16
49	D3	Reqmnts & Solution Architecture Validation Services Complete	0 days	1/20/16	1/20/16
50	F	**Configuration/Customization Services**	**152 days**	**1/13/16**	**8/15/16**
51		**Configuration Build 1**	**23 days**	**1/13/16**	**2/15/16**
52		Build 1 - 1/2 Scheduling	20 days	1/13/16	2/10/16
53		Build 1 - Test Case Dev/Testing	10 days	1/28/16	2/10/16
54		Build 1 - Walkthrough	3 days	2/11/16	2/15/16
55	F1	Build 1 - Complete	0 days	2/15/16	2/15/16
56		**Configuration Build 2**	**22 days**	**2/11/16**	**3/14/16**
57		Build 2 - 1/2 Scheduling & Cost & Resource Mgmt	20 days	2/11/16	3/10/16
58		Build 2 - Test Case Dev/Testing	10 days	2/26/16	3/10/16
59		Build 2 - Walkthrough	2 days	3/11/16	3/14/16
60	F2	Build 2 - Complete	0 days	3/14/16	3/14/16
61		**Interface Development**	**42 days**	**3/11/16**	**5/9/16**
62		DCDS Development	10 days	3/11/16	3/24/16
63		DCDS Walkthrough	2 days	3/25/16	3/28/16
64	G5	DCDS Development Complete	0 days	3/28/16	3/28/16
65		ProjectWise Development	10 days	3/25/16	4/7/16
66		ProjectWise Walkthrough	2 days	4/8/16	4/11/16
67	G4	ProjectWise Development Complete	0 days	4/11/16	4/11/16
68		JobNet Development	20 days	4/8/16	5/5/16
69		JobNet Walkthrough	2 days	5/6/16	5/9/16
70	G6	JobNet Development Complete	0 days	5/9/16	5/9/16
71		**Data Conversion/Migration**	**38 days**	**3/11/16**	**4/21/16**
72		Closed Project Data Migration Routines and Testing	25 days	3/11/16	4/14/16
73		State Review and Approval	5 days	4/15/16	4/21/16
74	G1D	Closed Project Data Conversion Testing Complete	0 days	4/21/16	4/21/16
75		**Configuration Build 3**	**32 days**	**5/6/16**	**6/20/16**
76		Build 3 - Program Management & 1/2 Reporting	30 days	5/9/16	6/16/16
77		Build 3 - Test Case Dev/Testing	10 days	6/3/16	6/16/16
78		Build 3 - Walkthrough	2 days	6/17/16	6/20/16
79	F3	Build 3 - Complete	0 days	6/20/16	6/20/16
80		**Configuration Build 4**	**22 days**	**6/17/16**	**7/18/16**
81		Build 4 - 1/2 Reporting	20 days	6/17/16	7/14/16
82		Build 4 - Test Case Dev/Testing	10 days	7/1/16	7/14/16
83		Build 4 - Walkthrough	2 days	7/15/16	7/18/16
84	F4	Build 4 - Complete	0 days	7/18/16	7/18/16
85		**Configuration Build 5**	**22 days**	**7/15/16**	**8/15/16**
86		Final Build and delivery for testing	20 days	7/15/16	8/11/16
87		Final Build - Test Case Dev/Testing	10 days	7/29/16	8/11/16
88		Final Build - Walkthrough	2 days	8/12/16	8/15/16
89	F5	Final Build - Complete	0 days	8/15/16	8/15/16
90	H	**Training Services**	**204 days**	**1/19/16**	**10/31/16**
91		Finalize Training Plan	5 days	5/16/16	5/20/16
92		State Review and Approval	6 days	5/23/16	5/27/16
93		**MDOT End User Training**	**204 days**	**1/19/16**	**10/31/16**
94		**MDOT System Admin Training**	**3 days**	**1/19/16**	**1/21/16**
95		Initial System Admin Training	3 days	1/19/16	1/21/16
96	H3	System Admin Training Session1 Complete	0 days	1/21/16	1/21/16
97		**MDOT Planisware Core Training**	**40 days**	**7/5/16**	**8/29/16**
98		Develop Planisware Core Training	20 days	7/5/16	8/1/16
99		Conduct Pilot Planisware Core Webinar	5 days	8/2/16	8/8/16
100		Conduct Planisware Core Webinar Training	15 days	8/8/16	8/29/16
101	H2	Conduct Planisware Core Training Complete	0 days	8/29/16	8/29/16
102		**MDOT Configuration Training**	**111 days**	**5/30/16**	**10/31/16**
103		Configuration Train-the-Trainer Development	75 days	5/30/16	9/9/16
104		Conduct Configuration Train-the-Trainer Sessions	10 days	9/12/16	9/23/16
105		Configuration Training System Setup	5 days	9/20/16	9/26/16
106		Support Pilot HQ Configuration Training	5 days	9/27/16	10/3/16
107	H1	XRiver Configuration Complete	0 days	10/3/16	10/3/16
108		MDOT Regional Training	20 days	10/4/16	10/31/16

DTMB COTS PPM Solution

Revised Project Schedule: Task Order 02

ID	MS	Task Name	Duration	Start	Finish
109	G	**Implementation Services**	**310 days**	**11/16/15**	**1/31/17**
110		Finalize Implementation Plan	5 days	11/16/15	11/20/15
111		**Data Conversion/Migration**	**209 days**	**11/23/15**	**9/19/16**
112		Common Data & MDOT Configuration Data Development	60 days	11/23/15	2/23/16
113		State Review and Approval	5 days	2/24/16	3/1/16
114	G1B	Common Data & MDOT Configuration Data Complete	0 days	3/1/16	3/1/16
115		MDOT Template & Library Development	60 days	1/11/16	4/5/16
116		State Review and Approval	5 days	4/6/16	4/12/16
117	G1C	MDOT Template & Library Data Complete	0 days	4/12/16	4/12/16
118		Current Project Data Conversion Testing	5 days	9/6/16	9/12/16
119		State Review and Approval	5 days	9/13/16	9/19/16
120	G1E	Current Project Data Conversion Testing Complete	0 days	9/19/16	9/19/16
121		**Algorithm Development**	**76 days**	**4/13/16**	**7/26/16**
122		MDOT Rule Conversion	30 days	4/13/16	5/24/16
123		Algorithm Testing	30 days	5/25/16	7/5/16
124		Algorithm Maintenance Review	15 days	7/6/16	7/26/16
125	G2	Algorithm Development Complete	0 days	7/26/16	7/26/16
126		**Testing**	**25 days**	**8/16/16**	**9/19/16**
127		Conduct System Testing	15 days	8/16/16	9/5/16
128	G7	System Testing Complete	0 days	9/5/16	9/5/16
129		Conduct UAT	10 days	9/6/16	9/19/16
130	G8	UAT Complete	0 days	9/19/16	9/19/16
131		**Go Live Production**	**84 days**	**10/11/16**	**1/31/17**
132		Configuration Build Prep & Load	10 days	10/11/16	10/24/16
133		Interface Load/Connectivity	1 day	10/25/16	10/25/16
134		Pilot Production Data Conversion/Migration	2 days	10/26/16	10/27/16
135		Installation Checkout	1 day	10/28/16	10/28/16
136	G9	Go Live Production	0 days	10/31/16	10/31/16
137		Performance Warranty Period	66 days	11/1/16	1/31/17
138	I	**Additional Documentation**	**106 days**	**7/11/16**	**12/5/16**
139		Supplemental User Guide Development	40 days	7/11/16	9/2/16
140		State Review and Approval	10 days	9/5/16	9/16/16
141	I1	Supplemental User Guide Complete	0 days	9/16/16	9/16/16
142		Technical Manual Development	20 days	11/1/16	11/28/16
143		State Review and Approval	5 days	11/28/16	12/5/16
144	I2	Technical Manual Complete	0 days	12/5/16	12/5/16
145	K	**Knowledge Transfer/Transition**	**111 days**	**7/11/16**	**12/12/16**
146		Soution Transfer Plan Development	20 days	7/11/16	8/5/16
147		State Review and Approval	5 days	8/8/16	8/12/16
148	K1	Solution Transition Plan Complete	0 days	8/12/16	8/12/16
149		Technical Review Session	5 days	12/6/16	12/12/16
150	K2	Technical Review Session Complete	0 days	12/12/16	12/12/16
151		PEX Training	20 days	7/11/16	8/5/16
152	K3	PEX Training Complete	0 days	8/5/16	8/5/16
153		Project Completion	0 days	1/31/17	1/31/17



A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
1.0		**Schedule Creation**																		
1.1		**POST RFP CLARIFICATION ITEMS**											0	$ -					0	$ -
1.1.1	Project Attributes	**Project Attributes - Approximately 40 Project Attributes will need to be added to the Project Header**	MH	L2	IN	Deliverable	Configuration will need to implement additional project attributes	See "Project attributes" tab. Need to be revisted during screen design because we will need to place these attributes on the project creation/editing popup.	F1	1	10	50	61	$ 13,325	F1IN	1	10	50	61	$ 13,325
1.1.2	Activity Attributes	**Activity Attributes - Approximately 20 Activity Attributes will need to be added to the Activity Header**	MH	L2	IN	Deliverable	Configuration will need to implement additional project attributes	See "Activity attributes" tab.	F1	1	5	30	36	$ 7,850	F1IN	0	1	5	6	$ 1,300
1.1.3	Algorithm Execution	**Network Generation - on demand, must apply algorithms to project schedules (which are initially loaded without resources) to set the activity durations, resource codes and resource quantities based on project drivers.**	MH	L1	IN	Capability (consulting effort)	Configuration will need to implement use of algorithms XRiver is responsible for entering/modifying algorithm template/equations **Using standard OOB Parametric algorithms**	Configuration for project drivers handled in 1.1.1. Initial algorithm execution will be part of the project creation wizard, RTM item 1.1.4. Subsequent execution can be done using OOB features. The Implementation Plan will address conversion of the existing algorithms and training MDOT on using the OOB fucntionality.	F1	0	10	0	10	$ 2,750	F1IN	0	0	0	0	$ -
1.1.4	Project creation wizard	N/A - added to RTM on August 28th instead of using an existing line item for it. The capability to easily generate a project must be provided in the GUI.	NH	L2	IN	Deliverable	N/A - added to RTM on August 28th instead of using an existing line item for it.	**This RTM line has been added.** There is a new tab on the project popup called "Creation wizard" which will display several project header attributes. These attributes are to be used for generating the structure of the network. If the project has a job number and a work type, the user will be able to click on a "generate network" button (only once though) which will: 1) Run algorithms to update activity durations/resource hours (RTM item 1.1.3) 2) Run OBS code replacement and resource assignments according to the TSC (RTM item 1.2.3) 3) Deleting 0 duration activities and re-linking functionality (RTM item 1.3.1) Using this approach greatly simplifies the level of configuration required.	F2						F2IN	4	12	40	56	$ 12,800
1.2	Templates	System must provide the ability to create a project schedule with the use of MDOT defined templates.	MH	L1/L2	IN	Capability / Deliverable	Utilizes Planisware's own scheduling engine, not dependent on 3rd party tool. Can define templates that include resources, durations, costs, and meta-data that can be altered by the project manager once a project is created	OOB but configuration needed to change the access rights / groups of a template if a "regular" user sets the state to be "Project template" to be inaccessible to others. The way we determine "regular" users will be a boolean attribute on the user group. For example, business administrators will not be "regular" users and will always have access. This is done so that users can effectively create their own templates without those being in the picklist for other users.	F1	0	0	0	0	$ -	F1IN	0	1	4	5	$ 1,095
1.2.1	Template Mulit-Work Types	**Network Generation: One template can satisfy different work types. Work type A and work type B can have the same template.**	MH	OOB	IN	Capability	Configuration will need to implement multiple work type assignments for each template	You can apply any template when creating any project. It is a picklist selection on the project creation pop-up screen. There is no Planisware configured deliverable for this item.	F1	0	0	10	10	$ 2,050	F1IN	0	0	0	0	$ -
1.2.2	Template Selection	**Network Generation: Template selection should filter based on Project's defined Work Type.**	NH	L2	IN	Deliverable	Configuration will need to implement template work type filter	When selecting a work type (whether directly or indirectly through selecting the job number), the template field will be pre-populated with the template tied to the work type. The user can afterwards change the template if the user wants to. The tie to the work type will be administered in the back end on the work type table. It is assumed that a work type is only tied to a single template (a template can belong to several work types, though).	F1	0	2	10	12	$ 2,600	F1IN	0	2	12	14	$ 3,010
1.2.3	Template OBS Replacement	**Network Generation: System should replace generic (higher level) OBS codes on demand with location specific OBS codes based on Project Region or TSC attributes**	NH	L2	IN	Deliverable	Configuration will need to implement automatic update of OBS based on selected region/TSC	The base assumption is that the template will be loaded with OBS values for activities. In the administrative tables for the TSC and OBS, there will be an attribute (administered and set-up initially by the business admins) that will link the values together so that we can have logic behind this and have a mapping. A button will be made available to users inside the projects module, which will do the following upon clicking: 1) Modify the OBS on the activities which map to the TSC at the project level (based on the mapping in the admin table) 2) Modify the Resource on planned hours which map to the TSC at the project level (mapping through OBS relation in the RBS - same mapping as in #1). This will also be called as part of the "Generate network" button in the project creation wizard - see RTM item 1.1.4.	F2	0	2	10	12	$ 2,600	F2IN	0	10	24	34	$ 7,670

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
1.3	Template Library	System should provide the ability to add an MDOT defined sub template(s) for support units including but not limited to real estate and environmental to an MDOT defined base template.	MH	OOB	IN	Capability	Fully Supported using Planisware's library template functionality	Activity libraries can be inserted into projects at any point. Activity libraries are essentially templates or sections of templates.	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -
1.3.1	Template Auto Integration	**Network Generation: Automatically link the added sub template based on common activites**	NH	L2	IN	Deliverable	Configuration will need to implement automatic linkage via duplicate activities	When inserting an activity library, everything that is contained within your selection is inserted. So if you insert a WBS element with 5 tasks underneath and they are linked together, these links will come in. However, if one of those 5 tasks are linked to a milestone/activity outside of the inserted WBS element, those do not come in. Configuration will be done to automatically link inserted activities within your project based on the links they have in the template - the assumption is that the activities they are linked to in the template are already present in your project. The key value for determining this will be the "activity type" of the activities in the template and the project. A master template must exist that has all of the dependencies between activities so that we can see what they should be when doing the re-linking. This functionality will be available in the form of a button in the toolbar. This will also be called as part of the "Generate network" button in the project creation wizard - see RTM item 1.1.4.	F2	4	10	50	64	$ 14,300	F2IN	4	24	55	83	$ 19,175
1.4	Copy Project Schedule	System must provide the ability to create a project schedule by copying a previous project.	NH	L1/L2	IN	Capability / Deliverable	Fully Supported Small configuration to allow certain metadata to be updated upon save-as	The 'save as' button is an OOB feature which creates a full copy of your project (all project header attributes, the network, the costs, the actuals, etc.). Configuration will be pursued to strip the "job number" from all newly created projects (either through 'save as' or version creation).	F1	1	5	10	16	$ 3,750	F1IN	1	5	14	20	$ 4,570
1.5	Project Identifier	System must include unique MDOT identifier to associate schedule to MDOT project.	MH	L2	IN	Deliverable	Fully Supported, If that unique identifier must be a specific MDOT created identifier, then couple possibly require minor configuration.	Can be done by manually inputting into the project "name" attribute but configuration required to automatically change the project "name" to the job number once the job number is chosen for the project.	F1	1	5	10	16	$ 3,750	F1IN	0	2	6	8	$ 1,780
1.6	Project Start Date	System must provide the ability to add new start date when copying an existing project schedule.	MH	OOB	IN	Capability	Fully Supported	Input into the project field "Start date" which will in turn change the start dates in your schedule network.	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -
1.7	Project Creation Validations	System must limit creation of schedules that will be included in the program to a list of jobs and concepts from the corporate project budgeting system.	MH	L2	IN	Deliverable	Planisware can validate lists of jobs from imported data from the corporate project budgeting system. Import from external system is handled by the MAP interface	Job numbers are imported from MAP and then they will be selectable on the project creation/editing popup. The job number can be changed at any point until the project is approved and then it is locked except for PMO users. The project can be deleted (which will strip the job number) up until the point that the project is approved.	F2	1	5	20	26	$ 5,800	F2IN	2	10	25	37	$ 8,525
1.8	Non Dept Schedules	System should allow users to create schedules that are not part of departmental program reporting.	MH	OOB	IN	Capability	This is typically used for things like what-if analysis, proposed projects, etc	Users can create any kind of schedule they want. Only those that have a selected "job number" will be used in reporting / portfolio filtering. The Planisware "state" of "Simulation" or "Can be consolidated" can also be used to distinguish these projects from regular "Active" projects. There is no Planisware configured deliverable for this item. The reports in the RTM should define which projects should and should not be displayed and we can filter accordingly.	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -
2.0		**Project Schedule**																		

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
2.1	Task Description Lock	System must use predefined non-editable MDOT task descriptions from a predefined WBS and milestones.	NH	L2	IN	Deliverable	Can be done through access rights or optionally, activity types	On all projects, "regular users" will not be able to modify the (will be greyed out): 1) Name 2) Description 3) Activity type This will be driven by the "activity type" attribute. The name/description of the task will match the name/description of the activity type which is administered in the admin table. If a task does not have an activity type, the user will be allowed to modify the name/description (i.e. subtasks or general task creation for anything). Once an activity type is set, however, the name/description will default to the activity type value and then will be locked for further update. When projects are created from a template or when activities are inserted from an activity library, the activity type attribute should already be set in the template and thus this will enforce the locking. The way we determine "regular" users will be a boolean attribute on the user group. For example, business administrators will not be "regular" users and will always have access.	F1	1	5	20	26	$ 5,800	F1IN	1	4	17	22	$ 4,910
2.2	Task Project Uniqueness	System must provide the ability to allow changes to the system-generated schedule and tasks to make them unique to the project.	MH	OOB/L2	IN	Capability / Deliverable	Fully Supported	Standard activity updates in projects. A warning alert should be configured if the user is creating an activity with a name that already exists in the project.	F1	0	0	0	0	$ -	F1IN	1	4	17	22	$ 4,910
2.3	Task Res Auto Assignments	System should be able to automatically assign resources to tasks based on scope such as project location, work type code, etc.	MH	L1	IN	Capability (consulting effort)	Depending on specific process desired, system can assign resources (by name, dept, skill) based on location, work type, etc Using parametric estimation with level-1 configuration drivers	Resource load assignment should be done by: 1) Being pre-loaded from the template/activity library 2) Algorithms based on drivers Configuration for project drivers handled in 1.1.1. There is no Planisware configured deliverable needed for this item aside from consultation on creating equations.	F1	1	5	10	16	$ 3,750	F1IN	0	0	0	0	$ -
2.4	Task Precedence	System must provide the ability to create and change the order of sequential tasks based on predecessors and successors.	MH	OOB	IN	Capability	Fully Supported	Links can be created in several ways: 1) Gantt drag/drop 2) Activity highlighting and then buttons 3) Input into the predecessors/successors fields	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -
2.5	Task Subtasks	System should allow addition of custom subtasks to meet the schedule of the parent task.	MH	OOB	IN	Capability	Fully Supported	"Custom subtasks" are simply standard tasks in Planisware. You can insert tasks at any point, however, the parent must be a "WBS element". Both "tasks" and "WBS elements" are called "activities" in Planisware but only a "WBS element" can have children. Once you have sub-tasks underneath a WBS element, it is a best practice to drive the dates/duration of the WBS element by the sub-tasks underneath.	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -
2.6	Task Checklists	System should allow for the creation of checklist items for a task.	MH	OOB	IN	Capability	Checklist items can be accomplished using Planisware deliverables	Can be done through sub-tasks or simply through the activity notepad field.	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -
2.7	Task Target Dates	System must provide the ability for the user to input MDOT defined key dates to provide critical path analysis	MH	OOB/L1	IN	Capability / Deliverable	Fully Supported Using OOB project scheduling	Several date fields exist in Planisware for computation, in order of precedence: 1) Planned start/finish & expected finish 2) Start no earlier than / finish no later than 3) Fixed start date 4) Actual start/finish The system should lock down the ability to enter actual dates in the future.	F1	0	0	0	0	$ -	F1IN	0	0	4	4	$ 820
2.8	CPM Scheduling	System must identify the critical path within the project.	MH	OOB	IN	Capability	Fully Supported OOB critical path calculation is used	Critical path computation is fully OOB. A dedicated screen exists for it in the Gantt page. In the regular Gantt, yellow highlighting will show which activities have a negative float.	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -
2.9	Priority Scheduling	System should provide the ability to schedule tasks based on project's priority within the program. Ex: Ten projects all needing environmental clearance task but one project is given a higher priority than the rest so that project's task is scheduled first	MH	L2	IN	Capability / Deliverable	Project priorities are supported. Having said that, given the information within the question, there would be no reason not to schedule those tasks at the same time unless there is a shortage or resources, for example. Assumption: Use OOB project's/activity's priority field. No automation	There is a field for "Priority" on both the project and activity level. We will pursue configuration to update the activity level "priority" field whenever the project level "priority" field changes. This is a number field so only numbers are accepted. MIDOT needs to work on the actual process for how priority is handled. Ref: RTM item 8.6.	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
2.10	Task Res Distribution	System should provide the ability to manually edit labor hour's distribution.	MH	OOB	IN	Capability	Fully Supported using OOB resource load array	Can be done a time-scale basis in the 'Resources' page or can be done by setting up distributions which can then be assigned to the load (e.g. backload, frontload, etc.).	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -
2.11	Task Dur Locking	System must provide the ability to lock task duration changes for sensitive or government regulated tasks to be changed only by an authorized user based on permissions.	NH	L2	IN	Deliverable	Fully Supported. Set by permissions or locks	On all projects, only specific users will be able to modify the duration (and any relevant scheduling attributes which would let users indirectly modify the duration - to be reviewed during configuration). This will be driven by the "activity type" attribute. When projects are created from a template or when activities are inserted from an activity library, the activity type attribute should already be set in the template and thus this will enforce the locking. Along with RTM item 2.1, the activity type will be locked down and therefore there is no worry about users indrectly bypassing the duration lock. This configuration will be dynamic according to the activity type admin table so that it can be used for several different types of activities, through the following design: 1) A boolean attribute on the activity type to determine if those activities should be locked or not 2) A string attribute on the activity type to determine which user groups have access to modify the activities (the admin user group should be included in this string) 3) A duration attribute on the activity type to determine the minimum duration for the task (e.g. 60d for government tasks) 4) A duration attribute on the activity type to determine the maxmum duration for the task (e.g. 60d for government tasks)	F1	1	10	30	41	$ 9,225	F1IN	1	10	30	41	$ 9,225
2.12	Task Dur Audit Trail	System must maintain an audit trail of estimated task labor hours and estimated task durations changes.	MH	OOB	IN	Capability	Planisware can track via monthly snapshots, or via customized audit trail reporting	It was decided that information will be kept for auditing in the form of baselines and versions. The 'history' tab of the activity popup window will be used in conjunction with the versions and baselines to compare changes (along with the compare table functionality for versions from the Planisware menu). Also, at any point, you can see the user/date of the last change that took place on something (last modification author/date fields). There is no Planisware configured deliverable for this item.	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -
2.13	Task Dur Audit Access	System must provide the ability to retrieve audit trail for viewing, reporting, and comparison reporting.	MH	OOB	IN	Capability	Audit trail standard, but can also track via snapshots or versions which is best method for comparison. Assumption: Use baseline/version to track changes in project.	It was decided that information will be kept for auditing in the form of baselines and versions. The 'history' tab of the activity popup window will be used in conjunction with the versions and baselines to compare changes (along with the compare table functionality for versions from the Planisware menu). Also, at any point, you can see the user/date of the last change that took place on something (last modification author/date fields). There is no Planisware configured deliverable for this item.	F1	0	10	20	30	$ 6,850	F1IN	0	0	0	0	$ -
2.14	Schedule Baselines	System must provide the ability to maintain multiple schedules, resource, and cost baselines during the life of a project. Minimum number of baselines is 10.	MH	L2	IN	Capability / Deliverable	Unlimited baselines Assumption: No more than 10 baselines are loaded	Configuration will be required to lock down the capture of certain baselines. MIDOT needs to provide the baseline names they would like. The approved baseline generation is restricted to PMO users and is used in conjunction with the interface process. When a project's dates are re-approved, PMO will re-baseline the project.	F1	0	5	0	5	$ 1,375	F1IN	0	6	8	14	$ 3,290
2.15	Schedule Baseline Comparisons	System must provide the ability to compare up to 3 baselines side-by-side at one time including but not limited to a Gantt Chart view.	MH	OOB	IN	Capability	Fully Supported	You can insert any baseline fields at any point. Graphically in the Gantt view, you can compare durations from baselines and versions through the 'View' menu option.	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -
2.16	Project Bundling	The new system must allow for multiple jobs that will be advertised, let and bid together to be bundled using a Package ID from a separate MDOT application.	MH	L2	IN	Capability / Deliverable	Fully Supported if Package ID input into Planisware, but "C" if interface required to bring Package ID in from another system Assumption: Package ID is just managed as a different data structure. No specific logic/control around this	Package ID will be a Planisware breakdown structure and the value will be coming from the project header interface. Initally the field will be sourced in Planisware.	F1	0	5	5	10	$ 2,400	F1IN	0	2	2	4	$ 960

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
2.17	Project Unbundling	System must provide the ability to unbundle projects that have been removed from a Package ID into individual projects each with individual schedules.	MH	L1	IN	Capability / Deliverable	And if necessary, inter-project links for any constraints one may have regarding the other	The package ID is interfaced (see RTM item 2.16) so therefore, all bundling and unbundling will be handled in the source system. Initally the field will be sourced in Planisware.	F1	0	0	0	0	$ -	F1IN	0	2	2	4	$ 960
2.18	Cross Project Schedule Links	System must provide the ability to link milestones for multiple projects that will be let together and identified by a Package ID.	NH	L2	IN	Capability / Deliverable	Via manually entered Inter-project constraints	It was decided to use 'synchronized activities' to model the linking between projects. This is an OOB feature which allows you to synchronize activities between proejcts through indicators and buttons. There will be configuration at the project level: a button which synchronizes activities from the driver project (the driver = whatever line the user selects) to all the other projects within the package ID of the driver project based on a mapping admin table (the mapping key will be activity type and the underlying assumption is that the activities with the same activity type exist in the other projects). There will be another button to synchronize all the tasks within the package ID (from the project level, just like the previous button).	F1	0	0	0	0	$ -	F1IN	2	14	38	54	$ 12,290
2.19	Bundled Project Reporting	System must provide the ability to report on individual design projects that are bundled using a Package ID.	MH	OOB	IN	Capability	Each project will have its own identifier	Projects can always be reported on individually. Any specific reporting needs should be identified through the report requirements.	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -
2.20	Project Letting Reporting	System must provide the ability to report by Package ID (e.g. MDOT management needs report of how many projects are being bid in a specific month and this needs to be reported by package ID.)	MH	OOB	IN	Capability	Fully Supported. Since our database is relational, projects can be reported by Project ID, project type, geographic location, etc	Any breakdown structure can be reported against. Since projects are tied to a package ID, you will always be able to report by package ID. Any specific reporting needs should be identified through the report requirements.	F1	0	0	0	0	$ -	F1IN	0	0	0	0	$ -
3.0		Resource Management							F2	0	0	0	0	$ -	F2				0	$ -
3.1	Internal/External Resources	System must provide the ability for the user to identify resource as external or internal.	MH	OOB/L1	IN	Capability / Deliverable	Fully Supported. Resource breakdown structure can identify external vs internal as part of the structure	The data structure of the RBS can distinguish what is internal or external. This can then be reported against according to the appropriate branch. Depending on reporting needs later, we might have to add an attribute to the RBS to identify what elements are internal/external.	F2	0	3	10	13	$ 2,875	F2IN	0	0	0	0	$ -
3.2	Labor Hour Tracking	System must provide the ability to input and track labor hours for (both internal and external) resources for each project task.	MH	L2	IN	Capability	Hours can be input manually, or C if imported from another system. Planisware also has timecard system built in if desired to use	Since external resources are simply RBS elements, there is no distinction in regards to how the planned hours get created in Planisware. To faciliate the process, though, there will be configuration for project and activity level 'external?' fields. Propagation logic needs to be configured from the project field to the activity field (will be based on an activity type boolean - all activities with an activity type where that boolean is true will be set to true/false, respectively, as the project level field is changed). The activity field can be independently changed as well, though. The rest is to be handled by equation computation formulas using the activity driver field. Algorithms need to be properly created - Planisware is not responsible for creating the algorithms.	F2	0	5	10	15	$ 3,425	F2IN	0	6	20	26	$ 5,750
3.3	Resource Amounts	System must provide average, actual, and projected information including but not limited to labor hours, durations, and costs by resource (person) for a given date range.	MH	OOB	IN	Capability	Can include escalations in costs if projecting costs to go up over time, or calculate averages based on a given algorithm	All costs can be viewed over any period of time, past and future, with a chosen time scale. Costs are converted using resource rates which can be set up by time for the future using escalations. There is no Planisware configured deliverable for this item.	F2	0	5	10	15	$ 3,425	F2IN	0	0	0	0	$ -
3.4	Resource Scheduling	System must perform automated program resource leveling using project priorities as input by altering project schedules and/or shifting work to other areas.	NN	L2	OUT	OUT	Functionally, Planisware supports this feature but recommends this feature be used only for what-if scenarios in sandbox environment. Assumption: Using OOB conflict resolution tool to adjust task scheduling based on priority. Requires proper data setup and is user triggered	Not needed; OOB provides views for analyzing resource load/availability based on project priority (bottleneck analysis, resource load view in the projects) but automated leveling is a feature that is not available in the graphical user interface (Planisware Pro).	F2	2	5	20	27	$ 6,125	F2OUT	0	0	0	0	$ -

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
3.5	Resource Graphics	System must allow for program resource leveling through graphical methods including but not limited to histograms.	NN	L2	OUT	OUT	One specific method shows Gantt type bars on top and histogram on bottom reflecting resource load. User can slide projects on timeline to view how resource overloads can be eliminated Assumption: Use OOB Resource Load view with proper context attribute definition	Not needed; OOB provides views for analyzing resource load/availability based on project priority (bottleneck analysis, resource load view in the projects) but automated leveling is a feature that is not available in the graphical user interface (Planisware Pro).	F2	0	2	10	12	$ 2,600	F2OUT	0	0	0	0	$ -
3.6	Internal Res Cost Forecasts	System must calculate internal resource costs for project development.	MH	OOB	IN	Capability	Resources can have multiple cost factors including internal rate, external rates and variables based on skill requirement, etc	The resource cost is computed by the number of planned hours multiplied by the resource rate which is an input in the Planisware RBS table. There is no Planisware configured deliverable for this item.	F2	1	5	10	16	$ 3,750	F2IN	0	0	0	0	$ -
3.7	External Res Cost Forecasts	System must calculate external resource costs for project development.	MH	OOB	IN	Capability	As long as the external resources are in the system with associated rates, the system can calculate, summarize and report external costs	The resource cost is computed by the number of planned hours multiplied by the resource rate which is an input in the Planisware RBS table. There is no Planisware configured deliverable for this item.	F2	1	5	10	16	$ 3,750	F2IN	0	0	0	0	$ -
3.8	Task Cost Reporting	System must provide the ability to identify task data including but not limited to labor hours, durations, and costs based on whether they are/were performed internal/external to the department.	MH	OOB	IN	Capability	Fully Supported	Since external tasks are identified through a boolean attribute and external resources are in the RBS, this distinction is always identifiable. Task data has the costing information that are tied to the labor hours which are created on the task. Any specific requirements for viewing the data should be handled through the report RTM items. There is no Planisware configured deliverable for this item.	F2	1	3	5	9	$ 2,175	F2IN	0	0	0	0	$ -
3.9	Task Cost Analysis	System must provide the ability to analyze task data including but not limited to labor hours, durations, and costs based on whether they are/were performed internal/external to the department.	MH	OOB	IN	Capability	Assuming updates entered such as time spent, actual dates (start/finish/forecasts), etc Assumption: Customer has ability to use PEX to do data analysis	Since external tasks are identified through a boolean attribute and external resources are in the RBS, this distinction is always identifiable. Task data has the costing information that are tied to the labor hours which are created on the task. Any specific requirements for viewing the data should be handled through the report RTM items. There is no Planisware configured deliverable for this item.	F2	0	0	0	0	$ -	F2IN	0	0	0	0	$ -
3.10	Project Cost Forecast	System must provide the ability to calculate project cost based on the scheduled labor hours and an average rate for each work unit.	MH	OOB	IN	Capability	Fully Supported. Our bid is based on average rate being an input by the State rather than calculated. We can provide calculated average cost as optional configuration service or change order.	The resource cost is computed by the number of planned hours multiplied by the resource rate which is an input in the Planisware RBS table. There is no Planisware configured deliverable for this item.	F2	0	3	10	13	$ 2,875	F2IN	0	0	0	0	$ -
3.11	Resource Profiles	System must provide the ability to assign multiple resources to each task.	MH	OOB	IN	Capability	Fully Supported	Planned hours are created on tasks. Planned hours can be created with a fixed rate or a pre-determined load and the planned hours are created on resources. You can create as many planned hours on as many resources as you need to.	F2	0	0	0	0	$ -	F2IN	0	0	0	0	$ -
4.0		**Project Structure**							F2	0	0	0	0	$ -	F2				0	$ -
4.1	Project WBS	System should provide the capability to create Work Breakdown Structure (WBS) views at project, task, and subtask level.	MH	OOB	IN	Capability	Fully Supported	The "WBS" is the activity hierarchy where each sub-level is simply part of the branch of the parent. The "Project" is it's own table and stores the header data and each project has a set of activities (the WBS / network) when it is opened.	F2	0	0	0	0	$ -	F2IN	0	0	0	0	$ -
4.2	Program/Project WBS Rollups	System should provide the ability to roll-up and measure project funding, cost and schedule at the project and program level for every work breakdown element for viewing, reporting, and dashboard.	MH	OOB	IN	Capability	Fully Supported	The OOB data model is completely relational. Anything defined on the project can be reported against. A "program" is effectively a "portfolio" of projects and can therefore be used as a grouping for reporting. Any specific requirements relating to this should be identified in the reporting RTM items. There is no Planisware configured deliverable for this item.	F2	0	0	0	0	$ -	F2IN	0	0	0	0	$ -
4.3	Program/Project Hierarchy Rollups	System must provide the ability to roll-up task and hours information through a hierarchy including but not limited to task, milestone, project, and program levels.	MH	OOB	IN	Capability	And any other breakdown structure as well as other groupings of projects/programs called portfolios Assumption: Using OOB existing breakdown structures	The OOB data model is completely relational. Anything defined on the task can be reported against on the project level. A "program" is effectively a portfolio of projects and can therefore be used as a grouping for reporting. Any specific requirements relating to this should be identified in the reporting RTM items. There is no Planisware configured deliverable for this item.	F2	0	0	0	0	$ -	F2IN	0	0	0	0	$ -

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
4.4	Project OBS	System must provide the capability to create an Organizational Breakdown Structure (OBS) view at project and task level.	MH	OOB	IN	Capability	Fully Supported	The OBS is the "responsibility" field on the project and the "OBS element" field on the activity (task). When it is inputted on the project, propagation automatically populates it on the activities. It can be changed manually on each activity to any respective value. There is no Planisware configured deliverable for this item.	F2	0	0	10	10	$ 2,050	F2IN	0	0	0	0	$ -
4.5	Program/Project OBS Rollups	System must provide the ability to roll-up program and project information, including resource demands and estimated cost, through the organizational hierarchy including but not limited to unit, section, division, region, office, bureau, and department.	MH	OOB	IN	Capability	As long as that breakdown exists in the OBS	The OOB data model is completely relational. Anything (i.e. OBS elements) defined on the task can be reported against throughout the project portfolio. A "program" is effectively a portfolio of projects and can therefore be used as a grouping for reporting. Any specific requirements relating to this should be identified in the reporting RTM items. There is no Planisware configured deliverable for this item.	F2	0	0	0	0	$ -	F2IN	0	0	0	0	$ -
4.6	Program/Project Work Unit Reporting	System must provide reports showing the program and project schedules for each of the work units for a given date range.	MH	OOB	IN	Capability	Fully Supported Report needs to be created at the program level	Planned hours created on tasks have an element of time involved in their allocation which can always be reported against at the RBS level (i.e. how many hours for this resource unit for next year). The OOB bottleneck analysis provides a view where the user can choose a time scale and then view all scheduled work for a particular RBS element (i.e. work unit). A "program" is effectively a portfolio of projects and can therefore be used as a grouping for reporting. Any specific requirements relating to this should be identified in the reporting RTM items. There is no Planisware configured deliverable for this item.	F2	1	5	15	21	$ 4,775	F2IN	0	0	0	0	$ -
5.0		**Tracking & Monitoring**																		
5.1	Program/Project Status Indicator	System must provide a schedule status field including but not limited to proposed, submitted, approved, and archived at the project and program levels.	MH	L1	IN	Capability / Deliverable	Fully Supported. Status field can be configured to meet State objectives	Use business project status to map to Planisware state. State would essentially become an admin-only field. Portfolio popup would have the state tickboxes hidden and only allow filtering by business project status. There will be a business project status for "Archived" which actually maps to the "Active" state and a business project status for "Closed" which maps to the "Closed" state. This will allow MIDOT to keep a project loaded in the applicaiton until the next fiscal year and then it can be officially closed for better utilization of system resources. Automated triggers for status (everything else manual): Going to refined will be a button Going to approved will be done when PMO baselines the project	F2	1	5	10	16	$ 3,750	F2IN	1	6	15	22	$ 5,050
5.2	Workload Trending	System must provide the ability to view current trends of allocation and utilization to predict workloads by work unit, agency, district, work type, project managers, program managers and required resources.	MH	OB/L1/L	IN	Capability	Several capabilities to meet this requirement, including alerts when forecasts exceed thresholds, health status indicators, and bottleneck style reports and dashboards with drill down capability Assumption: Use OOB indicators	OOB indicator batches can be used. Teaching how to set up an indicator batch will be addressed in the training plan. This assumes that Planisware will not be consulted, beyond the training, for implementing any specific trend indicators. MIDOT must define indicators they would want us to configure and deliver in the implementation or specific needs would be treated as change requests to the scope.	F2	1	10	30	41	$ 9,225	F2IN	0	0	0	0	$ -
5.3	Thresholds	System must provide the ability to configure thresholds for program, project, and task for gauging performance.	MH	OB/L1/L	IN	Capability	Fully Supported Assumption: Use threshold on OOB indicators	See RTM item 5.2. Nothing specifically identified right now because MIDOT is currently not doing this. Examples need to be provided on when emails should be generated for performance thresholds. There is no Planisware configured deliverable for this item.	F2	0	3	5	8	$ 1,850	F2IN	0	0	0	0	$ -
5.4	User Email Addresses	System must provide the ability to capture Email addresses for each user.	MH	OOB	IN	Capability	Fully Supported. Notifications can be internal, external (email) or both	All users have an email address attribute and users can change their own email address in the Home module "profile" style.	F2	0	0	0	0	$ -	F2IN	0	0	0	0	$ -
5.5	Exception Email Notificaiton	System must send Email notification to appropriate user when performance is outside of the acceptable thresholds.	NH	L1/L2	OUT	OUT	Configure real-time email notification triggers using workflow/alerts/batch	See RTM item 5.2. Nothing specifically identified right now because MIDOT is currently not doing this. There is no Planisware configured deliverable for this item.	F2	1	10	30	41	$ 9,225	F2OUT	0	0	0	0	$ -
5.6	Performance Indicators	System must allow the business administrator to define MDOT performance indicators.	NH	OOB	IN	Capability	Fully Supported	See RTM item 5.2. Nothing specifically identified right now because MIDOT is currently not doing this. There is no Planisware configured deliverable for this item.	F2	0	0	0	0	$ -	F2IN	0	0	0	0	$ -

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
5.7	Planned vs. Actual Costs	System must provide the user with the ability to analyze and review planned and actual cost/ hour's data.	MH	L2	IN	Capability / Deliverable	Actual cost/hours data can be input directly Import from external system is handled by DCDS interface	Actual hours are imported through the DCDS interface and will be saved at the task level using a total amount on the resource unit. The actual hours can be compared with the budgeted hours and planned hours. When actuals are imported, the remaining hours will be decremented with that same load (to have a "constant EAC"). When the task has an actual finish date entered, all the "planned hours" / "remaining" amounts should be zeroed on all resource allocations. The actuals field will be locked since it is being imported from DCDS. Because each resource unit can have a different cost for the hours, the cost will be stored as a seperate line and will not be tied to the actual hours using standard Planisware conversion rates. The total hours/$ on the task level will be accurate according to what is being imported.	F2	0	0	10	10	$ 2,050	F2IN	0	2	10	12	$ 2,600
5.8	Program What-if Analysis	System must provide the capability to conduct 'what if' analysis at program/ project level.	MH	L1/L2	IN	Capability / Deliverable	And the ability to compare different scenarios in a sandbox environment, not impacting active projects Assumption: Use OOB Budget	What-if' analysis can be done for projects by using versions. The buckets & investments module for time shift features will be used as program level 'what-if' analysis as well (but not using the rest of the module and only for PMO users). Effort required to initialize the module for usage.	F2	1	10	20	31	$ 7,175	F2IN	0	0	0	0	$ -
5.9	Task Work Unit Tracking	System must provide the user with the ability to track each work unit's actual labor hours by task for each project.	MH	OOB	IN	Capability	Manually input on task Import from external system is handled by DCDS interface	Actual hours are imported through the DCDS interface and will be saved at the task level using a total amount on the resource unit. Effort handled in interface scope.	F2	0	0	10	10	$ 2,050	F2IN	0	0	0	0	$ -
5.10	Realtime Search	System must allow the user to search real-time project, program, and archive data.	MH	OOB	IN	Capability	Can search within project/program or globally within system including text within attached documents Assumption: No search based on configured fields and data that are not loaded. User will need to navigate to the section with the data before searching	Search can be done on every page and also globally through the Planisware menu. Archived projects need to be opened up first for the details of those projects (i.e. the network, hours, cost).	F2	0	0	0	0	$ -	F2IN	0	0	0	0	$ -
5.11	Realtime Reporting	System must provide real-time reporting of project, program and archive data, including but not limited to comparative reporting, snapshots, and histograms.	MH	OOB	IN	Capability	Fully Supported	All data is real-time in Planisware when it is displayed.	F2	0	0	0	0	$ -	F2IN	0	0	0	0	$ -
5.12	External Resource Actual Input	System must provide the ability to allow external resources to record task actual dates and labor hours for project manager review and approval.	CW	L2	OUT	OUT	If external resources are given secured access to the system, hours can be recorded and routed for project manager approval using timecard. Configuration will need to be done for routing actual dates for approval.	The capability to do this is available and can be a configured workflow for approval. Timecard can be used for entering actual dates & hours but there is no OOB approval workflow. This can wait for a future phase. There is no Planisware configured deliverable for this item.	F2	2	20	50	72	$ 16,400	F2OUT	0	0	0	0	$ -
6.0		**Program Management**							F4	0	0	0	0	$ -	F4				0	$ -

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
6.1	Program Snapshots	System must provide the capability to capture program snapshots which are taken the first of every month and every Monday.	MH	L2	IN	Deliverable	Fully Supported Batch job to capture system- wide baselines	Due to volume and unique requirements, 2 separate tables for storing these will be pursued. One on the portfolio level (1 row inserted per snapshot) and one on the project level stored in the respective project (1 row inserted per project per snapshot). Reports will be built in PEX depending on requirements given. The table for the project snapshot values will be available in the project data page for reference. No innate OOB comparison capabilities for exist for this; everything that is needed must be communicated / configured for these snapshots. These snapshots will be captured in the form of a Planisware batch which will run from the server. An application outage is recommended during the batch run time (which would be during off-hours at night).	F3	1	5	30	36	$ 7,850	F3IN	2	18	40	60	$ 13,800
6.2	Program Snapshot Data	System must provide snapshots which include but not limited to the listing of jobs, the individual job cost, major milestones and milestone approved date, scheduled date, and actual date.	MH	L2	IN	Deliverable	All project/program attributes can saved in the snapshot	Based off of the design for RTM item 6.1. Attributes in this 'snapshot' are in "Program snapshot attributes" tab.	F3	0	0	10	10	$ 2,050	F3IN	2	16	38	56	$ 12,840
6.3	Program Snapshot History	System must maintain five years of snapshot history.	MH	L2	IN	Deliverable	Fully Supported. Changing Status to Complete or other than Active will help insure accuracy of relevant data.	Based off of the design for RTM item 6.1. The data will be stored in individual projects and also on the portfolio level. Storing more than 5 years is not an issue due to how we handle the data storage. If it is required to store this for "closed" projects as well (seperate from archived - see RTM 5.1), then it will drive a different batch design and more effort is required.	F3	0	0	10	10	$ 2,050	F3IN	1	5	17	23	$ 5,185
6.4	Annual Benchmark	System must provide a benchmark which is the annual snapshot.	MH	L2	IN	Deliverable	Fully Supported through approved baseline	Based off of the design for RTM item 6.1. This will just be a flag that is set on a record in the portfolio/project admin tables for storing this data to designate it as the benchmark. The date that this annual benchmark is taken will be a setting for admins in the Administration module to determine which batch run captures this.	F3	1	5	15	21	$ 4,775	F3IN	0	4	12	16	$ 3,560
6.5	Snapshot Reporting	System must provide a report that lists monthly and annual program snapshots to compare up to 13 snapshots. See Appendix M Report Samples: 9.28 Directors_Dashboard_Reports	NN	L1/L2	OUT	OUT	System is capable of doing this, but anticipates some unique requirements from State. Since no details provided, not included in estimate	See RTM item 9.28. This has been determined as not being needed anymore. This RTM item is therefore scoped out and there is no Planisware configuration deliverable for this item.	F3	1	5	15	21	$ 4,775	F3OUT	0	0	0	0	$ -
6.6	Snapshot Reporting Comparisons	System must be able to compare program level snapshots and identify job changes (date changes, cost changes, jobs added and removed from the program).	NN	L1/L2	OUT	OUT	Supported through use of snapshots (Versions) to compare for differences. If specific formats or unique MDOT processes are required, would be "C"	The comparison between these program snapshots is encompassed in RTM item 9.6 which is the "project status changes" report. This RTM item is therefore scoped out and there is no Planisware configuration deliverable for this item.	F3	2	10	70	82	$ 17,750	F3OUT	0	0	0	0	$ -
6.7	Snapshot Reporting Selection Criteria	System must be able to segment the program using user selectable criteria and report on these segments.	MH	OOB	IN	Capability	Assumption:Configured data model allows for segmentation.	A "program" is a collection of projects. Data can also be spliced through styles and portfolios on any consolidation element that is assigned to a project, like the OBS, TSC, Region, etc. There is no Planisware configuration deliverable for this RTM item.	F3	0	0	0	0	$ -	F3IN	0	0	0	0	$ -
7.0		**Interfaces**																		
7.1		**Interface with MAP database**																		

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
7.1.1		The System must be able to interface with an Oracle database (e.g, MAP database) to obtain job specific information including but not limited to Job Number, Control Section, Location Description, Route and Work Type. See Appendix L) for the MAP fields that the system will need access to.	MH	L2	IN	Deliverable	Planisware has a variety of methods to interface with external systems for passing data. Formats can be TXT, CSV XML, ODBC, SOAP Web Services, etc. We have certified SAP interface, and an API to allow data mapping with other systems. Although consultants will need to configure the mapping, timing etc, we consider this part of the standard service but billable consulting which is why the response is C	Details in interface design. High level: We will import the job number and all corresponding project header attributes from the database into a Planisware admin table. Then, on the project popup/table, there will be a picklist attribute to this job number admin table which will manipulate the respective project header metadata according to all the data from the job number (including the "name" of the project). Once a job number is tied to an existing project, it won't be able to be selected on another project (you will have to un-select it from a different project if you want the job number to be on a different project). Date fields coming in from the interface should be propagated to the network milestone approved dates (budget dates). This will be available via a nightly Planisware batch. Administrators will have the ability to manually launch the batch from the Administration module, ad hoc, as needed. We recommend to leave the run time for the night as much as possible.	NA	0	0	0	0	$ -	NAIN	0	0	0	0	$ -
7.1.2		The system must be able to transfer milestone date information to other databases (e.g, the MAP database).	MH	L2	IN	Deliverable	Fully Supported. Data mapping requires a "C" response	Details in interface design. High level: There will be a button in the projects module which will export the information to database tables. There will not be a regularly scheduled batch to perform this export as it will require an intelligent business decision on the part of a PM as to when the dates should be published. Dates are pushed to 3 tables in MAP: 1) Change requests 2) Tasks 3) Milestones The export to the change request table must be able to be performed from a project version (in cases of significant date changes).	NA	0	0	0	0	$ -	NAIN	0	0	0	0	$ -
7.1.3		The system must be able to read and write task actual start and actual end dates from and to an Oracle database given a job number and task number and apply them to project tasks. See Appendix L for MAP fields that the system will need access to.	MH	L2	IN	Deliverable	Fully Supported. Data mapping requires a "C" response	Details in interface design. High level: We will import from the database via a nightly Planisware batch (frequency can be administered in the administration module). We will also give the ability to have a button on the project to import the actual dates on an on-demand basis for that respective project. Administrators will have the ability to manually launch the batch from the Administration module, ad hoc, as needed. We recommend to leave the run time for the night as much as possible.	NA	0	0	0	0	$ -	NAIN	0	0	0	0	$ -
7.1.4		The system must be able to read and write milestone actual dates from and to an Oracle database given a job number and task number and write them to project milestones in the Oracle database. See Appendix L for MAP fields that the system will need access to.	MH	L2	IN	Deliverable	Fully Supported, but will require data mapping	Same as 7.1.3. In Planisware, a "milestone" is simply a "task" with 0 duration. Technically, it is the same object class so there isn't a separate interface to distinguish milestones from tasks.	NA	0	0	0	0	$ -	NAIN	0	0	0	0	$ -
7.2		**Interface with ProjectWise**												$ -						$ -
7.2.1		The system must be able to interface with the ProjectWise view to obtain actual start and finish dates given a job number and a Task and/or Milestone and apply them to project tasks. See Appendix L for the ProjectWise fields that the system will need to access.	MH	L2	IN	Deliverable	Inherent interface capabilities within Planisware will allow fo interface with ProjectWise via API. Data mapping requires a "C" response	Details in interface design. High level: We will import from the database via a nightly Planisware batch (frequency can be administered in the administration module). We will also give the ability to have a button on the project to import the actual dates on an on-demand basis for that respective project. Administrators will have the ability to manually launch the batch from the Administration module, ad hoc, as needed. We recommend to leave the run time for the night as much as possible.	NA	0	0	0	0	$ -	NA	0	0	0	0	$ -
7.3		**Interface with DCDS/MAIN**								0										

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
7.3.1		The system must be able to interface with the State's payroll system, DCDS/MAIN, to obtain payroll cost and hours and associate them with project tasks. See Appendix L for example flat file.	MH	L2	IN	Deliverable	Planisware has a variety of methods to interface with external systems for passing data. Formats can be TXT,CSV, XML, ODBC, SOAP Web Services, etc. We have certified SAP interface, and an API to allow data mapping with other systems. Data mapping requires a "C" response	Details in interface design. High level: We will import a .csv file that will be on the server which will contain incremental actual hours/costs. The hours/costs by resource code/role are stored in the network on the task level, so at any point, users can always see how much $ and how many hours are being charged to a particular task. An intermediary Planisware admin table will hold all the import data which will be used for error handling, processing, and reporting details (by employee, for example). This batch will run on an approximate bi-weekly basis and it will be launched through the shell (scheduled via crontab). We recommend an application outage when this batch runs due to its sensitive nature (importing actuals).	NA	0	0	0	0	$ -	NAIN	0	0	0	0	$ -
7.4		**Interface with AASHTOWare Project database**					**This interface is no longer required.**													
8.0		**System**																		
8.1	Budget vs. Actuals Reporting	System must provide the reporting capability to compare budgeted hours/cost to actual hours/cost for validation of tasks' calculated information.	MH	OOB	IN	Capability	Many reporting methods within Planisware, including our own BI Tool, Planisware Explorer.	This can be done directly in the functional PM views like the Gantt chart via hours and expenditure summary lines. Planisware explorer allows the ability to report against this set of data on the task or resource level. Any specific requirements relating to this should be identified in the reporting RTM items. There is no Planisware configured deliverable for this item.	NA	0			0	$ -	NAIN	0			0	$ -
8.2	User Defined Templates	System must provide the administrative ability to create and modify custom templates.	MH	OOB	IN	Capability	Fully Supported	Templates can be created simply by changing the project "State" attribute to "Project template". Templates can be modified at any point as long as users have write access to the template.	NA	0			0	$ -	NAIN	0			0	$ -
8.3	Actual Information Input	System must allow input/modification through a separate application including but not limited to the following fields: actual start date, actual finish date, and actual hours expended on tasks.	MH	OOB	IN	Capability	Fully Supported	This can be done through the Timecard module. There is no Planisware configured deliverable for this item.	NA	0			0	$ -	NAIN	0			0	$ -
8.4	CPM Calculations	System must require the following system calculated fields including but not limited to start date, finish date, and duration on tasks.	MH	OOB	IN	Capability	Fully Supported	Every task has several date fields and a duration field. There is a planned start and planned finish which are computed based on constraints, actuals, links, and etc.	NA	0			0	$ -	NAIN	0			0	$ -
8.5	Customizable Home Screen	System should provide a user customizable home screen.	MH	OOB	IN	Capability	Fully Supported	Users can choose what module they go to, they can choose if they want to land on their wall, their messages, or a style on the project table. The style can be customized to contain any columns, filters, sorting, and grouping that the user wants. There is no Planisware configured deliverable for this item.	F4	1	5	10	16	$ 3,750	F4IN	0	0	0	0	$ -
8.6	Project Priority Assignment	System should provide the ability to assign the priority of projects within a program.	MH	L1	IN	Capability / Deliverable	Fully Supported	The priority attribute exists but needs a process behind how it is defined. Configuration to pursue: a lock on the field so only particular users in user groups can modify this field. Ref: RTM item 2.9.	F4	0			0	$ -	F4IN	0			0	$ -
8.7	Customizable Dashboard	System must provide a user customizable dashboard that allows drill down capability to display status and graphical views of the project and program levels based on user's filters (filters including but not limited to: funding template, region, fiscal year) at any given time for current or future programmed projects.	MH	OOB	OUT	OUT	Planisware Explorer allows for design of queries and dashboards with drill down capability. Selection criteria can also be included such that end users just filter on the options presented to get the results they are looking to achieve	In Planisware explorer, you can define any bar/pie/table report on any dimension and be able to drilldown into the details of that. For example, if you have a report that shows cost by Package ID, you would be able to click on the Package ID to see a report by projects, and then you would be able to click on a project to see a report on activities in that project, and then you would be able to click on an activity to see the hours/costs for that activity. This needs to be set-up on the Planisware explorer report. Since portfolios are user-input driver, they can set-up the type of data they want to see and they can also use their Planisware dates/units to change the time scales and units used to compute the information. Any specific requirements relating to this should be identified in the reporting RTM items. There is no Planisware configured deliverable for this item.	F4	4	10	30	44	$ 10,200	F4OUT	0	0	0	0	$ -

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
8.8	Resource Notifications	System must notify Resource Units that an approved or scheduled date change has occurred and will have an impact on downstream dates for tasks for which they are responsible.	NH	L2	IN	Deliverable	Can set an alert based on the change to notify them as long as Resource Units are identified on the work effort	Configuration will be pursued to faciliate a manual process for PMs to notify the delegated units of a change. There will be a button in the toolbar which will create an internal Planisware notification to all the users who are delegated on all the activities in the project, with the exception of activities that have an actual finish date. They can then use OOB capabilities to subscribe to these notifications and receive them by email or choose to keep them internal to Planisware. Configuration and usage of "text keys" will be used for the subject and message but the PM should have to ability to add and change the text as needed, along with the email.	F2	1	5	10	16	$ 3,750	F2IN	1	8	16	25	$ 5,805
8.9	Respource Task Acceptance	System must provide the ability to allow resource units to have the ability to "accept" the tasks they are being assigned.	CW	L2	OUT	OUT	Could add this capability via a workflow, however, it is not considered Best Practice. Would recommend against a resource having the ability to accept or reject	It was decided that the standard workpackage delegation workflow would be acceptable. If a future workflow with acceptance is needed, it will be considered at a later point in time. MIDOT will try the system with what it currently offers, knowing that the ability to see notifications of delegations is already a huge improvement. There is no Planisware configured deliverable for this item.	F4	2	10	50	62	$ 13,650	F4OUT	0	0	0	0	$ -
8.1	Project/Task Email Notifications	System must provide project and task level Email notifications to appropriate users.	MH	OB/L1/L	IN	Capability	Notifications and Alerts are both part of OOB functionality	Related to RTM 5.2, 5.3, 5.4 and 5.5. Specifics need to be given for any particular details with this item for performance indicators. There is no Planisware configured deliverable for this item.	F4	0	0	5	5	$ 1,025	F4IN	0	0	0	0	$ -
8.11	Configurable Email Notifications	System must allow for configurable Email notifications.	MH	OOB	IN	Capability	Fully Supported, but if MDOT requires a specific email design, would require configuration "C"	Emails can be received for any notifications we configure in the system or for any standard OOB messages. Users can choose to subscribe to things from their home page and then choose to receive an email or not. Specific emailing functionality is handled in other RTM items such as 8.8 and 5.5. There is no Planisware configured deliverable for this item.	F4	1	5	10	16	$ 3,750	F4IN	0	0	0	0	$ -
8.12	Outlook Integration	System must send task information including but not limited to start date, finish date, and task to the resource's Outlook calendar.	CW	L2	OUT	OUT	Can interface to provide this capability	Determined as not being needed. Can wait for a future phase where we have more specifics	F4	2	10	50	62	$ 13,650	F4OUT	0	0	0	0	$ -
8.13	Management Reports	System must provide Management Reports used to evaluate the Program data including but not limited to project completion dates, exception reports, resource utilization reports, cost reports, roll-up reports, and milestone reports.	MH	OOB	IN	Capability	Many out of the box reports and dashboards included, and others can be created and modified using Planisware Explorer	Any reports not already in the standard product can be configured with Planisware explorer. Any specific requirements relating to this should be identified in the reporting RTM items. There is no Planisware configured deliverable for this item.	NA	0			0	$ -	NAIN	0			0	$ -
8.14	Breakdown Reports	System must provide the ability to print reports including but not limited to the following breakdowns: Region, TSC, Fiscal Year, Fiscal Quarter, Fiscal Month, Organization, Work type, Funding Template, Project Manager, In house, Consultant	MH	OOB	IN	Capability	In addition to printing Planisware Explorer reports and dashboards, any screen can be a report and output in PDF format, PowerPoint deck templates can be created and used for meeting presentation and reporting, and bi-directional exports to Excel can allow for traditional Excel type reporting. All data contained in the system can be reported on in both tabular and graphic reports and dashboards, including the breakdowns noted.	Screens can be printed to pdf, Excel, or PowerPoint. The Planisware 'Presentation' module can be used to construct a PowerPoint slide deck from several different screens in Planisware. Every configured report from Planisware explorer will be able to be exported in these pdf/Excel/PowerPoint formats as well.	NA	0			0	$ -	NAIN	0			0	$ -
8.15	Report Standards	System must provide standard reports including standard headings and footers on each page.	MH	OOB	IN	Capability / Deliverable	Supported with Planisware's own BI reporting tool, Planisware Explorer. Some configuration would be needed if using other reporting mechanisms	Planisware explorer dashboards can be used as templates for all reports. We just need to create the template dashboard in Planisware explorer which will be used when configuring the reports.	F3	0	2	10	12	$ 2,600	F3IN	0	2	6	8	$ 1,780
8.16	Report Output Modes	System must provide printing and exporting options to include but not limited to PDF, local printer, and XLS.	MH	OOB	IN	Capability	Fully Supported	Pages can be exported to pdf, Excel, and PowerPoint. From there, you are able to print anything.	NA	0			0	$ -	NAIN	0			0	$ -
8.17	Reporting Sorting and Views	System must provide flexible sorting and views, reports on user selected data elements, and comparative reporting ability.	MH	OOB	IN	Capability	Fully Supported	Every table can be saved as a "style" on an individual user basis with it's own columns, sorting, grouping, filtering, etc. Comparative reporting exists in the form of the "compare values in a table" feature and also versions/baselines.	NA	0			0	$ -	NAIN	0			0	$ -

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
8.18	User Defined Structural Data	System must allow for modifications to templates, calendars, resources, organizational structure, work breakdown structure, reports required to accommodate evolving MDOT business processes.	MH	OOB	IN	Capability	Planisware's system is designed to be flexible to evolve with the customer. Our very first customer in 1996 is still a customer today because the system has evolved with them.	Administrative tables are fully modifiable for future changes in the business process.	NA	0			0	$ -	NAIN	0			0	$ -
8.19	Database Update Conflicts	System must display an error message to users when there is a database usage conflict.	MH	OOB	IN	Capability	Planisware communicates, but the message is about the inability to write to a field in use by another	Planisware operates at a higher level than the database layer which we call the application server. However, if there does happen to be a database issue, the user would see an error message.	NA	0			0	$ -	NAIN	0			0	$ -
8.2	Program Simulation	System must allow the user to create a program with simulated data from multiple projects.	MH	OOB	IN	Capability	Our sandbox allows for multiple what if scenarios of new and existing projects to help determine the best mix for the DOT Use versions	Overlap of RTM item 5.8; what-if simulation capabilities for versions at project level and time shifting at buckets level. It should be handled in RTM item 5.8. There is no Planisware configured deliverable for this item.	F3	1	5	10	16	$ 3,750	F3IN	0	0	0	0	$ -
8.21	Graphic Schedule Reporting	System must provide graphing capability for project, program, and package within the software including but not limited to GANTT, PERT, and bar graphs.	MH	OOB	IN	Capability	Standard. Fully Supported	Users have access to Gantt, WBS, Pert, and "timeline" (roadmap) views from within their projects. You can open a group of projects (either a package or a program) at the same time so that you can see that grouping together.	NA	0			0	$ -	NAIN	0			0	$ -
8.22	Interactive Project Schedule UI	System must have a graphical interface to modify/create project schedule via the GANTT chart and optionally via PERT chart.	MH	OOB	IN	Capability	Drag and Drop, create links, assign resources all included in the Gantt Chart	Schedule and link logic changes are supported through drag-and-drop in the graphical views. The Gantt is the preferred view since it looks more visually appealing than the PERT chart.	NA	0			0	$ -	NAIN	0			0	$ -
8.23	Interactive Package Schedule UI	System must have a graphical interface to modify/create package schedule via the GANTT chart and optionally via PERT chart.	MH	OOB	IN	Capability	Fully Supported	Same as 8.22 except that it applies on a package instead of a project. You can select multiple projects and open them together at once - this is how you would open a "package" to display it together.	NA	0			0	$ -	NAIN	0			0	$ -
8.24	Historical Data	System must provide the ability to retain/store historical data for auditing purposes.	MH	OOB	IN	Capability	Fully Supported	All data is retained in the database even if it is not loaded in the application. Users will always be able to view the data in closed/past jobs after they have been archived.	NA	0			0	$ -	NAIN	0			0	$ -
8.25	User Defined Calendars	System must provide ability to create user defined calendars (not to exceed 15 calendars).	MH	OOB	IN	Capability	Fully Supported	Administrators can create as many calendars as needed. Calendars can be created with holidays and exception work days. Calendars can be inputed on the project, activity, link, and resource for proper duration/FTE computation.	NA	0			0	$ -	NAIN	0			0	$ -
8.26	Mobile Device Access	System should be able to be utilized from handheld devices.	NH	OOB	IN	Capability	Tablets and smart phones can be utilized	The application is a web-app which means that it actually can be accessed from a browser on any device (but obviously a smaller device will make this very hard to see). Planisware mobile is a specific application that has been created to be used for simple screens like a project listing with a indicator / time entry / messages / notifications / etc.	NA	0			0	$ -	NAIN	0			0	$ -
8.27	Offline Access	System should include the ability to work off-line on a mobile device using a local database that synchronizes once connected.	NH	OOB	IN	Capability	For offline use, the State would either download to Microsoft Project or tables to Excel, work offline, then import changes when able to connect back to system. Planisware does not support an offline client nor an offline database. Not included in proposal	You can extract a table into Excel and then work offline and import the changes back into the project when you are online. The same can be done with Microsoft project.								0			0	$ -
9.0		**Reports**																		
9.1	Job Status Report	Job Status	MH	L1/L2	IN	Deliverable	This project report provides the user with an overview of network status, and Plan Completion or Letting status of an open job, version, package (multi-job project) or all jobs owned by a chosen project manager. Assumption: Using PEX	Same as 9.4 but grouped by the status instead of the region.	F3	0	2	10	12	$ 2,600	F3IN	0	1	4	5	$ 1,095
9.2	Plan Completion and Letting Report	Plan Completion and Letting	NN	L1/L2	OUT	OUT	The Plan Completion and Letting Report provides the user with a quick look at the schedule of one or more job networks based on the Plan Completion and Letting targets. Assumption: Using PEX	Confirmed to no longer be needed since the data display is covered with other reports.	F3	0	2	10	12	$ 2,600	F3OUT	0	0	0	0	$ -

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
9.3	DCDS Payroll Report	DCDS (State of Michigan Data Collection Distribution System) Payroll	NH	L2	IN	Deliverable	This report provides the user with hours and costs for individual employees as gleaned from payroll data. Assumption: Using PEX	Since the purpose is to see faulty charges to projects, the DCDS report will be a separate style/table that will be accessed in the "Project data" tab when inside of a project. The table will be read-only to users and updated during every import of actual hours. Business administrators will also be able to reference the entire table, for all projects, through the Administration "Data" page.	F4	0	2	10	12	$ 2,600	F4IN	1	10	30	41	$ 9,225
9.4	Project Status Custom Report	Project Status Custom	MH	L2	IN	Deliverable	This program level report provides the user with a brief overview of the network status of job/jobs, as well as the schedule status according to major milestones. Assumption: Using PEX	This will be a report built in PEX for the portfolio module. The header should be dynamic according to the portfolio that the user has applied. The work description is the work type description. All date fields are from the network. Bold lines = late projects (they're red in reality) - handle through some kind of shading or an icon. This will be grouped by region and sums the # of jobs & const. cost. This report must be able to be printed on 11x17 (A3 size) pdf without truncating text. Investigate non-limited fields like project notepad and how to display that. Due to needing to display new jobs not tied to Planisware projects, the report should not iterate on project table but should iterate on the job table (and get everything from there as required through the relation). Report needs to have a date component where user selects a date and all projects in that date are displayed (e.g. fiscal year 2014). "Regular letting jobs" is just a heading text. Note for all reports: whatever footer is present on the reports, add it as static text to the PEX footer. Nice to have but not in the deliverable scope: print the PEX header on every page in the pdf sheet.	F3	0	2	10	12	$ 2,600	F3IN	0	8	30	38	$ 8,350
9.5	Project Status Historical Report	Project Status Historical	MH	L2	IN	Deliverable	This program level report provides the user with a brief overview of the network status of job/jobs, as well as the schedule status according to major milestones, as of a past collection date.	Same as 9.4 but on the historical program snapshot data. This will have to be a separate report based on the program snapshot tables where the user selects a date of which snapshot to view and then we display the rows from that snapshot table (to handle: snapshots on new jobs not tied to Planisware projects yet; potentially have rows in the same table stored in project files & in common files). Need a seperate named formula for late projects depending on the date of the snapshot taken.	F4	0	10	30	40	$ 8,900	F4IN	1	10	30	41	$ 9,225
9.6	Project Status Changes Report	Project Status Changes	MH	L2	IN	Deliverable	This program level report provides the user with a view of which jobs moved into and out of the program of jobs selected.	This will be a report built in PEX for the portfolio module. The header should be dynamic according to the portfolio that the user has applied. Choose two dates for the comparison and the intent of the report is to display 5 things: added jobs, removed jobs, plan completion change, letting change, const cost change. For "added" / "removed" jobs, the user selects the dates they want to see which is the "data collection period" and it is based off of the letting date of the project. Format does not need to match but intent is a must-have.	F4	0	5	15	20	$ 4,450	F4IN	1	40	20	61	$ 15,425
9.7	Network Status Report	Network Status	NN	L1/L2	OUT	OUT	This program report provides the user with the overall status of the Program or Selection as divided into the five major job groups.	Confirmed to no longer be needed since the data display is covered with other reports.	F3	0	5	30	35	$ 7,525	F3OUT	0	0	0	0	$ -
9.8	Network Changes Report	Network Changes	NN	L1/L2	OUT	OUT	This project report provides the user with a report of all the changes that have been made to a job version.	Confirmed to no longer be needed because the purpose of the report can be handled by versioning capabilities as long as the versions exist. The "compare values in a table" feature is the primary capability that will be used to meet this.	F3	0	5	30	35	$ 7,525	F3OUT	0	0	0	0	$ -

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
9.9	Completed Milestones Report	Completed Milestones	NH	L1/L2	IN	Deliverable	This program/project report provides the user with a list of one or more jobs, which milestones have been completed on those jobs, and when they were completed. Assumption: Using PEX	This will be a report built in PEX for the portfolio module. "Float" is a named formula that is the approved date minus the schedule date. The header should be dynamic according to the portfolio that the user has applied (i.e. it must get all the portfolio filtered values and display that). Portfolio filtering capabilities will be added for activity OBS elements so that this can be used in the report. Table sorting will be pre□determined and not flexible. The activities displayed should only be milestone activity types and are based on the user's chosen dates (the job's letting date must fall between the user's chosen dates). Only activities with a milestone activity type and an actual start date will be displayed.	F3	0	2	10	12	$ 2,600	F3IN	0	2	10	12	$ 2,600
9.1	Late Milestones Report	Late Milestones	NH	L1/L2	IN	Deliverable	This program/project report provides the user with a list of one or more jobs, showing what milestones are currently late on those jobs. Assumption: Using PEX	This will be a report built in PEX for the portfolio module. "Late" is a named formula which will be done using configuration in the Administration module so that it is dynamic and can be changed in the future. The header should be dynamic according to the portfolio that the user has applied (i.e. it must get all the portfolio filtered values and display that). Portfolio filtering capabilities will be added for activity OBS elements so that this can be used in the report. Table sorting will be pre□determined and not flexible. The activities displayed should only be milestone activity types and are based on the user's chosen dates (the job's letting date must fall between the user's chosen dates). Only activities with a milestone activity type and that are true for the "late" formula will be displayed.	F3	0	2	10	12	$ 2,600	F3IN	0	2	10	12	$ 2,600
9.11	Milestone Status Report	Milestone Status	NH	L1/L2	IN	Deliverable	This program/project report provides the user with the status of all milestones on a particular selected job or group of jobs. Assumption: Using PEX	This will be a report built in PEX for the portfolio module. The header should be dynamic according to the portfolio that the user has applied (i.e. it must get all the portfolio filtered values and display that). Portfolio filtering capabilities will be added for activity OBS elements so that this can be used in the report. Table sorting will be pre□determined and not flexible. The activities displayed should only be milestone activity types and are based on the user's chosen dates (the job's letting date must fall between the user's chosen dates). Only activities with a milestone activity type will be displayed.	F3	0	5	10	15	$ 3,425	F3IN	0	2	10	12	$ 2,600
9.12	Milestone Gantt Chart Report	Milestone Gantt Chart	NN	L1/L2	OUT	OUT	This program and/or project report provides the user with the same information as found in the Milestone Status Report, but in Gantt Chart form. The milestones are displayed in date order with the earliest date first.	Confirmed to no longer be needed since this can be met by opening up one/multiple projects at the same time and applying a filter in the Gantt view. This can then be saved as a style which can be shared with other users.	F3	0	5	20	25	$ 5,475	F3OUT	0	0	0	0	$ □
9.13	Milestone Summary Report	Milestone Summary	NH	L1/L2	IN	Deliverable	The program and/or project report provides the user with the status of all milestones on a particular selected job or group of jobs, grouped into Work Breakdown Structure levels. Assumption: Using PEX	This will be a report built in PEX for the portfolio module. The header should be dynamic according to the portfolio that the user has applied (i.e. it must get all the portfolio filtered values and display that). Portfolio filtering capabilities will be added for activity OBS elements so that this can be used in the report. Table sorting will be pre□determined and not flexible. The activities displayed should only be milestone activity types and are based on the user's chosen dates (the job's letting date must fall between the user's chosen dates). Activities with a milestone activity type will be displayed. Activities that are WBS elements of milestones are to be displayed as well.	F3	0	2	10	12	$ 2,600	F3IN	0	2	15	17	$ 3,625

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
9.14	Milestone Summary Gantt Chart Report	Milestone Summary Gantt Chart	NN	L1/L2	OUT	OUT	This program and/or project report provides the user with the status of all milestones on a particular selected job or group of jobs, grouped into Work Breakdown Structure levels, and presented in Gantt Chart form	Confirmed to no longer be needed since this can be met by opening up one/multiple projects at the same time and applying a filter in the Gantt view. This can then be saved as a style which can be shared with other users.	F3	0	5	15	20	$ 4,450	F3OUT	0	0	0	0	$ -
9.15	Predecessors and Successors Report	Predecessors and Successors	NN	L1/L2	OUT	OUT	This project report provides the user with all preceding and succeeding constraints for each task in an open job, version, or multi job project.	Confirmed to no longer be needed since this view and capability is met using the "Links" page within the projects module. You can toggle between Gantt/Pert views for your network which adapt according to your selected activity. The predecessors and successors will be displayed accordingly.	F4	0	5	30	35	$ 7,525	F4OUT	0	0	0	0	$ -
9.16	Task Status Report	Task Status	NH	L1/L2	IN	Deliverable	This program and/or project report provides the user with provides the user with the status of all tasks on a particular selected job or group of jobs.	This will be a report built in PEX for the portfolio module. The header should be dynamic according to the portfolio that the user has applied (i.e. it must get all the portfolio filtered values and display that). Portfolio filtering capabilities will be added for activity OBS elements so that this can be used in the report. Table sorting will be pre-determined and not flexible. The activities displayed should only be milestone activity types and are based on the user's chosen dates (the job's letting date must fall between the user's chosen dates). Only activities that have a task activity type will be displayed.	F3	0	5	15	20	$ 4,450	F3IN	0	2	10	12	$ 2,600
9.17	Task Gantt Chart Report	Task Gantt Chart	NN	L1/L2	OUT	OUT	This program and/or project report provides the user with the same information as found in the Task Status Report, but in Gantt Chart form. The tasks are displayed in date order with the earliest date first.	Confirmed to no longer be needed since this can be met by opening up one/multiple projects at the same time and applying a filter in the Gantt view. This can then be saved as a style which can be shared with other users.	F4	0	5	15	20	$ 4,450	F4OUT	0	0	0	0	$ -
9.18	Late Tasks Report	Late Tasks	NH	L1/L2	IN	Deliverable	The Late Tasks Report provides the user with a list of one or more jobs, showing what tasks are currently late on those jobs. Assumption: Using PEX	This will be a report built in PEX for the portfolio module. The header should be dynamic according to the portfolio that the user has applied (i.e. it must get all the portfolio filtered values and display that). Portfolio filtering capabilities will be added for activity OBS elements so that this can be used in the report. Table sorting will be pre-determined and not flexible. The activities displayed should only be milestone activity types and are based on the user's chosen dates (the job's letting date must fall between the user's chosen dates). Only activities that have a task activity type and are true for the "late" formula will be displayed.	F3	0	2	10	12	$ 2,600	F3IN	0	2	10	12	$ 2,600
9.19	Completed Tasks Report	Completed Tasks	NH	L1/L2	IN	Deliverable	This program and/or project report provides the user with a list of one or more jobs, showing what tasks are currently completed on those jobs. Assumption: Using PEX	This will be a report built in PEX for the portfolio module. The header should be dynamic according to the portfolio that the user has applied (i.e. it must get all the portfolio filtered values and display that). Portfolio filtering capabilities will be added for activity OBS elements so that this can be used in the report. Table sorting will be pre-determined and not flexible. The activities displayed should only be milestone activity types and are based on the user's chosen dates (the job's letting date must fall between the user's chosen dates). Only activities that have a task activity type and have an actual start/finish will be displayed.	F3	0	2	10	12	$ 2,600	F3IN	0	2	20	22	$ 4,650

A		B	D1	D2	D3	D4	F1	F2	Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
9.2	Program Status Custom Report	Program Status Custom	MH	L2	IN	Deliverable	The Program Status Custom Report provides the user with a view of the overall status of a job or group of jobs by number of major milestones met, plus a chart showing the balance of lettings for the Fiscal Year selected. Assumption: Using PEX	This will be a report built in PEX for the portfolio module. The header should be dynamic according to the portfolio that the user has applied. The "data collection date" is simply the current date. All dates, aside from the benchmark ones, are the current real-time dates. The top report is year-to-date data with the start being the start of your date fliter and the end being the data collection date which in this case is the current date (the bottom goes for the full date range and not to the current date). The benchmark date is the program snapshot that is designated as the benchmark. The date filter that the user chooses is filtering jobs for the approved letting date (so you could have major gaps of months due to the schedule date being different).	F4	0	5	20	25	$ 5,475	F4IN	4	50	10	64	$ 17,100
9.21	Program Status Historical Report	Program Status Historical	MH	L2	IN	Deliverable	This program report provides the user with a view of the overall status of a group of jobs by number of major milestones met, plus a table showing the status of lettings for the Fiscal Year selected, with data gathered as of a past collection date. Assumption: Using PEX	Same as 9.20 except that it is sourced from the program snapshot data. The "data collection date" is the date a user chooses to display the program snapshot for.	F4	0	4	10	14	$ 3,150	F4IN	4	52	15	71	$ 18,675
9.22	Program Performance Report	Program Performance	NN	L1/L2	OUT	OUT	The Program Performance Report provides the user with an overview of the status of a selected job/jobs focusing on just the Plan Completion or just the Letting date. Assumption: Using PEX	Confirmed to no longer be needed.	F4	0	2	10	12	$ 2,600	F4OUT	0	0	0	0	$ -
9.23	Responsibilities Work Schedule Report	Responsibilities Work Schedule	NN	L1/L2	OUT	OUT	This program and/or project report provides the user with the status of all tasks and milestones on a particular selected job or group of jobs, grouped by responsible unit.	Confirmed to no longer be needed since this data can be gotten through the functional screens in Planisware after projects/workpackages are opened and then appropriate WBS/RBS filters are applied.	F4	0	2	10	12	$ 2,600	F4OUT	0	0	0	0	$ -
9.24	Responsibilities Work Schedule Gantt Chart Report	Responsibilities Work Schedule Gantt Chart	NN	L1/L2	OUT	OUT	This program and/or project report provides the user with the status of all tasks and milestones on a particular	Confirmed to no longer be needed since this data can be gotten through the functional screens in Planisware after projects/workpackages are opened (responsible units are delegated workpackages).	F4	0	5	15	20	$ 4,450	F4OUT	0	0	0	0	$ -
9.25	Resource Histogram Report	Resource Histogram	MH	L1/L2	IN	Deliverable	This program report provides the user with a histogram showing resource loading per month for a selected date range. Assumption: Using PEX	This will be a report built in PEX for the portfolio module. Resource availability will be displayed as an overlay line and the planned hours will be the bars (the unit will be hours). The user needs to be able to filter for RBS units.	F3	0	2	10	12	$ 2,600	F3IN	0	3	20	23	$ 4,925
9.26	Resource Summary Report	Resource Summary	NN	L1/L2	OUT	OUT	This program report provides the user with a tabular summary showing resource loading per month for a selected date range. Assumption: Using PEX	Confirmed to no longfer be needed since this data can be gotten through the bottleneck analysis view in the Resources module.	F4	0	2	10	12	$ 2,600	F4OUT	0	0	0	0	$ -
9.27	Resource Profile Availabilities Report	Resource Profile Availabilities	NN	L1/L2	OUT	OUT	This program report shows resource availability per month for a selected date range. Assumption: Using PEX	Confirmed to no longer be needed since this view and capability is met using the Resource availablility spreadsheet and table list in the Resources module. Users have access to this if they are the "resource manager" of a resource. Business administrators can place themselves as the resource manager for all resources.	F4	0	2	10	12	$ 2,600	F4OUT	0	0	0	0	$ -
9.28	Director's Dashboard Report	Director's Dashboard	NN	L1/L2	OUT	OUT	This program level report provides the user with a quick look at the benchmark and job data for any fiscal year, also affording drill down to specific information. Assumption: Using PEX	Confirmed to no longer be needed.	F4	0	5	20	25	$ 5,475	F4OUT	0	0	0	0	$ -

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
9.29	Benchmark Status Report	Benchmark Status	NN	L1/L2	OUT	OUT	This program report provides the user with different reports, comparing benchmarked jobs and costs per month to jobs and costs per month as of another collection date, based on selection criteria	Confirmed to no longer be needed.	F4	0	5	30	35	$ 7,525	F4OUT	0	0	0	0	$ -
		Shared reporting configuration items			IN				F3	0	0	0	0	$ -	F3IN	4	40	65	109	$ 25,625
		Final build cleanup			IN				F5	20	80	160	260	$ 61,300	F5IN	20	80	160	260	$ 61,300
10.0		**Documents**																		
10.1	Customizable Online Help	System must provide a customizable online help system. Best practice from the market scan: uses wiki technology, uses context sensitive help at the field level	MH	OOB	IN	Capability	Customizable online help as well as the ability to create personalized e-Learning. Wiki technology not supported	Documents and videos can be uploaded to the elearning suite in Planisware. Planisware Tour can be used for creating interactive tutorials. There is no Planisware configured deliverable for this item.		0			0	$ -	IN	0	0	0	0	$ -
10.2	Customizable Online Guides	System must provide a customizable online stepwise reference guides.	MH	OOB	IN	Capability	Include as part of context sensitive help	Documents can be uploaded to the elearning suite in Planisware. There is no Planisware configured deliverable for this item.		0			0	$ -	IN	0	0	0	0	$ -
10.3	Customizable Online Videos	System must provide customizable online video tutorials.	MH	OOB	IN	Capability	Custom e-Learning videos supported	Videos can be uploaded to the elearning suite in Planisware. Planisware Tour can also be used to create interactive tutorials. There is no Planisware configured deliverable for this item.		0			0	$ -	IN	0	0	0	0	$ -
10.4	Customizable Online FAQs	System must include customizable online FAQs for frequent issues staff/users may encounter.	MH	OOB	IN	Capability	Our eLearning suite allows the State to control which documents are available to the end users, including uploading FAQ's	Documents can be uploaded to the elearning suite in Planisware. There is no Planisware configured deliverable for this item.		0			0	$ -	IN	0	0	0	0	$ -
11.0		**Data Migration**																		
11.1	Data Dictionary	Vendor must provide the data structure including but not limited to a data dictionary.	N/A	N/A	IN	N/A	Fully Supported	To be addressed in the implementation plan / data migration scope.	NA				0	$ -	NAIN	0	0	0	0	$ -
11.2	Legacy Data	System must provide the ability to import all open P/PMS job data and supporting data from P/PMS CATII to new PM system.	N/A	N/A	IN	N/A	Fully Supported	To be addressed in the implementation plan / data migration scope.	NA				0	$ -	NAIN	0	0	0	0	$ -
11.3	10 Year History	System must provide the ability to import the last 10 years of P/PMS data for archived jobs and the supporting data for those archived jobs from P/PMS to new PM system.	N/A	N/A	IN	N/A	Planisware supports data migration through one of the many available formats, but data mapping will be needed to insure information goes into the right fields	To be addressed in the implementation plan / data migration scope.	NA				0	$ -	NAIN	0	0	0	0	$ -
11.4	Data Mapping	Contractor must provide a data map from the current system to the new system before construction begins.	N/A	N/A	IN	N/A	Fully Supported	To be addressed in the implementation plan / data migration scope.	NA				0	$ -	NAIN	0	0	0	0	$ -
12.0		**Security**																		

A		B	D1	D2	D3	D4	F1	F2		Original Estimate						Revised Estimate					
No.	Summary	Requirement	ReClass	Level	In/ Out	Capability / Deliverable / Out	Proposal Comments	Review Comments	MS	Exec	PM	Prog	Hrs	Labor	MS	Exec	PM	Prog	Hrs	Labor
12.1	System Roles	System must provide the ability to enforce role based security at program, project and task levels. See also Functional Requirement 2.11 regarding task locking.	MH	L2	IN	Capability / Deliverable	Even within role based security, there will be capability to restrict access to individuals or groups as desired.	Standard Planisware security will be used to meet the needs of MIDOT. At the project level, you can control full read/write access on a full project-by-project basis based on the attributes: 1) Rights 2) User groups with read permission 3) User groups with write permission Where #2 and #3 are users in the system or user groups in the system (a user belongs to several user groups; for example, all users in a partiular region can belong to the regional user group which can be used as an assignment on the project security access rights instead of many individual users). For activity level security, the workpackage delegation workflow will be used. You can assign in the 'Delegated to' field any users/user groups that you would like and then those users only have write access to what they have been delegated in the "Workpackages" module. Any user with write access on the project itself will always have write access to the activities in that project as well. Configuration will be pursued to automatically fill in the 'Delegated to' field based on the OBS of the activity. This will be done when the project has been approved and will also be available in the form of a button in the toolbar. What we delegate needs to be mapped to this somehow in the OBS table (an attribute to store what to delegate to based on the respective OBS - it is initialized once and then can be administered/modified as needed).	F5	1	10	20	31	$ 7,175	F5IN	1	10	18	29	$ 6,765
12.2	System Administrator	System must provide the ability to allow a user to be the system business administrator.	MH	OOB	IN	Capability	Fully Supported	Business administrators are driven through the "Administrator" attribute on the user and also through the user profiles. Business administrators have access to the administration module, where, amongst other things: 1) common data (OBS, RBS, activity types, TSC, etc.) is managed 2) user access is managed 3) level 1 configuration is managed Aside from this, whenever requirements refer to not being able to update something except in the case of being an administrative, business administrators also fill that role and that exception.	NA				0	$ -	NAIN	0	0	0	0	$ -
												TOTALS	2059	$ 462,225				TOTALS	1578	$ 365,970

ReClass¤ MH---Must-have-
NH---Nice-to-Have-
CW---Can-Wait-NN-
--Not-Needed¤

Level¤ OOB---Out-of-the-Box¶
L1----Level-1-Configuration-(UI)¤

¤

Build-Totals¤	MS¤	Original-Estimate¤					MS¤	Revised-Estimate¤				
Build-1---1/2-Scheduling¤	F1¤	7	77	205	289	$ → 65,475¤	F1IN¤	7	63	209	279	$·····62,445¤
Build-2---Cost-&-Resource-Management-&-1/2-Scheduling¤	F2¤	18	121	375	514	$·····116,000¤	F2IN¤	12	78	205	295	$·····67,375¤
Build-3---Program-Management-&-1/2-Reporting¤	F3¤	6	80	380	466	$·····101,850¤	F3IN¤	9	111	317	437	$·····98,435¤
Build-4---1/2-Reporting¤	F4¤	10	99	390	499	$·····110,425¤	F4IN¤	11	162	105	278	$·····69,650¤
Final-Build-and-delivery-for-testing¤	F5¤	21	90	180	291	$ → 68,475¤	F5IN¤	21	90	178	289	$·····68,065¤
		62 → 467¤		1530¤		$·····462,225¤		60	504	1014¤		$····· 365,970¤

¶

DTMB COTS PPM
Solution
Detailed Task Resource Estimate

TASK	MS	Task	XRiver												Planisware						Totals			
			Off-Site Hours						On-Site Hours						Off-Site Hours			On-Site Hours			Off-Site	On-Site	Total	Total
			PM	BusAna	SoftDev	Prog	Trainer	TechWri	PM	BusAna	SoftDev	Prog	Trainer	TechWri	Exec	PM	Prog	Exec	PM	Prog				
			$ 188	$ 165	$ 150	$ 85	$ 135	$ 65	$ 253	$ 230	$ 215	$ 150	$ 200	$ 130	$ 325	$ 275	$ 205	$ 410	$ 360	$ 290	Hours	Hours	Hours	Labor
		Project Monitoring and Control *Develop Project*																						
1 & 2	B1	*Management Plan Develop Finalized Project*	32.0	8.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	2.0	8.0	0.0	0.0	0.0	0.0	50.0	8.0	58.0	$ 12,190
1 & 2	B1	*Plan & Schedule Performance Review Meetings*	8.0	8.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	2.0	8.0	0.0	0.0	0.0	0.0	26.0	16.0	42.0	$ 9,710
1 & 2	B1	*(Bi-Weekly) Perform Issue Management*	104.0	52.0	0.0	0.0	0.0	0.0	104.0	0.0	0.0	0.0	0.0	0.0	16.0	52.0	0.0	0.0	0.0	0.0	224.0	104.0	328.0	$ 73,840
1 & 2	B1	*Review/Reporting Perform Risk Management*	52.0	26.0	0.0	0.0	0.0	0.0	52.0	0.0	0.0	0.0	0.0	0.0	8.0	52.0	0.0	0.0	0.0	0.0	138.0	52.0	190.0	$ 44,070
1 & 2	B1	*Review/Reporting Perfrom Change*	26.0	13.0	0.0	0.0	0.0	0.0	26.0	0.0	0.0	0.0	0.0	0.0	8.0	26.0	0.0	0.0	0.0	0.0	73.0	26.0	99.0	$ 23,335
1 & 2	B1	*Management Reviews*	26.0	13.0	0.0	0.0	0.0	0.0	26.0	0.0	0.0	0.0	0.0	0.0	4.0	26.0	0.0	0.0	0.0	0.0	69.0	26.0	95.0	$ 22,035
		Project Initialization																						
1	C1	*Project Kickoff - Orientation Meeting*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	$ -
1	C1	*Project Kickoff - Initiation Meeting*	16.0	6.7	0.0	0.0	0.0	0.0	16.0	16.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	16.0	0.0	26.7	48.0	74.7	$ 18,680
		Requirements and Solution Architecture Validation Services																						
1	D1	*Conduct Planisware Demonstration to Core Team*	16.0	4.0	0.0	0.0	0.0	0.0	24.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	20.0	72.0	92.0	$ 23,880
1	D1	*Conduct Functional Workshops Conduct Report*	24.0	4.0	0.0	0.0	0.0	0.0	48.0	48.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	24.0	0.0	30.0	120.0	150.0	$ 37,610
1	D1	*Req Review Meetings Conduct Interface Req*	8.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	24.0	0.0	10.0	48.0	58.0	$ 16,850
1	D1	*Review Meetings Develop Draft RTM Conduct*	16.0	4.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	24.0	0.0	28.0	48.0	76.0	$ 20,760
1	D1	*RTM Review Meeting/Feedback Develop*	40.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	72.0	0.0	72.0	$ 15,420
1	D1	*Configuration/Customization Plan Develop Draft*	8.0	8.0	0.0	0.0	0.0	0.0	24.0	24.0	0.0	0.0	0.0	0.0	8.0	28.0	0.0	0.0	24.0	0.0	52.0	72.0	124.0	$ 33,340
1	D2	*Interface Design Conduct Plan Review*	40.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	80.0	0.0	0.0	0.0	0.0	176.0	0.0	176.0	$ 41,300
1	D2	*Meeting/Feedback*	24.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	40.0	0.0	0.0	0.0	0.0	86.0	0.0	86.0	$ 20,090
1	D2		16.0	16.0	0.0	0.0	0.0	0.0	24.0	24.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	24.0	0.0	36.0	72.0	108.0	$ 27,160
2	D3	*Develop Configuration Screen Design*	24.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	80.0	0.0	0.0	0.0	0.0	124.0	0.0	124.0	$ 30,440
2	D3	*Develop Final Interface Design Conduct*	8.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	48.0	0.0	0.0	0.0	0.0	64.0	0.0	64.0	$ 16,660
2	D3	*Design Review Meeting/Feedback*	16.0	8.0	0.0	0.0	0.0	0.0	24.0	24.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	24.0	0.0	32.0	72.0	104.0	$ 27,140
1	D1	*EASA and IT Security Assessment Input/Reviews*	8.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	2.0	32.0	0.0	0.0	0.0	0.0	42.0	8.0	50.0	$ 12,970
		Installation of "out of the box" COTS *Support*																						
2	E1	*Installation of COTS on Development Support*	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	24.0	12.0	24.0	36.0	$ 9,630
2	E2	*Installation of COTS on QA/Training Support*	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.0	0.0	0.0	24.0	9.0	24.0	33.0	$ 8,805
2	E3	*Installation of COTS on Production*	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.0	0.0	0.0	24.0	9.0	24.0	33.0	$ 8,805
		Configuration/ Customization Services *Build 1: ½*																						
2	F1	*Scheduling Build 2: Cost/Resource Mgmt and ½*	80.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	63.0	209.0	0.0	0.0	0.0	375.0	0.0	375.0	$ 80,085
2	F2	*Scheduling Build 3: Program Mgmt and ½*	80.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	78.0	205.0	0.0	0.0	0.0	391.0	0.0	391.0	$ 85,015
2	F3	*Reporting Build 4: ½ Reporting*	64.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	111.0	317.0	0.0	0.0	0.0	517.0	0.0	517.0	$ 113,075
2	F4	*Build 5: Final Build*	64.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	162.0	105.0	0.0	0.0	0.0	358.0	0.0	358.0	$ 84,290
2	F5		80.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	90.0	178.0	0.0	0.0	0.0	385.0	0.0	385.0	$ 85,705
		Implementation Services																						
1	G1	*Implementation Plan Development*	16.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	2.0	8.0	0.0	0.0	0.0	0.0	26.0	24.0	50.0	$ 11,910
2	G1	*Data Conversion /Migration Mapping*																						
2	G1	*Global Common Data MDOT*	0.0	0.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	12.0	0.0	0.0	0.0	100.0	0.0	100.0	$ 16,660
2	G1	*Configuration Data Template &*	0.0	0.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	12.0	0.0	0.0	0.0	100.0	0.0	100.0	$ 16,660
2	G1	*Library Data*	0.0	0.0	160.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	10.0	0.0	0.0	0.0	178.0	0.0	178.0	$ 28,250
2	G1	*Closed Project, JobNet, Payroll & Snapshot Data*	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.0	164.0	0.0	0.0	0.0	269.0	0.0	269.0	$ 58,095
2	G1	*Current Project, JobNet, Payroll & Snapshot Data*	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	16.0	0.0	0.0	0.0	40.0	0.0	40.0	$ 8,120
2		*Algorithm Development*																						
2	G2	*MDOT Rule Conversion*	0.0	160.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	190.0	0.0	190.0	$ 34,650
2	G2	*MDOT Algorithn Testing*	0.0	160.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	160.0	0.0	160.0	$ 26,400
2	G2	*Algorithm Review Session*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	40.0	$ 9,200

DTMB COTS PPM
Solution
Detailed Task Resource Estimate

TASK	MS	Task	XRiver												Planisware						Totals			
			Off-Site Hours						On-Site Hours						Off-Site Hours			On-Site Hours			Off-Site	On-Site	Total	Total
			PM	BusAna	SoftDev	Prog	Trainer	TechWri	PM	BusAna	SoftDev	Prog	Trainer	TechWri	Exec	PM	Prog	Exec	PM	Prog				
			$ 188	$ 165	$ 150	$ 85	$ 135	$ 65	$ 253	$ 230	$ 215	$ 150	$ 200	$ 130	$ 325	$ 275	$ 205	$ 410	$ 360	$ 290	Hours	Hours	Hours	Labor
		Interfaces - Development																						
2	G4	*ProjectWise Interface DCDS*	8.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	60.0	0.0	0.0	0.0	81.0	0.0	81.0	$ 16,495
2	G5	*Interface JobNet Interfaces*	8.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	90.0	30.0	0.0	0.0	0.0	141.0	0.0	141.0	$ 35,345
2	G6	*Testing Current Project Data Migration Testing*	8.0	32.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	120.0	120.0	0.0	0.0	0.0	280.0	0.0	280.0	$ 64,380
		System Testing																						
2	G7	*UAT Testing Production Go-Live*	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	24.0	26.0	24.0	50.0	$ 12,710
2	G7	*Performance Warranty Period*	24.0	8.0	0.0	0.0	0.0	0.0	120.0	0.0	0.0	0.0	0.0	0.0	4.0	120.0	172.0	0.0	0.0	40.0	328.0	160.0	488.0	$ 117,280
2	G8		24.0	8.0	0.0	0.0	0.0	0.0	96.0	0.0	0.0	0.0	0.0	0.0	4.0	56.0	128.0	0.0	24.0	0.0	220.0	120.0	340.0	$ 81,640
2	G9	**Training Services**	8.0	8.0	0.0	0.0	0.0	0.0	72.0	0.0	0.0	0.0	0.0	0.0	4.0	100.0	24.0	0.0	0.0	80.0	144.0	152.0	296.0	$ 77,920
2	G10		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	$ -
1	H1	*Training Plan Development*	16.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	20.0	24.0	44.0	$ 10,160
2	H1	*Configuration Training DB Setup*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	16.0	0.0	0.0	0.0	20.0	0.0	20.0	$ 4,380
2	H1	*Configuration Training Material Development*	8.0	0.0	0.0	0.0	320.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	328.0	24.0	352.0	$ 49,500
2	H1	*Configuration Train-the-Trainer Session*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.0	64.0	$ 12,800
2	H1	*Configuration End User Training Support Planisware*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	40.0	$ 8,000
2	H2	*Core Training DB Setup Planisware Core Training*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	16.0	0.0	0.0	0.0	20.0	0.0	20.0	$ 4,380
2	H2	*Development Planisware Core Training Sessions*	8.0	0.0	0.0	0.0	80.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	104.0	40.0	144.0	$ 24,700
2	H2	*PLW System Administration Training Session*	0.0	0.0	0.0	0.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	0.0	80.0	$ 10,800
2	H3	*Online access to training (PDF submissions)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	24.0	16.0	48.0	64.0	$ 15,760
2	H2	*Training Documentation*	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	8.0	$ 1,500
2	H2		8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	8.0	$ 1,500
		Additional Documentation *User*																						
		manual - Draft User manual -																						
2	I01	*Final*	0.0	0.0	0.0	0.0	0.0	120.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	128.0	24.0	152.0	$ 15,780
2	I01	*Technical manuals- As Built Design Docs*	8.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	56.0	0.0	56.0	$ 6,020
2	I02		40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	50.0	0.0	0.0	0.0	94.0	0.0	94.0	$ 18,850
		Knowledge Transfer/Transition *Knowledge Transfer Plan*																						
		Advanced ProWeb and Code Walkthrough Sessions																						
2	K1	*Advanced PEX Session*	16.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	22.0	24.0	46.0	$ 10,710
2	K2		0.0	24.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0	0.0	4.0	24.0	0.0	0.0	40.0	52.0	64.0	116.0	$ 27,100
2	K3		4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	54.0	0.0	54.0	$ 11,000
		TOTAL HOURS - INITIAL PROJECT	1120	806.667	320	0	480	160	832	248	0	0	168	0	504	1970.5	2147.75	410	555.5	558.75	6727.67	1736	8463.67	$ 1,851,545
								2886.67						1248			4622.25			1524.25				

Form No. DTMB-3522 (Rev. 2/2015)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
525 W. ALLEGAN, LANSING, MI 48933

NOTICE OF CONTRACT NO. 071B5500119

between

THE STATE OF MICHIGAN

and

NAME & ADDRESS OF CONTRACTOR	PRIMARY CONTACT	EMAIL
XRiver Technologies LLC	Edward P. Maddox	emaddox@xrivertech.com
14150 Parkeast Cir, STE 280	PHONE	VENDOR TAX ID # (LAST FOUR DIGITS ONLY)
Chantilly, VA 20151-2235	703.674.4886	3373

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
PROGRAM MANAGER	MDOT	Brian Zakrzewski	517-335-2227	ZakrzewskiB@michigan.gov
CONTRACT ADMINISTRATOR	DTMB	Jarrod Barron	517-284-7045	BarronJ1@michigan.gov

CONTRACT SUMMARY

DESCRIPTION: MDOT COTS PPM Solution

INITIAL TERM	EFFECTIVE DATE	INITIAL EXPIRATION DATE	AVAILABLE OPTIONS
5 years	July 15, 2015	June 30, 2020	Twelve (12) month increments. Not execute more than three (3) Renewal Periods at any given time.

PAYMENT TERMS	F.O.B.	SHIPPED TO
45	N/A	N/A

ALTERNATE PAYMENT OPTIONS	EXTENDED PURCHASING
☐ P-card ☐ Direct Voucher (DV) ☐ Other	☒ Yes ☐ No

MINIMUM DELIVERY REQUIREMENTS:

N/A

MISCELLANEOUS INFORMATION:

N/A

ESTIMATED CONTRACT VALUE AT TIME OF EXECUTION:	$ 3,564,048.00

THIS IS NOT AN ORDER: This Contract is awarded on the basis of our inquiry bearing the solicitation # 007114B0002909. Orders for delivery will be issued directly by the Department of Technology, Management & Budget through the issuance of a Purchase Order Form.

For the Contractor:

_____ _____

Edward P. Maddox**,**
President
XRiver Technologies

Date

For the State:

_____ _____

Bill Pemble**,**
IT Division Director
State of Michigan

Date

Table of Contents

Article 1 – Statement of Work (SOW)

1.000 Project Identification

1.001 Project Request

The State of Michigan ("the State"), through the Department of Technology, Management & Budget (DTMB), and Department of Transportation (MDOT) (collectively "the Client'), has issued this Contract to XRiver Technologies LLC. or otherwise referenced as "XRiver" or "Contractor" for a web-based Commercial-of-the Shelf (COTS) Program and Project Management (PPM) system (the "COTS PPM Solution") utilizing Planisware V6 software. This COTS PPM Solution will be hosted by the State and used, at minimum, for the purpose of scheduling, reporting progress, and tracking the status of trunkline jobs and tasks.

1.002 Background

MDOT's stated mission is "**Providing the highest quality integrated transportation services for economic benefit and improved quality of life."**

One of the goals within the strategic plan supporting this mission is to achieve improved organizational results by continuing to enhance products, processes, and culture. One of the objectives underlying this goal is directly related to the COTS PPM Solution initiative:

- Improve organizational effectiveness, including developing and delivering programs on-time, on-budget and with quality.

Implemented in 1994, the current software named Program and Project Management System (P/PMS) is a highly customized UNIX based COTS package.

The P/PMS application is used for scheduling, reporting progress, and tracking the status of jobs to be let as trunkline road and bridge projects in the Early Preliminary Engineering (Scoping) and Preliminary Engineering (Design) stages. P/PMS functions from concept to award in the project life cycle.

The entry point into the MDOT's Transportation Construction Program is through a system called MPINs where ideas and concepts are formulated and ultimately result in approved jobs. Approved jobs become part of the Transportation Construction Program. Trunkline road and bridge jobs that are to have their construction components put out for bid, or "let", need Early Preliminary Engineering (Scoping) and Preliminary Engineering (Design) work. It is these phases of projects that the COTS PPM Solution will address. Although there is some desire to offer construction scheduling in the future, this would be after a successful implementation of the pre-construction phases.

There are separate domain specific systems for managing other aspects of the Transportation Construction Program including

- Financial Obligation of jobs
- Rail jobs
- Local Agency jobs
- Aeronautic jobs
- Non-let jobs

The current system interfaces with 5 other MDOT and state data sources to get approved jobs, target milestone end dates, actual start and finish dates for tasks and milestones, hours, and cost information.

The existing system also has a web based application provides the ability to generate all P/PMS reports dynamically online.

1.100 Scope of Work and Deliverables

1.101 In Scope

The project consists of the following scope:

1.104 Work and Deliverables

A. COTS PPM Software Acquisition
   - 1.104.1 COTS PPM Software
   - 1.104.2 Functional Requirements
   - 1.104.3 Technical Requirements

B. COTS PPM Solution Services
   - 1.104.4 Project Monitoring and Control
   - 1.104.5 Project Initiation Services
   - 1.104.6 Requirements and Solution Architecture Validation Services
   - 1.104.7 Installation and Configuration/Customization Services
   - 1.104.8 Implementation Services
   - 1.104.9 Training
   - 1.104.10 Additional Documentation
   - 1.104.11 Maintenance and Support
   - 1.104.12 Knowledge Transfer/Transition
   - 1.104.13 Supplemental Services

A more detailed description of the software, services (work) and deliverables sought for this project is provided in Article 1, Section 1.104, Work and Deliverables.

No other State agencies are involved with this initial procurement to support MDOT; however, this contract may be used as an enterprise solution.

The State reserves the right to purchase hardware and software from other State Contracts.

1.102 Out Of Scope

The following tasks and deliverables are out-of-scope:

- Procurement and deployment of Hardware

1.103 Environment

The links below provide information on the state's enterprise information technology (IT) policies, standards and procedures which includes security policy and procedures, eMichigan web development, and the State Unified Information Technology Environment (SUITE).

Services and products provided as a result of this Contract must comply with *applicable* State IT policies and standards.

Enterprise IT Policies, Standards and Procedures:

http://michigan.gov/dtmb/0,4568,7-150-56355_56579_56755---,00.html

All software customizations provided by the Contractor must run on and be compatible with the DTMB Standard Information Technology Environment. Therefore, non-standard development tools may not be used unless approved by DTMB. The Contractor must request, in writing, approval to use non-standard software development tools, providing justification for the requested change and all costs associated with any change. The State's Project Manager must approve any tools, in writing, before use on any information technology project.

It is recognized that technology changes rapidly. The Contractor may request, in writing, a change in the standard environment, providing justification for the requested change and all costs associated with any change. The State's Project Manager must approve any changes, in writing, before work may proceed based on the changed environment.

Enterprise IT Security Policy and Procedures:

http://michigan.gov/documents/dmb/1305_193158_7.pdf

http://www.michigan.gov/documents/dmb/1325_193160_7.pdf

http://www.michigan.gov/documents/dmb/1335_193161_7.pdf

http://www.michigan.gov/documents/dmb/1340_193162_7.pdf

The State's security environment includes:

- DTMB Single Login.
  Secured Socket Layers.
  SecureID (State Security Standard for external network access and high risk Web systems)

DTMB requires that its single - login security environment be used for all new software development. Where software is being purchased, the security mechanism must be approved in writing by the State's Project Manager and DTMB Cybersecurity and Infrastructure Protection.

Other State enterprise shared solution environments include:

1. GeoData Services such as a geospatial data warehouse (MS SQL Spatial and Oracle Spatial) and an enterprise ArcGIS Server as an application tier.

The State Unified Information Technology Environment (SUITE):

Includes standards for project management, systems engineering, and associated forms and templates – must be followed: http://www.michigan.gov/suite

Solution Platform(s)

The following three (3) environments will be established to support the Contractor's implementation strategy:

DEVELOPMENT

State's development environment – This environment is hosted by the State. To start, it will be loaded with the base COTS solution in order to confirm proper server setup and provide the State with a working copy of the base system in order to gain familiarity with the product. This environment will also be used for installation testing and data migration testing. Configurations and customizations will be loaded here prior to moving to the quality assurance/testing environment.

QUALITY ASSURANCE/TESTING/TRAINING

This environment is hosted at the state and is where the State will pilot and validate installation procedures, validate data migration procedures as well as conduct all System Testing, Training, and User Acceptance Testing for the integrated solution.

PRODUCTION

This environment is hosted at the state and is where the final integrated solution is deployed.

The COTS PPM Solution must be capable of operating in a Virtual Machine (VM) environment.

Agency Specific Technical Environment
A preliminary SOM Enterprise Architecture Assessment Worksheet (EASA), (Attachment N) has been completed by the Contractor. The Contractor must work with the SOM to complete the finalized EASA.

The COTS PPM Solution will be implemented within MDOT's current business application architecture as specified in the EASA. The DTMB/MDOT Standard Information Technology Environment consists of the Desktop Environment, IT Project Management Tools, the Business System Development Environment, the Web/Intranet Site and Application Development Environment, the Security Environment, and the Network Environment. These environments are listed in Appendix N.

Interfaces
The State has initially identified the following interfaces the Contractor's COTS solution may need to interface with. The scope for Interfaces are expected to be defined during requirements validation in Task Order #1.

Direct or Indirect Data Updates	System	Description	Data Source
Direct	ProjectWise	Central Repository of all production specs and documents	Oracle
	DCDS	Data Collection Distribution System Management Accounting Information Network - (State of Michigan accounting, payroll, purchasing, contracting, budgeting, personnel and revenue management system) Job number with tasks and hours charged.	Flat File
Indirect	Michigan Architectural Project (MAP) Database	MAP is the cooperate database that houses information to manage the scope, schedule and budget of jobs that are part of the department's Capital Outlay Program.	Oracle

The detailed information to be transferred between the COTS PPM Solution and the existing State data sources is specified in Appendix L. Interfaces.

1.104 Work and Deliverables

The purpose of this section is to describe the work and deliverables necessary to provide the required functionality to support the COTS PPM Solution**.**

APPROACH SUMMARY
This Project will be delivered on a Task Order approach, consisting of two key elements; 1) the services scope be limited to the project initiation and basic project management, with the primary effort focused on the requirement validation and detailed design scoping, and 2) the procurement and use of the Planisware software would be deferred until MDOT approves the results of Task Order #1.

See Appendix G Project Plan for both Task Order 1 and 2. This Project Plan is broken out by the Section services delineation used in this Contract, Section 1.104 Work and Deliverables. For each Section of 1.104, the detailed proposed activities, assumptions, and deliverables are stated in Appendix G Project Plan.

Specifically, the proposed Task Order #1 services would include:

- Currently defined Task B: Project Initiation services
- Currently defined Task C: Project Monitoring & Control services, limited to the PMP development and the status reporting required only for the initial task period
- Currently defined Task D: Requirements and Solution Architecture Validation Services through the development, review and approval of the Configuration/Customization Plan.
- Currently defined Task G: Limited to development of a preliminary Implementation Plan
- Currently defined Task H: Limited to development of a preliminary Training Plan

The requirements validation and preliminary design process will rely heavily on conducting requirements and design workshops, using demonstrations of the system, and showing out-of-the box functionality supported by best practice discussions will provide the best opportunity for achieving overall project cost reductions. A deliverable of this approach would be a revised/updated detailed estimate and schedule for the follow-on development and implementation tasks, all subject to review and approval by the State. To facilitate the requirements validation services, XRiver will use a SaaS version of the Planisware system to support the review sessions. There would be no charge for the use of this system. Note this system would only be accessible by XRiver and not "for use" as yet by MDOT staff.

XRiver would defer the State's requirement to procure any software until the completion of Task Order #1. Task Order #1 would take approximately 3 months to complete based on the preliminary Project Schedule. At the end of Task Order #1, the State will make a go/no-go decision, at which point, a go decision would trigger the actual procurement of the software. A no-go decision cancels any obligation to obtain any additional services or buy the Planisware software. Specifically, the proposed software terms following Task 1 would include:

- If the project schedule for Task Order #1 is not delayed, the State will make a go/no-go decision and initial license purchase no later than December 15, 2015.
- If the State does desire to move forward, the State would then procure the total system licenses Planisware system as currently defined to take advantage of the proposed discounts.
- Detailed pricing for XRiver's proposed Task Order #1 are included in the Cost Tables as Appendix F.

All project artifacts are to be reviewed by the State. Approval of all project artifacts shall be the sole responsibility of the State DTMB/MDOT Project Manager and/or designee.

Services and Deliverables to Be Provided

A. COTS PPM Software Acquisition

1.104.1 COTS PPM Software

The Contractor is responsible to provide the COTS PPM Solution software licenses in sufficient quantities to meet MDOT PPM system functional requirements as summarized below and specified in detail within Appendix B Functional Requirements, and Appendix C Technical Requirements.

XRiver is an authorized distributer of the Planisware software. While XRiver is the distributer, the license agreement to use the Planisware software will be directly between the State and Planisware.

Planisware User Licensing

The following subsection provides a description of the Planisware licensing components and a mapping to the MDOT license requirements.

Total User count estimates:

- Project Manager users: 125
- Program Manager users: 25
- Scheduling Assistant users: 125
- Reporting only users: 200
- Users who will enter task Actual (Start/End) Dates only: 200

In addition to these license quantities, XRiver has added proposed licenses for System Administration and Configuration Support users. One key Planisware benefit is that it is an all-inclusive application. All functionality is included in a single, fully integrated comprehensive PPM solution.

Planisware License Components

The Planisware perpetual licensing has 2 main components: The Application Server license (A) and functional module licenses (B). A minimum of one Application server license is required for operating the software. Quantities of the functional modules are determined based on the end users' particular needs.

A) Planisware Application Server licenses:

This server license is based on the number of CPUs in use for the production environment. Planisware offers 3 options for Application Server licensing:

- 4-CPU license
- Unlimited CPU license for enterprise wide usage X64\Linux
- Unlimited CPU license for enterprise wide usage X64\Windows

B) Planisware V6 functional modules are:

- Planisware V6 Intranet (Read Write)
- Planisware V6 Intranet (Read Only)
- Planisware V6 PM Office
- Planisware V6 Team Member
- Planisware V6 Pro Web – Authoring Tool

The license mapping for the State requirements is as follows:

Planisware Functional Module	MDOT User Role	Total Licenses
Unlimited CPU license for enterprise wide usage X64\Windows	Application Server License	1
Planisware 5 Intranet (Read Write)	Project Managers	125
Planisware 5 Intranet (Read Write)	Schedule Assistants	125
Planisware 5 Intranet (Read Only)	Report Managers	200
Planisware 5 PM Office	Program Managers & Administration Users	30
Planisware 5 Team Member	Task Users	200
Planisware 5 ProWeb - Authoring Tool	Configuration/Tech Support Users	2

Planisware Functional Modules

Planisware functional modules are fully integrated and form a complete program, project, resource, cost and portfolio management offering. Licensing of each of these modules is on a per named-user basis. All functional modules are web based and accessible from the corporate intranet/extranet. Following is a brief description of each proposed Planisware V6 license type:

Planisware V6 Intranet (Read Write) provides a single tool to enable access and update, via the customer's Intranet/Extranet, to all information contained in the database. Planisware V6 read write provides a complete role-based and web-based PPM solution where program/project managers, resources managers and work package managers can create and manipulate schedules, estimate resource effort and cost, request and assign resources, create budget and save baselines, track their projects and so on.

Planisware V6 Intranet (Read Only) provides a single tool for managers who want to retrieve all the information contained in the database. These users can use predefined reports and dashboards which are updated with the latest data available or create their own reports using the built-in report wizard. Users of the Planisware Intranet license can save their own environment objects (styles, reports, bookmarks, portfolio filters, etc.) but cannot save data changes back to the database.

Planisware V6 PM Office provides, in addition to all the functionalities included in Planisware Intranet 5 r/w, access to the more advanced functions of Planisware V6: portfolio management & simulations, roadmapping, access rights to screens and data, estimations rules, score card definitions, referential data updates, users and groups administration. PM Office is required to create queries and dashboards using Explorer.

Planisware V6 Team Member users can access their personal project agenda and collaboration functions (documents, issues, forums, etc.), be notified when they are involved in a workflow and update the information required in this workflow. The portal also includes all Idea and Demand management with collaboration, scoring and voting features. Team Members may input their actual hours and Estimate to Complete at the team member portal, which includes an optional access to the Time Card functionalities.

Planisware V6 Pro Web is the authoring application used by the power users for configuring the system to match user's business requirements. All intranet pages, reports, alerts, custom wizards, workflows etc. are directly created using Planisware Pro. Planisware Pro is a MS Windows based client and is typically only used by the system's administrators.

Project Management

At any given time MDOT is actively managing more than 900 Early Preliminary Engineering (Scoping) and Preliminary Engineering (Design) projects. There are approximately 160 project managers. Projects have an average of 80 tasks (typical range is 20 – 140). Projects use standard sets of tasks and milestones, depending on the characteristics of the trunkline and/or bridge work to be performed. The state is divided into 7 regions and task work is allocated to resources in the regions where the jobs are located and to centralized specialty areas in Lansing's central office.

A project network showing all of the possible tasks is attached as Appendix J. The P/PMS Task Manual may be found at: http://www.michigan.gov/documents/mdot/mdot_task_manual_297105_7.pdf.

A representative project schedule from the current system is attached as Appendix K.

The COTS PPM Solution will include basic project management functionality including but not limited to:

- defining standard tasks
- defining standard milestones
- linking dependent tasks
- creating a Baseline(s)
- assigning resources
- resource leveling
- estimating hours
- capturing actual hours
- entering estimated Start and Finish Dates
- identifying critical path
- produce project management query and reporting including ad-hoc and customized

Planisware V6 includes very robust Project Management functionality. All items specifically cited in this section of the Contract are supported by the software:

MDOT Project Management Requirements	Planisware V6 Feature/Comment
Actively manage 900+ projects	Planisware can handle thousands of projects in the system.
Support 160+ project managers	The Planisware system architecture supports scalability to support hundreds if not thousands of users. This software proposal and hardware recommendation take into account the size of the MDOT user base.
Support 7+ state regions	State Regions could be supported by a user-defined attribute which can be connected to projects, tasks, resources, and any other element desired in the system. This attribute could be a structure attribute, which provides for automatic aggregation of related data. Regions could also be included in the Organizational Breakdown Structure, which would allow for security of data access based on geographical areas if desired.
Support representative project schedules as shown in Appendix J and K	Planisware can readily support the input, maintenance, and scheduling of the representative project schedules shown in Appendix J & K. Note XRiver would also review and discuss the relative merits of using in-line milestones as opposed to SS/FF connected milestone on tasks (as illustrated in Attachment J).
Support defining standard tasks	Planisware supports the definition of standardized tasks.
Support defining standard milestones	Planisware supports the definition of standardized milestones.
Support linking dependent tasks	Planisware supports standard Critical Path Method constraint linking (SS, FS, FF, SF) with lead and lag times within and across projects.
Support creating a Baseline(s)	Planisware supports the creation of multiple baselines.
Support assigning resources	Planisware supports assigning resource and resource profiles at the activity (task or WBS) level.
Support resource leveling	The Planisware scheduling engine supports the standard Critical Path Method resource leveling.
Support estimating hours	Planisware supports estimating hours in multiple ways based on specified curves, estimation by analogy, or smart templating based on business parameters provided..
Support capturing actual hours	Planisware supports the capture of actual hours. Actual hours can be entered in bulk, or can be captured via the Planisware's Time Card module (which is included in the Team Member license). However this proposal assumes actual hours are to be loaded in bulk via an interface.
Support entering estimated Start and Finish Dates	Planisware supports entering estimated (forecasted) start and finish dates.
Support identifying critical path	The Planisware scheduling engine supports the standard Critical Path Method of scheduling.
Support production of project management queries and reporting including ad-hoc and customized	Planisware includes a robust query and reporting capability.

Program Management

MDOT Program management is performed at global and sub-program levels based on 5-year outlooks and single fiscal year activity. In addition the MDOT program is managed from Region, Resource Unit and various other perspectives.

Each fiscal year a Transportation Construction Program baseline is established. This is referred to as the program benchmark. Projects will move in and out of the program through-out the course of the year. At regular monthly intervals a snapshot of the program is taken that allows comparison of the benchmark to the snapshot to determine job status and to confirm expected use of federal and state funding is on target.

Planisware is a true enterprise project, program, portfolio management solution incorporating top-to-bottom strategic management and cross-enterprise transparency that empowers departments of transportation to handle complex strategic and financial decisions regarding selection and prioritization of programs and allocation of State and Federal Funding. Planisware combines the tools of an enterprise-level solution that can be configured to accommodate specific requirements of the State incorporated with industry standards such as PMI PMBOK®, that can evolve with MDOT as your needs change over time.

Planisware includes a variety of views and reports to communicate the health of projects and programs, at any level of the WBS structure. Additionally, Planisware allows for capturing "snapshots" of projects and programs at designated points in time to generate progress reports reflecting changes since the last reporting period. Due to the comprehensive nature of Planisware, MDOT may wish to establish notification or alert thresholds on critical milestones that notify the stakeholder of any delays that might have an impact to the overall programs as they occur.

All items specifically cited in this Contract are supported by the software:

MDOT Program Management Requirements	Planisware V6 Feature/Comment
Support a program hierarchy – global and subprograms	As Planisware supports "Structures" such as WBS, OBS, RBS and CBS, a Program hierarchy is simply comprised of multiple project structures which may or may not have inter-project links between themselves as well as links to projects outside of the Program.
Support management and assessment of Federal and State funding usage and targets	One of the key requirements of any portfolio management system is to be able to prioritize projects and programs, and determine how much can be accomplished based on the Federal and State funding available, and resource availability. The use of "buckets" within Planisware allows for a breakdown of planned funding usage by program type, and then reports can determine if actual funding distribution is aligned with planned distribution
Support a 5 year program window	There is no time limit on a program's duration. Planisware also supports Roadmapping where the DOT can build a long term strategic plan, then associate projects and programs against that strategic plan to track how well they align with the long term strategy. The timeframe of the roadmap is defined by the user.
Support review of programs by Region, Resource Unit, and other TBD views.	Planisware supports review of programs by any meta-data element that exists in the database by simply filtering by that selection or combination of selections.
Support establishment of annual Transportation Construction Program (TCP) benchmarks	Planisware supports establishment of annual TCP benchmarks which can be handled either as a portfolio baseline or as a Roadmap with associated meta-data, based on your processes
Support ongoing TCP updates.	TCP updates can be applied as needed to the TCP baseline method, and re-baselined, or to the Roadmapping method
Support monthly TCP snapshots and comparisons.	TCP snapshots by using either method described above will allow for monthly TCP comparisons, and trends can be tracked and reported on using indicators.

Reports

Reports will be generated from the COTS PPM Solution including project- level reports, program-level reports, and resource reports. MDOT will be able to run reports based on various criteria such as Region, Transportation Service Center (TSC), Fiscal Year, Sub-Program, Organization Unit, etc. through the Contractor's COTS PPM Solution. Some of the criteria will be native to the COTS PPM Solution and some will be available as a result of the interfaces described above under Project Management. The COTS PPM Solution will allow the user to drill down from the report to underlying detail.

Planisware V6 has a variety of reporting capability and venues, none of which are 3rd party tools although some customers have used 3rd party reporting tools such as Cognos to query the Planisware database. Several reports addressing timing, resources, finances and risks are available with Planisware V6 out-of-the-box. These reports provide a great starting point for comprehensive portfolio analysis, combined with specific reports outlined in Appendix M that will be included in our implementation proposal.

Planisware includes our own Business Intelligence (BI) query tool called Planisware Explorer or "PEX" for short. For many customers, PEX will be the solution of choice for reporting. PEX provides the same tools and processes as those in standard BI suites. PEX is a graphical drag and drop oriented tool for generating queries, reports and dashboards with drill down and drill through capability. Each of these reports or dashboards can be created by dragging and dropping widgets, reports, queries, roadmaps and filters into a new dashboards and adjust the components to fit any desired arrangement. PEX features the right level of flexibility by enabling the report creator to not only build screens but to define the options for the end user to filter and analyze the data as well. Planisware's strengths when compared to pure BI solutions are a significantly reduced deployment time and cost, and a superior intuitive interface.

In addition to PEX, all end users screens can also be reports using the one click PDF generator included with Planisware. Additionally, reports can be created with the authoring tool, Planisware ProWeb, or data can be sent to Excel for reporting, and/or sent to the presentation module to create PowerPoint style presentations using slide deck templates created for meeting updates.

All items specifically cited in this Contract are supported by the software:

MDOT Reports Requirements	Planisware V6 Feature/Comment
Support project, program, resource level reports	Planisware has an underlying foundation of "structures" such as Work Breakdown Structures, Organizational Breakdown Structures and Resource and Cost Breakdown structures. There is no limit as to the number of structures that can be input which will allow for rolling up information within or across structures to support all levels of reporting.
Support report criteria such as region, TSC, fiscal year, sub-program, organizational unit, etc.	Using the structures note above, along with information such as time period, sub-program name, organizational unit or any other existing filtering criteria will provide the desired result.
Support referential (non-native Planisware/interfaced data) criteria/inclusion in reports.	Planisware has been called the "single source of truth" because of our ability to import non-native data from other critical systems for inclusion in Planisware reports. We are able to accomplish this due to the flexibility of the Planisware data model which allows for unlimited database extensions
Support report drill down to underlying detail	Planisware includes the ability to drill down, or drill-thru reporting. While a senior manager may be looking at a summary view, and has concerns as to the cause of critical delays showing on a high visibility program, even the "read only" Planisware licenses allow for drilling down to the underlying detail.

XRiver will work with the State to recreate reports that are functionally similar to those listed in Appendix M as part of the implementation.

Roles

The COTS PPM Solution should support groups and roles as follows.

- Application Administrators –may access and change any and all information within the system.
- Cost and Scheduling Engineers – initiate, maintain, and monitor networks at the Region or TSC level. They have read and write access to jobs in their area, and can grant access to others, as well as having read access to the Program and Administration Areas.
- System Manager - a manager of the Department's Highway program. They have read and write access to all information in the Program. They may build and maintain the department's overall highway master program, as well as sub-programs and program scenarios.
- Project Manager - initiates and maintains project networks. They have read and write access to their jobs in the Job/Project area. Project Managers can grant read and write access to Assistants or other Project Managers. Project Managers have read access to other Project Manager's jobs and to the Program and Administration areas.
- Read Only Users - read only access to all three areas (Administration, Job/Project and Program).
- Real Estate - Real Estate personnel have limited access to just the Real Estate tasks on all jobs. They control the modification of their tasks.
- Scheduling Specialist/Project Manager Assistant - given access to jobs by the Project Manager to help maintain project networks and schedules. They have read and write access to their assigned jobs in the Job/Project area. Scheduling Specialists have read access to other Project Manager's jobs and to the Program and Administration areas.
- Responsible Units, such as Traffic & Safety or Survey Task Owners - have the ability to enter/modify actual start and finish dates, and read-only access otherwise.

Using a combination of Planisware V6 license types and user defined roles, each of the stated MDOT groups and roles can be supported. XRiver will work with MDOT to define both the functional and data access requirements for each specified group. One or more user defined roles may be required to support each group. XRiver will implement each defined role as part of the system implementation process.

MDOT Role Requirements	Planisware V6 License/Role Comment
Support Application Administrators	Planisware V6 Program Manager – a specific master Role would be configured/established to specify functional and data access restrictions (if any).
Support Cost and Scheduling Engineers Users	Planisware V6 Program Manager – new Roles would be established and configured to specify functional and data access restrictions, and to allow user to grant access to others.
Support System Manager Users	Planisware V6 Program Manager – new Roles would be established and configured to specify functional and data access restrictions.
Support Project Manager Users	Planisware V6 Internet (Read Write) - new Roles would be established and configured to specify functional and data access restrictions
Support Read Only Users	Planisware V6 Internet (Read Only) - new Roles would be established and configured to specify functional and data access restrictions
Support Real Estate Users	Planisware V6 Team Member - new Roles would be established and configured to specify functional and data access restrictions
Support Scheduling Specialist/Project Manager Assistant Users	Planisware V6 Internet (Read Write) - new Roles would be established and configured to specify functional and data access restrictions
Support Responsible Unit Users	Planisware V6 Team Member - new Roles would be established and configured to specify functional and data access restrictions

Deliverables

- Procurement of COTS PPM Solution software on suitable media, such as DVD or USB key (two (2) copies to be provided) or FTP access to distribution site for electronic transfer.
- Detailed installation manuals / instructions in support of the COTS PPM Solution software, in electronic format as described in the Installation and Configuration/Customization Services section below.

Acceptance Criteria

Per section 1.500

1.104.1.1 Innovative Software Approach

Mobile Interface

The proposed Planisware application comes with out-of-the-box Mobile interface capabilities that support both tablets and smartphones. The only requirement is the device support HTML 5. Customer uses include viewing any Planisware screens or dashboards on a tablet, input or updating of timecards, expenses, to-do lists, program issues encountered and even RSS feeds. Additional specific modules can be built to meet the specific needs of the State.

Smart Templates

Many features of the Planisware software are designed to help automate processes to assist with improving consistency and efficiency such as network/schedule generation. By allowing the user to provide some critical project/program information regarding scope and location, the system can automatically include or exclude project templates and sub-templates (libraries) of activities required to fulfill the project or program requirements. These templates and sub-templates can come loaded with typical resource requirements, durations, and other attributes to further automate the network generation process.

Parametric Estimation and Estimation by Analogy (algorithms)

Included in the Planisware software are a couple of modules designed to specifically help in estimating resources, costs and other project/program attributes called Parametric Estimation and Estimation by Analogy . The primary application of these tools would be for resource allocation based on some type of defined linear curve for certain type activities and tasks.

Parametric estimation is best suited for multi-criteria conditions and complex models. It is frequently used to forecast work effort, resources, costs and other variables. Using algorithms is considered advanced configuration, and requires a lot of investigation and analysis if algorithms do not already exist. For example, one Planisware client uses Parametric Estimation to help build their networks for installing new transmission lines, taking into consideration external factors (wind, soil, ocean currents, etc.)

Estimation by Analogy, on the other hand, functions by providing estimates, cost, resources and other project/program attributes based on previous experience. This tool is best used with historical data is available to draw from because it is based on real world history. The obvious potential risk in this method is if there is no accurate historical information or benchmark data to draw from in the distribution of resources, costs and timing.

1.104.2 Functional Requirements

Functional Requirements are provided in Appendix B. Functional requirements identify the initial functionality of the COTS PPM Solution, to enable performance of work tasks and any applicable service levels.

1.104.3 Technical Requirements

Technical Requirements are provided in Appendix C. Technical requirements identify the general framework in which the product must work, such as: system architecture, documentation, audit and backup and recovery.

B. COTS PPM Solution Services

1.104.4 Project Monitoring and Control

Project Plan and Schedule

The Contractor's Project Management Plan including the preliminary schedule is delineated as section B in the Appendix G project plan. Following is a summary description for these proposed services.

XRiver will develop a finalized Project Management Plan that covers all aspect of project management and control procedures to be used on the effort. The objective of this plan, is to ensure that the mutually agreed upon processes and procedures needed to effectively manage the project are in place. The final Project Management Plan would be submitted to the State for formal approval within 30 working days of the execution of the Contract. Upon approval, the plan establishes the guidelines for all planning and control activities for the project.

This finalized Project Management Plan must include the following, but not limited to:

a. The Contractor's project organizational structure.
b. The Contractor's staffing table with names and title of personnel assigned to the project. This must be in agreement with staffing of accepted proposal. Necessary substitutions due to change of employment status and other unforeseen circumstances may only be made with prior approval of the State.
c. The project work breakdown structure (WBS) showing sub-projects, activities and tasks, and resources required and allocated to each.
d. The time-phased plan in the form of a graphic display, showing each event, task, and decision point in the WBS.

Payment to the Contractor will be made upon the completion and acceptance of the milestone, not to exceed contractual costs. A milestone is defined as complete when all of the deliverables within the milestone have been completed and accepted.

Project Control

The Contractor will work jointly with the State to manage the project in accordance with SUITE or Contractor's comparable forms and templates

Performance Review Meetings

The State will require the Contractor to attend weekly meetings with the State's project team to review the Contractor's performance under the Contract. The meetings will be held in Lansing, Michigan, or by teleconference, as mutually agreed by the State and the Contractor. The State shall bear no cost for the time and travel of the Contractor for attendance at the meeting.

Reports

Reporting formats will be submitted to the State's Project Manager for approval as agreed upon by both Contractor and State as part of the Project Management Plan development described above Once both parties have agreed to the format of the report, it shall become the standard to follow for the duration of the contract and provided as agreed upon by both parties.

Issue Management

An issue is an identified event or circumstance that if not addressed may affect schedule, scope, quality, or budget.

The Contractor will utilize the cloud based Desk.com from Salesforce (or suitable replacement) as its Issue Management and Help Desk Support software. The use of this software will provide an integrated long term view

of the project and reduce the duplication of data and learning both our staff and the client. Desk.com will support the defined data tracking requirements:

- Description of issue
- Issue identification date
- Responsibility for resolving issue.
- Priority for issue resolution (to be mutually agreed upon by the State and the Contractor)
- Resources assigned responsibility for resolution
- Resolution date and Resolution description

The issue management log must be communicated to the State's Project Manager on an agreed upon schedule, with email notifications and updates.

Issues shall be escalated for resolution as agreed upon by both Contractor and State as part of the Project Management Plan development described above.

Risk Management

As part of the Project Management Plan development, XRiver will establish a risk management plan and process, including the identification and recording of risk items, prioritization of risks, definition of mitigation strategies, monitoring of risk items, and will conduct periodic risk assessment reviews with the State. The following risk types will be tracked as part of risk management:

- Overall project risks for schedule and/or cost
- Activity specific risks for schedule and/or cost

The following data elements will be provided for each risk identified:

- Risk description
- Risk identification date
- Risk level (high, medium, low)
- Risk probability (percentage)
- Impact of risk on schedule and cost
- Risk mitigation steps
- Person responsible for monitoring risk

XRiver will submit the risk management plan to the State for approval as part of the Project Management Plan. XRiver understands it is responsible for identification of risks for each phase of the project. Mitigating and/or eliminating assigned risks will be the responsibility of XRiver, subject to review and input by the State. The State will assume the same responsibility for risks assigned to them. XRiver uses Microsoft Excel to track project risk and Microsoft Project to track activity risk. The plan will be updated bi-weekly, along with the project status. XRiver will work with the State to determine an acceptable method for the inclusion of updates on the State risk items.

Change Management

Change management is defined as the process to communicate, assess, monitor, and control all changes to system resources and processes. The State also employs change management in its administration of the Contract per Section 2.024 Change Request.

As part of the Project Management Plan development, XRiver will establish a change management plan and process. XRiver understands that 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 XRiver under the Contract.

XRiver understands that it may become necessary for the State to discontinue certain business practices or create Additional Services/Deliverables upon changing needs or through greater familiarization of the software. At a minimum, when these instances occur, XRiver will provide a detailed breakout of the work affected/to be done, including tasks, timeframes, resource, and estimated pricing changes. XRiver will perform this action upon the receipt of a written approval from the State.

The Change Management plan will specify the documentation needed to by XRiver and the State to determine the need and cost for making a change. This should include:

- Establish a Change Management Team responsible for review and approval of changes.
- Document and conduct a preliminary assessment to include:
  - Detailed description of the nature of the change
  - Identification of source responsible for initiating the change
  - Ballpark cost and schedule impacts for the change
  - Submission, review and preliminary approval of any changes prior to requesting a formal quotation and issuing a change order.
- Final change documentation should include:
  - Provide the CM Team with the following data elements for each change request:
    - Change Description and reason for change
    - Change Request Date
    - Impact of Change to project schedule
    - Cost impact if available
    - Other programs affected
    - Time estimate to complete the change

If provisionally approved, then XRiver will produce a quotation as specified in Section 2.024, and will provide a detailed outline of all work to be done, including tasks necessary to accomplish the Additional Services/Deliverables, timeframes, listing of key personnel assigned, estimated hours for each individual per task, and a complete and detailed cost justification. XRiver will not proceed with Change until receiving official notification from the State.

1.104.5 Project Initiation Services

Project Kick-off Meeting - Contractor will work with the State's Project Manager to arrange an official project kick-off meeting as follows:

Initiation/Orientation Meeting - within 10 calendar days from execution of the Contract, the Contractor will be required to facilitate an initiation/orientation meeting for the Contractor to present the project team and including sponsors as needed, outlining the proposed approach to the COTS PPM Solution implementation, including but not limited to the following: an overview of the proposed COTS software, project plan, project schedule, Contractor and State resources and responsibilities, risk mitigation plan, content and procedures of the Contract, etc. The meeting must be held in Lansing, Michigan, at a date and time mutually acceptable to the State and the Contractor.

1.104.6 Requirements and Solution Architecture Validation Services

The detailed project plan for the Requirements and Solution Architecture Validation Services is delineated as Task D in the Appendix G project plan. Following is a summary description for these proposed services.

COTS Software Orientation Workshops

The initial activities proposed for the Requirements and Solution Architecture will consist of several COTS Software Orientation Workshops. Initially XRiver will provide a detailed 2-day workshop which will include a demonstration of the "out-of-the-box" software configuration to the designated State Core Team. The objective of this demonstration is to familiarize the Core Team with the software and to begin the requirements validation process by identifying the initial system components and features to be used by the State (Planisware has capabilities beyond those specified in the RFP). In addition, this session will identify which summary components and features are to be demonstrated to the functional teams. Subsequent ½-1 day workshops/demonstrations will be given to each identified functional team to obtain their initial validation/input on the system. Separate workshops will be held to do detailed review of each interface's requirements (estimated at 2-4 hours per interface).

For stability and access, all workshop demonstrations will be conducted using XRiver's SaaS based instance of Planisware V6.

As required, XRiver will also conduct Enterprise Architecture Solution Assessment (EASA) and an IT Security Assessment reviews, supported by the appropriate Planisware technical resources (via webinar).

Requirements Validation

Prior to conducting the workshops, XRiver will develop a preliminary Requirements Traceability Matrix (RTM) for the effort. This preliminary RTM will be based on the stated Contract requirements and will be used to guide the workshops (with the objective of keeping the requirements in-line with the stated Contract requirements). Upon workshop completion, based on the input received, XRiver will obtain clarification/more detail where deemed necessary, will incorporate changes into the RTM, and will conduct an internal assessment to determine if the requirements are still in sync with the stated Contract requirements. If required, identified changes will be raised with the State for resolution. The final RTM will be submitted for review and approval.

System Design

The system design effort consists of the activities required to define the detailed designs needed to develop the approved RTM line items. Using the approved RTM, the XRiver technical team will conduct internal sessions to determine the best implementation methods/approaches to accomplish all configuration and interface items. Based on these results, additional interviews to fully review/validate the RTM line items and obtain any required detail/clarifications may be needed to implement the requirement. The result will include the development of a system design document(s) detailing each requirement in the RTM (where deemed necessary). This would include the detailed breakout of roles, screen selection and modifications, process/work flow modification, etc. Upon completion, the final system design document(s) will be submitted for review and approval.

1.104.7 Installation and Configuration/Customization Services

The detailed project plan for the Installation and Configuration/Customization Services are delineated as Task E (Installation) and Task F (Configuration/Customization) in the Appendix G project plan.

NOTE: There will be no changes to the Planisware source code as part of any configuration/customization, all requirements will be implemented and used as is with just configuration changes.

Following is a summary description for these proposed services.

Planisware V6 Installation

During the course of the project, it is anticipated that three separate instances of the Planisware V6 software will be established. This will include a development instance, a test/training instance, and the final production instance. This task encompasses establishing the initial "out-of-the-box" instances.

Given that multiple installation instances are to be established and maintained by the State, the objective of the installation services is to make the State as self-sufficient as possible. Prior to the installation, XRiver and Planisware technical resource will provide the information needed by the State technical team to prepare the required hosting environment(s).

When deemed ready, XRiver will coordinate a 2-day installation session. During this session, a Planisware resource will be on-site to provide instruction, guidance and any necessary troubleshooting. The intent is for a State resource to do all of the "hands-on" effort required for the installation. The objective of the site visit will be to install all instances. If the State decides not to install all instances, subsequent installation support will be provided remotely.

Planisware V6 Configuration/Customization

Planisware V6 is a completely configurable system. Technically this is accomplished via two primary means, which Planisware refers to as Level 1 and Level 2 configuration:

Level 1 Configuration: Level 1 configuration is done via menu driven Planisware V6 Administration capabilities accessible via the PM Office license. These configuration features include:

- Establishing Roles & Access
- Updating the data model (limitations apply)
- Define alerts, locks, data management rules
- Edit pop-ups
- Building Reports
- Smart Template and Algorithm Development

Level 2 Configuration: Level 2 configuration is done via the ProWeb-Authoring tool license. These configuration features include:

- Extending the data model
- Using Planisware script for full access to the Planisware object model API
- Establishing and managing workflows
- Modifying screen layouts
- Create new module and functionalities

The ProWeb Authoring Tool provides considerable customization capability by allowing for the inclusion of Java Scripting within the application.

Proposed Configuration Builds

XRiver proposes to perform the configuration build in five interim builds. Each build will address a one or more core component requirements as listed in Appendix B. Each build would also incorporate the integration of one or more of the interfaces.

As builds 1 through 4 are deemed ready, XRiver will conduct a walkthrough of the build with the State core team to demonstrate the implemented functionality and obtain feedback. In scope feedback will be incorporated during the final build. Upon completion of the final build, the system will be ready for system testing.

Following is the summary break out of the deliverable interim builds. As part of the design effort, a more detailed breakout of what is to be included in each build will be provided to the State:

Interim Build	Short Name	Appendix B Section	Included Interface
1	Scheduling	1, 2, most of 4	7.2 ProjectWise inbound
2	Resource & Cost Mgmt, including Actuals	All of 3, 5, remainder of 4 (rolling up costs/hours)	7.1 MAP inbound
3	Program Mgmt Reporting (1/2)	6 and half of 9	7.3 DCDS/MAIN inbound
4	Reporting (2/2)	Half of 9	ALL outbound interfaces
5	Full System + Data Migration	8	

1.104.8 Implementation Services

The detailed project plan for the Implementation Services is delineated as Task G in the Appendix G project plan. Following is a summary description for these proposed services.

Implementation Plan

Due to the overall complexity of an implementation of this scale, XRiver proposes to develop an Implementation Plan to guide the overall implementation effort. This plan will specify the detailed activities required for the software installation, data migration and cut-over for production use. The plan will also define roles and responsibilities for the implementation.

Data Conversion & Migration

XRiver will work with the State to determine the domain of data to be migrated from the existing P/PM system to Planisware V6. Part of this exercise will be to determine what administrative/structural data needs to be developed and loaded into system, what historical data needs to be converted, and what current production data needs to be loaded from the legacy system. Part of this exercise will be to determine the technical approach for each data type and the appropriate mapping/conversion rules. Note this activity will be done in parallel with the configuration build as historically we have found working with actual client data to be essential to the overall development and testing process.

System administrative/structural data consists of the small sets of data used for validation purposes. This consists of items such as WBS and OBS structures, Resource Codes, etc. Depending on the quantity of this type of data, this may be loaded via a more manual process.

It is anticipated that an automated approach will be used to load historical and production project data. It is also anticipated that this process be segregated in that historical data, which is not subject to change, will be loaded well prior to production data.

Note that data conversion and migration entails taking “existing” data, converting it to a format that supports loading, or migration into Planisware V6. It would include making the appropriate tweaks to the data necessary to make the migrated data operational within Planisware. What it does not include and the translation or mapping of data to new coding conventions desired by the State (for example, the State wants to revamp its standard WBS structure and the project activities mapped to the WBS elements). Nor does it include “data scrubbing” to clean up bad or incorrect data. Typically data mapping and conversion routines will highlight data anomalies. When found, these will be the responsibility of the state to correct.

The State should also note that COTS scheduling engines, even those based on the core common Critical Path Method (CPM) algorithm, may perform schedule calculations slightly differently due to the inherent features and functions embedded within the software. While XRiver will make best effort to address these issues in the conversion routine, there may be some items that simply will not translate into Planisware. As an example, many older CPM tools supported a "hammock" activity type. These are not supported in the Planisware V6 model. As such, some legacy data or features may no longer be supported.

Interface Development

The detailed requirements for each interface will have been validated and designed as part of the Requirements and Solution Architecture Validation Services Task. The development and testing of each interface will be conducted and tested as part of the implementation services effort. Note this activity will be also done in parallel with the configuration build as interface data elements are often used/required by some of the configuration build requirements.

Configuration Testing

Configuration testing will consist of two phases. First is System Testing which will be conducted by XRiver. This will entail the development of Test Scripts to be used to test each option/process within Planisware V6 which required configuration, and each interface. XRiver uses standard Test Case forms, which are Microsoft Excel based, to document the items to be tested, and to record the test results. The test scripts are developed using the RTM/System Design documentation to establish the parameters of each test. Testing is then done by non-developers of the software. System testing is typically an iterative process where system testers test and report problems to the development team, who address the problem, which are then retested. This loop continues until all items are resolved. Once XRiver is satisfied that the system is ready for the State testing, it will be loaded onto the test environment, along with a fresh test data load, for the State User Acceptance Testing (UAT).

UAT is a joint exercise. Historically XRiver has found it to be more effective and efficient to actively facilitate the client's UAT effort. XRiver will provide all XRiver developed System Testing test cases. In addition, XRiver will be in attendance to walk the State test team through the elements to be tested, the Test Cases to be performed, and input/explanation as required. The State is also encouraged to develop your own Test Cases/scenarios as deemed necessary. As with System Testing, it is typical for some issues to arise. When this happens, it is submitted to the development team for immediate resolution to keep the UAT on track. Upon a successful UAT, the system is deemed ready to be loaded on production.

Go-Live Production

XRiver's proposes a one-time Go-Live Production approach. That is, once the UAT has passed, XRiver will support the installation of the "off-the-shelf" production instance as necessary, load the configuration build and interface components and perform an installation checkout to ensure everything is working properly. Once the software is deemed "ready," XRiver will coordinate and perform the data migration from the existing legacy system to the Planisware V6 database on the Development and or Test platform prior to production. XRiver will then perform summary data checks to validate the data transfer was successful. At this point, the system is deemed ready for "go-live."

Once the system is live, the State may decide to run both the new and legacy systems in parallel. This will be the State's choice. Note however, XRiver will not be responsible for subsequent data migrations from the legacy system.

Performance Warranty

Once the system is go-live, the 90-day performance warranty period will begin. During this period, all subsequent software problems found will be addressed, retested and reloaded on the production server.

Following the performance warranty period, XRiver additional Configuration Build support would be provided as a supplemental service. This is described further in the Recommended Supplemental Services section.

1.104.9 Training

The detailed project plan for the Training services is delineated as Task H in the Appendix G project plan. Following is a summary description for these proposed services.

Train-the-Trainer Training

XRiver proposes to develop a Training Plan to guide the overall training effort. This plan will specify the number of courses, training materials needed, training data requirements, number of sessions and facilities required for training. The plan will also define roles and responsibilities for training.

XRiver's effort for the training will include support for the development of training materials, support for the development of training data to support workshops, and conducting train-the-trainer training sessions. For training materials, XRiver anticipates a presentation (slides with screen shots & bullets) and workshops/exercises for each course/topic. In developing the materials, XRiver will be responsible for the "how does the system work" type of input and the State will be responsible for providing any relevant procedural, workflow or data content. XRiver would be responsible for final compilation of the materials. The State would be responsible for the production of course materials for the end user. Upon completion of the materials, XRiver will conduct as-needed sessions over a two week period with the State trainer personnel to cover all developed materials. Based on the feedback from these sessions, the materials will be updated and be deemed ready for training.

In addition to the trainer materials, XRiver will work with the State to establish a training environment, and the scripts required to initialize/load the training data onto the training system.

Online Access to Training Materials

Upon completion of the train-the-trainer development, XRiver will provide the source files and a PDF version of all training materials that can be placed on the State website for download and use by the State and/or State designees. Neither supplemental training materials nor any computer based training are to be developed for online training.

Administration Training

To support Planisware V6 System Administrator training, a Planisware resource, supported by XRiver, will conduct technical sessions (over a 4-day period) using Planisware's standardized System Administrator training materials.

Additional Training

In the event of that a future Planisware release affects the current specified end-user functionality; XRiver will develop a presentation and provide a webinar session per release to review the changes with the State core team/training staff. Also for each release, XRiver will conduct a webinar to the State technical staff to cover all changes to the System Administration features.

With the exclusion of copyrighted materials provided by Planisware all training manuals, training plans and other documentation provided become the property of the State.

1.104.10 Additional Documentation

The detailed project plan for the Additional Documentation services is delineated as Task I in the Appendix G project plan. Following is a summary description for these proposed services.

Planisware Documentation

As a licensee of the Planisware software, the State will be provided with the following standard documentation afforded to all Planisware clients:

- Install Guide
- Technical Operation Guide
- Data Dictionary
- Maintenance Package User Guide
- User and Configuration Guides per Module
- ProWeb User Guide
- Advanced Technical Configuration Whitepaper
- Interface Whitepapers for SAP, SSO, LDMS, Others
- Example Test Scripts
- Release Notes for Latest Version

In addition, as a licensed Planisware user, the State will have direct access to the Planisware Customer Portal. All of the documents listed above are available for download to all customers, and updated as new releases, patches or versions become available. In addition, there are a number of whitepapers, e-Learning videos, Best Practices, Training Material and similar documents available on the Customer Portal. Note that Planisware documents are provided "as is" and will not be subject to formats, content, numbering nor any other manner of specification or approval dictated by the State.

Project Documentation

All final work product documents developed by XRiver during the course of this effort will also be provided to the State. XRiver will provide both the source files and a PDF version of each deliverable. This will include:

- Plan documents:
  - Project Management Plan
  - Training Plan
  - Implementation Plan*
  - Solution Transition Plan
- System design documents:
  - Requirements Traceability Matrix
  - COTS PPM Solution Configuration/Customization Plan or Functional Design
  - COTS PPM Solution Screen Configuration/Customization Plan
  - Interface Design Document
- Training documents:
  - Training presentations/workshops

* Includes, but not limited to, Installation guide to load the configuration build and interface components.

The only additional effort proposed under the Additional Documentation services task is to develop a Supplemental User Guide. The Supplemental User Guide will augment the standard user guide by documenting the incremental differences included in the custom configuration build.

Other than what is listed above, no additional documentation is to be provided by XRiver. In addition, other than access to the Planisware portal, XRiver will not provide a website for document access, rather all documents will be provided to the State in PDF format for loading on your internal website.

1.104.11 Maintenance and Support

The detailed project plan for the Maintenance and Support is delineated as Task J1 – Maintenance and Support Services in the Appendix G project plan. Following is a summary description for these proposed services. Maintenance and support will meet the maintenance and support requirements set in Appendix I Schedule C.

Planisware Maintenance Agreement

While XRiver is an authorized distributer of the Planisware software, the maintenance agreement for the Planisware software will be directly between the State and Planisware.

A key component of Planisware's maintenance support is that it entitles the State to all software updates (both major and minor) released while the maintenance is in effect.

The Planisware Maintenance Support is limited to core Planisware software issues. The standard support does not cover issues relating to the custom configuration build, which upon delivery is no longer under XRiver control. A primary feature of the Planisware software is its flexibility. It is intended to be modified and enhanced by its customers to support their evolving needs. As the configuration build is subject to modification/enhancement by the State staff, providing support for the build is outside of the standard maintenance and is delineated in Task J2 Configuration Build Support in the Appendix G project plan.

In addition, while upgrade/release instructions are provided by Planisware, clients typically need some level of Planisware consulting support to migrate custom configuration builds from one release to the next (primarily for major releases). Migration support is not included in the standard maintenance and is delineated in Task J2 Configuration Build Support in the Appendix G project plan..

It is Planisware's standard policy to commence the annual Planisware Maintenance Support of the Planisware software on January 1st of each calendar year. For this Contract, the given that the software purchase and delivery is scheduled to occur prior to the December 15, 2015, a warranty period will begin upon purchase and extend until June 30, 2016. Following the warranty, the initial Planisware Maintenance Support will be prorated to begin on July 1, 2016 and end on December 31, 2016. Subsequent annual maintenance periods will begin on January 1 and end on December 31 annually.

Technical Support

XRiver proposes to augment the Planisware Maintenance Support by providing Technical Support services to the State as delineated in Task J1 – Maintenance and Support Services. For the effort, the support of the COTS PPM Solution will be carried out on a joint basis with the State, XRiver and Planisware.

The State will be responsible for all infrastructure and business process support related issues. The State will also act as Primary support for the Planisware application and interfaces. This typically entails working with the end user and performing initial troubleshooting/diagnostics to determine if an issue is a configuration build or core Planisware software related issue. Only designated State Primary support resources would contact/report issues to the XRiver Help Desk.

As part of technical support services, XRiver will provide the State with basic "how-to" guidance, will provide troubleshooting/diagnostics assistance to classify the problem, will attempt to resolve basic items, and for items to be elevated, will work with Planisware to resolve core problems.

1.104.12 Knowledge Transfer/Transition

The detailed project plan for the Knowledge Transfer/Transition services is delineated as Task K in the Appendix G project plan. Following is a summary description for these proposed services.

Knowledge Transfer Plan:

XRiver will work with the State to develop a Solution Transition Plan to document all transition activities. XRiver's intent is to accomplish knowledge transfer throughout the project. This begins with the initial workshops through advance technical training to the State staff. The final objective is for the State to be self-sufficient in the use and support of the final solution. Embedded knowledge transfer activities include:

- Core Team workshops
- Functional user workshops
- Installation support
- Submission and review of all work product
- End user training support

For additional transfer, XRiver proposes to provide up to 4-days of on-site Planisware ProWeb technical review session for up to 6 State technical staff. This session would include code walkthroughs of relevant configuration build elements. In addition, XRiver proposes to provide Planisware PEX webinar training to State staff. This training consists of 4 hours/week consisting of a 2 hour online session and 2 hours of a homework assignment per week, over a 4 week period.

1.104.13 Supplemental Services

The State anticipates new functionality and/or changes to the COTS PPM Solution may be requested from either the State or Contractor.

The State intends to establish a reserved bank for new functionality and/or changes of the COTS PPM Solution that may be needed by the Contractor beyond those listed in this Contract, such as additional State, federal, and/or legislative changes. Actual funding for supplemental services shall occur on a yearly basis, and there is no guarantee as to the level of funding for supplemental services, if any, available to the project. Change requests must go through a rigorous review process established by the State before being submitted to the Contractor for impact assessment and estimates.

For any changes in functionality or services, the Contractor must perform an impact analysis to determine the functional areas impacted by the change, and the associated requirements and deliverables that must be modified to incorporate the change. Once the impact analysis has been completed, the Contractor must submit a change request detailing the proposed changes to incorporate the new/changed functionality. A change request should additionally include impact to the project schedule, the Contractor's staff required to incorporate and to implement the change and either the firm-fixed price and/or time and material price to implement the change. The standard base rates used by XRiver for the supplemental services are included in the pricing table. Travel, if required, will be incorporated into the pricing.

The change request will follow the defined and approved process in Section 2.024 Change Requests.

Unless otherwise agreed by the parties, each Statement of Work will include:

- Background
- Project Objective
- Scope of Work
- Deliverables
- Acceptance Criteria
- Project Control and Reports
- Specific Department Standards
- Project Contacts
- Agency Responsibilities and Assumptions

- Location of Where the Work is to be performed
- Expected Contractor Work Hours and Conditions
- Cost Estimate and Payment Schedule

1.200 Roles and Responsibilities

1.201 Contractor Staff, Roles, and Responsibilities

A. Contractor Staff

Single Point of Contact (SPOC)

Ed Maddox will be the Single Point of Contact (SPOC). The duties of the SPOC shall include, but not be limited to:

- Supporting the management of the Contract,
- Facilitating dispute resolution, and
- Advising the State of performance under the terms and conditions of the Contract.

The State reserves the right to require a change in the current SPOC if the assigned SPOC is not, in the opinion of the State, adequately serving the needs of the State.

Key Personnel

All Key Personnel may be subject to the State's interview and approval process. Any key staff substitution must have the prior approval of the State. The State has identified the following as key personnel for this project:

- *Project Manager*
- *Senior Technical Lead*
- *System Trainer*

The contractor will provide a *Project Manager, Diane East,* to interact with the designated personnel from the State to insure a smooth transition to the COTS PPM Solution. The Contractor's Project Manager Responsibilities include, at a minimum:

- Conduct weekly status meetings to discuss project schedule and progress, project issues and action items
- Provide written meeting minutes for all project-related meetings within 48 hours throughout the life of the project
- Develop, communicate and manage the project plan and schedule, and update as needed. The project plan should include:
  - Project Scope Document
  - Communication Plan
  - Project Schedule
  - Resource Plan
  - Issue Management Plan and issue log
  - Risk Management Plan and identified risks
  - Change Management Plan
- Serve as the point person for all project issues
- Escalate project issues, risks, and other concerns
- Coordinate and oversee the day-to-day project activities of the project team
- Manage all defined contractor responsibilities in this scope of services
- Manage contractor's subcontractors, if any
- Prepare project documents and materials

- Review all project deliverables and provide feedback
- Proactively propose/suggest options and alternatives for consideration
- Utilize change control procedures
- Manage and report on the project's budget

The designated SPOC, Mr. Maddox, will act as Ms. East's backup on the effort.

The Contractor will provide *a Senior Technical Lead*, David Reinmuth, to design, configure, and implement the proposed solution. The Senior Technical Lead is to be a skilled, experienced individual that will accept responsibility for leading the design and implementation of the proposed COTS PPM Solution in the MDOT environment.

The Contractor will provide a *Trainer,* Jo Ann Reel, to be responsible for delivering training in the use of the proposed COTS PPM Solution within the MDOT environment. Experience in effective delivery of training and in depth knowledge of the Contractor's solution is required.

The designated PM, Ms. East, will act as Ms. Reel's backup on the effort.

Subcontractors

Planisware will be the primary subcontractor. As owner of the Planisware PPM Application, Planisware will provide product configuration capabilities.

Planisware's US Headquarters is located:
Planisware USA, Inc.
300 Montgomery St, Suite 930
San Francisco, CA 94104

Primary Planisware Contact:
Perry Nolen, Director, US Sales
Houston, TX
713-344-0334

The Contractor provided an organizational chart (Appendix H) indicating lines of authority for personnel involved in performance of this Contract and relationships of this staff to other programs or functions of the firm. The Contractor will update when changed, approved by the State.

B. On Site Work Requirements

1. Location of Work

All work that requires State staff will be performed at the following location:

State Transportation Building
425 W. Ottawa Street
Lansing, MI 48919

As necessary and as determined by the State, the work is to be performed, completed, and managed in the greater Lansing, Michigan area. Where appropriate and as agreed upon by the State, Contractor may perform work at their location.

2. Hours of Operation:

a. Normal State working hours are 8:00 a.m. to 5:00 p.m. EST, Monday through Friday, with work performed as necessary after those hours to meet project deadlines. No overtime will be authorized or paid.

b. The State is not obligated to provide State management of assigned work outside of normal State working hours. The State reserves the right to modify the work hours in the best interest of the project.
c. Contractor shall observe the same standard holidays as State employees. The State does not compensate for holiday pay.

3. Travel:
a. No travel or expenses will be reimbursed unless pre-approved by the State. This includes travel costs related to training provided to the State by Contractor.

1.202 State Staff, Roles, And Responsibilities

The State will provide the following resources for the Contractor's use on this project:

- Work space
- Minimal clerical support
- Desk
- Access to copiers and scanners
- Network connectivity
- Internet connectivity

The State project team will consist of Subject Matter Experts (SME's), project support, and a State (DTMB) Project Manager:

Subject Matter Experts

The Subject Matter Experts representing the business units involved will provide the vision for the business design and how the COTS PPM Solution shall provide for that vision. They shall be available on an as needed basis. The SME's will be empowered to:

- Resolve project issues in a timely manner
- Review project plan, status, issues, and risks
- Resolve deviations from the project plan
- Provide acceptance sign-off
- Utilize change control procedures
- Ensure timely availability of State resources
- Make key implementation decisions, as identified by the Contractor's project manager, within 48-hours of their expected decision date.

Name	Agency/Division	Project Title
Mark Van Port Fleet	MDOT	IT Steering Committee (ITSC) Sponsor
Brian Zakrzewski	MDOT	Business Owner
Dennis Kelley	MDOT	Business Lead
Shravan Singireddy	DTMB	Technical Lead/SME

State DTMB Project Manager and MDOT Business Owner

DTMB will provide a Project Manager and MDOT will provide a Business Owner who will provide the following services:
Provide State facilities, as needed

- Coordinate the State resources necessary for the project
- Facilitate coordination between various external contractors
- Facilitate communication between different State departments/divisions
- Provide acceptance and sign-off of deliverable/milestone

- Review and sign-off of timesheets and invoices
- Resolve project issues
- Escalate outstanding/high priority issues
- Utilize change control procedures
- Conduct regular and ongoing review of the project to confirm that it meets original objectives and requirements
- Document and archive all important project decisions
- Arrange, schedule and facilitate State staff attendance at all project meetings
- Support the management of the Contract

Name	Agency/Division	Title
Jane Rademacher	DTMB	Project Manager/SPOC
Brian Zakrzewski	MDOT	Business Owner/SPOC

DTMB shall provide a Contract Administrator whose duties shall include, but not be limited to, supporting the management of the Contract.

Name	Agency/Division	Title
Jarrod Barron	DTMB	Contract Administrator

1.300 Project Schedule

See Section 1.104.4 Project Monitoring and Control

1.400 Project Management

See Section 1.104.4 Project Monitoring and Control

1.500 Acceptance

1.501 Criteria

The acceptance criteria for document and software deliverables are specified in the standard terms and conditions of the contract, in Article 2, Section 2.250. The Contractor shall follow this prescribed process for the review and approval of deliverables, milestones and stage exit reviews as required under the Contract.

Upon completion of the deliverable(s), the Contractor shall distribute the document to the reviewers and approvers. At the State's discretion, the State may require the Contractor to schedule and facilitate a follow-up meeting to collectively walkthrough the deliverable and review feedback from the State. During the review meeting, all deliverable comments, issues and defects should be discussed, resolved and the disposition documented in accordance with the acceptance criteria.

The Contractor PM is responsible for ensuring the approved changes resulting from the deliverable review are documented and incorporated in the appropriate deliverable(s). The review process is iterative until all changes are accepted. Any Deliverable for which agreement cannot be reached after the second (2nd) facilitated review shall follow the defined project escalation process. The deliverable shall be circulated for signature approval once the deliverable is updated to reflect the agreed upon changes.

Document Deliverables

1. Documents are dated and in electronic format, compatible with State of Michigan software.

2. Requirements documents are reviewed and updated throughout the design/configuration/customization/implementation process to assure requirements are delivered in the final COTS PPM Solution.
3. Draft documents are not accepted as final deliverables.
4. Approvals will be written and signed by DTMB/MDOT Project Manager and MDOT Business Owner.

Software Deliverables

- Usability – At the discretion of the State, any or all products and deliverables may be reviewed and accepted based upon the results of the usability-related testing listed below, even if all other technical and business criteria have been met. The Contractor must provide an appropriately operational implementation of the product for review unless otherwise stipulated by the project team. For example, a Usability Evaluation requires a mostly complete user interface design and functionality. Overall usability of the product and the quality of the end user experience will be evaluated as follows:

    - Usability Evaluations: DTMB staff will evaluate the user interface and task flow of the product using State of Michigan identified best practices as a guide. The results of the evaluation will be based upon these usability categories:
        - **Visibility of system status** – The COTS PPM Solution should always keep users informed about what is going on. Feedback should be appropriate and timely.
        - **Plain and appropriate language** – The COTS PPM Solution should speak the users' language, with words, phrases and concepts familiar to the user, rather than system – oriented terms. Follow real-world conventions, making information appear in a natural and logical order.
        - **User control** – COTS PPM Solution should be forgiving of errors, providing support of undo and redo.
        - **Consistency and standards** – Words, situations, or actions should always mean the same thing from screen to screen and within each screen. COTS PPM Solution should have consistency throughout and follows platform conventions.
        - **Error prevention** – The design should strive to eliminate error-prone conditions if at all possible. Otherwise it should check for them and present users with a confirmation option within a dialog before they commit to the action. Dialogs should be written concisely and in user terms.
        - **Ease of recognition** – Make objects, actions, and options visible to the user. The user should not have to remember information from one screen to another. Instructions for user of the system should be visible or easily retrievable whenever appropriate.
        - **Flexibility and efficiency of use** – The COTS PPM Solution should adapt to user levels of proficiency. The COTS PPM Solution should be designed to cater to both inexperienced and experienced users. The COTS PPM Solution should allow users to tailor frequent actions.
        - **Aesthetic and minimalist design** – Text boxes and dialogues should not contain information which is irrelevant or rarely needed.
        - **Help users recognize diagnose, and recover from errors** – Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution with proper options to select.
        - **Help and documentation** – Any such required information should be easy to search, focused on the user's task, list concreted steps to be carried out, and not be too large.

1.502 Final Acceptance

The Contractor will be paid upon completion and acceptance of the milestone as defined in Appendix F. Cost Tables. A milestone is defined as complete when all of the deliverables within the milestone have been completed. Final acceptance is expressly conditioned upon completion of ALL deliverables/milestones, completion of ALL tasks in the project plan as approved, completion of ALL applicable inspection and/or testing procedures, and the certification by the State that the Contractor has met the defined requirements.

1.600 Compensation and Payment

1.601 Compensation and Payment

Method of Payment

Payments to the Contractor will be made on a defined milestone basis upon the completion and acceptance of the deliverable or milestone, as defined in Appendix F. Cost Tables.

The parties agree that the Services/Deliverables to be rendered by Contractor pursuant to this Contract (and any future amendments of it) will be defined and described in detail in Statements of Work or Purchase Orders ("**PO**") executed under this Contract. Contractor shall not be obliged or authorized to commence any work to implement a Statement of Work until authorized via a PO issued against this Contract. Contractor shall perform in accordance with this Contract, including the Statements of Work/Purchase Orders executed under it.

Invoicing

Contractor will submit properly itemized invoices to

DTMB – Financial Services
Accounts Payable
P.O. Box 30026
Lansing, MI 48909
or
DTMB-Accounts-Payable@michigan.gov

Invoices must provide and itemize, as applicable:

- Contract number;
- Purchase Order number
- Contractor name, address, phone number, and Federal Tax Identification Number;
- Description of any commodities/hardware, including quantity ordered;
- Date(s) of delivery and/or date(s) of installation and set up;
- Price for each item, or Contractor's list price for each item and applicable discounts;
- Maintenance charges;
- Net invoice price for each item;
- Other applicable charges;
- Total invoice price; and
- Payment terms, including any available prompt payment discount.

Incorrect or incomplete invoices will be returned to Contractor for correction and reissue.

Article 2, Terms and Conditions

2.000 Contract Structure and Term

2.001 Contract Term

This Contract is for a period of 5 years beginning July 15, 2015 through June 30, 2020. All outstanding Purchase Orders must also expire upon the termination for any of the reasons listed in **Section 2.150** of the Contract, unless otherwise extended under the Contract. Absent an early termination for any reason, Purchase Orders issued but not expired, by the end of the Contract's stated term, shall remain in effect for the balance of the fiscal year for which they were issued.

2.002 Options to Renew

The parties may agree in writing to extend this Contract prior to the expiration of the Base Term, or any Renewal Term, by twelve (12) month increments (each a "Renewal Term"). The parties may not execute more than three (3) Renewal Periods at any given time. Successful completion of negotiations surrounding the terms of the extension, will be a pre-requisite for the exercise of any Renewal Term.

2.003 Legal Effect

Contractor accepts this Contract by signing two copies of the Contract and returning them to the DTMB-Procurement. The Contractor shall not proceed with the performance of the work to be done under the Contract, including the purchase of necessary materials, until both parties have signed the Contract to show acceptance of its terms, and the Contractor receives a contract release/purchase order that authorizes and defines specific performance requirements.

Except as otherwise agreed in writing by the parties, the State shall not be liable for costs incurred by Contractor or payment under this Contract, until Contractor is notified in writing that this Contract or Change Order has been approved by the State Administrative Board (if required), signed by all the parties and a Purchase Order against the Contract has been issued.

2.004 Attachments & Exhibits

All Attachments and Exhibits affixed to any and all Statement(s) of Work, or appended to or referencing this Contract, are incorporated in their entirety and form part of this Contract, including without limitation both the License Terms, which set out in Attachment One to Article 2, and the Maintenance Terms, which are set out in Attachment One to Appendix I, Section C.

2.005 Ordering

The State must issue an approved written Purchase Order, Blanket Purchase Order, Direct Voucher or Procurement Card Order to order any Services/Deliverables under this Contract. All orders are subject to the terms and conditions of this Contract. No additional terms and conditions contained on either a Purchase Order or Blanket Purchase Order apply unless they are specifically contained in that Purchase Order or Blanket Purchase Order's accompanying Statement of Work. Exact quantities to be purchased are unknown; however, the Contractor will be required to furnish all such materials and services as may be ordered during the Contract period. Quantities specified, if any, are estimates based on prior purchases, and the State is not obligated to purchase in these or any other quantities.

2.006 Order of Precedence

The Contract, including any Statements of Work, Attachments and Exhibits, to the extent not contrary to the Contract, each of which is incorporated for all purposes, constitutes the entire agreement between the parties with respect to the subject matter and supersedes all prior agreements, whether written or oral, with respect to the subject matter and as additional terms and conditions on the purchase order must apply as limited by **Section 2.005.**

In the event of any inconsistency between the terms of the Contract and a Statement of Work, the terms of the Statement of Work shall take precedence (as to that Statement of Work only), provided, however, that a Statement of Work may not modify or amend the terms of the Contract. The Contract may be modified or amended only by a formal Contract amendment.

2.007 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 the Contract.

2.008 Form, Function & Utility

If the Contract is for use of more than one State agency and if the Deliverable/Service does not the meet the form, function, and utility required by that State agency, that agency may, subject to State purchasing policies, procure the Deliverable/Service from another source.

2.009 Reformation and Severability

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

2.010 Consents and Approvals

Except as expressly provided otherwise in the Contract, if either party requires the consent or approval of the other party for the taking of any action under the Contract, the consent or approval must be in writing and must not be unreasonably withheld or delayed.

2.011 No Waiver of Default

If a party fails to insist upon strict adherence to any term of the Contract then the party has not waived the right to later insist upon strict adherence to that term, or any other term, of the Contract.

2.012 Survival

Any provisions of the Contract that impose continuing obligations on the parties, including without limitation the parties' respective warranty, indemnity and confidentiality obligations, and payment obligations survive the expiration or termination of the Contract for any reason IN ACCORDANCE WITH THE TERMS OF THIS CONTRACT AND ANY ATTACHMENT, INCLUDING WITHOUT LIMITATION AS SET FORTH IN THE LICENSE TERMS WHICH PROVIDES FOR THE RIGHTS AND OBLIGATIONS OF THE PARTIES WITH RESPECT TO THE PRODUCTS FOLLOWING ANY EXPIRATION OR TERMINATION OF THIS CONTRACT. Specific references to survival in the Contract are solely for identification purposes and not meant to limit or prevent the survival of any other section.

2.020 Contract Administration

2.021 Issuing Office

This Contract is issued by the Department of Technology, Management & Budget, Procurement and Michigan Department of Transportation (collectively, including all other relevant State of Michigan departments and agencies, the "State"). DTMB-Procurement is the sole point of contact in the State with regard to all procurement and contractual matters relating to the Contract. The DTMB-Procurement Contract Administrator Buyer for this Contract is:

Jarrod Barron, Buyer
Department of Technology, Management & Budget, Procurement
Constitution Hall, 1st Floor
PO Box 30026
Lansing, MI 48909
BarronJ1@michigan.gov
517-284-7045

2.022 Contract Compliance Inspector

The Director of DTMB-Procurement directs the person named below, or his or her designee, to monitor and coordinate the activities for the Contract on a day-to-day basis during its term. **Monitoring Contract activities does not imply the authority to change, modify, clarify, amend, or otherwise alter the prices, terms, conditions and specifications of the Contract. DTMB-Procurement is the only State office authorized to change, modify, amend, alter or clarify the prices, specifications, terms and conditions of this Contract.** The Contract Compliance Inspector for this Contract is:

Jane Rademacher
Department of Technology, Management and Budget
425 W. Ottawa, Lansing, MI
rademacherj2@michigan.gov
517-373-3579

2.023 Project Manager

The following individuals will oversee the project:

Jane Rademacher
Department of Technology, Management and Budget
425 W. Ottawa, Lansing, MI
rademacherj2@michigan.gov
517-373-3579

Brian Zakrzewski
MDOT Business Owner
Michigan Department of Transportation
425 W. Ottawa, Lansing, MI
zakrzewskib@michigan.gov
517-335-2227

2.024 Change Requests

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. During the course of ordinary business, it may become necessary for the State to discontinue certain business practices or create Additional Services/Deliverables. At a minimum, to the extent applicable, Contractor shall provide a detailed outline of all work to be done, including tasks necessary to accomplish the Additional Services/Deliverables, timeframes, listing of key personnel assigned, estimated hours for each individual per task, and a complete and detailed cost justification.

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

If the State requests or directs the Contractor to perform any services or provide deliverables that are consistent with and similar to the Services/Deliverables being provided by the Contractor under the Contract, but which the Contractor reasonably and in good faith believes are not included within the Statements of Work, then before performing such Services or providing such Deliverables, the Contractor shall notify the State in writing that it considers the Services or Deliverables to be an Additional Service/Deliverable 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 that Service or providing that Deliverable. If the Contractor does so notify the State, then such a Service or Deliverable shall be governed by the Change Request procedure in this Section.

In the event prices or service levels are not acceptable to the State, the Additional Services or New Work shall be subject to competitive bidding based upon the specifications.

(1) Change Request at State Request
If the State requires Contractor to perform New Work, Additional Services or make changes to the Services that would affect the Contract completion schedule or the amount of compensation due Contractor (a "Change"), the State shall submit a written request for Contractor to furnish a proposal for carrying out the requested Change (a "Change Request").

(2) Contractor Recommendation for Change Requests:
Contractor shall be entitled to propose a Change to the State, on its own initiative, should Contractor believe the proposed Change would benefit the Contract.

(3) Upon receipt of a Change Request or on its own initiative, Contractor shall examine the implications of the requested Change on the technical specifications, Contract schedule and price of the Deliverables and Services and shall submit to the State without undue delay a written proposal for carrying out the Change. Contractor's proposal shall include any associated changes in the technical specifications, Contract schedule and price and method of pricing of the Services. If the Change is to be performed on a time and materials basis, the Amendment Labor Rates shall apply to the provision of such Services. If Contractor provides a written proposal and should Contractor be of the opinion that a requested Change is not to be recommended, it shall communicate its opinion to the State but shall nevertheless carry out the Change as specified in the written proposal if the State directs it to do so.

(4) By giving Contractor written notice within a reasonable time, the State shall be entitled to accept a Contractor proposal for Change, to reject it, or to reach another agreement with Contractor. Should the parties agree on carrying out a Change, a written Contract Change Notice must be prepared and issued under this Contract, describing the Change and its effects on the Services and any affected components of this Contract (a "Contract Change Notice").

(5) No proposed Change shall be performed until the proposed Change has been specified in a duly executed Contract Change Notice issued by the Department of Technology, Management & Budget, Procurement.

(6) If the State requests or directs the Contractor to perform any activities that Contractor believes constitute a Change, the Contractor must notify the State that it believes the requested activities are a Change before beginning to work on the requested activities. If the Contractor fails to notify the State before beginning to work on the requested activities, then the Contractor waives any right to assert any claim for additional compensation or time for performing the requested activities. If the Contractor commences performing work outside the scope of this Contract and then ceases performing that work, the Contractor must, at the request of the State, retract any out-of-scope work that would adversely affect the Contract.

2.025 Notices

Any notice given to a party under the Contract must be deemed effective, if addressed to the 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 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.

State:
State of Michigan
DTMB-Procurement
Attention:
PO Box 30026
530 West Allegan
Lansing, Michigan 48909

Contractor:
XRiver Technologies LLC
Name: Ed Maddox
Address: 14150 Parkeast Circle, Suite 280, Chantilly VA 20151-2235

Either party may change its address where notices are to be sent by giving notice according to this Section.

2.026 Binding Commitments

Representatives of Contractor must have the authority to make binding commitments on Contractor's behalf within the bounds set forth in the Contract. Contractor may change the representatives from time to time upon giving written notice.

2.027 Relationship of the Parties

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

2.028 Covenant of Good Faith

Each party shall act reasonably and in good faith. Unless stated otherwise in the Contract, the parties shall not unreasonably delay, condition or withhold the giving of any consent, decision or approval that is either requested or reasonably required of them in order for the other party to perform its responsibilities under the Contract.

2.029 Assignments

Neither party may assign the Contract, or assign or delegate any of its duties or obligations under the Contract, to any other party (whether by operation of law or otherwise), without the prior written consent of the other party; provided, however, that the State may assign the Contract to any other State agency, department, division or department without the prior consent of Contractor and Contractor may assign the Contract to an affiliate so long as the affiliate is adequately capitalized and can provide adequate assurances that the affiliate can perform the Contract. The State may withhold consent from proposed assignments, subcontracts, or novations when the transfer of responsibility would operate to decrease the State's likelihood of receiving performance on the Contract or the State's ability to recover damages.

Contractor may not, without the prior written approval of the State, assign its right to receive payments due under the Contract. If the State permits an assignment, the Contractor is not relieved of its responsibility to perform any of its contractual duties and the requirement under the Contract that all payments must be made to one entity continues.

If the Contractor intends to assign the contract or any of the Contractor's rights or duties under the Contract, the Contractor must notify the State in writing at least 90 days before the assignment. The Contractor also must provide the State with adequate information about the assignee within a reasonable amount of time before the assignment for the State to determine whether to approve the assignment.

2.030 General Provisions

2.031 Administrative Fee and Reporting

The Contractor must remit an administrative fee of 1% on all on all payments remitted to Contractor under the Contract including transactions with the State (including its departments, divisions, agencies, offices, and commissions), MiDEAL members, and other states (including governmental subdivisions and authorized entities). Contractor must submit an itemized purchasing activity report, which includes at a minimum, the name of the purchasing entity and the total dollar volume in sales.

Itemized purchasing activity reports should be mailed to DTMB-Procurement and the administrative fee payments shall be made by check payable to the State of Michigan and mailed to:

The Department of Technology, Management & Budget
Financial Services – Cashier Unit
Lewis Cass Building
320 South Walnut St.
P.O. Box 30681
Lansing, MI 48909

The administrative fee and purchasing activity report are due within 30 calendar days from the last day of each quarter.

2.032 Media Releases

News releases (including promotional literature and commercial advertisements) pertaining to the RFP and Contract or project to which it relates shall 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 activities associated with the RFP and Contract are to be released without prior written approval of the State and then only to persons designated.

2.033 Contract Distribution

DTMB-Procurement retains the sole right of Contract distribution to all State agencies and local units of government unless other arrangements are authorized by DTMB-Procurement.

2.034 Permits – RESERVED

2.035 Website Incorporation

The State is not bound by any content on the Contractor's website, even if the Contractor's documentation specifically referenced that content and attempts to incorporate it into any other communication, unless the State has actual knowledge of the content and has expressly agreed to be bound by it in a writing that has been manually signed by an authorized representative of the State.

2.036 Future Bidding Preclusion

Contractor acknowledges that, to the extent this Contract involves the creation, research, investigation or generation of a future RFP, it may be precluded from bidding on the subsequent RFP. The State reserves the right to disqualify any Bidder if the State determines that the Bidder has used its position (whether as an incumbent Contractor, or as a Contractor hired to assist with the RFP development, or as a Vendor offering free assistance) to gain a competitive advantage on the RFP.

2.037 Freedom of Information

All non-pricing information in any proposal submitted to the State by Contractor and this Contract, other than pricing information contained therein, is subject to the provisions of the Michigan Freedom of Information Act, 1976 Public Act No. 442, as amended, MCL 15.231, et seq (the "FOIA").

2.038 Disaster Recovery

Contractor and the State recognize that the State provides essential services in times of natural or man-made disasters. Therefore, except as so mandated by Federal disaster response requirements, Contractor personnel dedicated to providing Services/Deliverables under this Contract shall make a reasonable attempt to provide the State with priority service for repair and work around in the event of a natural or man-made disaster. Services performed in support of disaster recovery would be considered Supplemental Services and would be compensated for under the relevant Supplemental Services terms.

2.040 Financial Provisions

2.041 Fixed Prices for Services/Deliverables

Each Statement of Work or Purchase Order issued under this Contract shall specify (or indicate by reference to the appropriate Contract Exhibit) the firm, fixed prices for all Services/Deliverables, and the associated payment milestones and payment amounts.

2.042 Adjustments for Reductions in Scope of Services/Deliverables

If the scope of the Services/Deliverables under any Statement of Work issued under this Contract is subsequently reduced by the State, the parties shall negotiate an equitable reduction in Contractor's charges under such Statement of Work commensurate with the reduction in scope.

2.043 Services/Deliverables Covered

The State shall not be obligated to pay any amounts in addition to the charges specified in this Contract for all Services/Deliverables to be provided by Contractor and its Subcontractors, if any, under this Contract,.

2.044 Invoicing and Payment – In General

(a) Each Statement of Work issued under this Contract shall list (or indicate by reference to the appropriate Contract Exhibit) the prices for all Services/Deliverables, equipment and commodities to be provided, and the associated payment milestones and payment amounts.

(b) Each Contractor invoice shall show details as to charges by Service/Deliverable component and location at a level of detail reasonably necessary to satisfy the State's accounting and charge-back requirements. Invoices for Services performed on a time and materials basis shall show, for each individual, the number of hours of Services performed during the billing period, the billable skill/labor category for such person and the applicable hourly billing rate. Prompt payment by the State is contingent on the Contractor's invoices showing the amount owed by the State minus any holdback amount to be retained by the State in accordance with **Section 1.600**.

(c) Correct invoices shall be due and payable by the State, in accordance with the State's standard payment procedure as specified in 1984 Public Act No. 279, MCL 17.51 et seq., within 45 days after receipt, provided the State determines that the invoice was properly rendered.

(d) All invoices should reflect actual work done. Specific details of invoices and payments shall be set forth in the Statement of Work.

The invoice should show payment amount and should reflect actual work done by the payment dates, less any penalty cost charges accrued by those dates.

2.045 Pro-ration

To the extent there are Services that are to be paid for on a monthly basis, the cost of such Services shall be pro-rated for any partial month.

2.046 Antitrust Assignment

The Contractor assigns to the State any claim for overcharges resulting from antitrust violations to the extent that those violations concern materials or services supplied by third parties to the Contractor, toward fulfillment of this Contract.

2.047 Final Payment

The making of final payment by the State to Contractor does not constitute a waiver by either party of any rights or other claims as to the other party's continuing obligations under the Contract, nor shall it constitute a waiver of any claims by one party against the other arising from unsettled claims or failure by a party to comply with this Contract, including claims for Services and Deliverables not reasonably known until after acceptance to be defective or substandard. Contractor's acceptance of final payment by the State under this Contract shall constitute a waiver of all claims by Contractor against the State for payment under this Contract, other than those claims previously filed in writing on a timely basis and still unsettled.

2.048 Electronic Payment Requirement

Electronic transfer of funds is required for payments on State Contracts. Contractors are required to register with the State electronically at http://www.cpexpress.state.mi.us. As stated in Public Act 431 of 1984, all contracts that the State enters into for the purchase of goods and services shall provide that payment shall be made by electronic fund transfer (EFT).

2.050 Taxes

2.051 Employment Taxes

Contractor shall collect and pay all applicable federal, state, and local employment taxes, including the taxes.

2.052 Sales and Use Taxes

Contractor shall register and remit sales and use taxes on taxable sales of tangible personal property or services delivered into the State. Contractors that lack sufficient presence in Michigan to be required to register and pay tax must do so as a volunteer. This requirement extends to: (1) all members of any controlled group as defined in § 1563(a) of the Internal Revenue Code and applicable regulations of which the company is a member, and (2) all organizations under common control as defined in § 414(c) of the Internal Revenue Code and applicable regulations of which the company is a member that make sales at retail for delivery into the State are registered with the State for the collection and remittance of sales and use taxes. In applying treasury regulations defining "two or more trades or businesses under common control" the term "organization" means sole proprietorship, a partnership (as defined in § 701(a) (2) of the Internal Revenue Code), a trust, an estate, a corporation, or a limited liability company.

2.060 Contract Management

2.061 Contractor Personnel Qualifications

All persons assigned by Contractor to the performance of Services under this Contract must be employees of Contractor or its majority-owned (directly or indirectly, at any tier) subsidiaries (or a State-approved Subcontractor) and must be fully qualified to perform the work assigned to them. Contractor must include a similar provision in any subcontract entered into with a Subcontractor. For the purposes of this Contract, independent contractors engaged by Contractor solely in a staff augmentation role must be treated by the State as if they were employees of Contractor for this Contract only; however, the State understands that the relationship between Contractor and Subcontractor is an independent contractor relationship.

2.062 Contractor Key Personnel

(a) The Contractor must provide the Contract Compliance Inspector with the names of the Key Personnel.

(b) Key Personnel must be dedicated as defined in the Statement of Work to the Project for its duration in the applicable Statement of Work with respect to other individuals designated as Key Personnel for that Statement of Work.

(c) The State shall have the right to recommend and approve in writing the initial assignment, as well as any proposed reassignment or replacement, of any Key Personnel. Before assigning an individual to any Key Personnel position, Contractor shall notify the State of the proposed assignment, shall introduce the individual to the appropriate State representatives, and shall provide the State with a resume and any other information about the individual reasonably requested by the State. The State reserves the right to interview the individual before granting written approval. In the event the State finds a proposed individual unacceptable, the State shall provide a written explanation including reasonable detail outlining the reasons for the rejection.

(d) Contractor must not remove any Key Personnel from their assigned roles (as set forth in the Statement of Work) on the Contract without the prior written consent of the State. The Contractor's removal of Key Personnel without the prior written consent of the State is an unauthorized removal ("Unauthorized Removal"). Unauthorized Removals does not include replacing Key Personnel for reasons beyond the reasonable control of Contractor, including illness, disability, leave of absence, personal emergency

circumstances, resignation or for cause termination of the Key Personnel's employment. Unauthorized Removals does not include replacing Key Personnel because of promotions or other job movements allowed by Contractor personnel policies or Collective Bargaining Agreement(s) as long as the State receives prior written notice before shadowing occurs and Contractor provides 15 days of shadowing unless parties agree to a different time period. The Contractor with the State must review any Key Personnel replacements, and appropriate transition planning will be established. Any Unauthorized Removal may be considered by the State to be a material breach of the Contract, in respect of which the State may elect to exercise its termination and cancellation rights. Contractor reserves the right to reassign key personnel in the event of unreasonable delays caused by material performance deficiencies by the State.

(e) The Contractor must notify the Contract Compliance Inspector and the Contract Administrator at least 10 business days before redeploying non-Key Personnel, who are dedicated to primarily to the Project, to other projects. If the State does not object to the redeployment by its scheduled date, the Contractor may then redeploy the non-Key Personnel.

2.063 Re-assignment of Personnel at the State's Request

The State reserves the right to require the removal from the Project of Contractor personnel found, in the judgment of the State, to be unacceptable. The State's request must be written with reasonable detail outlining the reasons for the removal request. Additionally, the State's request must be based on legitimate, good faith reasons. Replacement personnel for the removed person must be fully qualified for the position. If the State exercises this right, and the Contractor cannot immediately replace the removed personnel, the State agrees to an equitable adjustment in schedule or other terms that may be affected by the State's required removal. If any incident with removed personnel results in delay not reasonably anticipatable under the circumstances and which is attributable to the State, the applicable SLAs for the affected Service shall not be counted for a time as agreed to by the parties.

2.064 Contractor Personnel Location

All staff assigned by Contractor to work on the Contract shall perform their duties either primarily at Contractor's offices and facilities or at State facilities. Without limiting the generality of the foregoing, Key Personnel shall, at a minimum, spend at least the amount of time on-site at State facilities as indicated in the applicable Statement of Work. Subject to availability, selected Contractor personnel may be assigned office space to be shared with State personnel.

2.065 Contractor Identification

Contractor employees must be clearly identifiable while on State property by wearing a State-issued badge, as required. Contractor employees are required to clearly identify themselves and the company they work for whenever making contact with State personnel by telephone or other means.

2.066 Cooperation with Third Parties

Contractor agrees to cause its personnel and the personnel of any Subcontractors to cooperate with the State and its agents and other contractors including the State's Quality Assurance personnel. As reasonably requested by the State in writing, the Contractor shall provide to the State's agents and other contractors reasonable access to Contractor's Project personnel, systems and facilities to the extent the access relates to activities specifically associated with this Contract and shall not interfere or jeopardize the safety or operation of the systems or facilities. The State acknowledges that Contractor's time schedule for the Contract is very specific and agrees not to unnecessarily or unreasonably interfere with, delay or otherwise impeded Contractor's performance under this Contract with the requests for access.

2.067 Contract Management Responsibilities

Contractor shall be responsible for all acts and omissions of its employees, as well as the acts and omissions of any other personnel furnished by Contractor to perform the Services. Contractor shall have overall responsibility for managing and successfully performing and completing the Services/Deliverables, subject to the overall direction and supervision of the State and with the participation and support of the State as specified in this Contract. Contractor's duties shall include monitoring and reporting the State's performance of

its participation and support responsibilities (as well as Contractor's own responsibilities) and providing timely notice to the State in Contractor's reasonable opinion if the State's failure to perform its responsibilities in accordance with the Project Plan is likely to delay the timely achievement of any Contract tasks.

The Contractor shall provide the Services/Deliverables directly or through its affiliates, subsidiaries, subcontractors or resellers. Regardless of the entity providing the Service/Deliverable, the Contractor shall act as a single point of contact coordinating these entities to meet the State's need for Services/Deliverables. Nothing in this Contract, however, shall be construed to authorize or require any party to violate any applicable law or regulation in its performance of this Contract.

2.068 Contractor Return of State Equipment/Resources

The Contractor shall return to the State any State-furnished equipment, facilities and other resources when no longer required for the Contract in the same condition as when provided by the State, reasonable wear and tear excepted.

2.070 Subcontracting by Contractor

2.071 Contractor full Responsibility

Contractor shall have full responsibility for the successful performance and completion of all of the Services and Deliverables. The State shall consider Contractor to be the sole point of contact with regard to all contractual matters under this Contract, including payment of any and all charges for Services and Deliverables.

2.072 State Consent to delegation

Contractor shall not delegate any duties under this Contract to a Subcontractor unless the Department of Technology, Management & Budget, Procurement has given written consent to such delegation. The State shall have the right of prior written approval of all Subcontractors and to require Contractor to replace any Subcontractors found, in the reasonable judgment of the State, to be unacceptable. The State's request shall be written with reasonable detail outlining the reasons for the removal request. Additionally, the State's request shall be based on legitimate, good faith reasons. Replacement Subcontractor(s) for the removed Subcontractor shall be fully qualified for the position. If the State exercises this right, and the Contractor cannot immediately replace the removed Subcontractor, the State shall agree to an equitable adjustment in schedule or other terms that may be affected by the State's required removal. If any such incident with a removed Subcontractor results in delay not reasonable anticipatable under the circumstances and which is attributable to the State, the applicable SLA for the affected Work shall not be counted for a time agreed upon by the parties.

The State hereby confirms its approval for Contractor to use Planisware as a Subcontractor in connection with this Contract.

2.073 Subcontractor bound to Contract

In any subcontracts entered into by Contractor for the performance of the Services, Contractor shall require the Subcontractor, to the extent of the Services to be performed by the Subcontractor, to be bound to Contractor by the terms of this Contract and to assume toward Contractor all of the obligations and responsibilities that Contractor, by this Contract, assumes toward the State. The State reserves the right to receive copies of and review all subcontracts, although Contractor may delete or mask any proprietary information, including pricing, contained in such contracts before providing them to the State. The management of any Subcontractor shall be the responsibility of Contractor, and Contractor shall remain responsible for the performance of its Subcontractors to the same extent as if Contractor had not subcontracted such performance. Contractor shall make all payments to Subcontractors or suppliers of Contractor. Except as otherwise agreed in writing by the State and Contractor, the State shall not be obligated to direct payments for the Services other than to Contractor. The State's written approval of any Subcontractor engaged by Contractor to perform any obligation under this Contract shall not relieve Contractor of any obligations or performance required under this Contract. A list of the Subcontractors, if any, approved by the State as of the execution of this Contract, together with a copy of the applicable subcontract is attached.

2.074 Flow Down

Except where specifically approved in writing by the State on a case-by-case basis, Contractor shall flow down the obligations in **Sections 2.031, 2.060, 2.100, 2.110, 2.120, 2.130, and 2.200** in all of its agreements with any Subcontractors.

2.075 Competitive Selection

The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the Contract.

2.080 State Responsibilities

2.081 Equipment

The State shall provide only the equipment and resources identified in the Statement of Work and other Contract Exhibits.

2.082 Facilities

The State must designate space as long as it is available and as provided in the Statement of Work, to house the Contractor's personnel whom the parties agree will perform the Services/Deliverables at State facilities (collectively, the "State Facilities"). The Contractor shall have reasonable access to, and unless agreed otherwise by the parties in writing must observe and comply with all rules and regulations relating to each of the State Facilities (including hours of operation) used by the Contractor in the course of providing the Services. Contractor agrees that it shall not, without the prior written consent of the State, use any State Facilities or access any State information systems provided for the Contractor's use, or to which the Contractor otherwise gains access in the course of performing the Services, for any purpose other than providing the Services to the State.

2.090 Security

2.091 Background Checks

On a case-by-case basis, the State may investigate the Contractor's personnel before they may have access to State facilities and systems. The scope of the background check is at the discretion of the State and the results shall be used to determine Contractor personnel eligibility for working within State facilities and systems. The investigations shall include Michigan State Police Background checks (ICHAT) and may include the National Crime Information Center (NCIC) Finger Prints. Proposed Contractor personnel may be required to complete and submit an RI-8 Fingerprint Card for the NCIC Finger Print Check. Any request for background checks and/or drug testing shall be initiated by the State and shall be reasonably related to the type of work requested. Contractor will pay for all reasonable costs associated with ensuring their staff meets all requirements.

2.100 Confidentiality

2.101 Confidentiality

Contractor and the State each acknowledge that the other possesses and shall continue to possess confidential information that has been developed or received by it. As used in this Section, "Confidential Information" of Contractor must mean all non-public proprietary information of Contractor (other than Confidential Information of the State as defined below), which is marked confidential, restricted, proprietary, or with a similar designation. "Confidential Information" of the State must mean any information which is retained in confidence by the State (or otherwise required to be held in confidence by the State under applicable federal, state and local laws and regulations) or which, in the case of tangible materials provided to Contractor by the State under its performance under this Contract, is marked as confidential, proprietary or with a similar designation by the State. "Confidential Information" excludes any information (including this Contract) that is publicly available under the Michigan FOIA.

2.102 Protection and Destruction of Confidential Information

The State and Contractor shall each use at least the same degree of care to prevent disclosing to third parties the Confidential Information of the other as it employs to avoid unauthorized disclosure, publication or dissemination of its own confidential information of like character, but in no event less than reasonable care. Neither Contractor nor the State shall (i) make any use of the Confidential Information of the other except as contemplated by this Contract, (ii) acquire any right in or assert any lien against the Confidential Information of the other, or (iii) if requested to do so, refuse for any reason to promptly return the other party's Confidential Information to the other party. Each party shall limit disclosure of the other party's Confidential Information to employees and Subcontractors who must have access to fulfill the purposes of this Contract. Disclosure to, and use by, a Subcontractor is permissible where (A) use of a Subcontractor is authorized under this Contract, (B) the disclosure is necessary or otherwise naturally occurs in connection with work that is within the Subcontractor's scope of responsibility, and (C) Contractor obligates the Subcontractor in a written Contract to maintain the State's Confidential Information in confidence. At the State's request, any employee of Contractor and of any Subcontractor having access or continued access to the State's Confidential Information may be required to execute an acknowledgment that the employee has been advised of Contractor's and the Subcontractor's obligations under this Section and of the employee's obligation to Contractor or Subcontractor, as the case may be, to protect the Confidential Information from unauthorized use or disclosure.

Promptly upon termination or cancellation of the Contract for any reason, Contractor must certify to the State that Contractor has destroyed all State Confidential Information.

2.103 PCI DATA Security Standard – RESERVED

2.104 Exclusions

Notwithstanding the foregoing, the provisions in this Section shall not apply to any particular information which the State or Contractor can demonstrate (i) was, at the time of disclosure to it, in the public domain; (ii) after disclosure to it, is published or otherwise becomes part of the public domain through no fault of the receiving party; (iii) was in the possession of the receiving party at the time of disclosure to it without an obligation of confidentiality; (iv) was received after disclosure to it from a third party who had a lawful right to disclose the information to it without any obligation to restrict its further disclosure; or (v) was independently developed by the receiving party without reference to Confidential Information of the furnishing party. Further, the provisions of this Section shall not apply to any particular Confidential Information to the extent the receiving party is required by law to disclose the Confidential Information, provided that the receiving party (i) promptly provides the furnishing party with notice of the legal request, and (ii) assists the furnishing party in resisting or limiting the scope of the disclosure as reasonably requested by the furnishing party.

2.105 No Implied Rights

Nothing contained in this Section must be construed as obligating a party to disclose any particular Confidential Information to the other party, or as granting to or conferring on a party, expressly or impliedly, any right or license to the Confidential Information of the other party.

2.106 Security Breach Notification

If the Contractor breaches this Section, the Contractor must (i) promptly cure any deficiencies and (ii) comply with any applicable federal and state laws and regulations pertaining to unauthorized disclosures. Contractor and the State shall cooperate to mitigate, to the extent practicable, the effects of any breach, intrusion, or unauthorized use or disclosure. Contractor must report to the State in writing any use or disclosure of Confidential Information, whether suspected or actual, other than as provided for by the Contract within 72 hours of becoming aware of the use or disclosure or the shorter time period as is reasonable under the circumstances.

2.107 Respective Obligations

The parties' respective obligations under this Section must survive the termination or expiration of this Contract for any reason, for a period not to exceed five years after termination or expiration.

2.110 Records and Inspections

2.111 Inspection of Work Performed

The State's authorized representatives, at reasonable times and with 10 days prior notice, have the right to enter the Contractor's premises or any other places where work is being performed in relation to this Contract. The representatives may inspect, monitor, or evaluate the work being performed, to the extent the access will not reasonably interfere with or jeopardize the safety or operation of Contractor's systems or facilities. The Contractor must provide reasonable assistance for the State's representatives during inspections.

2.112 Retention of Records

(a) The Contractor must retain all financial and accounting records related to this Contract for a period of 7 years after the Contractor performs any work under this Contract (Audit Period).

(b) If an audit, litigation, or other action involving the Contractor's records is initiated before the end of the Audit Period, the Contractor must retain the records until all issues arising out of the audit, litigation, or other action are resolved or until the end of the Audit Period, whichever is later.

2.113 Examination of Records

(a) The State, upon 10 days' notice to the Contractor, may examine and copy any of the Contractor's records that relate to this Contract any time during the Audit Period. The State does not have the right to review any information deemed confidential by the Contractor if access would require the information to become publicly available. This requirement also applies to the records of any parent, affiliate, or subsidiary organization of the Contractor, or any Subcontractor that performs services in connection with this Contract

(b) In addition to the rights conferred upon the State in paragraph (a) of this section and in accordance with MCL 18.1470, DTMB or its designee may audit the Contractor to verify compliance with the Contract. The financial and accounting records associated with the Contract shall be made available to DTMB or its designee and the auditor general, upon request, during the term of the Contract and any extension of the Contract and for 3 years after the later of the expiration date or final payment under the Contract.

2.114 Audit Resolution

If necessary, the Contractor and the State will meet to review any audit report promptly after its issuance. The Contractor must respond to each report in writing within 30 days after receiving the report. The Contractor and the State must develop, agree upon, and monitor an action plan to promptly address and resolve any deficiencies, concerns, or recommendations in the report.

2.115 Errors

(a) If an audit reveals any financial errors in the records provided to the State, the amount in error must be reflected as a credit or debit on the next invoice and subsequent invoices until the amount is paid or refunded in full. However, a credit or debit may not be carried forward for more than four invoices or beyond the termination of the Contract. If a balance remains after four invoices, the remaining amount will be due as a payment or refund within 45 days of the last invoice on which the balance appeared or upon termination of the Contract, whichever is earlier.

(b) In addition to other available remedies, if the difference between the State's actual payment and the correct invoice amount, as determined by an audit, is greater than 10%, the Contractor must pay all reasonable audit costs, not to exceed $25,000.00.

2.120 Warranties

2.121 Warranties and Representations

The Contractor represents and warrants:

(a) It is capable in all respects of fulfilling and must fulfill all of its obligations under this Contract. The performance of all obligations under this Contract must be provided in a timely, professional, and workman-like manner and must meet the performance and operational standards required under this Contract.

(b) The Contract Appendices, Attachments and Exhibits identify the software and services necessary for the Deliverable(s) to perform and Services to operate in compliance with the Contract's requirements and other standards of performance.

(c) It is the lawful owner or licensee of any Deliverable licensed or sold to the State by Contractor or developed by Contractor under this Contract, and Contractor has all of the rights necessary to convey to the State the licensed use, as applicable, of any and all Deliverables. None of the Deliverables provided by Contractor to the State under neither this Contract, nor their use by the State shall infringe the patent, copyright, trade secret, or other proprietary rights of any third party.

(d) If, under this Contract, Contractor procures any equipment, software or other Deliverable for the State (including equipment, software and other Deliverables manufactured, re-marketed or otherwise sold by Contractor under Contractor's name), then in addition to Contractor's other responsibilities with respect to the items in this Contract, Contractor must assign or otherwise transfer to the State or its designees, or afford the State the benefits of, any manufacturer's warranty for the Deliverable.

(e) The contract signatory has the power and authority, including any necessary corporate authorizations, necessary to enter into this Contract, on behalf of Contractor.

(f) It is qualified and registered to transact business in all locations where required.

(g) Neither the Contractor nor any Affiliates, nor any employee of either, has, must have, or must acquire, any contractual, financial, business, or other interest, direct or indirect, that would conflict in any manner or degree with Contractor's performance of its duties and responsibilities to the State under this Contract or otherwise create an appearance of impropriety with respect to the award or performance of this Agreement. Contractor must notify the State about the nature of the conflict or appearance of impropriety within two days of learning about it.

(h) Neither Contractor nor any Affiliates, nor any employee of either has accepted or must accept anything of value based on an understanding that the actions of the Contractor or Affiliates or employee on behalf of the State would be influenced. Contractor must not attempt to influence any State employee by the direct or indirect offer of anything of value.

(i) Neither Contractor nor any Affiliates, nor any employee of either has paid or agreed to pay any person, other than permitted Subcontractor, bona fide employees and consultants working solely for Contractor or the Affiliate, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this Contract.

(j) The prices proposed by Contractor were arrived at independently, without consultation, communication, or agreement with any other Bidder for the purpose of restricting competition; the prices quoted were not knowingly disclosed by Contractor to any other Bidder; and no attempt was made by Contractor to induce any other person to submit or not submit a proposal for the purpose of restricting competition.

(k) All financial statements, reports, and other information furnished by Contractor to the State as part of its response to the RFP or otherwise in connection with the award of this Contract fairly and accurately represent the business, properties, financial condition, and results of operations of Contractor as of the respective dates, or for the respective periods, covered by the financial statements, reports, other information. Since the respective dates or periods covered by the financial statements, reports, or other information, there have been no material adverse changes in the business, properties, financial condition, or results of operations of Contractor.

(l) All written information furnished to the State by or for the Contractor in connection with this Contract, including its bid, is true, accurate, and complete, and contains no untrue statement of material fact or omits any material fact necessary to make the information not misleading.

(m) It is not in material default or breach of any other contract or agreement that it may have with the State or any of its departments, commissions, boards, or agencies. Contractor further represents and warrants that it has not been a party to any contract with the State or any of its departments that was terminated by the State or the department within the previous five years for the reason that Contractor failed to perform or otherwise breached an obligation of the contract.

(n) If any of the certifications, representations, or disclosures made in the Contractor's original bid response change after contract award, the Contractor is required to report those changes immediately to the Department of Technology, Management & Budget, Procurement.

2.122 Warranty of Merchantability - RESERVED

2.123 Warranty of Fitness for a Particular Purpose - RESERVED

2.124 Warranty of Title - RESERVED

2.125 Equipment Warranty - RESERVED

2.126 Equipment to be New - RESERVED

2.127 Prohibited Products - RESERVED

2.128 Consequences for Breach

In addition to any remedies available in law, if the Contractor breaches any of the warranties contained in this section, the breach may be considered as a default in the performance of a material obligation of this Contract.

2.130 Insurance

2.131 Liability Insurance

For the purpose of this Section, "State" includes its departments, divisions, agencies, offices, commissions, officers, employees, and agents.

(a) The Contractor must provide proof that it has obtained the minimum levels of insurance coverage indicated or required by law, whichever is greater. The insurance must protect the State from claims that may arise out of, or result from, or are alleged to arise out of, or result from, the Contractor's or a Subcontractor's performance, including any person directly or indirectly employed by the Contractor or a Subcontractor, or any person for whose acts the Contractor or a Subcontractor may be liable.

(b) The Contractor waives all rights against the State for the recovery of damages that are covered by the insurance policies the Contractor is required to maintain under this Section. The Contractor's failure to obtain and maintain the required insurance will not limit this waiver.

(c) All insurance coverage provided relative to this Contract is primary and non-contributing to any comparable liability insurance (including self-insurance) carried by the State.

(d) The State, in its sole discretion, may approve the use of a fully-funded self-insurance program in place of any specified insurance identified in this Section.

(e) Unless the State approves otherwise, any insurer must have an A.M. Best rating of "A" or better and a financial size of VII or better, or if those ratings are not available, a comparable rating from an insurance rating agency approved by the State. All policies of insurance must be issued by companies that have been approved to do business in the State.

(f) Where specific coverage limits are listed in this Section, they represent the minimum acceptable limits. If the Contractor's policy contains higher limits, the State is entitled to coverage to the extent of the higher limits.

(g) The Contractor must maintain all required insurance coverage throughout the term of this Contract and any extensions. However, in the case of claims-made Commercial General Liability policies, the Contractor must secure tail coverage for at least three (3) years following the termination of this Contract.

(h) The Contractor must provide, within five (5) business days, written notice to the Director of DTMB-Procurement if any policy required under this section is cancelled. The notice must include the applicable Contract or Purchase Order number.

(i) The minimum limits of coverage specified are not intended, and may not be construed, to limit any liability or indemnity of the Contractor to any indemnified party or other persons.

(j) The Contractor is responsible for the payment of all deductibles.

(k) If the Contractor fails to pay any premium for a required insurance policy, or if any insurer cancels or significantly reduces any required insurance without the State's approval, the State may, after giving the Contractor at least 30 days' notice, pay the premium or procure similar insurance coverage from another company or companies. The State may deduct any part of the cost from any payment due the Contractor, or require the Contractor to pay that cost upon demand.

(l) In the event the State approves the representation of the State by the insurer's attorney, the attorney may be required to be designated as a Special Assistant Attorney General by the Michigan Attorney General.

(m) The Contractor is required to pay for and provide the type and amount of insurance checked ☑ below:

☑ **(i) Commercial General Liability**

Minimal Limits:

$2,000,000 General Aggregate Limit other than Products/Completed Operations
$2,000,000 Products/Completed Operations Aggregate Limit
$1,000,000 Personal & Advertising Injury Limit, and
$1,000,000 Each Occurrence Limit.

Deductible maximum:

$50,000 Each Occurrence

Additional Requirements:

The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as additional insureds on the Commercial General Liability certificate. The Contractor also agrees to provide evidence that the insurance policy contains a waiver of subrogation by the insurance company.

The Products/Completed Operations sublimit requirement may be satisfied by evidence of the manufacturer's Commercial General Liability Insurance. The manufacturer must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as additional insureds on the Commercial General Liability certificate and must provide evidence that the policy contains a waiver of subrogation by the insurance company.

☑ **(ii) Umbrella or Excess Liability**

Minimal Limits:

$1,000,000.00 General Aggregate

Additional Requirements:

Umbrella or Excess Liability limits must at least apply to the insurance required in (i), General Commercial Liability. The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as additional insureds on the certificate. The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company.

☑ **(iii) Motor Vehicle**

Minimal Limits:

If a motor vehicle is used in relation to the Contractor's performance, the Contractor must have vehicle liability insurance on the motor vehicle for bodily injury and property damage as required by law.

☑ **(v) Workers' Compensation**

Minimal Limits:

The Contractor must provide Workers' Compensation coverage according to applicable laws governing work activities in the state of the Contractor's domicile. If the applicable coverage is provided by a self-insurer, the Contractor must provide proof of an approved self-insured authority by the jurisdiction of domicile.

For employees working outside of the state of the Contractor's domicile, the Contractor must provide certificates of insurance proving mandated coverage levels for the jurisdictions where the employees' activities occur.

Additional Requirements:

The Contractor must provide the applicable certificates of insurance and a list of states where the coverage is applicable. Contractor must provide proof that the Workers' Compensation insurance policies contain a waiver of subrogation by the insurance company, except where such a provision is prohibited or limited by the laws of the jurisdiction in which the work is to be performed.

☑ **(vi) Employers Liability**

Minimal Limits:

$100,000 Each Incident
$100,000 Each Employee by Disease
$500,000 Aggregate Disease

Additional Requirements:

The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as additional insureds on the certificate.

Deductible Maximum:

$50,000 Per Loss

Additional Requirements:

Insurance must cover Forgery and Alteration, Theft of Money and Securities, Robbery and Safe Burglary, Computer Fraud, Funds Transfer Fraud, Money Order and Counterfeit Currency.

The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as Loss Payees on the certificate.

☑ **(viii) Professional Liability (Errors and Omissions)**

Minimal Limits:

$1,000,000 Each Occurrence
$1,000,000 Annual Aggregate

Deductible Maximum:

$50,000 Per Loss

☑ **(ix) Cyber Liability**

Minimal Limits:

$1,000,000 Each Occurrence
$1,000,000 Annual Aggregate

Additional Requirements:
Insurance should cover (a) unauthorized acquisition, access, use, physical taking, identity theft, mysterious disappearance, release, distribution or disclosures of personal and corporate information; (b) transmitting or receiving malicious code via the insured's computer system; (c) denial of service attacks or the inability to access websites or computer systems.

2.132 Subcontractor Insurance Coverage

Except where the State has approved a subcontract with other insurance provisions, the Contractor must require any Subcontractor to purchase and maintain the insurance coverage required in Section 2.13.1, Liability Insurance. Alternatively, the Contractor may include a Subcontractor under the Contractor's insurance on the coverage required in that Section. The failure of a Subcontractor to comply with insurance requirements does not limit the Contractor's liability or responsibility.

2.133 Certificates of Insurance

Before the Contract is signed, and not less than 20 days before the insurance expiration date every year thereafter, the Contractor must provide evidence that the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents are listed as additional insureds as required. The Contractor must provide DTMB-Procurement with all applicable certificates of insurance verifying insurance coverage or providing, if approved, satisfactory evidence of self-insurance as required in Section 2.13.1, Liability Insurance. Each certificate must be on the standard "Accord" form or equivalent and MUST IDENTIFY THE APPLICABLE CONTRACT OR PURCHASE ORDER NUMBER.

2.140 Indemnification

2.141 General Indemnification

Subject to the applicable limitation of liability, and to the extent permitted by law, the Contractor must indemnify, defend and hold harmless the State from liability, including all claims and losses, and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties), accruing or resulting to any person, firm or corporation that may be injured or damaged by the Contractor in the performance of this Contract and that are attributable to the negligence or tortious acts of the Contractor or any of its subcontractors, or by anyone else for whose acts any of them may be liable.

2.142 Code Indemnification

Subject to the applicable limitation of liability, and to the extent permitted by law, the Contractor shall indemnify, defend and hold harmless the State from any claim, loss, or expense arising from Contractor's breach of the No Surreptitious Code Warranty, excluding the Contractor's Software Activation Key which is part of every application deployment.

2.143 Employee Indemnification

In any 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 must 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 provisions, 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 provisions.

2.144 Patent/Copyright Infringement Indemnification

Subject to the applicable limitation of liability and to the extent permitted by law, the Contractor must indemnify, defend and hold harmless the State from and against all losses, liabilities, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties) incurred in connection with any action or proceeding threatened or brought against the State to the extent that the action or proceeding is based on a claim that the software or service supplied by the Contractor or its subcontractors, or the operation of the software, or the use or reproduction of any documentation provided with the software or service infringes any United States patent, copyright, trademark or trade secret of any person or entity, which is enforceable under the laws of the United States provided that the State promptly notifies Contractor in writing of the claim, and allows Contractor or Subcontractor to cooperate with the State in, the defense or any related settlement negotiations.

In addition, should the software and services, become or in the State's or Contractor's opinion be likely to become the subject of a claim of infringement, the Contractor must at the Contractor's sole expense (i) procure for the State the right to continue using the software or service or, if the option is not reasonably available to the Contractor, (ii) replace or modify to the State's satisfaction the same with software or service of equivalent function and performance so that it becomes non-infringing, or, if the option is not reasonably available to Contractor, (iii) accept its return by the State with equitable adjustment to the State against the fees paid by the State.

Notwithstanding the foregoing, the Contractor has no obligation to indemnify or defend the State for, or to pay any costs, damages or attorneys' fees related to, any claim based upon (i) software developed based on written specifications of the State; (ii) use of the software in a configuration other than implemented or approved in writing by the Contractor, including, but not limited to, any modification of the software by the State; or (iii) the combination, operation, or use of the software not supplied by the Contractor under this Contract.

2.145 Continuation of Indemnification Obligations

The Contractor's duty to indemnify under this Section continues in full force and effect, notwithstanding the expiration or early cancellation of the Contract, with respect to any claims based on facts or conditions that occurred before expiration or cancellation.

2.146 Indemnification Procedures

The procedures set forth below must apply to all indemnity obligations under this Contract.

(a) After the State receives notice of the action or proceeding involving a claim for which it shall seek indemnification, the State must promptly notify Contractor of the claim in writing and take or assist Contractor in taking, as the case may be, any reasonable action to avoid the imposition of a default judgment against Contractor. No failure to notify the Contractor relieves the Contractor of its indemnification obligations except to the extent that the Contractor can prove damages attributable to the failure. Within 10 days following receipt of written notice from the State relating to any claim, the Contractor must notify the State in writing whether Contractor agrees to assume control of the defense and settlement of that claim (a "Notice of Election") if a response is required within 10 days at the State's expense during that period.

(b) If Contractor delivers a Notice of Election relating to any claim: (i) the State is entitled to participate in the defense of the claim and to employ counsel at its own expense to assist in the handling of the claim and to monitor and advise the State about the status and progress of the defense; (ii) the Contractor must, at the request of the State, demonstrate to the reasonable satisfaction of the State, the Contractor's financial ability to carry out its defense and indemnity obligations under this Contract; (iii) the Contractor must periodically advise the State about the status and progress of the defense and must obtain the prior written approval of the State before entering into any settlement of the claim or ceasing to defend against the claim; and (iv) to the extent that any principles of Michigan governmental or public law may be involved or challenged, the State has the right, at its own expense, to control the defense of that portion of the claim involving the principles of Michigan governmental or public law. But the State may retain control of the defense and settlement of a claim by notifying the Contractor in writing within 10 days after

the State's receipt of Contractor's information requested by the State under clause (ii) of this paragraph if the State determines that the Contractor has failed to demonstrate to the reasonable satisfaction of the State the Contractor's financial ability to carry out its defense and indemnity obligations under this Section. Any litigation activity on behalf of the State, or any of its subdivisions under this Section, must be coordinated with the Department of Attorney General. In the event the insurer's attorney represents the State under this Section, the insurer's attorney may be required to be designated as a Special Assistant Attorney General by the Attorney General of the State of Michigan.

(c) If Contractor does not deliver a Notice of Election relating to any claim of which it is notified by the State as provided above, the State may defend the claim in the manner as it may deem appropriate, at the cost and expense of Contractor. If it is determined that the claim was one against which Contractor was required to indemnify the State, upon request of the State, Contractor must promptly reimburse the State for all the reasonable costs and expenses.

2.150 Termination/Cancellation

2.151 Notice and Right to Cure

If the Contractor breaches the contract, and the State in its sole discretion determines that the breach is curable, then the State shall provide the Contractor with written notice of the breach and a time period (not less than 30 days) to cure the Breach. The notice of breach and opportunity to cure is inapplicable for successive or repeated breaches 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.

2.152 Termination for Cause

(a) The State may terminate this contract, for cause, by notifying the Contractor in writing, if the Contractor (i) breaches any of its material duties or obligations under this Contract (including a Chronic Failure to meet any particular SLA), or (ii) fails to cure a breach within the time period specified in the written notice of breach provided by the State

(b) Subject to the Limitation of the Liability, If this Contract is terminated for cause, the Contractor must pay all actual and verifiable costs incurred by the State in terminating this Contract, including but not limited to, State administrative costs, reasonable attorneys' fees and court costs, and any reasonable additional costs the State may incur to procure the Services/Deliverables required by this Contract from other sources.

(c) If the State chooses to partially terminate this Contract for cause, charges payable under this Contract shall be equitably adjusted to reflect those Services/Deliverables that are terminated and the State must pay for all Services/Deliverables for which Final Acceptance has been granted provided up to the termination date. Services and related provisions of this Contract that are terminated for cause must cease on the effective date of the termination.

(d) If the State terminates this Contract for cause under this Section, and it is determined, for any reason, that Contractor was not in breach of contract under the provisions of this section, that termination for cause must be deemed to have been a termination for convenience, effective as of the same date, and the rights and obligations of the parties must be limited to that otherwise provided in this Contract for a termination for convenience.

2.153 Termination for Convenience

The State may terminate this Contract for its convenience, in whole or part, if the State determines that a termination is in the State's best interest. Reasons for the termination must 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 Services no longer practical or feasible, (c) unacceptable prices for Additional Services or New Work requested by the State, or (d) falsification or misrepresentation, by inclusion or non-inclusion, of information material to a response to any RFP issued by the State. The State may terminate this Contract for its convenience, in whole or in part, by giving Contractor written notice at least 30 days before the date of

termination. If the State chooses to terminate this Contract in part, the charges payable under this Contract must be equitably adjusted to reflect those Services/Deliverables that are terminated. Services and related provisions of this Contract that are terminated for convenience must cease on the effective date of the termination. If there is a termination for convenience, such termination will not affect pre-paid fees for software or pre-paid fees for maintenance if termination is mid-year.

2.154 Termination for Non-Appropriation

(a) 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 Contract. If funds to enable the State to effect continued payment under this Contract are not appropriated or otherwise made available, the State must terminate this Contract and all affected Statements of Work, in whole or in part, at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to Contractor. The State must give Contractor at least 30 days advance written notice of termination for non-appropriation or unavailability (or the time as is available if the State receives notice of the final decision less than 30 days before the funding cutoff).

(b) If funding for the Contract is reduced by law, or funds to pay Contractor for the agreed-to level of the Services or production of Deliverables to be provided by Contractor are not appropriated or otherwise unavailable, the State may, upon 30 days written notice to Contractor, reduce the level of the Services or change the production of Deliverables in the manner and for the periods of time as the State may elect. The charges payable under this Contract shall be equitably adjusted to reflect any equipment, services or commodities not provided by reason of the reduction.

(c) If the State terminates this Contract, eliminates certain Deliverables, or reduces the level of Services to be provided by Contractor under this Section, the State must pay Contractor for all Work-in-Process performed through the effective date of the termination or reduction in level, as the case may be and as determined by the State, to the extent funds are available. This Section shall not preclude Contractor from reducing or stopping Services/Deliverables or raising against the State in a court of competent jurisdiction, any claim for a shortfall in payment for Services performed or Deliverables finally accepted before the effective date of termination.

2.155 Termination for Criminal Conviction

The State may terminate this Contract immediately and without further liability or penalty in the event Contractor, an officer of Contractor, or an owner of a 25% or greater share of Contractor is convicted of a criminal offense related to a State, public or private Contract or subcontract.

2.156 Termination for Approvals Rescinded

The State may terminate this Contract if any final administrative or judicial decision or adjudication disapproves a previously approved request for purchase of personal services under Constitution 1963, Article 11, § 5, and Civil Service Rule 7-1. In that case, the State shall pay the Contractor for only the work completed to that point under the Contract. Termination may be in whole or in part and may be immediate as of the date of the written notice to Contractor or may be effective as of the date stated in the written notice.

2.157 Rights and Obligations upon Termination

(a) If the State terminates this Contract for any reason, the Contractor must (a) stop all work as specified in the notice of termination, (b) take any action that may be necessary, or that the State may direct, for preservation and protection of Deliverables or other property derived or resulting from this Contract that may be in Contractor's possession, (c) return all materials and property provided directly or indirectly to Contractor by any entity, agent or employee of the State, (d) transfer title in, and deliver to, the State, unless otherwise directed, all Deliverables intended to be transferred to the State at the termination of the Contract and which are resulting from the Contract (which must be provided to the State on an "As-Is" basis except to the extent the amounts paid by the State in respect of the items included compensation to Contractor for the provision of warranty services in respect of the materials), and (e) take any action to mitigate and limit any potential damages, or requests for Contractor adjustment or termination settlement costs, to the maximum practical extent, including terminating or limiting as otherwise applicable those subcontracts and outstanding orders for material and supplies resulting from the terminated Contract.

(b) If the State terminates this Contract before its expiration for its own convenience, the State must pay Contractor for all charges due for Services provided before the date of termination and, if applicable, as a separate item of payment under this Contract, for Work In Process, on a percentage of completion basis at the level of completion determined by the State. All completed or partially completed Deliverables prepared by Contractor under this Contract, at the option of the State, becomes the State's property, and Contractor is entitled to receive equitable fair compensation for the Deliverables. Regardless of the basis for the termination, the State is not obligated to pay, or otherwise compensate, Contractor for any lost expected future profits, costs or expenses incurred with respect to Services not actually performed for the State.

(c) Upon a good faith termination, the State may assume, at its option, any subcontracts and agreements for services and deliverables provided under this Contract, and may further pursue completion of the Services/Deliverables under this Contract by replacement contract or otherwise as the State may in its sole judgment deem expedient.

2.158 Reservation of Rights

Any termination of this Contract or any Statement of Work issued under it by a party must be with full reservation of, and without prejudice to, any rights or remedies otherwise available to the party with respect to any claims arising before or as a result of the termination.

2.160 Termination by Contractor

2.161 Termination by Contractor

If the State breaches the Contract, and the Contractor in its sole discretion determines that the breach is curable, then the Contractor will provide the State with written notice of the breach and a time period (not less than 30 days) to cure the breach. The Notice of Breach and opportunity to cure is inapplicable for successive and repeated breaches.

The Contractor may terminate this Contract if the State (i) materially breaches its obligation to pay the Contractor amounts due and owing under this Contract, (ii) breaches its other obligations under this Contract to an extent that makes it impossible or commercially impractical for the Contractor to perform the Services, or (iii) does not cure the breach within the time period specified in a written notice of breach. But the Contractor must discharge its obligations under **Section 2.170** before it terminates the Contract.

2.170 Transition Responsibilities

2.171 Contractor Transition Responsibilities

If the State terminates this contract, for convenience or cause, or if the Contract is otherwise dissolved, voided, rescinded, nullified, expires or rendered unenforceable, the Contractor shall comply with direction provided by the State to assist in the orderly transition of equipment, services, software, leases, etc. to the State or a third party designated by the State. If this Contract expires or terminates, the Contractor agrees to make all reasonable efforts to effect an orderly transition of services within a reasonable period of time that in no event will exceed 20 business days. These efforts must include, but are not limited to, those listed in **Section 2.150.**

2.172 Contractor Personnel Transition

The Contractor shall work with the State, or a specified third party, to develop a transition plan setting forth the specific tasks and schedule to be accomplished by the parties, to effect an orderly transition. The Contractor must allow as many personnel as practicable to remain on the job to help the State, or a specified third party, maintain the continuity and consistency of the services required by this Contract. In addition, during or following the transition period, in the event the State requires the Services of the Contractor's subcontractors or vendors, as necessary to meet its needs, Contractor agrees to reasonably, and with good-faith, work with the State to use the Services of Contractor's subcontractors or vendors. Contractor will notify all of Contractor's subcontractors of procedures to be followed during transition.

2.173 Contractor Information Transition

The Contractor shall provide reasonable detailed specifications for all Services/Deliverables needed by the State, or specified third party, to properly provide the Services/Deliverables required under this Contract. The Contractor will provide the State with asset management data generated from the inception of this Contract through the date on which this Contractor is terminated in a comma-delineated format unless otherwise requested by the State. The Contractor will deliver to the State any remaining owed reports and documentation still in Contractor's possession subject to appropriate payment by the State.

2.174 Contractor Software Transition

The Contractor shall reasonably assist the State in the acquisition of any Contractor software required to perform the Services/use the Deliverables under this Contract. This must include any documentation being used by the Contractor to perform the Services under this Contract. If the State transfers any software licenses to the Contractor, those licenses must, upon expiration of the Contract, transfer back to the State at their current revision level. Upon notification by the State, Contractor may be required to freeze all non-critical changes to Deliverables/Services.

2.175 Transition Payments

If the transition results from a termination for any reason, the termination provisions of this Contract must govern reimbursement. If the transition results from expiration or termination for convenience by the State, the Contractor will be reimbursed for all reasonable transition costs (i.e. costs incurred within the agreed period after contract expiration that result from transition operations) at the rates agreed upon by the State. The Contractor will prepare an accurate accounting from which the State and Contractor may reconcile all outstanding accounts.

2.176 State Transition Responsibilities

In the event that this Contract is terminated, dissolved, voided, rescinded, nullified, or otherwise rendered unenforceable, the State agrees to reconcile all accounts between the State and the Contractor, complete any pending post-project reviews and perform any others obligations upon which the State and the Contractor agree.

(a) Reconciling all accounts between the State and the Contractor;
(b) Completing any pending post-project reviews.

2.180 Stop Work

2.181 Stop Work Orders

The State may, at any time, by written Stop Work Order to Contractor, require that Contractor stop all, or any part, of the work called for by the Contract for a period of up to 90 calendar days after the Stop Work Order is delivered to Contractor, and for any further period to which the parties may agree. The Stop Work Order must be identified as a Stop Work Order and must indicate that it is issued under this **Section**. Upon receipt of the stop work order, Contractor must immediately comply with its terms and take all reasonable steps to minimize incurring 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 must either: (a) cancel the stop work order; or (b) terminate the work covered by the Stop Work Order as provided in **Section 2.182**.

2.182 Cancellation or Expiration of Stop Work Order

The Contractor shall resume work if the State cancels a Stop Work Order or if it expires. State acknowledges that Contractor resources may have been reassigned by the Contractor during the Stop Work period and may not be available to return to the effort. The parties shall agree upon 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 Contractor's costs properly allocable to, the performance of any part of the Contract; and (b) Contractor asserts its right to an equitable adjustment within 30 calendar 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 Contractor proposal submitted at any time before final payment under the Contract. Any adjustment will conform to the requirements of **Section 2.024**.

2.183 Allowance of Contractor Costs

If the Stop Work Order is not canceled and the work covered by the Stop Work Order is terminated for reasons other than material breach, the termination shall be deemed to be a termination for convenience under **Section 2.153**, and the State shall pay reasonable costs resulting from the Stop Work Order in arriving at the termination settlement. For the avoidance of doubt, the State shall not be liable to Contractor for loss of profits because of a Stop Work Order issued under this Section**.**

2.190 Dispute Resolution

2.191 In General

Any claim, counterclaim, or dispute between the State and Contractor arising out of or relating to the Contract or any Statement of Work must be resolved as follows. For all Contractor claims seeking an increase in the amounts payable to Contractor under the Contract, or the time for Contractor's performance, Contractor must submit a letter, together with all data supporting the claims, executed by Contractor's Contract Administrator or the Contract Administrator's designee certifying that (a) the claim is made in good faith, (b) the amount claimed accurately reflects the adjustments in the amounts payable to Contractor or the time for Contractor's performance for which Contractor believes the State is liable and covers all costs of every type to which Contractor is entitled from the occurrence of the claimed event, and (c) the claim and the supporting data are current and complete to Contractor's best knowledge and belief.

2.192 Informal Dispute Resolution

(a) All disputes between the parties shall be resolved under the Contract Management procedures in this Contract. If the parties are unable to resolve any dispute after compliance with the processes, the parties must meet with the Director of Procurement, DTMB, or designee, to resolve the dispute without the need for formal legal proceedings, as follows:

(1) The representatives of Contractor and the State must meet as often as the parties reasonably deem necessary to gather and furnish to each other all information with respect to the matter at issue which the parties believe to be appropriate and germane in connection with its resolution. The representatives shall discuss the problem and negotiate in good faith in an effort to resolve the dispute without the necessity of any formal proceeding.

(2) During the course of negotiations, all reasonable requests made by one party to another for non-privileged information reasonably related to the Contract shall be honored in order that each of the parties may be fully advised of the other's position.

(3) The specific format for the discussions shall be left to the discretion of the designated State and Contractor representatives, but may include the preparation of agreed upon statements of fact or written statements of position.

(4) Following the completion of this process within 60 calendar days, the Director of Procurement, DTMB, or designee, shall issue a written opinion regarding the issue(s) in dispute within 30 calendar days. The opinion regarding the dispute must be considered the State's final action and the exhaustion of administrative remedies.

(b) This Section shall not be construed to prevent either party from instituting, and a party is authorized to institute, formal proceedings earlier to avoid the expiration of any applicable limitations period, to preserve a superior position with respect to other creditors, or under Section 2.193.

(c) The State shall not mediate disputes between the Contractor and any other entity, except state agencies, concerning responsibility for performance of work under the Contract.

2.193 Injunctive Relief

A claim between the State and the Contractor is not subject to the provisions of Section 2.192, Informal Dispute Resolution, where a party makes a good faith determination that a breach of the Contract by the other party will result in damages so immediate, so large or severe, and so incapable of adequate redress that a temporary restraining order or other injunctive relief is the only adequate remedy.

2.194 Continued Performance

Each party agrees to continue performing its obligations under the Contract while a dispute is being resolved except to the extent the issue in dispute precludes performance (dispute over payment must not be deemed to preclude performance) and without limiting either party's right to terminate the Contract as provided in **Section 2.150**, as the case may be.

2.200 Federal and State Contract Requirements

2.201 Nondiscrimination

In the performance of the Contract, Contractor agrees not to discriminate against any employee or applicant for employment, with respect to his or her 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, and marital status, physical or mental disability. Contractor further agrees that every subcontract entered into for the performance of this Contract or any purchase order resulting from this Contract will contain a provision requiring non-discrimination in employment, as specified here, binding upon each Subcontractor. This covenant is required under the Elliot Larsen Civil Rights Act, 1976 PA 453, MCL 37.2101, et seq., and the Persons with Disabilities Civil Rights Act, 1976 PA 220, MCL 37.1101, et seq., and any breach of this provision may be regarded as a material breach of the Contract.

2.202 Unfair Labor Practices

Under 1980 PA 278, MCL 423.321, 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 under 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. Under section 4 of 1980 PA 278, MCL 423.324, the State may void any Contract if, after award of the Contract, the name of Contractor as an employer or the name of the Subcontractor, manufacturer or supplier of Contractor appears in the register.

2.203 Workplace Safety and Discriminatory Harassment

In performing Services for the State, the Contractor shall comply with the Department of Civil Services Rule 2-20 regarding Workplace Safety and Rule 1-8.3 regarding Discriminatory Harassment. In addition, the Contractor shall comply with Civil Service regulations and any applicable agency rules provided to the Contractor. For Civil Service Rules, see http://www.mi.gov/mdcs/0,1607,7-147-6877---,00.html.

2.204 Prevailing Wage

Wages rates and fringe benefits to be paid each class of individuals employed by the Contractor, its subcontractors, their subcontractors, and all persons involved with the performance of this Contract in privity of contract with the Contractor shall not be less than the wage rates and fringe benefits established by the Michigan Department of Licensing and Regulatory Affairs, Wage and Hour Division, schedule of occupational classification and wage rates and fringe benefits for the local where the work is to be performed. The term Contractor shall include all general contractors, prime contractors, project managers, trade contractors, and all of their contractors or subcontractors and persons in privity of contract with them.

The Contractor, its subcontractors, their subcontractors and all persons involved with the performance of this contract in privity of contract with the Contractor shall keep posted on the work site, in a conspicuous place, a copy of all wage rates and fringe benefits as prescribed in the Contract. Contractor shall also post, in a conspicuous place, the address and telephone number of the Michigan Department of Licensing and Regulatory Affairs, the agency responsible for enforcement of the wage rates and fringe benefits. Contractor shall keep an accurate record showing the name and occupation of the actual wage and benefits paid to each individual employed in connection with this contract. This record shall be available to the State upon request for reasonable inspection.

If any trade is omitted from the list of wage rates and fringe benefits to be paid to each class of individuals by the Contractor, it is understood that the trades omitted shall also be paid not less than the wage rate and fringe benefits prevailing in the local where the work is to be performed.

2.210 Governing Law

2.211 Governing Law

The Contract shall in all respects be governed by, and construed according to, the substantive laws of the State of Michigan without regard to any Michigan choice of law rules that would apply the substantive law of any other jurisdiction to the extent not inconsistent with, or pre-empted by federal law.

2.212 Compliance with Laws

Contractor shall comply with all applicable state, federal and local laws and ordinances in providing the Services/Deliverables.

2.213 Jurisdiction

Any dispute arising from the Contract shall be resolved in the State of Michigan. With respect to any claim between the parties, Contractor consents to venue in Ingham County, Michigan, and irrevocably waives any objections it may have to the jurisdiction on the grounds of lack of personal jurisdiction of the court or the laying of venue of the court or on the basis of forum non conveniens or otherwise. Contractor agrees to appoint agents in the State of Michigan to receive service of process.

2.220 Limitation of Liability

2.221 Limitation of Liability

IN NO EVENT WILL EITHER PARTY BE LIABLE UNDER THIS AGREEMENT FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY, SPECIAL OR PUNITIVE DAMAGES. IN NO EVENT SHALL EITHER PARTY'S AGGREGATE LIABILITY UNDER THIS CONTRACT EXCEED THE AMOUNT OF $3,500,000.00, FOR ANY RENEWAL TERM, IN NO EVENT SHALL EITHER PARTY'S AGGREGATE LIABILITY UNDER THIS CONTRACT EXCEED THE GREATER OF (i) $500,000.00 or (ii) THE AGGREGATE VALUE OF THE RENEWAL TERM FEE.

2.230 Disclosure Responsibilities

2.231 Disclosure of Litigation

Contractor shall disclose any material criminal litigation, investigations or proceedings involving the Contractor (and each Subcontractor) or any of its officers or directors or any litigation, investigations or proceedings under the Sarbanes-Oxley Act. In addition, each Contractor (and each Subcontractor) shall notify the State of any material civil litigation, arbitration or proceeding which arises during the term of the Contract and extensions, to which Contractor (or, to the extent Contractor is aware, any Subcontractor) is a party, and which involves: (i) disputes that might reasonably be expected to adversely affect the viability or financial stability of Contractor or any Subcontractor; or (ii) a claim or written allegation of fraud against Contractor or, to the extent Contractor is aware, any Subcontractor by a governmental or public entity arising out of their business dealings with governmental or public entities. The Contractor shall disclose in writing to the Contract Administrator any litigation, investigation, arbitration or other proceeding (collectively, "Proceeding") within 30 days of its occurrence. Details of settlements that are prevented from disclosure by the terms of the settlement may be annotated. Information provided to the State from Contractor's publicly filed documents referencing its material litigation shall be deemed to satisfy the requirements of this Section.

If any Proceeding disclosed to the State under this Section, or of which the State otherwise becomes aware, during the term of this Contract would cause a reasonable party to be concerned about:

(a) the ability of Contractor (or a Subcontractor) to continue to perform this Contract according to its terms and conditions, or

(b) whether Contractor (or a Subcontractor) in performing Services for the State is engaged in conduct which is similar in nature to conduct alleged in the Proceeding, which conduct would constitute a breach of this Contract or a violation of Michigan law, regulations or public policy, then the Contractor must provide the State all reasonable assurances requested by the State to demonstrate that:

(1) Contractor and its Subcontractors will be able to continue to perform this Contract and any Statements of Work according to its terms and conditions, and

(2) Contractor and its Subcontractors have not and will not engage in conduct in performing the Services which is similar in nature to the conduct alleged in the Proceeding.

(c) Contractor shall make the following notifications in writing:

(1) Within 30 days of Contractor becoming aware that a change in its ownership or officers has occurred, or is certain to occur, or a change that could result in changes in the valuation of its capitalized assets in the accounting records, Contractor must notify DTMB-Procurement.

(2) Contractor shall also notify DTMB Procurement within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership or officers.

(3) Contractor shall also notify DTMB-Procurement within 30 days whenever changes to company affiliations occur.

2.232 Call Center Disclosure

Contractor and/or all subcontractors involved in the performance of this Contract providing call or contact center services to the State shall disclose the location of its call or contact center services to inbound callers, if asked. Failure to disclose this information is a material breach of this Contract.

2.233 Bankruptcy- RESERVED

2.240 Performance

2.241 Time of Performance

(a) Contractor shall use commercially reasonable efforts to provide the resources necessary to complete all Services and Deliverables according to the time schedules contained in the Statements of Work and other Exhibits governing the work, and with professional quality.

(b) Without limiting the generality of **Section 2.241,** Contractor shall notify the State in a timely manner upon becoming aware of any circumstances that may reasonably be expected to jeopardize the timely and successful completion of any Deliverables/Services on the scheduled due dates in the latest State-approved delivery schedule and must inform the State of the projected actual delivery date.

(c) If the Contractor believes that a delay in performance by the State has caused or will cause the Contractor to be unable to perform its obligations according to specified Contract time periods, the Contractor must notify the State in a timely manner and must use commercially reasonable efforts to perform its obligations according to the Contract time periods notwithstanding the State's failure. Contractor will not be in default for a delay in performance to the extent the delay is caused by the State.

2.242 Service Level Agreement (SLA)- RESERVED

2.243 Liquidated Damages

Unauthorized Removal of any Key Personnel

It is acknowledged that an Unauthorized Removal will interfere with the timely and proper completion of the Contract, to the loss and damage of the State, and that it would be impracticable and extremely difficult to fix the actual damage sustained by the State as a result of any Unauthorized Removal. Therefore, Contractor and the State agree that in the case of any Unauthorized Removal in respect of which the State does not elect to exercise its rights under **Section 2.152**, the State may assess liquidated damages against Contractor as specified below.

For the Unauthorized Removal of any Key Personnel designated in the applicable Statement of Work, the liquidated damages amount is $25,000.00 per individual if the Contractor identifies a replacement approved by the State under **Section 2.060** and assigns the replacement to the Project to shadow the Key Personnel who is leaving for a period of at least 15 days before the Key Personnel's removal.

If Contractor fails to assign a replacement to shadow the removed Key Personnel for at least 15 days, in addition to the $25,000.00 liquidated damages for an Unauthorized Removal, Contractor must pay the amount of $833.33 per day for each day of the 15 day shadow period that the replacement Key Personnel does not shadow the removed Key Personnel, up to $25,000.00 maximum per individual. The total liquidated damages that may be assessed per Unauthorized Removal and failure to provide 15 days of shadowing must not exceed $50,000.00 per individual.

2.244 Excusable Failure

Neither party will be liable for any default, damage or delay in the performance of its obligations under the Contract to the extent the default, damage or delay is caused by government regulations or requirements (executive, legislative, judicial, military or otherwise), power failure, electrical surges or current fluctuations, lightning, earthquake, war, water or other forces of nature or acts of God, delays or failures of transportation, equipment shortages, suppliers' failures, or acts or omissions of common carriers, fire; riots, civil disorders; strikes or other labor disputes, embargoes; 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 a party; provided the non-performing party and its Subcontractors are without fault in causing the default or delay, and the 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.

If a party does not perform its contractual obligations for any of the reasons listed above, the non-performing party will be excused from any further performance of its affected obligation(s) for as long as the circumstances prevail. But the party must use commercially reasonable efforts to recommence performance whenever and to whatever extent possible without delay. A party must promptly notify the other party in writing immediately after the excusable failure occurs, and also when it abates or ends.

If any of the above-enumerated circumstances substantially prevent, hinder, or delay the Contractor's performance of the Services/provision of Deliverables for more than 10 Business 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/Deliverables from an alternate source, and the State is not be liable for payment for the unperformed Services/ Deliverables not provided under the Contract for so long as the delay in performance continues; (b) the State may terminate any portion of the Contract so affected and the charges payable will be equitably adjusted to reflect those Services/Deliverables terminated; or (c) the State may terminate the affected Statement of Work without liability to Contractor as of a date specified by the State in a written notice of termination to the Contractor, except to the extent that the State must pay for Services/Deliverables provided through the date of termination.

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/Deliverables not provided as a result of the Excusable Failure condition. Defaults or delays in performance by Contractor which are caused by acts or omissions of its Subcontractors will not relieve Contractor of its obligations under the Contract except to the extent that a Subcontractor is itself subject to an Excusable Failure condition described above and 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.

2.250 Approval of Deliverables

2.251 Delivery of Deliverables

A list of the Deliverables to be prepared and delivered by Contractor including, for each Deliverable, the scheduled delivery date and a designation of whether the Deliverable is a document ("Written Deliverable") or a Custom Software Deliverable is attached, if applicable. All Deliverables shall be completed and delivered for State review and written approval and, where applicable, installed in accordance with the State-approved delivery schedule and any other applicable terms and conditions of this Contract.

Prior to delivering any Deliverable to the State, Contractor will first perform all required quality assurance activities, and, in the case of Custom Software Deliverables, System Testing to verify that the Deliverable is complete and in conformance with its specifications. Before delivering a Deliverable to the State, Contractor shall certify to the State that (1) it has performed such quality assurance activities, (2) it has performed any applicable testing, (3) it has corrected all material deficiencies discovered during such quality assurance activities and testing, (4) the Deliverable is in a suitable state of readiness for the State's review and approval, and (5) the Deliverable/Service has all Critical Security patches/updates applied.

2.252 Contractor System Testing

Contractor will be responsible for System Testing each Custom Software Deliverable in Contractor's development environment prior to turning over the Custom Software Deliverable to the State for User Acceptance Testing and approval. Unless otherwise specified in the initial or subsequent Statements of Work, with the Statements of Work taking precedence, System Testing is to include the following:

Contractor will be responsible for performing Unit Testing and incremental Integration Testing of the components of each Custom Software Deliverable.

Contractor's System Testing will also include Integration Testing of each Custom Software Deliverable to ensure proper inter-operation with all prior software Deliverables, interfaces and other components that are intended to inter-operate with such Custom Software Deliverable, and will include Regression Testing, volume and stress testing to ensure that the Custom Software Deliverables are able to meet the State's projected growth in the number and size of transactions to be processed by the Application and number of users, as such projections are set forth in the applicable Statement of Work.

Contractor's System Testing will also include Business Function Testing and Technical Testing of each Application in a simulated production environment. Business Function Testing will include testing of full work streams that flow through the Application as the Application will be incorporated within the State's computing environment. The State shall participate in and provide support for the Business Function Testing to the extent reasonably requested by Contractor. Within ten (10) days before the commencement of Business Function Testing pursuant to this Section, Contractor shall provide the State for State review and written approval Contractor's test plan for Business Function Testing.

Within five (5) Business Days following the completion of System Testing pursuant to this **Section**, Contractor shall provide to the State a testing matrix establishing that testing for each condition identified in the System Testing plans has been conducted and successfully concluded. To the extent that testing occurs on State premises, the State shall be entitled to observe or otherwise participate in testing under this Section as the State may elect.

2.253 Approval of Deliverables, In General

Unless otherwise specified in the initial or subsequent Statements of Work, with the Statements of Work taking precedence, all Deliverables (such as Written Deliverables, Workshops, Training Sessions, Demonstrations/Walkthroughs and Custom Software Deliverables, etc.) require formal written approval by the State, in accordance with the following procedures. Unless otherwise specified in the Statement of Work, formal approval by the State requires that the Deliverable be confirmed in writing by the State to meet its specifications, which, in the case of Custom Software Deliverables, will include the successful completion of

State User Acceptance Testing, to be led by the State with the support and assistance of Contractor. The parties acknowledge that the approval process set forth herein will be facilitated by ongoing consultation between the parties, visibility of interim and intermediate Deliverables and collaboration on key decisions.

The State's obligation to comply with any State Review Period is conditioned on the timely delivery of Deliverables being reviewed. If Contractor fails to provide a Deliverable to the State in a timely manner, the State will nevertheless use commercially reasonable efforts to complete its review or testing within the applicable State Review Period.

Before commencement of its review or testing of a Deliverable, the State may inspect the Deliverable to confirm that all components of the Deliverable (e.g., software, associated documentation, and other materials) have been delivered. If the State determines that the Deliverable is incomplete, the State may refuse delivery of the Deliverable without performing any further inspection or testing of the Deliverable. Otherwise, the review period will be deemed to have started on the day the State receives the Deliverable and the applicable certification by Contractor in accordance with this Section.

The State will approve in writing a Deliverable upon confirming that it conforms to and, in the case of a Custom Software Deliverable, performs in accordance with, its specifications without material deficiency. The State may, but shall not be required to, conditionally approve in writing a Deliverable that contains material deficiencies if the State elects to permit Contractor to rectify them post-approval. In any case, Contractor will be responsible for working diligently to correct within a reasonable time at Contractor's expense all deficiencies in the Deliverable that remain outstanding at the time of State approval.

If, after three (3) opportunities (the original and two repeat efforts), Contractor is unable to correct all deficiencies preventing State approval of a Deliverable, the State may: (i) demand that Contractor cure the failure and give Contractor additional time to cure the failure at the sole expense of Contractor; or (ii) keep this Contract in force and do, either itself or through other parties, whatever Contractor has failed to do, in which event Contractor shall bear any reasonable excess expenditure incurred by the State in so doing beyond the contract price for such Deliverable (iii) terminate this Contract for default, either in whole or in part by notice to Contractor (and without the need to afford Contractor any further opportunity to cure). Notwithstanding the foregoing, the State shall not use, as a basis for exercising its termination rights under this Section, deficiencies discovered in a repeat State Review Period that could reasonably have been discovered during a prior State Review Period.

The State, at any time and in its own discretion, may halt the UAT or approval process if such process reveals deficiencies in or problems with a Deliverable in a sufficient quantity or of a sufficient severity as to make the continuation of such process unproductive or unworkable. In such case, the State may return the applicable Deliverable to Contractor for correction and re-delivery prior to resuming the review or UAT process and, in that event, Contractor will correct the deficiencies in such Deliverable in accordance with the Contract, as the case may be.

Approval in writing of a Deliverable by the State shall be provisional; that is, such approval shall not preclude the State from later identifying deficiencies in, and declining to accept, a subsequent Deliverable based on or which incorporates or inter-operates with an approved Deliverable, to the extent that the results of subsequent review or testing indicate the existence of deficiencies in the subsequent Deliverable, or if the Application of which the subsequent Deliverable is a component otherwise fails to be accepted pursuant to **Section 2.080**.

2.254 Process for Approval of Written Deliverables

The State Review Period for Written Deliverables will be the number of days set forth in the applicable Statement of Work following delivery of the final version of the Written Deliverable (failing which the State Review Period, by default, shall be five (5) Business Days for Written Deliverables of one hundred (100) pages or less and ten (10) Business Days for Written Deliverables of more than one hundred (100) pages). The duration of the State Review Periods will be doubled if the State has not had an opportunity to review an interim draft of the Written Deliverable prior to its submission to the State. The State agrees to notify Contractor in writing within 5 business days after the end of the State Review Period either stating that the Written Deliverable is approved in the form delivered by Contractor or describing any deficiencies that shall be

corrected prior to approval of the Written Deliverable (or at the State's election, subsequent to approval of the Written Deliverable). Failure to provide notice of acceptance or rejection shall be deemed to constitute State's acceptance of the Deliverable. If the State delivers to Contractor a notice of deficiencies, Contractor will correct the described deficiencies and within five (5) Business Days resubmit the Deliverable in a form that shows all revisions made to the original version delivered to the State. Contractor's correction efforts will be made at no additional charge. Upon receipt of a corrected Written Deliverable from Contractor, the State will have a reasonable additional period of time, not to exceed the length of the original State Review Period, to review the corrected Written Deliverable to confirm that the identified deficiencies have been corrected.

2.255 Process for Approval of Custom Software Deliverables

The State will conduct UAT of each Custom Software Deliverable in accordance with the following procedures to determine whether it meets the criteria for State approval – i.e., whether it conforms to and performs in accordance with its specifications without material deficiencies.

Unless otherwise specified in the initial or subsequent Statements of Work, with the Statements of Work taking precedence, within thirty (30) days (or such other number of days as the parties may agree to in writing) prior to Contractor's delivery of any Custom Software Deliverable to the State for approval, Contractor shall provide to the State a set of proposed test plans, including test cases, scripts, data and expected outcomes, for the State's use (which the State may supplement in its own discretion) in conducting UAT of the Custom Software Deliverable. Contractor, upon request by the State, shall provide the State with reasonable assistance and support during the UAT process.

For the Custom Software Deliverables listed in an attachment, the State Review Period for conducting UAT will be as indicated in the attachment. For any other Custom Software Deliverables not listed in an attachment, the State Review Period shall be the number of days agreed in writing by the parties (failing which it shall be thirty (30) days by default). The State Review Period for each Custom Software Deliverable will begin when Contractor has delivered the Custom Software Deliverable to the State accompanied by the certification required by this **Section** and the State's inspection of the Deliverable has confirmed that all components of it have been delivered.

The State's UAT will consist of executing test scripts from the proposed testing submitted by Contractor, but may also include any additional testing deemed appropriate by the State. If the State determines during the UAT that the Custom Software Deliverable contains any deficiencies, the State will notify Contractor of the deficiency by making an entry in an incident reporting system available to both Contractor and the State. Contractor will modify promptly the Custom Software Deliverable to correct the reported deficiencies, conduct appropriate System Testing (including, where applicable, Regression Testing) to confirm the proper correction of the deficiencies and re-deliver the corrected version to the State for re-testing in UAT. Contractor will coordinate the re-delivery of corrected versions of Custom Software Deliverables with the State so as not to disrupt the State's UAT process. The State will promptly re-test the corrected version of the Software Deliverable after receiving it from Contractor.

Within ten (10) business days after the end of the State Review Period, the State will give Contractor a written notice indicating the State's approval or rejection of the Custom Software Deliverable according to the criteria and process set out in this **Section**. Failure to provide notice of acceptance or rejection shall be deemed to constitute State's acceptance of the Deliverable.

2.256 Final Acceptance - RESERVED

2.260 Ownership

2.261 Ownership of Work Product- RESERVED

2.262 Vesting of Rights – RESERVED

2.263 Rights in Data

The State is the owner of all data made available by the State to the Contractor or its agents, Subcontractors or representatives under the Contract. The Contractor will not use the State's data for any purpose other than

providing the Services, nor will any part of the State's data be disclosed, sold, assigned, leased or otherwise disposed of to the general public or to specific third parties or commercially exploited by or on behalf of the Contractor. No employees of the Contractor, other than those on a strictly need-to-know basis, have access to the State's data. Contractor will not possess or assert any lien or other right against the State's data. Without limiting the generality of this Section, the Contractor must only use personally identifiable information as strictly necessary to provide the Services and must disclose the information only to its employees who have a strict need-to-know the information. The Contractor must comply at all times with all laws and regulations applicable to the personally identifiable information.

2.264 Ownership of Materials

The State and the Contractor will continue to own their respective proprietary technologies developed before entering into the Contract. Any software licensed through the Contractor and sold to the State, will be licensed directly to the State.

2.270 State Standards

2.271 Existing Technology Standards

The Contractor must adhere to all existing standards as described within the comprehensive listing of the State's existing technology standards at http://www.michigan.gov/dmb/0,4568,7-150-56355-108233--,00.html.

2.272 Acceptable Use Policy

To the extent that Contractor has access to the State computer system, Contractor must comply with the State's Acceptable Use Policy, see http://michigan.gov/cybersecurity/0,1607,7-217-34395_34476---,00.html. All Contractor employees must be required, in writing, to agree to the State's Acceptable Use Policy before accessing the State system. The State reserves the right to terminate Contractor's access to the State system if a violation occurs.

2.273 Systems Changes

Contractor is not responsible for and not authorized to make changes to any State systems without written authorization from the Project Manager. Any changes Contractor makes to State systems with the State's approval must be done according to applicable State procedures, including security, access and configuration management procedures.

2.274 Electronic Receipt Processing Standard

All electronic commerce applications that allow for electronic receipt of credit/debit card and electronic check (ACH) transactions must be processed via the Centralized Electronic Payment Authorization System (CEPAS).

2.280 Extended Purchasing Program

2.281 Extended Purchasing Program

The Contract will be extended to MiDEAL members. MiDEAL members include local units of government, school districts, universities, community colleges, and nonprofit hospitals. A current list of MiDEAL members is available at www.michigan.gov/mideal. Upon mutual written agreement between the State of Michigan and the Contractor, this Contract may be extended to (a) State of Michigan employees, or (b) other states (including governmental subdivisions and authorized entities).
If extended, the Contractor must supply all goods and services at the established Agreement prices and terms. The State reserves the right to negotiate additional discounts based on any increased volume generated by such extensions.

The Contractor must submit invoices to, and receive payment from, extended purchasing program members on a direct and individual basis.

2.290 Environmental Provision

2.291 Environmental Provision

Energy Efficiency Purchasing Policy: The State seeks wherever possible to purchase energy efficient products. This includes giving preference to U.S. Environmental Protection Agency (EPA) certified 'Energy Star' products for any category of products for which EPA has established Energy Star certification. For other purchases, the State may include energy efficiency as one of the priority factors to consider when choosing among comparable products.

Environmental Purchasing Policy: The State of Michigan is committed to encouraging the use of products and services that impact the environment less than competing products. The State is accomplishing this by including environmental considerations in purchasing decisions, while remaining fiscally responsible, to promote practices that improve worker health, conserve natural resources, and prevent pollution. Environmental components that are to be considered include recycled content and recyclables; energy efficiency; and the presence of undesirable materials in the products, especially those toxic chemicals which are persistent and bioaccumulative. The Contractor should be able to supply products containing recycled and environmentally preferable materials that meet performance requirements and is encouraged to offer such products throughout the duration of this Contract. Information on any relevant third party certification (such as Green Seal, Energy Star, etc.) should also be provided.

Hazardous Materials: For the purposes of this Section, "Hazardous Materials" is a generic term used to describe asbestos, ACBMs, PCBs, petroleum products, construction materials including paint thinners, solvents, gasoline, oil, and any other material the manufacture, use, treatment, storage, transportation or disposal of which is regulated by the federal, state or local laws governing the protection of the public health, natural resources or the environment. This includes, but is not limited to, materials the as batteries and circuit packs, and other materials that are regulated as (1) "Hazardous Materials" under the Hazardous Materials Transportation Act, (2) "chemical hazards" under the Occupational Safety and Health Administration standards, (3) "chemical substances or mixtures" under the Toxic Substances Control Act, (4) "pesticides" under the Federal Insecticide Fungicide and Rodenticide Act, and (5) "hazardous wastes" as defined or listed under the Resource Conservation and Recovery Act.

(a) The Contractor shall use, handle, store, dispose of, process, transport and transfer any material considered a Hazardous Material according to all federal, State and local laws. The State shall provide a safe and suitable environment for performance of Contractor's Work. Before the commencement of Work, the State shall advise the Contractor of the presence at the work site of any Hazardous Material to the extent that the State is aware of the Hazardous Material. If the Contractor encounters material reasonably believed to be a Hazardous Material and which may present a substantial danger, the Contractor shall immediately stop all affected Work, notify the State in writing about the conditions encountered, and take appropriate health and safety precautions.

(b) Upon receipt of a written notice, the State will investigate the conditions. If (a) the material is a Hazardous Material that may present a substantial danger, and (b) the Hazardous Material was not brought to the site by the Contractor, or does not result in whole or in part from any violation by the Contractor of any laws covering the use, handling, storage, disposal of, processing, transport and transfer of Hazardous Materials, the State shall order a suspension of Work in writing. The State shall proceed to have the Hazardous Material removed or rendered harmless. In the alternative, the State shall terminate the affected Work for the State's convenience.

(c) Once the Hazardous Material has been removed or rendered harmless by the State, the Contractor shall resume Work as directed in writing by the State. Any determination by the Michigan Department of Community Health or the Michigan Department of Environmental Quality that the Hazardous Material has either been removed or rendered harmless is binding upon the State and Contractor for the purposes of resuming the Work. If any incident with Hazardous Material results in delay not reasonable anticipatable under the circumstances and which is attributable to the State, the applicable SLAs for the affected Work will not be counted in a time as mutually agreed by the parties.

(d) If the Hazardous Material was brought to the site by the Contractor, or results in whole or in part from any violation by the Contractor of any laws covering the use, handling, storage, disposal of, processing,

transport and transfer of Hazardous Material, or from any other act or omission within the control of the Contractor, the Contractor shall bear its proportionate share of the delay and costs involved in cleaning up the site and removing and rendering harmless the Hazardous Material according to Applicable Laws to the condition approved by applicable regulatory agency(ies).

Refrigeration and Air Conditioning: The Contractor shall comply with the applicable requirements of Sections 608 and 609 of the Clean Air Act (42 U.S.C. 7671g and 7671h) as each or both apply to this contract.

Environmental Performance: Waste Reduction Program - Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract. The Contractor's programs shall comply with applicable Federal, State, and local requirements, specifically including Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6962, et seq.).

2.300 Deliverables - RESERVED

2.310 Software Warranties

2.311 Performance Warranty

The Contractor represents and warrants that Deliverables, after the Go-Live date, will perform and operate substantially in compliance with the requirements and other standards of performance contained in this Contract (including all descriptions, specifications and drawings made a part of the Contract) for a period of (90) ninety days. In the event of a breach of this warranty, Contractor will promptly correct the affected Deliverable(s) at no charge to the State.

2.312 No Surreptitious Code Warranty

The Contractor represents and warrants that the COTS Solution and any Enhancements provided to the State do not contain or will not contain any Self-Help Code or any Unauthorized Code as defined below. This warranty is referred to in this Contract as the "No Surreptitious Code Warranty."

As used in this Contract, **"Self-Help Code"** means any back door, time bomb, drop dead device, or other software routine designed to disable a computer program automatically with the passage of time or under the positive control of a person other than the licensee of the software. Self-Help Code does not include Software routines in a computer program, if any, designed to permit an owner of the computer program (or other person acting by authority of the owner) to obtain access to a licensee's computer system(s) (e.g. remote access via modem) for purposes of maintenance or technical support. State acknowledges that the application proposed by Contractor does include an Activation Key.

As used in this Contract, **"Unauthorized Code"** means any virus, Trojan horse, spyware, worm or other Software routines or components designed to permit unauthorized access to disable, erase, or otherwise harm software, equipment, or data; or to perform any other such actions. The term Unauthorized Code does not include Self-Help Code. Unauthorized Code does not include software routines in a computer program, if any, designed to permit an owner of the computer program (or other person acting by authority of the owner) to obtain access to a licensee's computer system(s) (e.g. remote access via modem) for purposes of maintenance or technical support.

In addition, Contractor will use up-to-date commercial virus detection software to detect and remove any known viruses from any software prior to delivering it to the State.

2.313 Third-Party Materials Warranty

Contractor warrants that it will not include in the COTS Solution or Enhancements, and operation of the COTS Solution and Enhancements will not require, any Third-Party Materials, unless specifically approved in writing by the State.

2.314 Open Source Component Warranty

Contractor warrants that it will not include in the COTS Solution or Enhancements, and operation of the COTS Solution and Enhancements will not require, any Open Source Components, unless specifically approved in writing by the State.

2.315 Physical Media Warranty

Contractor represents and warrants that each licensed copy of the COTS Solution provided by the Contractor is free from physical defects in the media that tangibly embodies the copy. If the Contractor breaches this warranty, then the State shall be entitled to replacement of the non-compliant copy by Contractor, at Contractor's expense (including shipping and handling).

2.320 Software Licensing

The License Terms set out in Attachment One are the terms under which the Software is licensed to the State under the Contract.

2.330 Source Code Escrow

2.331 Definition

Licensor's (Planisware USA Inc.) parent company, Planisware S.A.S, is a member in good standing of The Agency for the Protection of Programs ("APP"), a European association of software developers and information technology professionals registered under the French law of 1901. The Software is a registered work on APP's tables and has been assigned an international identification number IDDN (Inter Deposit Digital Number) and the whole tree source, the source of the user documentation, the Licensor wiki database (contains the procedures used to rebuild the software), and binaries of the installation of the latest version of the Software are on deposit with the APP. Pursuant to Section 6 of the APP-IDDN General Regulations, as a duly authorized licensee of the Software, the State of Michigan shall have the right to obtain the source code to the Software on deposit with the APP upon the occurrence of one of the following events of default (each, a "Default"): (a) Licensor applies for or consents to the appointment of a trustee, receiver or other custodian for its business, or makes a general assignment for the benefit of creditors; (b) Licensor commences bankruptcy, reorganization or other case or proceeding under any bankruptcy law, or any dissolution, liquidation or insolvency proceeding under applicable law is commenced by or against Licensor and not dismissed or resolved in favor of Licensor within thirty (30) days from commencement of same; (c) Licensor ceases doing business, and its business is not continued by virtue of a merger or consolidation with, or a sale of all or substantially all of its assets to, or otherwise by, another corporation or entity; or (d) is in material breach of its maintenance and support services as provided for in this Agreement and is not resolved per the terms of the Agreement.

2.332 Escrow Fees

Licensor's (Planisware USA Inc.) parent company, Planisware S.A.S will pay all fees and expenses charged by the Escrow Agent.

2.333 Release Event Procedures

If the State desires to obtain the Source Code Escrow Package from the Escrow Agent upon the occurrence of an Event noted above, then:

(a) The State shall comply with all procedures in the Escrow Contract;
(b) The State shall maintain all materials and information comprising the Source Code Escrow Package in confidence in accordance with this Contract;
(c) The State shall may display, copy and modify the Software for its internal support and maintenance purposes only and only for the benefit of the State
(d) The State confirms that such release does not grant to The State the right to sell, sublicense, license or otherwise make available the source code to any third party.
(e) If the release is a temporary one, then the State shall promptly return all released materials to Contractor when the circumstances leading to the release are no longer in effect.

ATTACHMENT ONE TO ARTICLE 2, TERMS & CONDITIONS

"LICENSE TERMS"

The terms set out in this Attachment One to Article 2, Terms & Conditions ("**License Terms**") are incorporated into the Contract by this reference**.** Specifically, the State hereby acknowledges that the License Terms govern the licensing of the Software Product under the Contract, among other aspects of the commercial arrangement as more fully described in the Contract and the License Terms.

*** Remainder of Page Intentionally Left Blank ***

1. GENERAL.

The following terms have the meanings, which are respectively set forth below, as concerns the License Terms under the Contract.

1.1 "Products" means one or more of the following software programs in the PLANISWARE 6 Suite, in object code only, as selected in Exhibit A.

1.2 "End-User" means a user of the Products.

1.3 "End-User Materials" means End-User materials, including any and all user and training manuals.

1.4 "Designated Location(s)" means the location(s) specified in Exhibit A where the Products will be installed.

1.5 "Material Error" or **"Error"** means any material, reported and reproducible failure of the Products to perform substantially in accordance with their documentation which prevents use of the Products, or which seriously impacts use of the Products.

1.6 "Error Correction" means either a modification or addition that, when made or added to the Products, brings the Products into material conformity with their published specifications, or a procedure or routine that, when observed in the regular operation of the Products, avoids the practical adverse effect of such nonconformity.

1.7 "System Environment" means a database from which the Product is operating on Your server, which allows authorized Named End Users to access data and related configuration(s).

1.8 "Named End User License" means an individual authorized to use the Product to access a specific System Environment. Your total number of Named End User Licenses is listed in Exhibit A. You may increase this total number only by purchasing additional Named End User Licenses. In certain situations, a Named End User License may be permanently transferred to a different individual within your organization. Named End User Licenses are non-transferrable from one System Environment to another. Each Named End User may access the System Environment using different devices, but not concurrently. Each individual Named End User must be identified and licensed.

1.9 "Application Server License" means a single unique instance of a Software Program installed on a single server operating within one System Environment. Each Application Server License may only be used with one System Environment and may not be transferred to another.

1.10 "Permitted Use" means use of the COTS Solution and Documentation by the State for the purposes set forth in Article 1 of this Contract.

1.11 "You and Your" means the State, the Government and the State of Michigan as those terms are used interchangeably in the Contract.

2. LICENSE.

2.1 Grant of License. You are granted a non-exclusive, non-assignable right to use the Products (including any Error Corrections, or standard enhancements or updates provided under Planisware's Software Maintenance Addendum, if executed) on the computers at the Designated Location(s) and by the number of End-Users specified in Exhibit A, for your internal purposes only. This license specifically prohibits redistribution, transfer or resale of the Products.

2.2 Back-up Copies. Contractor will allow two (2) copies of the Products for nonproductive backup purposes. Each backup copy must be stored in a safe and secure location.

2.3 End-User Materials. The End-User Materials are provided solely to support your authorized use of the Products. You may copy and distribute the End-User Materials to End-Users in support of their authorized use of the Products, provided you reproduce and include Planisware's copyright notice and proprietary legend on each copy.

2.4 Ownership. Planisware solely owns all right, title, and interest in and to the Products and End-User Materials and all copies, modifications and Enhancements (including ownership of all copyrights and other intellectual property rights).

2.5 Order of Precedence. In the event of any inconsistency between the Contract and this Attachment One, as it pertains to the licensing of the Software Product, the License Terms shall take precedence.

3. INSTALLATION.

3.1 System Requirements; Delivery. The Parties are responsible for providing the Product's system requirements as set forth in Exhibit A. Planisware will use its reasonable efforts to deliver the Products in accordance with Exhibit A.

3.2 Installation. Where Planisware installs the Products, Planisware will not be responsible for delays caused by events or circumstances beyond its reasonable control. Installation shall be complete when copies of the Products have been installed on your computer system at the Designated Location(s), and the executability of the Products on such computer system has been demonstrated ("**Installation**").

4. EFFECT OF TERMINATION.

4.1 **Effect of Termination.** Upon termination of the Contract arising from Your uncured material breach as set forth in Section 2.160 of the Contract, You shall return or destroy, as requested by Planisware, all copies of the Products in Your possession and all other materials pertaining to the Products within fifteen (15) days of the date of termination. Upon Planisware's request, You agree to certify Your compliance with such requirement. Upon any other termination or expiration of the Contract, You may continue to use the Products solely for Your internal purposes and otherwise subject to all of the restrictions and limitations set forth in the Contract, including without limitation these License Terms, and Sections 2.100 (Confidentiality) and 2.260 (Ownership), provided that following any such termination or expiration, the Products are available solely on an AS-IS basis, without any warranties (express, statutory, implied or otherwise) and all of Contractor's obligations with respect to the Products, including without limitation the obligations to provide maintenance, support, upgrades and any new releases, shall terminate unless You and Contractor enter into a new agreement covering any such products or services. The continuing AS-IS, limited license contemplated by this Section 4.1 may be terminated by Contractor if You materially breach the any of the conditions to continued use set forth in this Section 4.1 and such breach is not cured within thirty (30) days following written notice of such breach.

5. DATA CONVERSION.

5.1 Data Conversion. You acknowledge that data conversion is subject to the likelihood of human and machine errors, delays, and losses, including inadvertent loss of data or damage to media, that may give rise to loss or damage. If Planisware converts data for you, Planisware shall not be liable for any errors, omissions, delays, or losses unless caused by its gross negligence or willful acts or omissions. You agree to adopt reasonable measures to limit the impact of such problems, including backing up data, and adopting procedures to ensure the accuracy of data; examining and confirming results prior to use; adopting procedures to identify and correct errors; replacing lost or damaged media; and reconstructing data.

6. WARRANTIES AND LIMITATION OF LIABILITY.

FOR PURPOSES OF THE CONTRACT THE WARRANTY FLOWS THROUGH FROM PLANISWARE TO THE STATE VIA THE CONTRACTOR, XRIVER TECHNOLOGIES. ANY ADDITIONAL WARRANTY PROVISIONS CONTAINED IN THE CONTRACT AS CONCERNS THE SOFTWARE PRODUCT ARE HEREBY DISCLAIMED BY PLANISWARE, AS A SUBCONTRACTOR TO THE CONTRACT.

6.1 Product Warranty. PLANISWARE WARRANTS FOR A PERIOD OF NINETY (90) DAYS AFTER INSTALLATION OF THE PRODUCTS, FOR YOUR BENEFIT ALONE, THAT THE PRODUCTS, WHEN PROPERLY INSTALLED AND OPERATED WITH THE EQUIPMENT CONFIGURATION AND IN THE OPERATING ENVIRONMENT SPECIFIED BY PLANISWARE, WILL PERFORM SUBSTANTIALLY IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS OR END-USER MATERIALS. PLANISWARE DOES NOT WARRANT THAT THE PRODUCTS OR SERVICES WILL BE ERROR-FREE IN ALL CIRCUMSTANCES.

6.2 Remedy. In the event of any Material Error covered by the warranty in Section 6.1 (Product Warranty), You agree to provide Planisware with sufficient detail to allow Planisware to reproduce the Material Error. As your exclusive remedy for any Material Error in the Products covered by such warranty, and as Planisware's entire liability in contract, tort, or otherwise, Planisware will correct such Material Error by issuing corrected instructions, a restriction, or a bypass. If Planisware is unable to correct such Material Error after a reasonable opportunity, at Planisware's sole option, Planisware will refund the license fees. Planisware is not responsible for any Material Error not reported during the warranty period or any Material Error in Products the State has modified, misused, or damaged.

6.3 Limitation on Warranty. EXCEPT AS EXPRESSLY SET FORTH IN SECTION 6.1 (PRODUCT WARRANTY), PLANISWARE MAKES AND YOU RECEIVE NO WARRANTIES, EXPRESS, IMPLIED, STATUTORY, OR IN ANY OTHER PROVISION OF THIS AGREEMENT, ANY ADDENDA OR ANY OTHER COMMUNICATION; AND PLANISWARE SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

EXHIBIT A

Reference Contract No.: 071B5500119 **Date**: 07/15/2015

Anticipated Installation Date of Products: As defined in the Statement of Work

Installation by: As defined in the Statement of Work.

Name of Planisware Products licensed and Scope of Use:

Planisware 6 Products	User Quantity	Unit Price	Extended Price
Planisware 6 Application Server	1	$225,000	$225,000
Planisware 6 Pro	2	$7.500	$15,000
Planisware 6 Intranet (Read/Write)	250	$1.275	$318,750
Planisware 6 Intranet (Read Only)	200	$750	$150,000
Planisware 6 PMO	25	$5,250	$131,250
Planisware 6 Team Member	200	$375	$75,000
Planisware 6 Timecard Resource	0	$150	$0

Fees:

PRODUCTS		TOTAL
Planisware 6 Portfolio & Project Management Suite	See names of products licensed	$915,000
Less 10% Discount		($91,500)
Total License Fees		$823,500

State's Responsibilities – System Requirements

The State of Michigan DTMB is responsible for providing all hardware, networking, server(s) OS, and software normally found in a data center to support enterprise software applications, including database, virus, and any security software. Contractor is only responsible for providing the Planisware software, which includes all necessary components to be fully functional in an otherwise established environment. Supported versions of OS, Browsers, Databases, etc have already been provided to the State and will be reviewed upon request. Neither Contractor, nor Planisware are responsible for any software or hardware other than the Planisware Version 6 application being provided under this contract.

The State will provide a protocol for Contractor to be able to log in remotely to the State as agreed upon by the State to be able to provide support of the Planisware application.

Glossary

Days	Means calendar days unless otherwise specified.
24x7x365	Means 24 hours a day, seven days a week, and 365 days a year (including the 366th day in a leap year).
AASHTOWare Project	Web-based Transportation Software Management Solution
AMS	Agreement Management System
Web TRNS*Port	Web-based Transportation Software Management Solution
Actual Date	Actual start/finish date
Additional Service	Means any Services/Deliverables within the scope of the Contract, but not specifically provided under any Statement of Work, that once added will result in the need to provide the Contractor with additional consideration.
Approved Date	Late start/late finish dates (backward pass). These dates are set as the baseline.
Audit Period	See Section 2.110
Baseline	Original project plan.
Benchmark	Annual snapshot of the entire program that becomes the program “baseline”.
Bid Construction Cost	The bid construction cost changes based on the stage of the job. After the job is awarded, the contract amount is used for the bid construction cost. If this is absent the engineers estimate is used from AASHTOWare Project.
Blanket Purchase Order	An alternate term for Contract as used in the States computer system.
Business Critical	Any function identified in any Statement of Work as Business Critical.
Business Day	Whether capitalized or not, shall mean any day other than a Saturday, Sunday or State-recognized legal holiday (as identified in the Collective Bargaining Agreement for State employees) from 8:00am EST through 5:00pm EST unless otherwise stated.
Characteristics	High-level scope information used to generate an initial network.
Chronic Failure	Defined in any applicable Service Level Agreements.
Construction Cost	The construction cost changes based on the stage of the job. Initially the costs are from the concept statement. In the next stage the amount for the job phase is used. Once the job is obligated, the obligated amount is used.
Contract ID	*Not referenced in this document.* The lowest job number of packaged jobs, concatenated with control section.
COTS PPM Solution or COTS Solution	The web-based Commercial-of-the-Shelf software program provided by Contractor under this Contract, and any update, upgrade, release, or other adaptation or modification of the COTS Solution, including any updated Documentation, that Contractor may generally provide to its licensees from time to time, which may contain, among other things, error corrections, enhancements, improvements or other changes to the user interface, functionality, compatibility, capabilities, performance, efficiency or quality of the COTS Solution.
DCDS	Data Collection Distribution System (State of Michigan time reporting system)
DTMB	Michigan Department of Technology, Management & Budget
Deliverable	Physical goods and/or commodities as required or identified by a Statement of Work
Documentation	All user manuals, operating manuals, technical manuals and any other instructions, specifications, documents and materials, in any form or media, that describe the functionality, installation, testing, operation, use, maintenance, support and technical and other components, features and requirements of the COTS Solution or Enhancements.
ECO	Environmental Clearance Organizer
EPE	Early Preliminary Engineering Job Phase

Enhancements	All modifications, corrections, repairs, translations, enhancements and other derivative works and improvements of the COTS Solution or Documentation made by Contractor pursuant to this Contract.
Environmentally preferable products	A product or service that has a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. Such products or services may include, but are not limited to, those that contain recycled content, minimize waste, conserve energy or water, and reduce the amount of toxics either disposed of or consumed.
Excusable Failure	See Section 2.244.
External Resources	Contractor Employees
Finish Date	A point in time associated with a schedule tasks completion. Usually qualified by one of the following: actual, planned, estimated, scheduled, early, late, baseline, target or current.
Funding Template	A source of funds which aligns funding and work to accomplish approved goals and performance standards.
Hazardous material	Any material defined as hazardous under the latest version of federal Emergency Planning and Community Right-to-Know Act of 1986 (including revisions adopted during the term of the Contract).
ITB	A generic term used to describe an Invitation to Bid. The ITB serves as the document for transmitting the RFP to potential bidders
Incident	Any interruption in Services.
Intellectual Property Rights	All or any of the following, in each case whether registered or unregistered and including all applications for, and renewals or extensions of, such rights, and all similar or equivalent rights or forms of protection in any part of the world: (a) patents, patent disclosures and inventions (whether patentable or not); (b) trademarks, service marks, trade dress, trade names, logos, corporate names and domain names, together with all of the goodwill associated therewith; (c) copyrights and copyrightable works (including computer programs), and rights in data and databases; (d) trade secrets, know-how and other confidential information; and (e) other intellectual property rights.
Internal Resources	MDOT Employees
Job	A work activity after the approval of funds, specifically, a number assigned by MDOT to uniquely identify all of the work activities required to be performed to prepare or maintain a specific transportation system component. See also Project.
Job Group	See Subprogram.
JobNet	JobNet is currently in development and will replace the current MPINS (MAP Project Information System). This system collects and tracks information about projects, from scoping through design, and builds documentation for projects.
Key Dates	Major milestone dates including but not limited to dates for plan completion, letting, ROW certification, and environmental clearance. These are the target dates or basis from which the schedule is generated.
Key Personnel	Any Personnel designated in Article 1 as Key Personnel.
Labor Hours	The time that a resource actually spends 'hands on' with a task, as opposed to duration (i.e. no periods of task inactivity). Project management defines this as work.
Letting Date	Date project quotes are opened and read to determine lowest bid.
MAP	MDOT Architectural Project Database (Global MDOT database)
MDOT	Michigan Department of Transportation
MFOS	MAP Financial Obligation System
MPINS	MPINS (MAP Project Information System) is used by MDOT to manage the scope, schedule and budget of jobs that are part of the department's Capital Outlay Program.

Major Milestone	Plan completion date, let date, omissions error check (OEC), plan review, and plan turn in date.
Milestone	A significant event in the job, usually the completion of a major deliverable.
New Work	Any Services/Deliverables outside the scope of the Contract and not specifically provided under any Statement of Work, that once added will result in the need to provide the Contractor with additional consideration.
Network	Diagram of a project's tasks and their dependencies, applied in a logical order.
Open Source Components	Any software component that is subject to any open-source copyright license agreement, including any GNU General Public License or GNU Library or Lesser Public License, or other license agreement that substantially conforms to the Open Source Definition as prescribed by the Open Source Initiative or otherwise may require disclosure or licensing to any third party of any source code with which such software component is used or compiled.
Ozone-depleting substance	Any substance the Environmental Protection Agency designates in 40 CFR part 82 as: (1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or (2) Class II, including, but not limited to, hydro chlorofluorocarbons
P/PMS	Program/Project Management System
Package	Multiple projects linked together with the same letting date. Ideally when a change is made to one that applies to all of the jobs, that change would be applied to all. For example, if the let date changed for the package, it would be applied to all jobs.
Package ID	Unique identifier for a package of multiple projects linked together with the same letting date.
Performance Indicator	Indicator will be determined by MDOT based on departmental priorities (ex: WIGS). This can include but not be limited to dates and costs
Post-Consumer Waste	Any product generated by a business or consumer which has served its intended end use, and which has been separated or diverted from solid waste for the purpose of recycling into a usable commodity or product, and which does not include post-industrial waste.
Post-Industrial Waste	Industrial by-products that would otherwise go to disposal and wastes generated after completion of a manufacturing process, but do not include internally generated scrap commonly returned to industrial or manufacturing processes.
Program	Multiple projects as defined by MDOT to be let in a certain fiscal year or group of fiscal years. Could also refer to a roll-up of projects in the program management system.
Project	A related set of tasks performed to achieve a specific goal.
Project Development	Work involved in the plan development and design for the construction of a highway project.
Project ID	***Not referenced in document***. Unique identifier assigned to a group of jobs with the same environmental clearance and could be let over multiple years. When jobs are combined in this way, they will be given a Project ID.
ProjectWise	Central Repository of all MDOT production specs and documents for all projects
REMIS	Real Estate Management System
RFP	Request for Proposal designed to solicit proposals for services
Recycling	The series of activities by which materials that are no longer useful to the generator are collected, sorted, processed, and converted into raw materials and used in the production of new products. This definition excludes the use of these materials as a fuel substitute or for energy production.
Region	An artificial geographical division of the state used by MDOT and other departments for conducting state business.

Resource	People (MDOT employees) involved in and required to complete a task, that are assigned hours (hands on time) to work on a particular task. This is the smallest breakdown of the OBS. Also known at MDOT as a Work Unit, Organizational Unit, or DCDS Index Code.
Responsible Unit	Specific resource assigned to a task that is responsible for reporting the actual start and finish dates for that task.
Reuse	Using a product or component of municipal solid waste in its original form more than once.
SUITE	(State Unified Information Technical Environment) DTMB initiative that integrates effective methodologies for project management and systems development across all projects.
SafeStat	Safety Status Program System
Schedule	Network that has start and finish dates for all activities, as applied via the Critical Path method.
Scheduled Date	Early start/early finish dates (forward pass). These dates are allowed to move based on progress.
Services	Any of the services Contractor is required to or otherwise does provide under this Contract or the Statement of Work, as more fully described in this Contract or such Statement of Work
Snapshot	The state of the program. Taken each Monday and the first day of each month. Consists of the listing of jobs (from which the number of jobs can be derived); job planned, engineer, estimated cost, actual cost; approved/scheduled/actual dates for major milestones (planned completion date, omissions and errors check, let date, plan review, plan turn in, base plan).
Source Code	The human readable source code of the COTS Solution to which it relates, in the programming language in which the COTS Solution was written, together with all related flow charts and Documentation, including a description of the procedure for generating object code, all of a level sufficient to enable a programmer reasonably fluent in such programming language to understand, operate, support, maintain and develop modifications, upgrades, updates, enhancements, improvements and new versions of, and to develop computer programs compatible with, such COTS Solution.
Source reduction	Any practice that reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment prior to recycling, energy recovery, treatment, or disposal.
Standard Task	A specific work responsibility performed by one or more resources. Tasks include both resource labor hours and duration commitments.
Start Date	A point in time associated with the beginning of schedule tasks. Usually qualified by one of the following: actual, planned, estimated, scheduled, early, late, baseline, target or current.
State Location	Any physical location where the State performs work. State Location may include state-owned, leased, or rented space.
Subcontractor	A company Contractor delegates performance of a portion of the Services to, but does not include independent contractors engaged by Contractor solely in a staff augmentation role.
Subprogram	Multiple projects as defined by MDOT to be let in a certain fiscal year or group of fiscal years. Refers to groupings in project management system. A set of jobs, projects and/or packages that have common templates (Road, Bridge, Traffic & Safety, Capital Preventative Maintenance, Increase Capacity).
TSC	Transportation Service Center which is a subdivision of the Region used for closer customer contacts.
Template	Group of tasks, default resources, durations and labor hours tailored for a particular type of work.

Third-Party Materials	Any materials and information, including documents, data, know-how, ideas, methodologies, specifications, software, content and technology, in any form or media, in which any person other than the State or Contractor owns any Intellectual Property Right, but specifically excluding Open-Source Components.
Trunkline	A state highway transportation system handling long-distance through traffic.
Unauthorized Removal	Contractor's removal of Key Personnel without the prior written consent of the State.
Validating Standards	Comparing actual durations and labor hours (gathered over time) versus what the system calculated, for specific scope situations. Significant differences would result in refining the standards to help ensure that the initial schedules generated are closer to real-life.
What-If	Capability that makes it easy to consider the impact of changes to the program/project without affecting program/project schedule.
Wizard	User interface that presents a user with a sequence of dialog boxes, leading the user through a series of well-defined steps to create a network.
Waste prevention	Source reduction and reuse, but not recycling.
Waste reduction and Pollution prevention	The practice of minimizing the generation of waste at the source and, when wastes cannot be prevented, utilizing environmentally sound on-site or off-site reuse and recycling. The term includes equipment or technology modifications, process or procedure modifications, product reformulation or redesign, and raw material substitutions. Waste treatment, control, management, and disposal are not considered pollution prevention, per the definitions under Part 143, Waste Minimization, of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended.
Work in Progress	A Deliverable that has been partially prepared, but has not been presented to the State for Approval.
Work Product	Refers to any data compilations, reports, and other media, materials, or other objects or works of authorship created or produced by the Contractor as a result of an in furtherance of performing the services required by this Contract.
Work Type	A code representing a recommended work activity. Provides primary classification for a set of work activities required to improve or maintain a specific, actual or proposed transportation component.
Work Unit	People (MDOT employees) involved in and required to complete a task, that are assigned hours (hands on time) to work on a particular task. This is the smallest breakdown of the OBS. Also known at MDOT as a Resource, Organizational Unit, or DCDS Index Code.

Appendix B. Functional Requirements

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A B,C D E)	Comments
1.0	**Schedule Creation**				
	POST RFP CLARIFICATION ITEMS				
	Project Attributes - Approximately 40 Project Attributes will need to be added to the Project Header	H	Yes	C	Configuration will need to implement additional project attributes
	Activity Attributes - Approximately 20 Activity Attributes will need to be added to the Activity Header	H	Yes	C	Configuration will need to implement additional project attributes
	Network Generation - on demand, must apply algorithms to project schedules (which are initially loaded without resources) to set the activity durations, resource codes and resource quantities based on project drivers.	H	Yes	C	Configuration will need to implement use of algorithms XRiver is responsible for entering/modifying algorithm template/equations **Using standard OOB Parametric algorithms**
1.2	System must provide the ability to create a project schedule with the use of MDOT defined templates.	H	Yes	A	Utilizes Planisware's own scheduling engine, not dependent on 3rd party tool. Can define templates that include resources, durations, costs, and meta-data that can be altered by the project manager once a project is created
	Network Generation: One template can satisfy different work types. Work type A and work type B can have the same template.	H	Yes	C	Configuration will need to implement multiple work type assignments for each template
	Network Generation: Template selection should filter based on Project's defined Work Type.	H	Yes	C	Configuration will need to implement template work type filter
	Network Generation: System should replace generic (higher level) OBS codes on demand with location specific OBS codes based on Project Region or TSC attributes	H	Yes	C	Configuration will need to implement automatic update of OBS based on selected region/TSC
1.3	System should provide the ability to add an MDOT defined sub template(s) for support units including but not limited to real estate and environmental to an MDOT defined base template.	M	Yes	A	Fully Supported using Planisware's library template functionality

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A B,C D E)	Comments
	Network Generation: Automatically link the added sub template based on common activities			C	Configuration will need to implement automatic linkage via duplicate activities
1.4	System must provide the ability to create a project schedule by copying a previous project.	H	Yes	A	Fully Supported Small configuration to allow certain metadata to be updated upon save-as
1.5	System must include unique MDOT identifier to associate schedule to MDOT project.	H	Yes	A	Fully Supported, If that unique identifier must be a specific MDOT created identifier, then couple possibly require minor configuration.
1.6	System must provide the ability to add new start date when copying an existing project schedule.	H	Yes	A	Fully Supported
1.7	System must limit creation of schedules that will be included in the program to a list of jobs and concepts from the corporate project budgeting system.	H	Yes	C	Planisware can validate lists of jobs from imported data from the corporate project budgeting system. Import from external system is handled by the MAP interface
1.8	System should allow users to create schedules that are not part of departmental program reporting.	M	Yes	A	This is typically used for things like what-if analysis, proposed projects, etc.
2.0	**Project Schedule**				
2.1	System must use predefined non-editable MDOT task descriptions from a predefined WBS and milestones.	H	Yes	A	Can be done through access rights or optionally, activity types
2.2	System must provide the ability to allow changes to the system-generated schedule and tasks to make them unique to the project.	H	Yes	A	Fully Supported
2.3	System should be able to automatically assign resources to tasks based on scope such as project location, work type code, etc.	M	Yes	C	Depending on specific process desired, system can assign resources (by name, dept, skill) based on location, work type, etc Using parametric estimation with level-1 configuration drivers
2.4	System must provide the ability to create and change the order of sequential tasks based on predecessors and successors.	H	Yes	A	Fully Supported
2.5	System should allow addition of custom subtasks to meet the schedule of the parent task.	M	Yes	A	Fully Supported
2.6	System should allow for the creation of checklist items for a task.	M	Yes	A	Checklist items can be accomplished using Planisware deliverables

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A B,C D E)	Comments
2.7	System must provide the ability for the user to input MDOT defined key dates to provide critical path analysis	H	Yes	A	Fully Supported Using OOB project scheduling
2.8	System must identify the critical path within the project.	H	Yes	A	Fully Supported OOB critical path calculation is used
2.9	System should provide the ability to schedule tasks based on project's priority within the program. Ex: Ten projects all needing environmental clearance task but one project is given a higher priority than the rest so that project's task is scheduled first	M	Yes	A	Project priorities are supported. Having said that, given the information within the question, there would be no reason not to schedule those tasks at the same time unless there is a shortage or resources, for example. Assumption: Use OOB project's/activity's priority field. No automation
2.10	System should provide the ability to manually edit labor hour's distribution	M	Yes	A	Fully Supported using OOB resource load array
2.11	System must provide the ability to lock task duration changes for sensitive or government regulated tasks to be changed only by an authorized user based on permissions.	H	Yes	A	Fully Supported. Set by permissions or locks
2.12	System must maintain an audit trail of estimated task labor hours and estimated task durations changes.	H	Yes	A	Planisware can track via monthly snapshots, or via customized audit trail reporting
2.13	System must provide the ability to retrieve audit trail for viewing, reporting, and comparison reporting.	H	Yes	A	Audit trail standard, but can also track via snapshots or versions which is best method for comparison. Assumption: Use baseline/version to track changes in project.
2.14	System must provide the ability to maintain multiple schedules, resource, and cost baselines during the life of a project. Minimum number of baselines is 10.	H	Yes	A	Unlimited baselines Assumption: No more than 10 baselines are loaded
2.15	System must provide the ability to compare up to 3 baselines side-by-side at one time including but not limited to a Gantt Chart view.	H	Yes	A	Fully Supported
2.16	The new system must allow for multiple jobs that will be advertised, let and bid together to be bundled using a Package ID from a separate MDOT application.	H	Yes	A	Fully Supported if Package ID input into Planisware, but "C" if interface required to bring Package ID in from another system Assumption: Package ID is just managed as a different data structure. No specific logic/control around this

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A B,C D E)	Comments
2.17	System must provide the ability to unbundle projects that have been removed from a Package ID into individual projects each with individual schedules.	H	Yes	A	And if necessary, inter-project links for any constraints one may have regarding the other
2.18	System must provide the ability to link milestones for multiple projects that will be let together and identified by a Package ID.	H	Yes	A	Via manually entered Inter-project constraints
2.19	System must provide the ability to report on individual design projects that are bundled using a Package ID.	H	Yes	A	Each project will have its own identifier
2.20	System must provide the ability to report by Package ID (e.g. MDOT management needs report of how many projects are being bid in a specific month and this needs to be reported by package ID.)	H	Yes	A	Fully Supported. Since our database is relational, projects can be reported by Project ID, project type, geographic location, etc
3.0	**Resource Management**				
3.1	System must provide the ability for the user to identify resource as external or internal.	H	Yes	A	Fully Supported. Resource breakdown structure can identify external vs internal as part of the structure
3.2	System must provide the ability to input and track labor hours for (both internal and external) resources for each project task.	H	Yes	A	Hours can be input manually, or C if imported from another system. Planisware also has timecard system built in if desired to use
3.3	System must provide average, actual, and projected information including but not limited to labor hours, durations, and costs by resource (person) for a given date range.	H	Yes	A	Can include escalations in costs if projecting costs to go up over time, or calculate averages based on a given algorithm
3.4	System must perform automated program resource leveling using project priorities as input by altering project schedules and/or shifting work to other areas.	H	Yes	A	Functionally, Planisware supports this feature but recommends this feature be used only for what-if scenarios in sandbox environment. Assumption: Using OOB conflict resolution tool to adjust task scheduling based on priority. Requires proper data setup and is user triggered
3.5	System must allow for program resource leveling through graphical methods including but not limited to histograms.	H	Yes	A	One specific method shows Gantt type bars on top and histogram on bottom reflecting resource load. User can slide projects on timeline to view how resource overloads can be eliminated Assumption: Use OOB Resource Load view with proper context attribute definition

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A B,C D E)	Comments
3.6	System must calculate internal resource costs for project development.	H	Yes	A	Resources can have multiple cost factors including internal rate, external rates and variables based on skill requirement, etc
3.7	System must calculate external resource costs for project development.	H	Yes	A	As long as the external resources are in the system with associated rates, the system can calculate, summarize and report external costs
3.8	System must provide the ability to identify task data including but not limited to labor hours, durations, and costs based on whether they are/were performed internal/external to the department.	H	Yes	A	Fully Supported
3.9	System must provide the ability to analyze task data including but not limited to labor hours, durations, and costs based on whether they are/were performed	H	Yes	A	Assuming updates entered such as time spent, actual dates (start/finish/forecasts), etc Assumption: Customer has ability to use PEX to do data analysis
3.10	System must provide the ability to calculate project cost based on the scheduled labor hours and an average rate for each work unit.	H	Yes	A	Fully Supported. Our bid is based on average rate being an input by the State rather than calculated. We can provide calculated average cost as optional configuration service or change order.
3.11	System must provide the ability to assign multiple resources to each task.	H	Yes	A	Fully Supported
4.0	**Project Structure**				
4.1	System should provide the capability to create Work Breakdown Structure (WBS) views at project, task, and subtask level.	M	Yes	A	Fully Supported
4.2	System should provide the ability to roll-up and measure project funding, cost and schedule at the project and program level for every work breakdown element for viewing, reporting, and dashboard.	M	Yes	A	Fully Supported
4.3	System must provide the ability to roll-up task and hours information through a hierarchy including but not limited to task, milestone, project, and program levels.	H	Yes	A	And any other breakdown structure as well as other groupings of projects/programs called portfolios Assumption: Using OOB existing breakdown structures

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A B,C D E)	Comments
4.4	System must provide the capability to create an Organizational Breakdown Structure (OBS) view at project and task level.	H	Yes	A	Fully Supported
4.5	System must provide the ability to roll-up program and project information, including resource demands and estimated cost, through the organizational hierarchy including but not limited to unit, section, division, region, office, bureau, and department.	H	Yes	A	As long as that breakdown exists in the OBS
4.6	System must provide reports showing the program and project schedules for each of the work units for a given date range.	H	Yes	A	Fully Supported Report needs to be created at the program level
5.0	**Tracking & Monitoring**				
5.1	System must provide a schedule status field including but not limited to proposed, submitted, approved, and archived at the project and program levels.	H	Yes	A	Fully Supported. Status field can be configured to meet State objectives
5.2	System must provide the ability to view current trends of allocation and utilization to predict workloads by work unit, agency, district, work type, project managers, program managers and required resources.	H	Yes	A	Several capabilities to meet this requirement, including alerts when forecasts exceed thresholds, health status indicators, and bottleneck style reports and dashboards with drill down capability Assumption: Use OOB indicators
5.3	System must provide the ability to configure thresholds for program, project, and task for gauging performance.	H	Yes	A	Fully Supported Assumption: Use threshold on OOB indicators
5.4	System must provide the ability to capture Email addresses for each user.	H	Yes	A	Fully Supported. Notifications can be internal, external (email) or both
5.5	System must send Email notification to appropriate user when performance is outside of the acceptable thresholds.	H	Yes	C	Configure email notification triggers using workflow/alerts/batch
5.6	System must allow the business administrator to define MDOT performance indicators.	H	Yes	A	Fully Supported
5.7	System must provide the user with the ability to analyze and review planned and actual cost/ hour's data.	H	Yes	A	Actual cost/hours data can be input directly Import from external system is handled by DCDS interface

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A B,C D E)	Comments
5.8	System must provide the capability to conduct 'what if' analysis at program/ project level.	H	Yes	A	And the ability to compare different scenarios in a sandbox environment, not impacting active projects Assumption: Use OOB Budget Investment module or version comparison or program module. Effort needed to initialize module
5.9	System must provide the user with the ability to track each work unit's actual labor hours by task for each project.	H	Yes	A	Manually input on task Import from external system is handled by DCDS interface
5.10	System must allow the user to search real-time project, program, and archive data.	H	Yes	A	Can search within project/program or globally within system including text within attached documents Assumption: No search based on configured fields and data that are not loaded. User will need to navigate to the section with the data before searching
5.11	System must provide real-time reporting of project, program and archive data, including but not limited to comparative reporting, snapshots, and histograms.	H	Yes	A	Fully Supported
5.12	System must provide the ability to allow external resources to record task actual dates and labor hours for project manager review and approval.	H	Yes	C	If external resources are given secured access to the system, hours can be recorded and routed for project manager approval using timecard. Configuration will need to be done for routing actual dates for approval.
6.0	**Program Management**				
6.1	System must provide the capability to capture program snapshots which are taken the first of every month and every Monday.	H	Yes	A	Fully Supported Batch job to capture system-wide baselines
6.2	System must provide snapshots which include but not limited to the listing of jobs, the individual job cost, major milestones and milestone approved date, scheduled date, and actual date.	H	Yes	A	All project/program attributes can saved in the snapshot
6.3	System must maintain five years of snapshot history.	H	Yes	A	Fully Supported. Changing Status to Complete or other than Active will help insure accuracy of relevant data.
6.4	System must provide a benchmark which is the annual snapshot.	H	Yes	A	Fully Supported through approved baseline

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A B,C D E)	Comments
6.5	System must provide a report that lists monthly and annual program snapshots to compare up to 13 snapshots. See Appendix M Report Samples: 9.28 Directors_Dashboard_Reports	H	Yes	A	System is capable of doing this, but anticipates some unique requirements from State. Since no details provided, not included in estimate
6.6	System must be able to compare program level snapshots and identify job changes (date changes, cost changes, jobs added and removed from the program).	H	Yes	C	Supported through use of snapshots (Versions) to compare for differences. If specific formats or unique MDOT processes are required, would be "C"
6.7	System must be able to segment the program using user selectable criteria and report on these segments.	H	Yes	A	Assumption:Configured data model allows for segmentation.
7.0	**Interfaces**				
7.1	**Interface with MAP database**				
7.1.1	The System must be able to interface with an Oracle database (e.g, MAP database) to obtain job specific information including but not limited to Job Number, Control Section, Location Description, Route and Work Type. See Appendix L) for the MAP fields that the system will need access to.	H	Yes	C	Planisware has a variety of methods to interface with external systems for passing data. Formats can be TXT, CSV, XML, ODBC, SOAP Web Services, etc. We have certified SAP interface, and an API to allow data mapping with other systems. Although consultants will need to configure the mapping, timing, etc, we consider this part of the standard service but billable consulting which is why the response is C
7.1.2	The system must be able to transfer milestone date information to other databases (e.g, the MAP database).	H	Yes	C	Fully Supported. Data mapping requires a "C" response
7.1.3	The system must be able to read and write task actual start and actual end dates from and to an Oracle database given a job number and task number and apply them to project tasks. See Appendix L for MAP fields that the system will need access to.	H	Yes	C	Fully Supported. Data mapping requires a "C" response
7.1.4	The system must be able to read and write milestone actual dates from and to an Oracle database given a job number and task number and write them to project milestones in the Oracle database. See Appendix L for MAP fields that the system will need access to.	H	Yes	C	Fully Supported, but will require data mapping
7.2	**Interface with ProjectWise**				

A	B	C	D	E	F
No.	**Requirement**	**H/M/L**	**Req. Response (Yes / No)**	**Response (A B,C D E)**	**Comments**
7.2.1	The system must be able to interface with the ProjectWise view to obtain actual start and finish dates given a job number and a Task and/or Milestone and apply them to project tasks. See Appendix L for the ProjectWise fields that the system will need to access.	H	Yes	C	Inherent interface capabilities within Planisware will allow for interface with ProjectWise via API. Data mapping requires a "C" response
7.3	**Interface with DCDS/MAIN**				
7.3.1	The system must be able to interface with the State's payroll system, DCDS/MAIN, to obtain payroll cost and hours and associate them with project tasks. See Appendix L for example flat file.	H	Yes	C	Planisware has a variety of methods to interface with external systems for passing data. Formats can be TXT,CSV, XML, ODBC, SOAP Web Services, etc. We have certified SAP interface, and an API to allow data mapping with other systems. Data mapping requires a "C" response
7.4	**Interface with AASHTOWare Project database**				**This interface is no longer required.**
8.0	**System**				
8.1	System must provide the reporting capability to compare budgeted hours/cost to actual hours/cost for validation of tasks' calculated information.	H	Yes	A	Many reporting methods within Planisware, including our own BI Tool, Planisware Explorer.
8.2	System must provide the administrative ability to create and modify custom templates.	H	Yes	A	Fully Supported
8.3	System must allow input/modification through a separate application including but not limited to the following fields: actual start date, actual finish date, and actual hours expended on tasks.	H	Yes	A	Fully Supported
8.4	System must require the following system calculated fields including but not limited to start date, finish date, and duration on tasks.	H	Yes	A	Fully Supported
8.5	System should provide a user customizable home screen.	M	Yes	A	Fully Supported
8.6	System should provide the ability to assign the priority of projects within a program.	M	Yes	A	Fully Supported

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A B,C D E)	Comments
8.7	System must provide a user customizable dashboard that allows drill down capability to display status and graphical views of the project and program levels based on user's filters (filters including but not limited to: funding template, region, fiscal year) at any given time for current or future programmed projects.	H	Yes	A	Planisware Explorer allows for design of queries and dashboards with drill down capability. Selection criteria can also be included such that end users just filter on the options presented to get the results they are looking to achieve
8.8	System must notify Resource Units that an approved or scheduled date change has occurred and will have an impact on downstream dates for tasks for which they are responsible.	H	Yes	A	Can set an alert based on the change to notify them as long as Resource Units are identified on the work effort
8.9	System must provide the ability to allow resource units to have the ability to "accept" the tasks they are being assigned.	H	Yes	C	Could add this capability via a workflow, however, it is not considered Best Practice. Would recommend against a resource having the ability to accept or reject
8.1	System must provide project and task level Email notifications to appropriate users.	H	Yes	A	Notifications and Alerts are both part of out of the box functionality
8.11	System must allow for configurable Email notifications.	H	Yes	A	Fully Supported, but if MDOT requires a specific email design, would require configuration "C"
8.12	System must send task information including but not limited to start date, finish date, and task to the resource's Outlook calendar.	H	Yes	C	Can interface to provide this capability
8.13	System must provide Management Reports used to evaluate the Program data including but not limited to project completion dates, exception reports, resource utilization reports, cost reports, roll-up reports, and milestone reports.	H	Yes	A	Many out of the box reports and dashboards included, and others can be created and modified using Planisware Explorer
8.14	System must provide the ability to print reports including but not limited to the following breakdowns: Region, TSC, Fiscal Year, Fiscal Quarter, Fiscal Month, Organization, Work type, Funding Template, Project Manager, In house, Consultant	H	Yes	A	In addition to printing Planisware Explorer reports and dashboards, any screen can be a report and output in PDF format, PowerPoint deck templates can be created and used for meeting presentation and reporting, and bi- directional exports to Excel can allow for traditional Excel type reporting. All data contained in the system can be reported on in both tabular and graphic reports and dashboards, including the breakdowns noted.

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A B,C D E)	Comments
8.15	System must provide standard reports including standard headings and footers on each page.	H	Yes	A	Supported with Planisware's own BI reporting tool, Planisware Explorer. Some configuration would be needed if using other reporting mechanisms
8.16	System must provide printing and exporting options to include but not limited to PDF, local printer, and XLS.	H	Yes	A	Fully Supported
8.17	System must provide flexible sorting and views, reports on user selected data elements, and comparative reporting ability.	H	Yes	A	Fully Supported
8.18	System must allow for modifications to templates, calendars, resources, organizational structure, work breakdown structure, reports required to accommodate evolving MDOT business processes.	H	Yes	A	Planisware's system is designed to be flexible to evolve with the customer. Our very first customer in 1996 is still a customer today because the system has evolved with them.
8.19	System must display an error message to users when there is a database usage conflict.	H	Yes	A	Planisware communicates, but the message is about the inability to write to a field in use by another
8.2	System must allow the user to create a program with simulated data from multiple projects.	H	Yes	A	Our sandbox allows for multiple what if scenarios of new and existing projects to help determine the best mix for the DOT Use versions
8.21	System must provide graphing capability for project, program, and package within the software including but not limited to GANTT, PERT, and bar graphs.	H	Yes	A	Standard. Fully Supported
8.22	System must have a graphical interface to modify/create project schedule via the GANTT chart and optionally via PERT chart.	H	Yes	A	Drag and Drop, create links, assign resources all included in the Gantt Chart
8.23	System must have a graphical interface to modify/create package schedule via the GANTT chart and optionally via PERT chart.	H	Yes	A	Fully Supported
8.24	System must provide the ability to retain/store historical data for auditing purposes.	H	Yes	A	Fully Supported
8.25	System must provide ability to create user defined calendars (not to exceed 15 calendars).	H	Yes	A	Fully Supported
8.26	System should be able to be utilized from handheld devices	M	Yes	A	Tablets and smart phones can be utilized

A	B	C	D	E	F
No.	**Requirement**	**H/M/L**	**Req. Response (Yes / No)**	**Response (A B,C D E)**	**Comments**
8.27	System should include the ability to work off-line on a mobile device using a local database that synchronizes once connected.	M	Yes / No	C/E	For offline use, the State would either download to Microsoft Project or tables to Excel, work offline, then import changes when able to connect back to system. Planisware does not support an offline client nor an offline database. Not included in proposal
9.0	**Reports**				
9.1	Job Status				This project report provides the user with an overview of network status, and Plan Completion or Letting status of an open job, version, package (multi-job project) or all jobs owned by a chosen project manager. Assumption: Using PEX
9.2	Plan Completion and Letting				The Plan Completion and Letting Report provides the user with a quick look at the schedule of one or more job networks based on the Plan Completion and Letting targets. Assumption: Using PEX
9.3	DCDS (State of Michigan Data Collection Distribution System) Payroll				This report provides the user with hours and costs for individual employees as gleaned from payroll data. Assumption: Using PEX
9.4	Project Status Custom				This program level report provides the user with a brief overview of the network status of job/jobs, as well as the schedule status according to major milestones. Assumption: Using PEX
9.5	Project Status Historical				This program level report provides the user with a brief overview of the network status of job/jobs, as well as the schedule status according to major milestones, as of a past collection date.
9.6	Project Status Changes				This program level report provides the user with a view of which jobs moved into and out of the program of jobs selected.
9.7	Network Status				This program report provides the user with the overall status of the Program or Selection as divided into the five major job groups.
9.8	Network Changes				This project report provides the user with a report of all the changes that have been made to a job version.

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A B,C D E)	Comments
9.9	Completed Milestones				This program/project report provides the user with a list of one or more jobs, which milestones have been completed on those jobs, and when they were completed. Assumption: Using PEX
9.1	Late Milestones				This program/project report provides the user with a list of one or more jobs, showing what milestones are currently late on those jobs. Assumption: Using PEX
9.11	Milestone Status				This program/project report provides the user with the status of all milestones on a particular selected job or group of jobs. Assumption: Using PEX
9.12	Milestone Gantt Chart				This program and/or project report provides the user with the same information as found in the Milestone Status Report, but in Gantt Chart form. The milestones are displayed in date order with the earliest date first.
9.13	Milestone Summary				The program and/or project report provides the user with the status of all milestones on a particular selected job or group of jobs, grouped into Work Breakdown Structure levels. Assumption: Using PEX
9.14	Milestone Summary Gantt Chart				This program and/or project report provides the user with the status of all milestones on a particular selected job or group of jobs, grouped into Work Breakdown Structure levels, and presented in Gantt Chart form
9.15	Predecessors and Successors				This project report provides the user with all preceding and succeeding constraints for each task in an open job, version, or multi job project.
9.16	Task Status				This program and/or project report provides the user with provides the user with the status of all tasks on a particular selected job or group of jobs.
A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A B,C D E)	Comments
9.17	Task Gantt Chart				This program and/or project report provides the user with the same information as found in the Task Status Report, but in Gantt Chart form. The tasks are displayed in date order with the earliest date first.
9.18	Late Tasks				The Late Tasks Report provides the user with a list of one or more jobs, showing what tasks are currently late on those jobs. Assumption: Using PEX
9.19	Completed Tasks				This program and/or project report provides the user with a list of one or more jobs, showing what tasks are currently completed on those jobs. Assumption: Using PEX
9.2	Program Status Custom				The Program Status Custom Report provides the user with a view of the overall status of a job or group of jobs by number of major milestones met, plus a chart showing the balance of lettings for the Fiscal Year selected. Assumption: Using PEX
9.21	Program Status Historical				This program report provides the user with a view of the overall status of a group of jobs by number of major milestones met, plus a table showing the status of lettings for the Fiscal Year selected, with data gathered as of a past collection date.
9.22	Program Performance				The Program Performance Report provides the user with an overview of the status of a selected job/jobs focusing on just the Plan Completion or just the Letting date. Assumption: Using PEX
9.23	Responsibilities Work Schedule				This program and/or project report provides the user with the status of all tasks and milestones on a particular selected job or group of jobs, grouped by responsible unit.
9.24	Responsibilities Work Schedule Gantt Chart				This program and/or project report provides the user with the status of all tasks and milestones on a particular selected job or group of jobs, grouped by responsible unit and presented in Gantt Chart form.

A	B	C	D	E	F
No.	**Requirement**	**H/M/L**	**Req. Response (Yes / No)**	**Response (A B,C D E)**	**Comments**
9.25	Resource Histogram				This program report provides the user with a histogram showing resource loading per month for a selected date range. Assumption: Using PEX
9.26	Resource Summary				This program report provides the user with a tabular summary showing resource loading per month for a selected date range. Assumption: Using PEX
9.27	Resource Profile Availabilities				This program report shows resource availability per month for a selected date range. Assumption: Using PEX
9.28	Director's Dashboard				This program level report provides the user with a quick look at the benchmark and job data for any fiscal year, also affording drill down to specific information. Assumption: Using PEX
9.29	Benchmark Status				This program report provides the user with different reports, comparing benchmarked jobs and costs per month to jobs and costs per month as of another collection date, based on selection criteria
10.0	**Documents**				
10.1	System must provide a customizable online help system. Best practice from the market scan: uses wiki technology, uses context sensitive help at the field level	H	Yes / No	A	Customizable online help as well as the ability to create personalized e-Learning. Wiki technology not supported
10.2	System must provide a customizable online stepwise reference guides.	H	Yes	A	Include as part of context sensitive help
10.3	System must provide customizable online video tutorials.	H	Yes	A	Custom e-Learning videos supported
10.4	System must include customizable online FAQs for frequent issues staff/users may encounter.	H	Yes	A	Our eLearning suite allows the State to control which documents are available to the end users, including uploading FAQ's
11.0	**Data Migration**				

A	B	C	D	E	F
No.	**Requirement**	**H/M/L**	**Req. Response (Yes / No)**	**Response (A B,C D E)**	**Comments**
11.1	Vendor must provide the data structure including but not limited to a data dictionary.	H	Yes	A	Fully Supported
11.2	System must provide the ability to import all open P/PMS job data and supporting data from P/PMS CATII to new PM system.	H	Yes	A	Fully Supported
11.3	System must provide the ability to import the last 10 years of P/PMS data for archived jobs and the supporting data for those archived jobs from P/PMS to new PM system.	H	Yes	C	Planisware supports data migration through one of the many available formats, but data mapping will be needed to insure information goes into the right fields
11.4	Contractor must provide a data map from the current system to the new system before construction begins.	H	Yes	A	Fully Supported
12.0	**Security**				
12.1	System must provide the ability to enforce role based security at program, project and task levels. See also Functional Requirement 2.11 regarding task locking.	H	Yes	A	Even within role based security, there will be capability to restrict access to individuals or groups as desired.
12.2	System must provide the ability to allow a user to be the system business administrator.	H	Yes	A	Fully Supported

Appendix C. Technical Requirements

1. Client/Workstation

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
1.1	System must function as a thin client architecture for: • Server Virtualization	H	Yes	A	Fully Supported
1.2	System must function in following desktop web browser(s) in INTRANET and INTERNET environment: • Microsoft IE 10.0 or above • Firefox 18.0 or above • Chrome 18.0 or above	H	Yes	A	IE 11.0 Firefox 28+ Chrome 33+ Safari Prior versions are also supported, some requiring a JRE
1.3	System must support deployment in following desktop Operating System (OS) : • Microsoft Windows 7 64-bit	H	Yes	A	Fully Supported
1.4	System should function in the following handheld device browser(s) in INTERNET environments: • Safari (iOS) • Chrome (Android 4.0 and above) • Microsoft Windows Mobile (optional)	L	Yes/No	A	Fully Supported
1.5	System should be developed using responsive design so as to function adaptively in handheld device browser(s) in INTERNET environments: • Safari (iOS) • Chrome (Android 4.0 and above) • Microsoft Windows Mobile	L	Partial	A	Mobile browsers are fully supported using HTML 5. However, other than timecard, no specific designs are available OOB for smaller handheld. If required, specific pages can be configured to run on such devices.
1.6	System should be able to view schedules, modify actual start and end dates from handheld devices.	L	Yes	A	The Planisware user interface is very feature rich, and as such would be impractical to view schedules on mobile phones, but display nicely on Tablet computers. If needed, specific screens that fit smaller formats could be developed to support specific data reviews/actions (such as an approval).
1.7	System should be able to view reports and dashboards from handheld devices with the same functionality as the desktop.	L	Yes	A	Running on Mobile browsers

2. Documentation and Standards

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
2.1	Vendor must provide a logical network diagram that describes how the infrastructure components will meet the functional requirements.	H	Yes	A	
2.2	Vendor must provide high-level architecture diagram, including logical and physical components	H	Yes	A	See 2.1 above
2.3	Vendor should describe recommended disaster recovery options for the COTS PPM Solution to be implemented by the State of Michigan (including Hot and Cold standby options, licensing implications, and critical vs. non-critical functionality and data).	M	Yes	A	Our enterprise architect can provide options available to customers supported by documentation for installation and set-up
2.4	Application/System documentation must provide FAQ and/or Support Information for frequent issues staff/users may encounter.	H	Yes	A	Planisware's technical manuals and installation guide provides support information staff may encounter.
2.5	Vendor must provide logical and conceptual data-flow diagrams.	H	Yes	A	Available within the help section of Planisware Pro
2.6	Vendor must provide complete installation and configuration documentation library.	H	Yes	A	Provided
2.7	System documentation must describe application error logging and how to access error logs.	H	Yes	A	Available in: V6 Installation Guide (English) version V6_0_1_15_A released on Sep-2014
2.8	For customizations, vendor must provide mock-ups of screens or actual screens showing appropriate MDOT data and data format (not empty screens).	H	Yes	A	Supported as part of configuration effort
2.9	Testing documentation must be shared with MDOT containing the testing approaches, expected results, actual results, and any known outstanding open defects.	H	Yes	A	Planisware standard testing test result can be made available upon request.
2.10	Vendor must provide weekly defect summaries during testing phases through implementation.	H	Yes	A	Part of project management of the testing process

2.11	Vendor must provide documentation indicating if application requires its own database. Documentation to include items such as but not limited to the following: • Can the database components be installed as a schema within an existing database or do they require their own database? • Are non-default database parameters settings required? • Are objects installed in the sys or system schemas? • Are non-standard privileges on sys or system objects required? • Does the system make use of public grants public synonyms, etc.? • Does the system require the DBA role or roles/privileges that grant the "any" privileges? • Does the system require connection to the database with elevated privileges such as an account that was granted the DBA role?	H	Yes	A	Planisware can utilize a generic schema within an existing database

3. Product Development

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
3.1	Vendor should provide a roadmap for all platform / application enhancements that are planned for the next two years.	M	No		Planisware does not publish its future product roadmap
3.2	System should have roadmap for complete mobile functionality within 18 months.	L	No		Planisware does not publish its future product roadmap

4. Reporting

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
4.1	Systems reporting framework must be compatible with n-Tier architecture (client-server & web).	H	Yes	A	Fully Supported
4.2	The software must deliver standard reports including standard headings and footers on each page, printing capabilities in PDF, XLS format, etc.	H	Yes	A	Fully Supported
4.3	The Graphical User Interface (GUI) query capability should enable non-technical end-users to create reports.	M	Yes	A	End-users can create reports by printing their views via PDF, or executing predesigned reports built by high end super user types
4.4	If the system utilizes an existing reporting package, this package allows the use of the State reporting standard of Business Objects.	M	Yes	A	Planisware has our own BI reporting tool called Planisware Explorer, but other tools such as Cognos or Business Objects may also be used.
4.5	The standard (e.g., regularly scheduled, recurring) reporting environment allows: • Standard reports to be executed, viewed on-line, printed (centrally or remotely) and dispersed. • The State to control the information that appears on standard reports so that data security is maintained.	H	Yes	A	Fully Supported
4.6	System reporting framework must not require any installed component in the client system other than the following: • PDF Format • Microsoft Excel	H	Yes	A	Fully Supported
4.7	System must allow staff to query an aggregate database to conduct real-time ad hoc analysis. The tools must utilize techniques that allow information to be filtered and sorted in varying levels of detail. The technology must allow end-users to conduct analysis without programming and with no advanced knowledge of the underlying data sources and structures.	H	Yes	A	Users can conduct analysis without programming or knowledge of data sources and structures, however, like any application, training will play an important role to understand how best to accomplish as-hoc analysis

5. Application Security

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
5.1	The solution must have built-in security controls and meet current SOM security requirements	H	Yes	A	Solution has built in security controls and can also utilize security policies within State LDAP and Single Sign on applications
5.2	Application access must be logged and have a viewable audit trail(s).	H	Yes	A	Supported, but might require specific views configured
5.3	The following application change event(s) must be logged: • Changes to individual permission level • Changes to role membership • Changes to role permissions • Changes to access to application functions	H	Yes	C	Tracking this information needs to be configured
5.4	Access to audit trail logs must be able to be restricted to approved administrators.	H	Yes	A	Fully Supported
5.5	Application access and changes to application access must log the following information: • Date/time • Nature of operation • Name of changed item • Name of who made the change • Before and after value of the changed item	H	Yes	C	Tracking this information needs to be configured
5.6	System must restrict the user from having direct access to the program libraries (i.e., Base codes)	H	Yes	A	Only those with explicit permission will be able to access base codes
5.7	Passwords and User ID's must be able to: • Protect sensitive data • Restrict access to only those intended • Meet State/Agency Security Standards (see link in 6.16) • Be Encryptable	H	Yes	A	Read only, read/write and no access. Can go down to the field level if required. Oracle database can be encrypted, and HTTPS is 128 bit encryption
5.8	User authentication method must include User ID and Passwords.	H	Yes	A	Fully Supported
5.9	User authentication method should include Single sign-on solution.	M	Yes	A	Single sign-on supplied by customer is supported
5.10	Session State must be stored and maintained in an encrypted manner.	H	Yes	A	Session states are managed by the web server, and are not stored
5.11	Application and database communication must use the following port(s) and protocol(s): • 80 / 443 using HTTP(s)	H	Yes	A	HTTPS. Ports can be configured

	• 1521/1433 using TCP • 80 / 443 using SOAP/XML				
5.12	Applications and systems must adhere to SOM Policy 1350.20 regarding Access to Protected Data Resources: http://www.michigan.gov/documents/dmb/1350.20_184600_7.pdf	H	Yes	C	Planisware recommends leveraging existing single sign on capabilities, and thus, meet this requirement. “C” classification is for interfacing with State single sign on capabilities.
5.13	End-user software applications, or components thereof, must not require privileged, super-user or administrator mode in order to function properly.	H	Yes	A	Fully Supported
5.14	Session State must be stored and maintained in one or more of the following manners: • Cookie • URL String • Database	H	Yes	A	At the database level
5.15	The system must ensure that the integrity and confidentiality of data is protected by safeguards to prevent release of information without proper consent.	H	Yes	A	Integrity and confidentiality of data are protected by Planisware, but also need to be protected by network security, virus protection and other protection mechanisms

6. Identity Management

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
6.1	System must restrict the access based on the individual user authorization (Role Based Access Control - RBAC). Users may belong to groups and roles.	H	Yes	A	Planisware uses RBAC, as well as groups
6.2	The application should be capable of integrating with the MDOT standard authorization system, SAM “System Access Manager” using web services.	L	Yes	C	This interface can be configured
6.3	The application must lock out users after three invalid login attempts due to bad passwords.	H	Yes	A	This is handled by the webserver, and the number of iteration for lock out is handled by it
6.4	The application must provide the system administrators with the capabilities to define different roles with different privileges.	H	Yes	A	Fully Supported
6.5	The application must provide the system administrators with the capabilities to create groups whose members can be either role-based or individual login account names	H	Yes	A	Fully Supported

7. Application Server

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
7.1	Application server software components must operate the same, without regard to the hosting platform or OS. They should expose the same functionality and API's regardless of OS.	H	Yes	A	Fully Supported
7.2	Systems running on the application server should support horizontal scaling.	M	Yes	A	Fully Supported
7.3	Systems running on the application server should support vertical scaling.	M	Yes	A	Fully Supported

8. Database Server

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
8.1	The database server must support horizontal scaling by partitioning of tables and clustering of server instances.	H	Yes	A	This is dependent on the database used, but the primary databases Planisware uses (Oracle, SQL Server), support this
8.2	The database server must support replication and mirroring across multiple servers.	H	Yes	A	This is dependent on the database used, but the primary databases Planisware uses (Oracle, SQL Server), support this
8.3	The database tier must support a shared connection with connection pooling.	H	Yes	A	This is dependent on the database used, but the primary databases Planisware uses (Oracle, SQL Server), support this
8.4	The database server must support table and index partitioning across multiple server instances.	H	Yes	A	This is dependent on the database used, but the primary databases Planisware uses (Oracle, SQL Server), support this
8.5	The database server must support parallel indexing operations.	H	Yes	A	This is dependent on the database used, but the primary databases Planisware uses (Oracle, SQL Server), support this
8.6	The database must be able to operate in n-Tier server architecture.	H	Yes	A	This is dependent on the database used, but the primary databases Planisware uses (Oracle, SQL Server), support this
8.7	The database must support table and row level locking during read/write operations.	H	Yes	A	This is dependent on the database used, but the primary databases Planisware uses (Oracle, SQL Server), support this
8.8	The database must not require users to have elevated database privileges/accounts for normal operation.	H	Yes	A	Fully Supported
8.9	The database server must support auditing and logging for DCL events (grant, revoke, deny).	H	Yes	A	This is dependent on the database used, but the primary databases Planisware uses (Oracle, SQL Server), support this
8.10	The database server must support auditing and logging for DML events (insert, update, delete).	H	Yes	A	This is dependent on the database used, but the primary databases Planisware uses (Oracle, SQL Server), support this
8.11	The database must provide support for XML data.	H	Yes	A	Fully Supported
8.12	If Oracle solution, the system must not create objects in SYSTEM or SYSAUX tablespace.	H	Yes	A	A dedicated tablespace to Planisware is recommended
8.13	If Oracle solution, provide list indicating if the following items are required: LONG, LONG_RAW, BLOB, CLOB	M	Yes	A	LONG are required. BLOB/CLOB are optional depending on where documents supporting projects are stored

8.14	If Oracle solution, provide list indicating if the system requires the following oracle products: Oracle JVM, Oracle Partitioning, Oracle Spatial Intermediate text	M	No		The listed products are not required
8.15	Provide a list of database privileges required by the database accounts/roles (typical user, system administrator, etc.).	H			A typical user with the ability to create/alter tables and indexes is recommended
8.16	System Administrator must not require elevated privileges such as DBA, or access to the SYS or SYSTEM accounts.	H			Such access is not required (see 8.15)
8.17	Indicate if the application creates or deletes database accounts.	H	No		Application does not create or delete database accounts

9. Solution Architecture

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
9.1	Solution architecture must be expandable and portable, with specific reference to the system capacity requirements presented in this Requirement Specifications.	H	Yes	A	Fully Supported
9.2	Solution architecture must be fully self-contained and capable of being operated by State staff with no dependency on Vendor services for its routine operation.	H	Yes	A	All operations of Planisware are self contained and can be managed by customer staff
9.3	Solution architecture must be compatible with the State's technical architecture and is sized suitable for the system specified.	H	Yes	A	Planisware is providing preferred architecture documentation that is compatible, and our staff with work with yours to insure it is sized properly
9.4	Solution architecture must be an open system, with no dependency on the use of specific models or models of equipment operating systems.	H	Yes	A	System is open, and not dependent on hardware, but does require certain versions of the different operating system versions (Windows, Linux)
9.5	Solution architecture must have the ability to keep logs of each transaction which alters the database. Logs are date and time stamped to allow the system to reconstruct activity for any period.	H	Yes	A	Planisware records changes through transactions. A transaction is always logged.
9.6	Solution architecture should follow the Service Oriented Architecture (SOA) design	L	No/Yes	A	For good interactions between components, Planisware does not adhere to SOA designs. However, Planisware WSDL for external application to communicate with Planisware follows such design.
9.7	The solution/application must be able to utilize the features and capabilities of the SOM enterprise data storage services for the following data storage needs: • Storage Area Network (SAN) • Network Attached Storage (NAS) • Content Addressable Storage (CAS)	H	Yes	A	As long as this can be mounted and seen as a file system from the server on which Planisware operates
9.8	The solution/application must support installation and operation in one or more disparate hosting centers. Fail-over from one hosting center to another must be possible without exceeding parameters specified in the contract.	H	Yes	A	Yes, if installed appropriately

9.9	The solution/application must support distributed deployment of application components and database tier components (n-Tier architecture).	H	Yes	A	Fully Supported
9.10	Vendor should provide a technology roadmap for the proposed system showing a five (5) year plan for new software version releases, support window, and sun setting.	M			Planisware does not attempt to predict technology variables as far out as 5 years. Our communication to industry is that we will continue to advance both software product functionality, best practices and ease of use, as well as the delivery mechanism, including servers/clients and mobile devices. Our software releases average 1 major release every 3 years, and 1 minor release every year; no sun setting.
9.11	Systems operating on an application server must interoperate with CA Unicenter monitoring agents.	H	Yes	E	This has to be done at the CA Unicenter admin level.
9.12	Systems operating on an application server must interoperate with Veritas Backup and Recovery agents.	H	Yes	E	This has to be done at the Veritas Backup and Recovery Agents admin level, but Planisware customers use a variety of back-up and recovery systems

10. Solution Integration

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
10.1	System must have the ability to import/export data from/to the format supported by the following sources: • Microsoft Project XML	H	Yes	A	Planisware has built in bi-directional interface with Microsoft Project
10.2	System integration must support the following method(s) to interface with industry standard databases such as but not limited to Oracle and MS databases: • Web Services (SOAP) • API • DB Links and DB Objects	H	Yes	A	Fully supported
10.3	An Application Programming Interface (API) for reporting and analysis should be supplied and supported for one of the following technologies: • Java (standard) • .NET (standard)	M	Yes/No	A	Planisware script, similar to Java script
10.4	System must have the ability to have 2-way interface between databases	H	Yes	A	Fully Supported

11. System Administration and Licensing

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
11.1	System documentation must clearly describe all critical factors in sizing or configuring the application (e.g., number of concurrent users, specific transaction volumes, number of products, number of layers in the product hierarchy, etc.).	H	No		Such documentation is an implementation project deliverable as it depended on how Planisware is planned to be used as it varies based on data volume, transactions, users, types of transactions, etc

12. System Performance

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
12.1	System must support at least 100 concurrent users in order to provide sufficient capacity for growth.	H	Yes	A	Planisware has customers with user communities in excess of 15,000+ named users, hundreds of which are concurrent at any point in time
12.2	System documentation must clearly describe the type of caching, if any, the system employs	H	No	A	While memory caching is heavily used in Planisware, this is not extensively described and documented in details
12.3	System must have the capability to handle large-volume batch processing via multi-threading.	H	Yes	A	Fully Supported. Advanced Symmetrical multi-threading (SMT technology)
12.4	System must support clustering and/or load balancing across multiple application servers	H	Yes	A	Planisware supports both clustering and load balancing across multiple application servers
12.5	The application must provide performance-optimization capabilities.	H	Yes	A	Several tools are provided to performed analysis and fine tuning of the Planisware application

13. Application Configuration Management – PCI-DSS

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
13.1	All known security vulnerabilities must be addressed in accordance with industry-accepted system hardening standards. Industry-accepted standards include: • SysAdmin Audit Network Security (SANS) • National Institute of Standards Technology (NIST) • Center for Internet Security (CIS)	H	Yes	A	Fully Supported
13.2	Only one primary function can be implemented per server (i.e. web, database, domain, etc.).	H	Yes/No	A	Depends on how the application is installed, but can be one primary function per server
13.3	All unnecessary and unsecure services and protocols (those not directly needed to perform the device's specified function) are disabled.	H	Reserved		Assuming the install is ultimately done by the State, this can be done at that moment
13.4	System security parameters must be configured to prevent misuse.	H	Yes	A	Included as part of implementation and set up
13.5	All unnecessary functionality is removed, such as: • Scripts • Drivers • Features • Subsystems • File Systems • Unnecessary Web Servers	H	Yes	A	Supported, however features are turned off as part of the implementation process, but available to the State to be turned on for future use.

14. Application Development Management – PCI-DSS

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
14.1	Software applications must be developed in accordance with PCI DSS (for example, secure authentication and logging) and based on industry best practices. Information security must be incorporated throughout the Systems Development Life Cycle (SDLC).	H	Yes	A	Planisware is developed in accordance with industry best practices
14.2	All security patches and system and software configuration changes must be tested before deployment, including but not limited to: • All input must be validated to prevent such things as cross-site scripting, injection flaws and malicious file execution. • Proper error handling must be incorporated into the software. • Data at rest must use secure cryptographic storage. • Data in motion must use secure communications. • Role-based access control (RBAC) must be used to control and audit user actions.	H	Yes	A	Planisware performed unitary testing, and full regression testing on every patch released

15. Application Password Management – PCI-DSS

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
15.1	The system will include a configurable inactivity setting. User must reenter his or her password to reactivate the session after more than 30 idle minutes.	H	Yes	A	Auto log-out

16. System Auditing

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
16.1	System must have the ability to query, view, filter, and sort the system audit trail. The system is able to store the queries.	H	Yes	C	Planisware offers a supervision module (W7) allowing this, which can be provided as a Supplemental Service, but would need to be configured to meet your specific requirements..
16.2	System must have the ability to identify and track data back to its input source (e.g., imaged document, keyed from form, interface file, etc.).	H	Yes	C	Planisware offers a supervision module (W7) allowing this, which can be provided as a Supplemental Service, but would need to be configured to meet your specific requirements..
16.3	System must have the ability to audit all override of edits and audits and identify the login ID, date, and time.	H	Yes	C	Planisware offers a supervision module (W7) allowing this, which can be provided as a Supplemental Service, but would need to be configured to meet your specific requirements..
16.4	The system's internal control functionality ensures that the data entry and processing associated with a business event has been completed before updating the database.	H	Yes	A	Fully Supported

17. Error Handling

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
17.1	System must ensure that all errors are written to an error log.	H	Yes	A	Supported
17.2	System must allow administrator to view, filter, sort, and search the error log.	H	Yes	A	Error log is a text file than can be viewed, sorted, and searched. Filtering in it will require handling in a special text file reader
17.3	System must allow administrator to archive error log entries based upon user-defined criteria.	H	Yes	E	This has to be setup by the system administrator

18. Software Package Specifications

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
18.1	System should allow the State and consultants, from computing devices to access and update all necessary information to complete a transaction.	M	Yes	A	Fully Supported
18.2	The software allows for the accurate and timely input and extraction of State data.	H	Yes	A	Fully Supported
18.3	The software provides a Graphical User Interface (GUI) that is user-friendly and provides data, calculation, reporting, and communication capabilities to State users.	H	Yes	A	Fully Supported, and simplified based on role definitions of your user base
18.4	The system is modular in design to accommodate phased implementation and future expansion.	H	Yes	A	Although all one product, modules can be turned on or off to accommodate phased implementation approach
18.5	The modularity allows the capabilities of the core systems to function without the entire system complement.	H	Yes	A	Supported. Modular design and allows capabilities of the core systems to function with unneeded system components turned off.
18.6	Additional modules may be integrated into the system without a major impact to the installed components.	H	Yes	A	Since Planisware is all one product, it remains integrated even if modules turned off until required
18.7	All modules of the system are integrated and designed to work together using a single input and a common database with no redundant data entry or data storage.	H	Yes	A	Single, fully integrated, web based design
18.8	The system should have the ability to accept batch entry from external sources while ensuring the same edits and validations as the online system.	L	Yes	A	Bath processes can be established to import data from external sources insuring validation
18.9	The software provides the capability of transferring data to and from the host/server to the client for processing on other software packages.	H	Yes	A	Such as processing on Excel, PowerPoint, MS Project, etc

19. Edit and Validation Control

A	B	C	D	E	F
No.	Requirement	H/M/L	Req. Response (Yes / No)	Response (A, B, C, D, E)	Comments
19.1	The system includes comprehensive field edits to prevent incomplete or incorrect data from entering the system.	H	Yes	A	Data types validated, and can validate meta-data
19.2	The system ensures data integrity and controls processing without hard-coded values	H	Yes	A	Fully Supported

Appendix F. Cost Tables

TABLE 1: PROJECT COST SUMMARY

No.	Project Cost(s)	Total Cost ($)
A.	**COTS PPM Software Acquisition– including Third Party Software** Give breakdown in Table 2.	$ 915,000
B.	**Project Monitoring and Control** Give breakdown in Table 3	$ 185,180
C.	**Project Initiation Services** Give breakdown in Table 3	$ 18,680
D.	**Requirements and Solution Architecture Validation Services** Give breakdown in Table 3	$ 329,320
E.	**Installation of "out of the box" COTS** Give breakdown in Table 3	$ 15,480
F.	**Configuration/ Customization Services** Give breakdown in Table 3	$ 544,425
G.	**Implementation Services** Give breakdown in Table 3	$ 565,720
H.	**Training Services** Give breakdown in Table 3	$ 151,370
I.	**Additional Documentation** Give breakdown in Table 3	$ 45,020
J.	**Recurring Annual Costs - Including Software License(s) and Maintenance and Support** Give breakdown in Table 4	$ 658,800
K.	**Knowledge Transfer/Transition** Give breakdown in Table 5	$ 50,840
L.	**Supplemental Services (Table 6)**	**$84,213**
	Total Project Cost	**$ 3,564,048**

TABLE 2: COTS PPM SOFTWARE ACQUISITION

No.	MS	Software License(s) Cost	Product Name and Version	Type (Enterprise or Individual)	Unit Cost ($)	Total Number of License(s)	Total Cost ($)
A.		**Commercial Off The Shelf (COTS)**					
	A1	Total COTS Licenses	*Planisware Price List*				**915,000**
		MDOT Roles					
			Planisware V6 – Application Server Unlimited-CPU license (Windows)	Server Fee	225,000	1	225,000
		Project Managers	*Planisware V6 Intranet (Read Write)*	Named User	1,275	125	159,375
		Scheduling Assistants	*Planisware V6 Intranet (Read Write)*	Named User	1,275	125	159,375
		Reporting Users	*Planisware V6 Intranet (Read Only)*	Named User	750	200	150,000
		Program Managers/Admin	*Planisware V6 PM Office*	Named User	5,250	25	131,250
		Task Users (enter Actual Start/Ends)	*Planisware V6 Team Member*	Named User	375	200	75,000
		Not required	*Planisware V6 Time Card*	Named User	150	0	-
		Configuration/Support Users	*Planisware V6 ProWeb - Authoring Tool*	Named User	7,500	2	15,000
		Total Number of COTS Software License(s) and Costs					**915,000**
		Third Party					
		Initial Third Party Licenses Required for Initial Installation					
		Remaining Third Party Licenses Required for Successful Implementation					
		Any other Third Party software required (List):					
		Total Number of Third Party Software License(s) and Costs					**915,000**

* No additional 3rd Party software is required.

License Quantity Notes:

Total User counts based on State Estimates:

- Project Manager users: 125
- Program Manager users: 25
- Scheduling Assistant users: 125
- Reporting only users: 200
- Users who will enter task Actual (Start/End) Dates only: 200

Note that two additional ProWeb users, which were not specified by the State but are recommended for in-house technical support, have been added to the total as an option to the State.

Pricing for Planisware Time Card users is included for reference only as this license type was not explicitly defined as a requirement, but have been added to the total as an option to the State.

Optional Pricing Discount

XRiver is optionally proposing a 10% discount on the Planisware software license if the purchase for the entire projected license purchase is executed and delivered to the State in full by December 15, 2015.

No.	MS	Software License(s) Cost	Total Cost ($)
A.		**Commercial Off The Shelf (COTS)**	
		Total COTS Licenses	**915,000**
		Less 10% Discount	**91,500**
	A1	**Discounted Third Party Software Costs**	**823,500**

Payment Milestone Criteria:

The COTS PPM Software Acquisition payment milestones are:

- Milestone #A1 - License Purchase:

  - The initial purchase date of the initial Planisware license is to be made post Task 01 with the go/no go decision to proceed with Task 02.
  - The Planisware software must be purchased and delivered no later than December 15, 2015 to obtain the 10% discount.
  - Delivery is accomplished by providing the State with the download link and the license key for the software

TABLE 3: COTS PPM SOLUTION SERVICES AND DELIVERABLES COSTS

Project Milestone Deliverables Summary

No.	Milestone Event	MS	Milestone Deliverable(s)	Total # of hours	Total cost ($)
B.	**Project Monitoring and Control (Payment based on final acceptance of the milestone event)**	**B1-B12**	12 Monthly Progress Payments	**812**	**185,180**
C.	**Project Initiation Services (Payment based on final acceptance of the milestone event)**	**C1**	Project Initiation Meeting	**75**	**18,680**
D.	**Requirements and Solution Architecture Validation Services (Payment based on final acceptance of the milestone deliverables)**	**D1**	COTS software orientation workshop	**572**	**160,830**
		D2	Final COTS PPM Solution Configuration/Customization Plan or Functional Design	**370**	**88,550**
		D3	Final COTS PPM Solution Screen Configuration/Customization Plan	**362**	**79,940**
E.	**Installation of "out of the box" COTS (Payment based on final acceptance of the milestone deliverables)**	**E1**	Software Installation	**68**	**15,480**
F.	**Configuration/ Customization Services (Dependent on the number of configurations/customizations needed. Payment based on final acceptance of of an agreed upon miles stone deliverable schedule.)**	**F1**	Build 1 - Scheduling	**461**	**100,015**
		F2	Build 2 - Cost & Resource Management	**258**	**54,440**
		F3	Build 3 - Program Management & 1/2 Reporting	**630**	**136,890**
		F4	Build 4 - 1/2 Reporting	**771**	**166,965**
		F5	Final Build	**387**	**86,115**
G.	**Implementation Services (Payment based on final acceptance of the milestone deliverables)**	**G1**	**Data Conversion /Migration**	**467**	**93,475**
		G1a	Implementation Plan	**50**	**11,910**
			Algorithm Development		
		G2	Procedures & Data Review	**240**	**40,200**
		G3	Baseline Development	**240**	**40,200**
			Interfaces		
			Direct:		
		G4	*ProjectWise*	**56**	**11,250**
		G5	*DCDS*	**135**	**28,875**
			Indirect:		
		G6	*MAPS Interfaces*	**258**	**52,300**
			Testing		
		G7	*System Testing*	**538**	**129,990**
		G8	*UAT Testing*	**340**	**79,600**
		G9	**Production Go-Live**	**296**	**77,920**
		G10	**Performance Warranty Period**	**0**	**0**
H.			**Train-the-Trainer training**		

No.	Milestone Event	MS	Milestone Deliverable(s)	Total # of hours	Total cost ($)
	Training Services (Payment based on final acceptance of the milestone deliverables)	H1a	*Training Plan*	44	10,160
		H1	*Project Manager Train-the-Trainer*	301	52,745
		H2	*General User Train-the-Trainer*	305	56,945
			Technical training		
			System administration training		
		H3	*System Admin Training - Session 1*	64	15,760
		H4	*System Admin Training - Session 2*	64	15,760
			Online access to training		
			Training Documentation		
			Additional Training (List):		
I.	Additional Documentation (Payment based on final acceptance of the milestone deliverables)	I1	**User manuals**	222	24,530
		I2	**Technical manuals**	102	20,490
			Additional Documentation (List):		
			Total Project		1,855,205

Task Order 01 Milestone Deliverables

No.	Milestone Event	MS	Milestone Deliverable(s)	Total # of hours	Total cost ($)
B.	Project Monitoring and Control (Monthly Progress Payments - 3 months)	B1-B3	Progress Payments - 3 Months	203	46,295
C.	Project Initiation Services (Payment based on final acceptance of the milestone event)	C1	Project Initiation Meeting	75	18.680
D.	Requirements and Solution Architecture Validation Services (Payment based on final acceptance of the milestone deliverables)	D1	COTS software orientation workshops, EASA and IT Security Assessment Input/Reviews	622	160,830
		D2	Final COTS PPM Solution Configuration/Customization Plan	370	88,550
G	Implementation Services	G1a	Preliminary Implementation Plan	50	11,910
H	Training Services	H1a	Preliminary Training Plan	44	10,160
			Total Task Order #1		336,425

Task Order 02 Milestone Deliverables

No.	Milestone Event	MS	Milestone Deliverable(s)	Total # of hours	Total cost ($)
B.	**Project Monitoring and Control (Payment based on final acceptance of the milestone event)**	**B4-B12**	8 Monthly Progress Payments	**812**	**138,885**
D.	**Requirements and Solution Architecture Validation Services (Payment based on final acceptance of the milestone deliverables)**	**D3**	Final COTS PPM Solution Screen Configuration/Customization Plan	**312**	**79,940**
E.	**Installation of "out of the box" COTS (Payment based on final acceptance of the milestone deliverables)**	**E1**	Software Installation	**68**	**15,480**
F.	**Configuration/ Customization Services (Dependent on the number of configurations/customizations needed. Payment based on final acceptance of of an agreed upon miles stone deliverable schedule.)**	**F1**	Build 1 - Scheduling	**461**	**100,015**
		F2	Build 2 - Cost & Resource Management	**258**	**54,440**
		F3	Build 3 - Program Management & 1/2 Reporting	**630**	**136,890**
		F4	Build 4 - 1/2 Reporting	**771**	**166,965**
		F5	Final Build	**387**	**86,115**
G.	**Implementation Services (Payment based on final acceptance of the milestone deliverables)**	**G1**	**Data Conversion /Migration**	**467**	**93,475**
			Algorithm Development		
		G2	Procedures & Data Review	**240**	**40,200**
		G3	Baseline Development	**240**	**40,200**
			Interfaces		
			Direct:		
		G4	*ProjectWise*	**56**	**11,250**
		G5	*DCDS*	**135**	**28,875**
			Indirect:		
		G6	*MAPS Interfaces*	**258**	**52,300**
			Testing		
		G7	*System Testing*	**538**	**129,990**
		G8	*UAT Testing*	**340**	**79,600**
		G9	**Production Go-Live**	**296**	**77,920**
		G10	**Performance Warranty Period**	**0**	**0**
H.	**Training Services (Payment based on final acceptance of the milestone deliverables)**		**Train-the-Trainer training**		
		H1	*Project Manager Train-the-Trainer*	**301**	**52,745**
		H2	*General User Train-the-Trainer*	**305**	**56,945**
			Technical training		
			System administration training		
		H3	*System Admin Training - Session 1*	**64**	**15,760**
		H4	*System Admin Training - Session 2*	**64**	**15,760**

No.	Milestone Event	MS	Milestone Deliverable(s)	Total # of hours	Total cost ($)
I.	Additional Documentation (Payment based on final acceptance of the milestone deliverables)		Online access to training		
			Training Documentation		
			Additional Training (List):		
		I1	User manuals	222	24,530
		I2	Technical manuals	102	20,490
			Additional Documentation (List):		
			Total Task Order #2		1,518,770

Task Order #1 -Payment Milestone Criteria:

- Section B: Project Monitoring & Control
  - Milestone #B1-B3 – Progress Payments: XRiver would invoice for 3 separate monthly payments each consisting of 1/12 of the proposed total Project Monitoring and Control pricing. XRiver would invoice at the end of each for the each month's progress payment.
- Section C: Project Initiation Services
  - Milestone #C1 – Project Initiation Services: This milestone is achieved upon the successful attendance and completion of the Project Initiation Meeting in Lansing, Michigan.
- Section D: Requirements and Solution Architecture Validation Services
  - Milestone D1- COTS Software Orientation Workshops: This milestone will be achieved at the completion of the following activities.
    - Planisware V6 Workshops Complete (Core Team Demonstration, Functional, Report Requirements, and Interface Workshops)
    - Requirement Traceability Matrix (RTM) submitted, reviewed and approved
  - Milestone D2 - Final COTS PPM Solution Configuration/Customization Plan Submitted and Approved. This milestone will be achieved at the completion of the following activities.
    - COTS PPM Solution Configuration/Customization Plan developed, submitted, reviewed and approved
- Section G: Implementation Services
  - Milestone G1a - Implementation Plan: This milestone will be achieved at the completion the following activities:
    - The Implementation Plan developed, submitted, reviewed and approved.
- Section H: Training Services
  - Milestone H1a – Training Plan: This milestone will be achieved at the completion of the following activities:
    - The Training Plan developed, submitted, reviewed and approved.

Task Order #2 -Payment Milestone Criteria:

- Section B: Project Monitoring & Control
  - Milestone #B4-B12 – Progress Payments: XRiver would invoice for 8 separate monthly payments each consisting of 1/12 of the proposed total Project Monitoring and Control pricing. XRiver would invoice at the end of each for the each month's progress payment.
- Section D: Requirements and Solution Architecture Validation Services
  - Milestone D3 - Final COTS PPM Solution Screen Configuration/Customization Plan Submitted and Approved. This milestone will be achieved at the completion of the following activities.
    - Final Interface Design developed, submitted, reviewed and approved
    - COTS PPM Solution Screen Configuration/Customization Plan developed, submitted, reviewed and approved
- Section F: Configuration/ Customization Services

  XRiver proposes progress milestones for completed functional groupings. Each build grouping will be deemed complete upon successful final Unit Testing and a webinar based walkthrough /demonstrations to the State of all designated Build Configuration/ Customization Plan items.
  - Milestone F1 - Scheduling Build Completion: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of all designated Schedule Build Configuration /Customization Plan items in the development environment.
  - Milestone F2 - Resource & Cost Management Build Completion: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of all designated Resource & Cost Management Build Configuration/Customization Plan items in the development environment.
  - Milestone F3 - Program Management & Report Build Completion: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of all designate Program Management and designated Report Build Configuration/Customization Plan items in the development environment.
  - Milestone F4 - Reporting Build Completion: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of designated Reporting Build Configuration /Customization Plan items in the development environment.
  - Milestone F5 - Final Build Completion: This milestone will be achieved at the completion of a webinar based walkthrough/demonstration of Full System Build Configuration/ Customization Plan items in the development environment. Focus will be on build items updated from previous webinars.
- Section G: Implementation Services

  Data Conversion/Migration
  - Milestone G1 - Data Conversion/Migration: This milestone will be achieved at the completion the following activities:
    - The successful data migration testing of routines in the development environment.

  Algorithm Development
  - Milestone G2 – Algorithm Development Procedures & Prioritization: This milestone will be achieved at the completion of the following activities:

- The Algorithm Development Procedures have been developed, reviewed and approved.
- The Algorithm Source Data Review & Prioritization has been developed, reviewed and approved.

- Milestone G3 – Baseline Algorithms: This milestone will be achieved at the completion of the following activities:
  - The baseline algorithms have been developed and loaded in the production system.

Interfaces

- Milestone G4 – Project Wise Interface: This milestone will be achieved at the completion of the following activities:
  - This milestone will be achieved at the completion of a webinar based walkthrough/demonstration, in the development environment, of the Project Wise Interface functional capabilities as specified in the Project Wise Interface Design.

- Milestone G5 – DCDS Interface: This milestone will be achieved at the completion of the following activities:
  - This milestone will be achieved at the completion of a webinar based walkthrough/demonstration, in the development environment, of the DCDS Interface as specified in the DCDS Interface Design.
- Milestone G6 – MAPS Interfaces: This milestone will be achieved at the completion of the following activities:
  - This milestone will be achieved at the completion of a webinar based walkthrough/demonstration, in the development, of the MAPS Interface environment as specified in the MAPS Interface Design.

Testing

- Milestone G7 – System Testing: This milestone will be achieved at the completion of the following activities:
  - The completion of Data Migration Test in the State test environment.
  - The completion of the Configuration Build and Interface System Testing in the State test environment.
- Milestone G8 – UAT Testing: This milestone will be achieved at the completion of the following activities:
  - The completion of the Configuration Build and Interface UAT in the State test environment.

Go-Live Production

- Milestone G9 – Go-Live Production: This milestone will be achieved at the completion of the following activities:
  - Completion and verification of the Configuration Build and Interface set up, and the final data migration in the production environment.

Performance Warranty Period

- Milestone G10 – Go-Live Production: This milestone will be achieved at the completion of the following activities:

- The Performance Warranty Period is deemed complete 90-days after the end of the Go-Live product period and when there are no Level 1, 2, or 3 severity level problems outstanding

Section H: Training Services

- Milestone H1 – Project Manager Train-the-Trainer Training: This milestone will be achieved at the completion of the following activities:
  - Completion of the Project Manager Train-the-Training session.
- Milestone H2 – General User Train-the-Trainer Training: This milestone will be achieved at the completion of the following activities:
  - Completion of the General User Train-the-Training session.
  - Delivery of all Train-the-Trainer source materials and copies in PDF format.
- Milestone H3 – System Administration Training Session 1: This milestone will be achieved at the completion of the following activities:
  - Completion of the System Administration Training Session 1.
- Milestone H4 – System Administration Training Session 2: This milestone will be achieved at the completion of the following activities:
  - Completion of the System Administration Training Session 2.

- Section I: Additional Documentation
  - Milestone I1 – User Manuals: This milestone will be achieved at the completion of the following activities:
    - Delivery of the standard Planisware User Manual
    - Delivery of the configuration build Supplemental User Manual
  - Milestone I2 – Technical Manuals: This milestone will be achieved at the completion of the following activities:
    - Provide the State with an access account to the Planisware web portal for direct access all standard Planisware technical documentation
    - Delivery of a Planisware Data Dictionary.

TABLE 4: RECURRING ANNUAL COSTS - INCLUDING SOFTWARE LICENSE(S) AND MAINTENANCE AND SUPPORT

No.	Recurring Annual Costs	Total Number of License(s)	Annual Cost ($)					Total Cost ($)
			Year 1	Year 2	Year 3	Year 4	Year 5	
J.	**COTS Software License Costs**		18%	18%	18%	18%	18%	
	Commercial Off The Shelf (COTS)	See Table 2						
	Total Software License Purchase		**82,350**	**164,700**	**164,700**	**164,700**	**82,350**	**658,800**
	Other (list):							
	Third Party Software (List):							
	1 None							
	Software Maintenance and Support Cost		**82,350**	**164,700**	**164,700**	**164,700**	**82,350**	**658,800**

Optional Software Discount

No.	Recurring Annual Costs	Total Number of License(s)	Annual Cost ($)					Total Cost ($)
			Year 1	Year 2	Year 3	Year 4	Year 5	
J.	**COTS Software License Costs**		18%	18%	18%	18%	18%	
	Commercial Off The Shelf (COTS)	See Table 2 Optional Discount						
	Total Software License Purchase		**74,115**	**148,230**	**148,230**	**148,230**	**74,115**	**592,920**
	Other (list):							
	Third Party Software (List):							
	1 None							
	Software Maintenance and Support Cost		**74,115**	**148,230**	**148,230**	**148,230**	**74,115**	**592,920**

Payment Milestone Criteria:

- Planisware Maintenance and Support (M&S) is currently charged at 18% of the license fee.
- The discounted M&S pricing is only available in conjunction with a discounted software purchase (as it is the maintenance fee applied against the purchase price). The Planisware software must be purchased and delivered no later than December 15, 2015 to obtain the reduced M&S pricing.
- Unless otherwise specified, all Planisware software M&S periods are based on calendar years with an annual January 1 start date and ending December 31. All fees are due at the start of the maintenance period. The tables reflect the following Annual Maintenance Periods for the specified Year:

Year	Maintenance Period
1	**7/1/16-12/31/16**
2	**1/1/17-12/31/17**
3	**1/1/18-12/31/18**
4	**1/1/19-12/31/19**
5	**1/1/20-6/31/20**

- Milestone J1– Planisware License M&S (Year 1 in the table): pricing reflects the M&S period for the calendar year 2016. This includes the M&S fees for the entire Planisware license for the prorated period from July 1, 2016 until December 31, 2016. This milestone is to be invoiced on or about May 1, 2016.
- Milestone J2 – Planisware License M&S (Year 2 in the table): pricing reflects the M&S period for the calendar years 2017. This includes the M&S fees for the entire Planisware license for the full year. This milestone is to be invoiced on or about November 1, 2016.
- Milestone J3 – Planisware License M&S (Year 3 in the table): pricing reflects the M&S period for the calendar years 2018. This includes the M&S fees for the entire Planisware license for the full year. This milestone is to be invoiced on or about November 1, 2017.
- Milestone J4 – Planisware License M&S (Year 4 in the table): pricing reflects the M&S period for the calendar years 2019. This includes the M&S fees for the entire Planisware license for the full year. This milestone is to be invoiced on or about November 1, 2018.
- Milestone 5 – Planisware License M&S (Year 5 in the table): pricing reflects the M&S for a prorated period from January 1, 2020 until June 30, 2020, which corresponds to the contract end date.. This includes the M&S fees for the entire Planisware license for the prorated year. This milestone is to be invoiced on or about November 1, 2019.
- Should the State choose to extend the original contract in the future, Planisware reserves the right to adjust the Planisware Maintenance and Support fee to the then current commercially available rate charged by Planisware, at the time of the extension, the greater of 3% or the previous year's US Annual Inflation rate based on the CPI.

TABLE 5: KNOWLEDGE TRANSFER/TRANSITION

No.	MS	Knowledge Transfer/Transition	Total # of hours	Total cost ($)
K.		**Knowledge Transfer/Transition (Includes required tasks. List below)**		
	K1	*Knowledge Transfer Plan*	**52**	**12,560**
	K2	*Advanced ProWeb & Code Walkthrough Session*	**112**	**27,280**
	K3	*Advanced PEX Session*	**54**	**11,000**

All Knowledge Transfer/Transition effort will be included in Task Order #2.

Payment Milestone Criteria:

- Knowledge Transfer/Transition
  - Milestone K1 - Knowledge Transfer Plan: This milestone will be achieved at the completion of the following activities.
    - Knowledge Transfer Plan developed, submitted, reviewed and approved
  - Milestone K2 - Advanced ProWeb & Code Walkthrough Session: This milestone will be achieved at the completion of the following activities.
    - Completion of the Advanced ProWeb & Code Walkthrough Session.
  - Milestone K3 - Advanced PEX Session: This milestone will be achieved at the completion of the following activities.
    - Completion of the Advanced PEX Session.

TABLE 6: SUPPLEMENTAL SERVICES RATE CARD

The State has reserved initially $84,213.00 for Supplemental Services. There is no commitment for the State to utilize these funds. To utilize Supplemental service a Change Request will be made per section 2.024 Change Requests. The following is XRiver's proposed rate card for the contract. Note this table includes not only the rates proposed for the original effort but also other standard XRiver rates that may potentially be used for future Supplemental Services.

No.	Provider	Internal Rate Category	Project Staffing Category	Not-to-Exceed Hourly	Not-to-Exceed Hourly
L.	XRiver	Principal-in-Charge I	Project Manager	$	$
	XRiver	Managing Consultant -	Business Analyst	$	$
	XRiver	Managing Consultant -	Software Developer	$	$
	XRiver	Managing Consultant -	Training Specialist	$	$
	XRiver	Principal Consultant -		$	$
	XRiver	Principal Consultant -		$	$
	XRiver	Principal Consultant - I		$	$
	XRiver	Senior Consultant - III		$	$
	XRiver	Senior Consultant - II	Programmer	$	$
	XRiver	Senior Consultant - I		$	$
	XRiver	Consultant - III	Technical Writer	$	$
	Planisware	Executive Consultant	Project Manager	$	$
	Planisware	Principal Consultant		$	$
	Planisware	Senior Consultant	Software Developer	$	$
	Planisware	Consultant - II		$	$
	Planisware	Consultant - I	Programmer	$	$
	Planisware	Associate Consultant		$	$

The On-Site labor rates that include travel and are based on a minimum 3-day on-site travel period.

Appendix G. Preliminary Project Plan and Schedule

Project Plan

The following sections provide the detailed Project Plan. This Plan is broken out by Contract Section 1.104 Work and Deliverables for each Task Order. For each Section, the detailed proposed activities, assumptions, and deliverables are stated.

Task Order #1

The following sections provide the detailed Task Order (TO)#1 work plan. .

Section B-Project Monitoring and Control Services

This section consists of the Project Monitoring and Control activities required to effectively manage and control the entire effort. This section includes the following activities:

- Develop a Project Management Plan which includes:
  - Establish overall project contacts, roles and responsibilities including identification of the State Core Team.
  - Project organization chart, staffing tables (with title, roles & responsibilities defined)
  - Project status reporting requirements (frequency, content, formats, distribution, etc.).
  - Work with the State to define Issue Management process and reporting requirements.
  - Work with the State to define Risk Management process and reporting requirements.
  - Work with the State to define Change Management process.
- Develop TO #1 Plan and Schedule:
  - WBS based Project Plan with task descriptions and deliverables
  - Microsoft Project compatible Project Schedule
- Perform Project Control Process:
  - Conduct bi-weekly status reporting - develop and submit the following Status Reports:
    - Updated project plan
    - Updated project schedule
    - Updated deliverable status
    - Updated Issue status (if necessary)
  - Conduct a weekly project review of the submitted status report.
- Perform Issue Management Process

Assumptions:

- No travel will be required specifically to support the review meetings. Reviews will be done via teleconference unless review can be coordinated with on-site travel for other activities.
- Planisware will be providing input to XRiver but will not be required to participate in status meetings with the State.

MDOT Responsibilities:

- Identify State Core Team and other primary functional/technical contacts/project participants
- Conduct a timely review upon delivery, comment on and approve the Project Management Plan.

- Participate in bi-weekly status meetings, provide oversight and input on progress, issues and risks.
- Support the timely resolution of State assigned Issues as they arise.
- Propose and/or evaluate change request items as they arise.
- Provide on-site work space/internet access for XRiver resources.

Deliverables:

1) Approved Project Management Plan
   a) TO#1 Plan
   b) Initial TO#1 Schedule
2) Bi-weekly status reports
3) Bi-weekly status briefing (teleconference)
4) Issue management reports (as per the agreed upon plan)

Section C-Project Initiation Services SOW

This section consists of the activities required to support the Project Initiation Services. This section includes the following activities:

- Participate in the Project Initiation Meeting:
  - Develop Technical Approach presentation.
  - Develop preliminary Project Plan presentation.
  - Attend Project Initiation Meeting, conduct presentation.

Assumptions:

- XRiver will lead/facilitate the Project Orientation Review session.

MDOT Responsibilities:

- Coordinate schedule for staff and facilities for the Project Initiation Meeting.
- Work with XRiver on agenda for the Project Initiation Meeting
- Respond accordingly to any action items /questions arising from either the session or meeting that are the States responsibility.

Deliverables:

1) Project Initiation Meeting
2) Presentation Materials

Section D- Requirements and Solution Architecture Validation Services SOW

This section consists of the activities required to support the Requirements and Solution Architecture Validation Services. This section includes the following activities:

- Conduct Workshops:
  - Develop workshop/demonstration content.
  - Conduct a 2-day State Core Team workshop.
  - Conduct six ½-1 day functional workshops.
  - Conduct interface requirements review meetings.

- Conduct Reporting Requirements workshop (if not covered in other workshops)

- Perform Requirements Validation:
  - Develop preliminary draft Requirements Traceability Matrix (RTM)
  - Update/finalize RTM based on workshop feedback.
  - Conduct an internal RTM functional review and analysis.
  - Submit RTM for review and approval.
- Develop System Design:
  - Conduct an internal RTM technical review and analysis.
  - Develop preliminary/draft system design documents
    - COTS PPM Solution Configuration/Customization Plan or Functional Design
    - Interface Functional Design (Data Mapping/Approach)
  - Develop Final system design documents
    - Conduct a review of the draft design documents
    - Develop a Final COTS PPM Solution Configuration/Customization Plan or Functional Design
  - Develop an updated cost estimate for the configuration based on the developed System Designs
  - Conduct a Design/Cost Review with the State Core Team
- Support the State IT Assessments:
  - Support webinars as needed with the State technical team concerning IT assessments
  - Provide technical information to the State as needed for Enterprise Architecture Solution Assessment (EASA) and an IT Security Assessment reviews.
  - Provide TO# 2 scope/price/schedule proposal documentation as requested by the State

Assumptions:

- XRiver will conduct/lead all demonstrations and workshops on site. Planisware will provide off-site prep, review and follow-up Q&A support as required.
- XRiver's intent is to use a Planisware provided SaaS instance for all demonstrations.

MDOT Responsibilities:

- Identify the appropriate State resources for the workshops.
- Coordinate schedule for staff and facilities for the workshops.
- Provide feedback concerning all function requirement items.
- Upon delivery, provide a timely review, comments, and approval of the submitted RTM.
- Provide ad-hoc feedback/clarifications as required in support of the design process
- Coordinate schedule for State staff for the State IT Assessment webinars.

Deliverables:

1) Planisware V6 orientation workshops.
2) RTM document.
3) System design documents:
   a) Planisware V6 Configuration/Customization Plan or Functional Design
   b) Preliminary Planisware V6 Interface Design Document

4) Design/Cost review based on Preliminary System Design
5) TO# 2 Scope/Price/Schedule Proposal

Section G-Implementation Services SOW

This section consists of the activities required to support the Implementation Services. The objective is to develop the information required to support the development of the TO#2 SOW. This section includes the following activities:

- Develop, submit and review an Implementation Plan. This plan will specify the detailed activities required for the software testing, data migration and cut-over for production use. The plan will also define roles and responsibilities for the installation/implementation.

Assumptions:

- Proposed implementation approach is an "all at once" combination of configuration and data migration.
- If the State chooses to keep the legacy system active, XRiver is not responsible for subsequent data conversions.

MDOT Responsibilities:

- Participation in the development of the Implementation Plan with detailed input on system testing, data migration, production environment setup, and user switch over to production issues.

Deliverables:

1) Final Implementation Plan subject to review and revision in TO#2.

Section H-Training Services SOW

This section consists of the activities required to support the Training Services. The objective is to develop the information required to support the development of the TO#2 SOW. This section includes the following activities:

- Develop, submit and review a Training Plan. This plan will specify the required training approach, number of courses, a general description of the training materials needed, a general description of the training data requirements, the number of sessions required and the facilities required for training. The plan will also define roles and responsibilities for training.

Assumptions:

- XRiver proposed approach for providing both the specified Project Manager and General User training will be similar in nature to the training XRiver used for the demonstration training for the State evaluation team. This primarily consisted of static sample screen captures with annotated notes and steps for each key topic to be covered. For the proposed training, this approach will be used along with using better training data and specific workshop exercises.
- Specifically, to minimize material development, the proposed approach would entail needing a basic outline (curriculum) which outlines a presentation (slides with screen shots & bullets) and workshops/exercises for each course.

MDOT Responsibilities:

- Participation in the development of the Training Plan with detailed input on curriculum topics to be covered.

Deliverables:

- Final Training Plan subject to review and revision in TO#2.

Task Order #2

The following sections provide the detailed Task Order (TO) #2 work plan.

Section B-Project Monitoring and Control Services SOW

This section consists of the Project Monitoring and Control activities required to effectively manage and control the entire effort. This section includes the following activities:

- Perform Project Control Process:
  - Conduct bi-weekly status reporting - develop and submit the following Status Reports:
    - Updated project plan
    - Updated project schedule
    - Updated deliverable status
    - Updated Issue status (if necessary)
    - Updated Risk management status (if necessary)
  - Conduct a weekly project review of the submitted status report.
- Perform Issue Management Process
- Perform Risk Management Process
- Perform Change Management:
  - Change Management will be based on the proposed RFP feature responses and approved Plans.
  - The Change Management process will assess potential project scope/budget/schedule changes and submit updates/CRs.

Assumptions:

- No travel will be required specifically to support the review meetings. Reviews will be done via teleconference unless review can be coordinated with on-site travel for other activities.
- Planisware will be providing input to XRiver but will not be required to participate in status meetings with the State.

MDOT Responsibilities:

- Participate in bi-weekly status meetings, provide oversight and input on progress, issues and risks.
- Support the timely resolution of State assigned Issues as they arise.
- Propose and/or evaluate change request items as they arise.
- Provide on-site work space/internet access for XRiver resources.

Deliverables:

2) Bi-weekly status reports
3) Bi-weekly status briefing (teleconference)
4) Issue management reports (as per the agreed upon plan)
5) Risk management reports (as per the agreed upon plan)
6) Change management (as needed)

Section D- Requirements and Solution Architecture Validation Services SOW

This section consists of the activities required to support the Requirements and Solution Architecture Validation Services. This section includes the following activities:

- Develop System Design:
  - Develop preliminary system design documents
    - COTS PPM Solution Screen Configuration/Customization Plan
    - Conduct a design review with the State Core Team
  - Develop final system design documents
    - COTS PPM Solution Screen Configuration/Customization Plan
    - Interface Functional Design (Data Mapping/Approach)
  - Conduct a design review with the State Core Team
  - Update system design review based on feedback
  - Submit system designs for review and approval.

Assumptions:

- Note while all requirements will be captured, a primary objective will to keep the requirements in line with the stated RFP functionality to minimize or eliminate the need to alter pricing or schedule changes.
- XRiver will conduct/lead all demonstrations and workshops on site. Planisware will provide off-site prep, review and follow-up Q&A support as required.
- XRiver's intent is to use a Planisware provided SaaS instance for all demonstrations.

MDOT Responsibilities:

- Provide ad-hoc feedback/clarifications as required in support of the design process
- Coordinate logistics/provide facilities for the design reviews.
- Upon delivery, provide a timely review, comments, and approval of the submitted System Design documents.

Deliverables:

1) System design documents:
   a) Final Planisware V6 Screen Configuration/Customization Plan
   b) Final Planisware V6 Interface Design Document

Section E-Installation Services SOW

This section consists of the activities required to support the Installation Services for the "out-of-the-box" Planisware V6 software. This section includes the following activities:

- Provide the State with all pre-installation technical environment information as needed.
- Provide the State with the standard Planisware V6 installation instructions for review.
- Conduct a webinar review of the installation instructions with the State staff if needed.
- Provide the license keys needed for the software installations.
- Support the on-site installation and checkout (anticipated to be a 2-day session).

Assumptions:

- The State may choose to not install all instances at project initiation. Subsequent installations would be supported remotely.

MDOT Responsibilities:

- Coordinate schedule for staff for installation.
- The State will designate one or more technical resources to participate in (or perform) the installation effort.
- The State will provide the access and permissions needed to perform the installation.

Deliverables:

1) Planisware V6 development, test/training, and production instances installed within the MDOT environment.

Section F-Configuration/Customization Services SOW

This section consists of the activities required to support the Configuration/Customization Services. This section includes the following activities:

- Development of all Planisware V6 Configuration elements:
  - Scheduling Build
  - Resource & Cost Management Build (including Actuals)
  - Program Management & Reporting (1/2) Build
  - Reporting (2/2) Build
  - Full System Build
- For each build;
  - Develop the Build and incorporate associated interfaces
  - Conducting Unit Testing of all developed elements
  - Upon completion, conduct demonstration/walkthrough with the State

Assumptions:

- Sample data MDOT will be made available for use in development.
- Each interim build may be unstable and until the final build, changes to previously configured items may occur.

MDOT Responsibilities:

- Provide sample data as requested for use in development
- Provide ad-hoc feedback/clarifications as required in support of the build process

Deliverables:

- Webinar based walkthrough/demonstrations for:
  - Scheduling Build
  - Resource & Cost Management Build (including Actuals)
  - Program Management Build
  - Reporting Build
  - Full System Build
- Final Planisware V6 configuration build, ready for System Testing

Section G-Implementation Services SOW

This section consists of the activities required to support the Implementation Services. This section includes the following activities:

- Review Task 01 Implementation Plan to determine if any changes need to be incorporated.
- Algorithm Development:
  - Establish Algorithm Development Procedures
    - Algorithm Data Collection Procedures
    - Algorithm Data Input Procedures
    - Algorithm Data Testing Procedures
  - Algorithm source data review & prioritization
    - Review templates, resource codes, project drivers, task drivers
    - Establish template & functional priorities
  - Conduct preliminary functional data collection sessions
  - Perform initial data collection input and testing
- Data Conversion/Migration:
  - Define data conversion/migration data mapping/conversion rules for:
    - Schedule Data
    - Template Data
    - Payroll Data
    - OBS/WBS & all other static domain data
    - Program Snapshot Data
    - Resource Availability Data
  - Develop appropriate data transfer scripts/load routines
  - Test data load and conversion routines, establish procedure to reload for repeatability
  - Perform initial data conversion to Development environment
- Interface Development:
  - Develop data mapping and logical/business rules for each interface:
    - Project Wise Interface - Milestone dates transferred from Project Wise to Planisware
    - DCDS Interface – Resource hours and cost dates transferred from DCDS flat files to Planisware
    - MAP PLW Job Details Import Interface – transfer of data from MAP to create projects in Planisware
    - MAP PLW Milestone Export Interface - transfer of milestone dates from Planisware into MAP
    - MAP PLW Baseline Export Interface – transfer of milestone/task dates from Planisware to MAP
    - MAP PLW Milestone Import Interface - transfer of milestone/task dates from MAP into Planisware
  - Develop & unit test each interface.
  - Upon completion of each interface, XRiver will conduct a walkthrough/demonstration with the State. The objective is to coordinate this with the Build demonstration/walkthroughs
- System Testing:
  - Load configuration build on the State test environment.

- Test load of historical data on the State test environment using data migration scripts/routines
- Test load of Production data on the State test environment using data migration scripts/routines
- Development of manual Test Cases for all components (validation against RTM)
- Conduct preliminary testing of all components using developed test cases
- Conduct iterative testing, resolution, retesting until all issues resolved

- User Acceptance Testing:
  - Provide facilitation support for the State User Acceptance Testing (UAT)
  - Reload test data on the State test environment
  - Conduct iterative testing, resolution, retesting until all issues resolved
- Go-Live Production:
  - Load final configuration build on the State production environment.
  - Setup/install all interface components on the State production environment.
  - Perform checkout/validation of installations.
  - Conduct data load of historical data on the State production environment.
  - Conduct data load/data migration routines on the State production environment.
  - Perform checkout/validation of data load.
  - Final system acceptance/signoff.
- Performance Warranty Period:
  - Address any functional or technical deficiencies with the system.
  - Address any functional or technical questions on system operations.

Assumptions:

- Test Cases are to be developed in Excel and will have a checklist oriented format.
- The State will provide XRiver direct access to the Planisware Test Environment for setup, loading, data migration testing and system testing of the Planisware configuration build.
- The State will NOT provide XRiver direct access to the Planisware Production Environment for setup, loading. Final data migration and verification testing of the Planisware configuration build.
- State personnel will be responsible for conducting performance testing if required. Performance testing effort varies widely depending on approach and technology to be used. As such, if required, proposed XRiver support is limited to providing technical guidance.

MDOT Responsibilities:

- Algorithm Development
  - The State will designate one or more State resources to take “ownership” of the rule base and to actively participate in the algorithm development exercise.
  - Functional stakeholders will participate as required in Algorithm Development sessions for their specific activities.
- Data Conversion
  - The State’s current PPM system consultant will be responsible for creating the export that will be used to import into the new system.
  - The State will be responsible for any data validation and clean-up required.
- Interface Development

- The state will provide sample database schemas, files and sample data as required to support Interface development.
- System Testing
  - Provide access/loading/setup support as agreed to in the Implementation Plan.
  - Provide access to Test environment for XRiver system testing.
- UAT Testing
  - State personnel will be responsible for conducting the final UAT using XRiver supplied Test Cases (which can be augmented by MDOT developed test scripts)
  - XRiver would guesstimate that MDOT should plan on having approximately 4 functional resources dedicated to support the initial UAT week long session, and as needed ad-hoc retesting support afterwards.
- Go-Live Production
  - Provide access/loading/setup support as agreed to in the Implementation Plan.
  - Provide access to Production environment for XRiver verification testing.
- Performance Warranty Period
  - Designate a primary and secondary Support contact for reporting system problems to XRiver
  - Provide resolution support as agreed to in Appendix I. Schedule C - Maintenance and Support.

Deliverables:

1) Revised Implementation Plan (if necessary)
2) Data migration scripts & routines
   a) Schedule Data
   b) Template Data
   c) Payroll Data
   d) OBS/WBS & all other static domain data
   e) Program Snapshot Data
   f) Resource Availability Data
3) System Interfaces
   a) Project Wise Interface
   b) DCDS Interface
   c) MAP - 4 Interfaces
3) System Test Cases
4) Configuration Build deemed ready for UAT
5) User Acceptance Test facilitation and support
6) Tested/approved Planisware V6 Configuration Build, ready for implementation
7) Performance Warranty Period support

Section H-Training Services SOW

This section consists of the activities required to support the Training Services. This section includes the following activities:

- Review the Task 01 Training Plan to determine if any changes need to be made.
- Training is to consist of the following 3 types of courses:
  - System Administrator training classes will be direct classroom training for approximately 10 State Administrators.

- Project Manager training classes will be conducted as train-the-trainer. XRiver will lead train-the-trainer course instruction and then provide on-site support for up to three (3) State-led training classes thereafter.
- General User training classes proposed will be conducted as train-the-trainer. XRiver will lead train-the-trainer course instruction and then provide on-site support for up to three (3) State-led training classes thereafter.

- Training system setup:
  - Support establishment of a V6 training instance.
  - Setup/load training all developed training data, establish procedure to reload for repeatability.
- Project Manager Training Development:
  - Support establishment of course to be taught and curriculum for each course.
  - Support development of training material and data to support classes.
  - Conduct train-the-trainer sessions (to support up to 15 total State trainers).
  - Provide support and feedback for 3 initial end user training sessions.
- General User development:
  - Support establishment of course to be taught and curriculum for each course.
  - Support development of training material and data to support classes.
  - Conduct train-the-trainer sessions (to support up to 15 total State trainers).
  - Provide support and feedback for 3 initial end user training sessions.
- System Administration Training:
  - Conduct an in-house standard Planisware System Administrator course for State resources (for up to 5 participants)
- Online Training & Training Documentation
  - XRiver is not providing online training other than the training material documentation developed for the Train-the-Trainer sessions.
  - XRiver will provide source and PDF copies of all training materials to allow the State to load on an in-house designated website. This is bundled with the Train-the-Trainer training.
- Additional Training is offered as a Supplemental Service and is not included in the proposed scope.

Assumptions:

- The State will provide all needed facilities on-site in the greater Lansing, MI area, and access to the MDOT's training instance, and system access for the training participants
- State personnel will be responsible for "relevant content" training material development.
- XRiver personnel will be responsible for "how to" functional user guide material and compilation of the user guide.
- Existing State production data can be used to familiarize material developed.
- Final Project Manager and General User training materials deliverables will be in electronic format. MDOT will be allowed to update and reuse all materials for unlimited internal use.
- Note that materials provided for standard Planisware Training courses, such as the System Administrator or Planisware Explorer(PEX) courses, will available in electronic format, but will remain the property of Planisware. Any distribution of these materials beyond the class participants is subject to Planisware authorization and approval.

MDOT Responsibilities:

- Participation in the review of the Training Plan.
- Provide sample data to support training data development

- Provide context input for workshop exercises
- Provide access/technical support if need in setup/loading of Training system
- Assigned designated trainers for the train-the-trainer sessions
- Responsible for all Project Manager and General User training
- Participate in System Administrator training

Deliverables:

1) Revised Training Plan (if necessary)
2) V6 Training Environment
3) Project Manager and General User Training Materials (in electronic format)
4) Completed Project Manager and General User Trainer-the-Trainer sessions
5) Support for 3 Project Manager Training and 3 General User Sessions
6) Two Planisware System Administrator Training Sessions

Section I-Additional Documentation Services SOW

This section consists of the activities required to support the Additional Documentation Services. This section includes the following activities:

- Development of a supplemental user guide
  - Work with the State to define format and content
  - Develop the supplemental user guide
- Provide access to Planisware Customer Portal for standard Planisware documentation
  - Includes a Planisware Data Dictionary
- Develop procedure for delivery of all project documentation.

Assumptions:

- State personnel will be responsible for “relevant content” user guide material development.
- XRiver personnel will be responsible for “how to” functional user guide material and compilation of the user guide.
- Final deliverables will be in electronic format.

MDOT Responsibilities:

- Participation in the development of the Supplemental User Guide format.
- Participation in the development of the Supplemental User Guide context content.

Deliverables:

1) Standard Planisware Documentation
2) Project Documentation (all work product developed for other tasks)
3) Supplemental User Guide

Section J1-Maintenance and Support Services SOW

This section consists of the activities required to support the Maintenance and Support Services. This section includes the following activities:

- Provide the following general Maintenance and Support Services:
  - All Maintenance and Support Services are bounded by the Maintenance and Support terms specified in the contractual terms and conditions, Appendix I, Section C.

- The standard maintenance agreement covers the base Planisware software product only. The standard maintenance agreement does not cover the configuration build or the external interfaces.
- Any services requested for additional support not pertaining to the services covered by the standard maintenance agreement would be considered either Enhancement Request or Configuration Build Maintenance Services.

- XRiver will provide the following standard Technical Support services:
  - XRiver technical support is available for designated State support staff from 9 am – 6 pm EST Monday through Friday with escalation as outlined in Attachment to Appendix I, Schedule C
  - A Web-enabled help desk self-service interface is provided at no additional cost for designated State "Primary" support staff. State support staff will also be provided with direct email/phone contact information to 2 primary XRiver support staff.
  - XRiver will attempt to determine if issue is with core product or configuration build
    - If deemed a core product error, will escalate to Planisware as per the terms specified in the Maintenance agreement.
    - If deemed a configuration build error, XRiver will assess effort needed for correction as per the Configuration Build Maintenance Support Services task.
  - XRiver will track, prioritize and communicate with Planisware to insure timely resolution of errors.
- XRiver will provide the following Release Management Support services:
  - XRiver will notify the State when releases are available.
  - XRiver will facilitate communication between the State and Planisware if any questions/issues arise concerning the implementation of releases.
  - It will be the State's responsibility to test and implement all upgrades and make any/all upgrades needed for the then current build or interfaces work properly.
  - XRiver technical support effort required for release implementation issues are not covered under the standard Maintenance Agreement and would be supplied as per the Enhancement Support Services.

Assumptions:

- The State acknowledges the following is NOT included in the Maintenance & Support, but can be provided as a supplemental service:
  - Configuration build support
  - Emergency service
  - On-site service
  - Release/upgrade support service
- All maintenance support services are provided via off-site/remote support.
  - State will provide sufficient access if remote diagnostics are required.

MDOT Responsibilities:

- Provide Level 1 support to your user community.
- Designate specific internal contacts (typically a primary and a backup) who are authorized to communication with XRiver/Planisware support staff.
- All support related computing environment.
- All support related to post-warranty configuration build.

Deliverables:

1) Annual renewable maintenance of the Planisware software.

Section J2–Configuration Build Maintenance Support Services SOW

This section consists of optional support services for providing maintenance support for the Configuration Build and Interfaces for the Planisware system. The intent of this section is to provide explicitly requested configuration build/interface error correction, after the initial Performance Warranty period has elapsed. Configuration Build Maintenance Requests can include support to address errors in configuration build items delivered/updated by XRiver or by State resources.

XRiver proposes that all Configuration Build Maintenance Requests be submitted and tracked as individual items. This section includes the following activities:

- Configuration Build Maintenance Request Submission
  - XRiver will use its DESK.COM (or equivalent) support system to log and track all error requests. XRiver will provide appropriate access for on-line submission of requests.
  - Error support request submissions would be the same for all system errors. As it may not be obvious if the problem is a configuration build problem or a core problem, all errors should be submitted via DESK.COM (or equivalent) to XRiver for diagnostics/assessment.
- Configuration Build Maintenance Request Assessment
  - XRiver will conduct diagnostics on each error to determine whether it's a configuration build issue or a core software issue. All core software issues will be handled in accordance with the Planisware Maintenance Agreement.
  - For identified Configuration Build errors, following the assessment, XRiver will provide a recommendation and/or scope, cost and schedule to correct the error.
  - The State would issue written authorization (email acceptable) to XRiver to proceed on each Configuration Build Maintenance Request.
    - If the State desires to simplify/expedite the approval process, XRiver will automatically proceed with implementation of the resolution if the estimate is less than a State defined maximum (e.g. 8 hours).
- Each Configuration Build Maintenance Request resolution should follow a general agreed upon approach for implementation. This should include roles and responsibilities for development, testing and installation.
- XRiver will provide all necessary notes, files, etc. needed by the State to load, test and install each resolved Configuration Build Maintenance Request.
- XRiver will provide up to 4 hours of First Line Support (non-Planisware support) of Configuration Build Maintenance support to the State per calendar month at no charge. Any efforts expended supporting non-core Software Maintenance Support activities will be against these 4 hours.
  - A minimum of 1 hour shall be charged for each specific request, with a minimum of ½ hour increments for any subsequent time required to support a specific request.
- Configuration Build Maintenance is to be performed remotely unless on-site support is specifically requested by the State. In the event that on-site support is required, a minimum trip of 3-days will be authorized.

Deliverables:

1) Configuration Build Maintenance Request scoping and estimates.
2) Configuration Build Maintenance Request code and implementation instructions.

Section K-Knowledge Transfer Services

This section consists of the activities required to support the Knowledge Transfer Services. This section includes the following activities:

- Develop a Solution Transition Plan
  - Work with the State to develop a Solution Transition Plan.
  - Submit plan for review and approval.
- Provide supplemental advance technical training sessions.
  - Provide up to 4-days of on-site Planisware ProWeb technical review session for up to 6 State technical staff. Session(s) would include code walkthroughs of relevant configuration build elements.
  - Provide Planisware PEX webinar training. This consists of 4 hours/week consisting of a 2 hour online session and 2 hours of a homework assignment per week, over a 4 week period, for up to 10 State users.

Assumptions:

- The State will provide all training facilities for on-site sessions.
- Participation will include up to 6 State technical resources.

Deliverables:

1) Solution Transition Plan
2) 4 total days ProWeb technical session(s)
3) 1 PEX Webinar training session (spread over 4 sessions) for up to 10 participants

MDOT Responsibilities:

- Participate in the development of the Solution Transition Plan.
- Participate in the ProWeb Technical Sessions.
- Participate in the PEX Webinar training sessions.

Section L – Supplemental (Enhancement) Services

This section consists of optional support services for providing enhancement support for the Configuration Build, Interfaces and Algorithm Development for the Planisware system. The primary intent of this section is to provide explicitly requested enhancements to the configuration after the initial system acceptance. Enhancement Requests could include any changes in functionality to existing delivered configured/interface features, or the creation of new functionality/features done via configuration. Enhancement Support Services could also include additional Algorithm development or Release Upgrade support.

XRiver proposes that all Enhancement Requests be submitted and tracked as individual items. This task includes the following activities:

- Enhancement support services would not begin until after the post system Go-Live date where the system has been completed and accepted.
- Enhancement Request Submission will follow Section 2.024 Change Request process
- XRiver will provide all necessary notes, files, etc. needed by the State to load, test and install each enhancement.

- Enhancement Request Support is to be performed remotely unless on-site support is specifically requested by the State. In the event that on-site support is required, a minimum trip of 3-days will be authorized.

Deliverables:

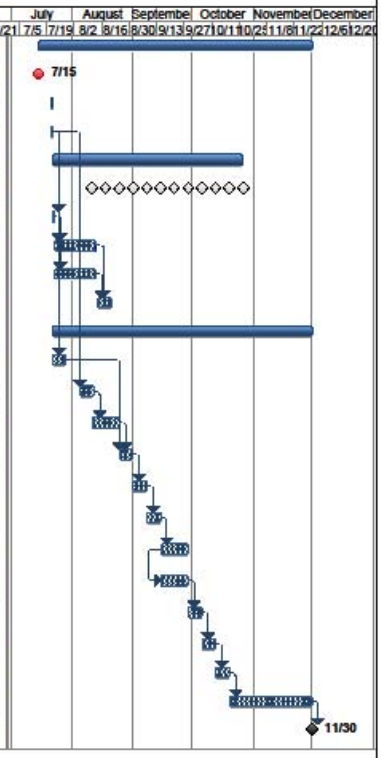
1) Enhancement Request scoping and estimates.
2) Enhancement Request code and implementation instructions.

Proposed Project Schedules

The following provides XRiver's proposed preliminary Project Schedule for Task Order 1. This schedule is broken out by the Section delineation used above. Upon project inception, XRiver will work with the State to validate and baseline the schedule as part of Project Monitoring and Control task. These schedules would then become the basis for tracking project progress.

DTMB COTS PPM Solution
Preliminary Project Schedule: Task Order #1

ID	Task	Task Name	Duration	Start	Finish
1		**COTS PPM Solution: Task Order #1**	**99 days**	**7/15/15**	**11/30/15**
2		Contract Notice to Proceed	0 days	7/15/15	7/15/15
3	C	**Project Initiation Services**	**1 day**	**7/21/15**	**7/21/15**
4	C1	Project Initiation Meeting	1 day	7/21/15	7/21/15
5	B	**Project Monitoring and Control Services**	**69 days**	**7/22/15**	**10/27/15**
6		**Project Status Reviews**	**55 days**	**8/11/15**	**10/27/15**
19		Review Draft Project Management Plan	1 day	7/22/15	7/22/15
20		Revise & Submit Project Management Plan	16 days	7/23/15	8/13/15
21		Develop Baseline Project Schedule	15 days	7/23/15	8/12/15
22	B1	State Review and Approval	5 days	8/14/15	8/20/15
23	D	**Rqmnts & Solution Architecture Validation Services**	**94 days**	**7/22/15**	**11/30/15**
24		Conduct Interface Requirements Reviews	5 days	7/22/15	7/28/15
25		Conduct Planisware Demonstration to Core Team	5 days	8/5/15	8/11/15
26		Conduct Functional & Reports Workshops	10 days	8/11/15	8/24/15
27		Develop Draft Requirements Traceability Matrix	5 days	8/25/15	8/31/15
28		Conduct RTM Review Meeting/Incorporate Feedback	5 days	9/1/15	9/7/15
29	D1	State Review and Approval	5 days	9/8/15	9/14/15
30		Develop Configuration/Customization Plan	10 days	9/15/15	9/28/15
31		Develop Draft Interface Designs	10 days	9/15/15	9/28/15
32		Conduct Plan Review Meeting/Incorporate Feedback	5 days	9/29/15	10/5/15
33		State Review and Approval	5 days	10/6/15	10/12/15
34		Develop/Submit Task 2 SOW/Pricing	5 days	10/13/15	10/19/15
35		State Review	30 days	10/20/15	11/30/15
36	D2	State Go/No-Go Decision	0 days	11/30/15	11/30/15

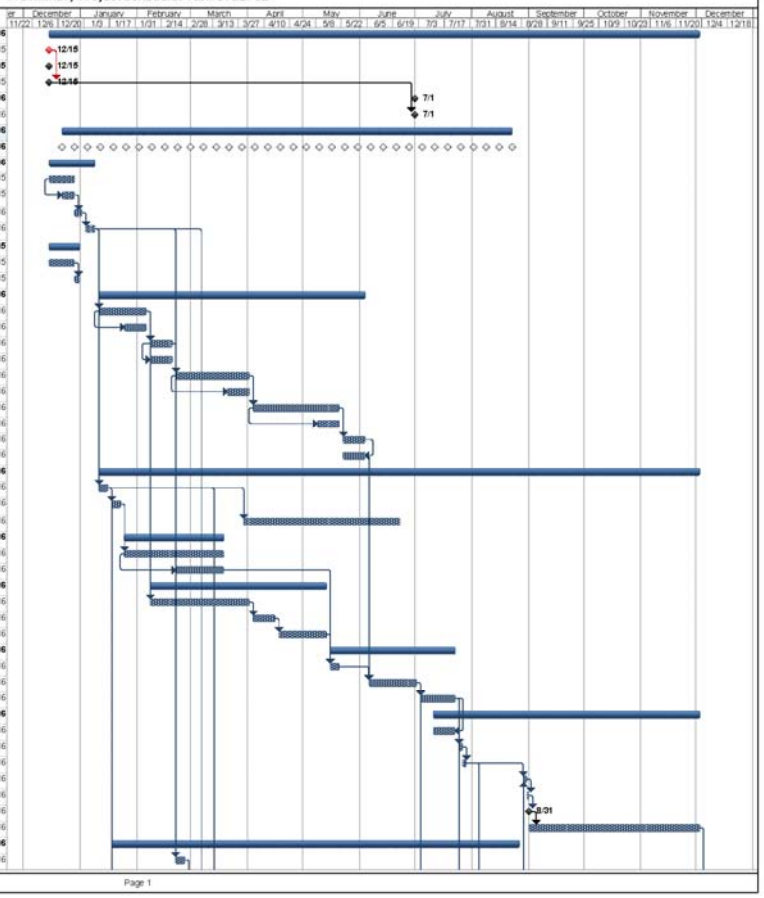


Page 1

The following provides XRiver's proposed preliminary Project Schedule for Task Order 2. This schedule is broken out by the Section delineations used above. This schedule is subject to change based on results of Task Order 1.

DTMB COTS PPM Solution
Preliminary Project Schedule: Task Order 02

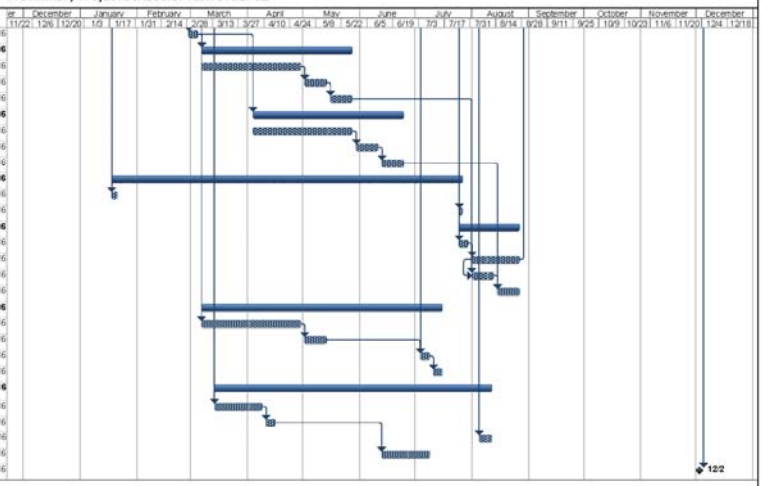
ID	Task	Task Name	Duration	Start	Finish
1		**COTS PPM Solution**	**254 days**	**12/15/15**	**12/2/16**
2		Task02 Notice to Proceed	0 days	12/15/15	12/15/15
3	**A**	**Planisware Software Acquisition**	**0 days**	**12/15/15**	**12/15/15**
4	A1	Full License Purchase	0 days	12/15/15	12/15/15
5	**J**	**Planisware Maintenance & Support**	**0 days**	**7/1/16**	**7/1/16**
6	J1	Full License 2016 Maintenace Period Begins	0 days	7/1/16	7/1/16
7	**B**	**Project Monitoring and Control Services**	**175 days**	**12/22/15**	**8/23/16**
8		**Project Status Reviews**	**175 days**	**12/22/15**	**8/23/16**
45	**D**	**Rqmnts & Solution Architecture Validation Services**	**19 days**	**12/15/15**	**1/8/16**
46		Develop Configuration Screen Design	10 days	12/15/15	12/28/15
47		Develop Final Integration Design	5 days	12/22/15	12/28/15
48		Conduct Design Review Meeting/Incorporate Feedback	4 days	12/29/15	1/1/16
49	D3	State Review and Approval	5 days	1/4/16	1/8/16
50	**E**	**Installation of COTS Services**	**13 days**	**12/15/15**	**12/31/15**
51		State Environment Setup	10 days	12/15/15	12/28/15
52	E1	Installation of Dev, Test & Production Environments	3 days	12/29/15	12/31/15
53	**F**	**Configuration/Customization Services**	**105 days**	**1/11/16**	**6/3/16**
54		Build 1 - Scheduling	20 days	1/11/16	2/5/16
55	F1	Build 1 - Test Case Dev/Testing	10 days	1/25/16	2/5/16
56		Build 2 - Cost & Resource Management	10 days	2/8/16	2/19/16
57	F2	Build 2 - Test Case Dev/Testing	10 days	2/8/16	2/19/16
58		Build 3 - Program Management & 1/2 Reporting	30 days	2/22/16	4/1/16
59	F3	Build 3 - Test Case Dev/Testing	10 days	3/21/16	4/1/16
60		Build 4 - 1/2 Reporting	35 days	4/4/16	5/20/16
61	F4	Build 4 - Test Case Dev/Testing	10 days	5/9/16	5/20/16
62		Final Build and delivery for testing	10 days	5/23/16	6/3/16
63	F5	Final Build - Test Case Dev/Testing	10 days	5/23/16	6/3/16
64	**G**	**Implementation Services**	**236 days**	**1/11/16**	**12/2/16**
65		Review Implementation Plan	5 days	1/11/16	1/15/16
66		State Review and Approval	5 days	1/18/16	1/22/16
67		Algorithm Development	61 days	3/30/16	6/22/16
68		**Data Conversion/Migration**	**40 days**	**1/25/16**	**3/18/16**
69		Script Development & Testing	40 days	1/25/16	3/18/16
70		Development Data Conversion/Migration	20 days	2/22/16	3/18/16
71		**Interface Development**	**70 days**	**2/8/16**	**5/13/16**
72		MAPS	40 days	2/8/16	4/1/16
73		ProjectWise	10 days	4/4/16	4/15/16
74		DCDS	20 days	4/18/16	5/13/16
75		**Testing**	**50 days**	**5/16/16**	**7/22/16**
76		Test Data Conversion/Migration	5 days	5/16/16	5/20/16
77		System Testing	20 days	6/6/16	7/1/16
78		UAT	15 days	7/4/16	7/22/16
79		**Go Live Production**	**105 days**	**7/11/16**	**12/2/16**
80		Go Live Production Setup	10 days	7/11/16	7/22/16
81		Configuration Build Load	2 days	7/25/16	7/26/16
82		Interface Load/Connectivity	2 days	7/27/16	7/28/16
83		Production Data Conversion/Migration	2 days	8/29/16	8/30/16
84		Installation Checkout	1 day	8/31/16	8/31/16
85		Go Live Production	0 days	8/31/16	8/31/16
86		90 Day Performance Warranty Period	67 days	9/1/16	12/2/16
87	**H**	**Training Services**	**160 days**	**1/18/16**	**8/26/16**
88		Review Training Plan	5 days	2/22/16	2/26/16



Page 1

DTMB COTS PPM Solution
Preliminary Project Schedule: Task Order 02

ID	Task	Task Name	Duration	Start	Finish
89		State Review and Approval	5 days	2/29/16	3/4/16
90		**Project Manager Training**	**60 days**	**3/7/16**	**5/27/16**
91		Train-the-Trainer Development	40 days	3/7/16	4/29/16
92		State Review and Approval	10 days	5/2/16	5/13/16
93		Conduct Train-the-Trainer Session	10 days	5/16/16	5/27/16
94		**General User Training**	**60 days**	**4/4/16**	**6/24/16**
95		Train-the-Trainer Development	40 days	4/4/16	5/27/16
96		State Review and Approval	10 days	5/30/16	6/10/16
97		Conduct Train-the-Trainer Session	10 days	6/13/16	6/24/16
98		**System Administration Training**	**137 days**	**1/18/16**	**7/26/16**
99		Initial System Admin Training	3 days	1/18/16	1/20/16
100		Supplemental System Admin Training	2 days	7/25/16	7/26/16
101		**MDOT End User Training**	**25 days**	**7/25/16**	**8/26/16**
102		Training System Setup	5 days	7/25/16	7/29/16
103		MDOT End User Training	20 days	8/1/16	8/26/16
104		Support MDOT PM Training (3 Classes)	10 days	8/1/16	8/12/16
105		Support MDOT General Training (3 Classes)	10 days	8/15/16	8/26/16
106	I	**Additional Documentation**	**95 days**	**3/7/16**	**7/15/16**
107		Preliminary Supplemental User Guide Development	40 days	3/7/16	4/29/16
108		State Review and Approval	10 days	5/2/16	5/13/16
109		Final Supplemental User Guide Development	5 days	7/4/16	7/8/16
110		State Review and Approval	5 days	7/11/16	7/15/16
111	J	**Knowledge Transfer/Transition**	**109 days**	**3/14/16**	**8/11/16**
112		Soution Transfer Plan Development	20 days	3/14/16	4/8/16
113		State Review and Approval	5 days	4/11/16	4/15/16
114		Technical Review Session	5 days	8/5/16	8/11/16
115		PEX Training	20 days	6/13/16	7/8/16
116		Project Completion	0 days	12/2/16	12/2/16



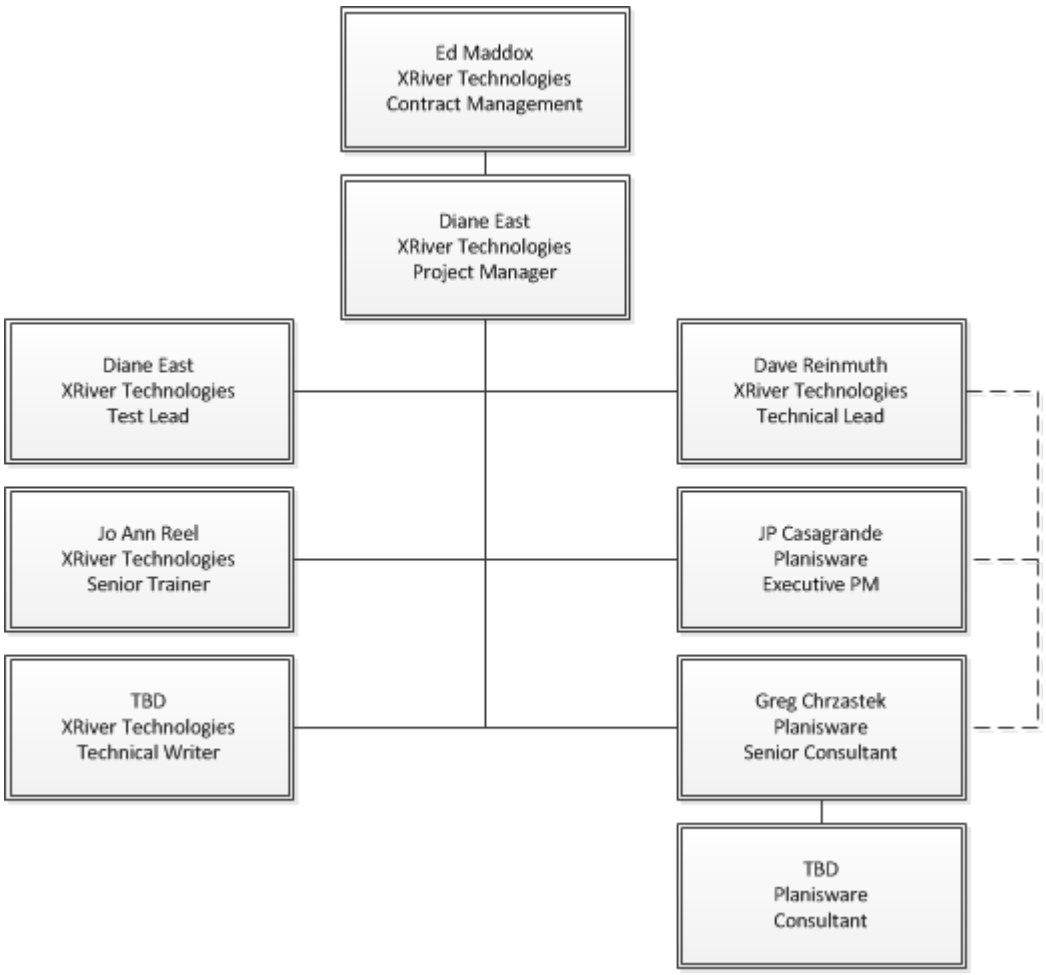
Page 2

Appendix H. Organization Chart and Staffing Resource Table

Hourly Totals	**Off-Site**	**On-Site**	**Total**
XRiver Technologies			**3964**
Planisware	**4793**	**448**	**5241**
	7205	**2000**	**9205**

Percentages	**Off-Site**	**On-Site**	**Total**
XRiver Technologies			**100%**
Planisware	**91%**	**9%**	**100%**
	78%	**22%**	**100%**

Company-Resource	**Staffing Category**	**% time on-site**	**Total FTE**
XRiver – Ed Maddox	Contract Management	<2%	NA
XRiver – Diane East	Senior Project Manager	35%	1.00
XRiver – Dave Reinmuth	Senior Technical Lead	30%	0.65
XRiver – Jo Ann Reel	System Trainer	70%	0.15
Planisware – Jean-Pascal (JP) Casagrande *	Senior Project Manager	<1%	0.15
Planisware – Greg Chrzastek*	Senior Technical Lead	7%	1.10
Planisware – TBD in Task 02 *	Developer(s)	0%	1.75


Ed Maddox
XRiver Technologies
Contract Management
Diane East
XRiver Technologies
Project Manager
Diane East
XRiver Technologies
Test Lead
Dave Reinmuth
XRiver Technologies
Technical Lead
Jo Ann Reel
XRiver Technologies
Senior Trainer
JP Casagrande
Planisware
Executive PM
TBD
XRiver Technologies
Technical Writer
Greg Chrzastek
Planisware
Senior Consultant
TBD
Planisware
Consultant

Appendix I. Schedule C - Maintenance and Support

The Parties acknowledge that the Software Maintenance Terms as concerns are set out in Attachment One to this Appendix I, which is incorporated herein by this reference.

1. **Definitions.** For purposes of this Schedule, the following terms have the meanings set forth below. All initial capitalized terms in this Schedule that are not defined in this **Section 1** shall have the respective meanings given to them in the Contract.

"Contact List" means a current list of Contractor contacts and telephone numbers set forth in the attached **Exhibit B** to enable the State to escalate its Support Requests, including: (a) the first person to contact; and (b) the persons in successively more qualified or experienced positions to provide the support sought.

"Error" means any material, reported and reproducible failure of the Products to perform substantially in accordance with their documentation which prevents use of the Products, or which seriously impacts use of the Products. To be reproducible, the failure must occur on a non-configured version of the Software.

"**First Line Support"** means the identification, diagnosis and correction of Errors by the provision of the following Support Services by XRiver technicians sufficiently qualified and experienced to identify and Resolve the State's Support Requests reporting these Errors: (a) telephone and email assistance; and (b) access to technical information on the Contractor's or Subcontractor's website for proper use of the Software. On-site support is included if, in the opinion of the Contractor, on-site technical support is required to resolve the issue.

"Contract" means the Contract to which this Schedule relates.

"Out-of-scope Services" means any of the following: (a) any services requested by the State and performed by Contractor in connection with any apparent Software Error that the State and Contractor agree in writing has been caused by a State Cause; (b) any escalated Second Line Support requested by the State and provided by an individual requested by the State whose qualification or experience is greater than that reasonably necessary to resolve the relevant Support Request, provided that an appropriately qualified or experienced individual was available at the time when the Second Line Support was sought, and (c) any Error resulting from configuration of the Software or interfaces with the Software that are not reproducible in the core Software.
.
"Resolve" and the correlative terms, **"Resolved", "Resolving"** and **"Resolution"** each have the meaning set forth in **Section 2.2.**

"Schedule" means this Schedule C to the Contract.

"Second Line Support" means the identification, diagnosis and workaround/correction of Errors by the provision of remote or on-site (if necessary) Planisware technical support.
"Service Credits" means the service credits specified in **Section 5.1.**

"Service Levels" means the defined Error severity levels and corresponding required service level responses, response times, Resolutions and Resolution times referred to in the Service Level Table.

"Service Level Table" means the table set out in **Section 2.2**.

"Severity Level 1 Error" shall mean **Business Critical Failures:** An Error that (a) materially affects the operations of the State's business or marketability of its service or product; or (b) disables or

materially impairs (i) any critical function of the Software or (ii) the State's use of any critical function of the Software.

"Severity Level 2 Error" shall mean **System Defect with Work-around:** (a) a Severity Level 1 Error for which the State has received, within the Resolution time for Severity Level 1 Errors, a work-around that the State has accepted; or (b) an Error, other than a Severity Level 1 Error, that affects operations of the State's business or marketability of its service or product

"Severity Level 3 Error" shall mean **Minor Error:** An isolated or minor Error in the Software that meets each of the following requirements: (a) does not significantly affect Software functionality; (b) can or does impair or disable only certain non-essential Software functions; (c) does not materially affect the State's use of the Software; and (d) has no or no more than a minor effect on the operations of the State's business or marketability of its service or product.

"Software" means the COTS Solution and any Enhancements (software releases and patches made available to all licensed clients) to the core software provided by Contractor under the Contract. For purposes of this contract, the configured aspects of the application and interface development performed subject to Statements of Work do not constitute Software as defined here.

"Specifications" means, for the Software, the specifications collectively set forth in the Contract's Statement of Work, together with any other specifications set forth in the RFP or Contractor's Bid Response, if any, for such Software, or elsewhere in the Statement of Work.

"State Cause" means any of the following causes of an Error, except, in each case, any such causes resulting from any action or inaction that is authorized by this Schedule or the Contract, specified in the then-current Specifications or Documentation, or otherwise authorized in writing by Contractor: (a) any negligent or improper use, misapplication, misuse or abuse of, or damage to, the Software by the State; (b) any maintenance, update, improvement or other modification to or alteration of the Software made solely by the State; any change to the infrastructure environment to unsupported versions of the State Systems necessary for the operation of the Software or (c) any use by the State of any Third-party Materials that Contractor has not provided or caused to be provided to the State. Any time spent by Contractor in Resolving incidents reported by the State that are determined to be caused by the State are chargeable under additional Support Services.

"State Systems" means the State's information technology infrastructure, including the State's computers, software, databases, electronic systems (including database management systems) and networks.

"Support Fees" has the meaning set forth in **Section 3.1**.

"Support Hours" means 9 am – 6 pm EST Monday through Friday, excluding State Holidays

"Support Period" means the period of time beginning on the date the State has Accepted the Aggregate Software under the Contract and ending on the date the Contract expires or is terminated.

"Support Request" has the meaning set forth in **Section 4.1.**

"Support Services" means Contractor's support of the Software, including First Line Support and Second Line Support, but excluding any Out-of-scope Services.

"Technical Contact" has the meaning set forth in **Section 4.2.**

"Third-party Products" means all third-party software, computer hardware, network hardware, electrical, telephone, wiring and all related accessories, components, parts and devices that Contractor has not provided or caused to be provided to the State under the Contract.

2. **Support Services**. Only designated State personnel will submit incidents to First Line Support. Contractor shall perform all First Line Support, Second Line Support and other Support Services during the Support Hours throughout the Support Period in accordance with the terms and conditions of this Schedule and the Contract, including the Service Levels and other Contractor obligations set forth in this **Section 2.**

2.1 Support Service Responsibilities. Contractor shall:

(a) respond to and Resolve all Support Requests in accordance with the Service Levels;

(b) provide unlimited First Line Support to the State during all Support Hours by means of the telephone number and e-mail address;

(c) provide Second Line Support to the State in accordance with **Section 2.3**;

(d) provide the State with online access to technical support bulletins and other user support information and forums, to the full extent Contractor makes such resources available to its other customers; and

(e) provide to the State all such other services as may be necessary or useful to correct an Error or otherwise fulfill the Service Level requirements, including defect repair, programming corrections and remedial programming.

2.2 Service Levels. Response and Resolution times will be measured from the time Contractor receives a Support Request until the respective times Contractor has (a) responded to that Support Request, in the case of response time and (b) Resolved that Support Request, in the case of Resolution time. **"Resolve", "Resolved", "Resolution"** and correlative capitalized terms mean, with respect to any particular Support Request, that Contractor has corrected, or provided a workaround for, the Error that prompted that Support Request and that the State has confirmed such correction and its acceptance of it in writing, which such acceptance shall not be unreasonably withheld or delayed. Contractor shall respond to and Resolve all Support Requests within the following times indicated for the severity of the associated Error. The parties may agree to revise such severity designation after Contractor's investigation of the reported Error and consultation with the State:

Error Severity Level	Phase 1: Acknowledge receipt/Diagnostics (Response time):	Phase 2: Delivery of correction or workaround within:	Phase 3: Resolution time:
Level 1	1 hour of the State's original notice for Acknowledgement <4 hours for Diagnostics	≤ 2 days after the Level 1 Response Time has elapsed	< 2days for correction or workaround. If the Contractor Resolves the Support Request by way of a work-around, the severity level assessment will be reduced to a Severity Level 2.
Level 2	2 hours of the State's original notice for Acknowledgement < 8 hours for Diagnostics	≤ 5 days after Level 2 Response Time has elapsed, or workaround provided	< 5 days after Level 2 Response Time has elapsed, or workaround provided
Level 3	4 hours of the State's original notice for Acknowledgement < 2 days for Diagnostics	The Next Release or 20 days after Level 3 Response Time as agreed	Not later than the Next releases

** All references to "hours" and "days" mean Support Hours as defined in Section 1, Definitions.

2.3 Acknowledgement/Diagnostics. Upon receipt of a Support Request, First Line Support will acknowledge receipt via an email notification to the appropriate designated State contact. First Line Support will then conduct diagnostics and make a preliminary assessment to establish if the Support Request is an Out-of-Scope or Error item, and if an Error, assign the Severity Level to the Support request. First Line Support will then notify the State of the assessment results and escalate to Phase 2 for resolution. All Errors will then be addressed in accordance within the resolution timeframes established in the Service Level table. Support Requests deemed Out-of-Scope will be subject to resolution procedures established in the services Statements-of-Work.

2.5 Escalation to Parties' single point of contact (SPOC) If Contractor does not respond to a Support Request within the relevant Service Level response time, the State may escalate the Support Request to the parties' respective SPOC and then to their respective Contract Administrators.

2.6 Time Extensions. The State may, on a case-by-case basis, agree in writing to a reasonable extension of the Service Level response or Resolution times.

2.7 Contractor Updates. Contractor shall give the State an electronic (email acceptable) or other written report and update of the nature and status of its efforts to correct any Service Level 1 and Service Level 2 Error, including a description of the Error and the time of Contractor's response and Resolution.

2.8 Time of the Essence. Contractor acknowledges and agrees that time is of the essence with respect to its performance under this Schedule and that Contractor's prompt and timely performance hereunder, including its performance of the Service Levels. All work will be done in a professional workmanship manner in accordance with software industry standards.

3. **Fees.**

3.1 Support Fees. In consideration of Contractor's performance of the Software Support Services in accordance with the terms and conditions of this Schedule and the Contract, the State shall pay to Contractor the fees set forth in the attached **Appendix F (Cost Tables).**

Payment to Contractor of the Support Fees pursuant to this Section 3 will constitute payment in full for the performance of the Software Support Services.

4. **Support Requests and State Obligations.**

4.1 Support Requests. The State may request Support Services by way of a Support Request. The State shall classify its requests for Error corrections in accordance with the severity level numbers and definitions of the Service Level Table set forth in **Section 2.2** (each a **"Support Request"**). The State shall notify Contractor of each Support Request by e-mail or telephone or such other means as the parties may agree to in writing. The State shall include in each Support Request a description of the reported Error and the time the State first observed the Error.

4.2 State Obligations. The State shall provide the Contractor with each of the following to the extent reasonably necessary to assist Contractor to reproduce operating conditions similar to those present when the State detected the relevant Error and to respond to and Resolve the relevant Support Request:

(i) with supervision and assistance from the DTMB Technical staff, access at the State's premises to the State Systems and the State's files, equipment and personnel;

(ii) description of steps taken resulting in error, relevant information regarding type of access, browser used as well as any output and other data, documents and information, each of which is deemed the State's Confidential Information as defined in the Contract; and

(iii) such other reasonable cooperation and assistance as Contractor may request.

5. **Service Credits.**

5.1 Service Credit Amounts. If Contractor fails to respond to a Service Level 1 Support Request within the applicable Service Level Response time or to Resolve a Service Level 1 Support Request within the applicable Service Level Resolution time, the State will be entitled to the corresponding service credits specified in the table below ("**Service Credits**"), provided that the relevant Error did not result from a State Cause. The State will notify Contractor in writing within 5 Business Days of the initial incident, that it intends to assess any Service Credits.

Response	**Resolution**
An amount equal to $100 for each hour by which Contractor's response exceeds the required Response time.	An amount equal to $500 for each day by which Contractor's Resolution of the Support Request exceeds the required Resolution time.

5.2 Compensatory Purpose. The parties intend that the Service Credits constitute compensation to the State, and not a penalty. The parties acknowledge and agree that the State's harm caused by Contractor's delayed delivery of the Support Services would be impossible or very difficult to accurately estimate as of the Effective Date, and that the Service Credits are a reasonable estimate of the anticipated or actual harm that might arise from Contractor's breach of its Service Level obligations.

5.3 Issuance of Service Credits. Contractor shall deduct any assessed and agreed Service Credits from Contractor's next annual invoice to the State. If any Service Credits are due the State after final invoice, then Contractor shall pay the amount of the Service Credit as a debt to the State within fifteen (15) Business Days of the undisputed State's assessment of the Service Credit.

6. **Communications.** In addition to the mechanisms for giving notice specified in Section 2.025 of the Contract, unless expressly specified otherwise in this Schedule or the Contract, the parties may use e-mail for communications on any matter referred to herein.

ATTACHMENT ONE TO
APPENDIX I – SCHEDULE C

MAINTENANCE AND SUPPORT TERMS

The terms set out in this Attachment One to Appendix I of the Contract ("**Software Maintenance Terms**") are incorporated into the Contract by this reference**.** Specifically, the State hereby acknowledges that the Software Maintenance Terms govern the provision of maintenance services under the Contract, among other aspects of the commercial arrangement as more fully described in the Contract and the Software Maintenance Terms.

Any capitalized terms not defined in this Addendum shall have the meaning set forth in the Agreement.

2. DEFINITION.

"**Enhancement**" means any modification or addition that, when made or added to a Product, materially changes its utility, efficiency, functional capability, or application, but that does not constitute solely an Error Correction.

"**Maintenance Services**" means Error Corrections and Enhancements provided by XRiver or Planisware.

3. TERM.

The Maintenance term for the Products shall commence as of 12:01 A.M. on July 1, 2016. The initial term for Maintenance shall expire December 31, 2016 ("Initial Term"), and shall be prorated to reflect the initial term being 6 months. Thereafter each new Maintenance term shall commence on January 1st of the subsequent year and shall end on December 31st of such year. Maintenance shall renew thereafter for subsequent terms of one (1) year each, up to a maximum of ten (10) years, unless and until either party gives the other party at least thirty (30) days written notice of termination prior to the commencement of the subsequent one (1) year term. For the last year of the initial Contract term, with proper 30 days notice before the beginning of the Maintenance term, Maintenance will be prorated to reflect the anticipated Maintenance period if less than 1 year.

4. MAINTENANCE SERVICES.

3.1 Maintenance Services. Under this Addendum, Contractor will provide the following Maintenance Services to two (2) technically qualified personnel and/or PLANISWARE 6 administrators appointed by you. Support may be provided by Planisware or a Planisware-authorized Reseller (XRiver).

3.2 Error Correction. An Error Correction, when completed, may be provided in the form of a "temporary fix," consisting of sufficient programming and operating instructions to implement the Error Correction.

3.3 Methods of Reporting. You may report Material Errors:

(a) via email. You agree to use email as your primary method of reporting Material Errors.

(b) via telephone hot-line, Monday through Friday from 9:00 a.m. to 5:00 p.m. Eastern Standard Time.

3.4 Remote Access. Maintenance Services will be provided via remote access. To be eligible for Maintenance Services you must 1) provide remote access to the environment hosting the application; 2) allow Contractor, its representatives, subcontractors or agents remote access to database and other similar files to perform remote diagnostics; and 3) have the communications software defined in the System Requirements in the Agreement. Remote diagnostics include: (1) diagnostic or corrective actions necessary to restore proper Product operation; (2) diagnostic analysis to assist in determining the cause of the reported problem; (3) correction of data file problems; and (4) down loading of Error Corrections or Enhancements.

3.5 Enhancements. You will be eligible to receive commercially released Enhancements.

5. COOPERATION.

You agree, if requested by Contractor, to submit a listing of output and any other data that Contractor may require in order to reproduce any Material Error and the operating conditions under which the Material Error occurred or was discovered.

6. PRIOR RELEASES.

5.1 Prior Release Support. Contractor will continue to provide full support for the prior releases for a period of one (1) year following a new product release. After 1 year, Contractor will provide 2 additional years of operational support provided the operational environment remains as it was on the last day of the full support year.

5.2 Failure to Install a New Release. If you choose not to install a new release, following the 1 year of full support and 2 additional years of

operational support, Contractor shall not be responsible to provide any error corrections until you upgrade to a supported version of the software.

5.3 Reactivating Maintenance. In the event you elect not to purchase maintenance services from Contractor, and choose to enter into a new Software Maintenance Addendum at a later date, an additional start up fee will be charged, dependent upon how many releases have been made from the expiration date of your prior Software Maintenance Addendum.

7. EXCEPTIONS.
The following matters are not available as Maintenance Services:

6.1 Any problem resulting from the misuse, improper use, alteration, or damage of the Products;

6.2 Any problem caused by modifications in any version of the Products not made or authorized by XRiver or Planisware;

6.3 Any problem resulting from computer software other than the Products;

6.4 Any problem resulting from your computer hardware or peripheral equipment. You are responsible for procuring, installing, and maintaining all equipment, telephone lines, communications interfaces, and other hardware necessary to operate the Products and to obtain Maintenance Services. Contractor will not be responsible for delays caused by events or circumstances beyond its reasonable control; and

6.5 User assistance in use of the Products.

8. ADDITIONAL SERVICES AVAILABLE.
The following services are not considered Maintenance Services under this Addendum but are available to you upon execution of a separate written Statement of Work:

7.1 Configuration and Modifications. Configuration of the Products, changes, customization, additions or corrections made by Contractor to the Products, and maintenance and support for such configuration and customization.

7.2 Training. Training classes for your employees.

7.3 Consulting. Assistance and consulting in connection with configuration of your system, analyzing problems, recommending solutions, and developing specifications for future work.

7.4 Data Conversion. Conversion of your data.

9. FEES AND EXPENSES.

8.1 Fees. The Maintenance Service fees are set forth in Attachment 1. Such fees do not include optional products and services, directories, shipping charges, or the costs of any recommended hardware. You agree to pay such additional fees and costs when and as the Maintenance Services are rendered and the expenses incurred, within thirty (45) days of receipt of a properly rendered invoice from Contractor. Maintenance and Support for the then current licensed configuration is Payable annually in advance, of the commencement for each year of the Maintenance Service period.

8.2 Changes. For the initial 5 year Contract Term, all maintenance is charged at 18% of the license purchase price. At any time following the expiration of the initial Contract Term, Contractor may provide updated pricing for Maintenance and Support for any extensions beyond the initial 5 year Contract Term, the greater of 3% or the previous year's US Annual Inflation rate based on the CPI.

*****INTENTIONALLY LEFT BLANK*****

Attachment 1

Annual Maintenance Services Fees are outlined below for the initial Contract term:

Recurring Annual Costs	Total Number of License(s)	Annual Cost ($)					Total Cost ($)
		Year 1	Year 2	Year 3	Year 4	Year 5	
COTS Software License Costs		18%	18%	18%	18%	18%	
Commercial Off The Shelf (COTS)	See Table 2						
Total Software License Purchase		**82,350**	**164,700**	**164,700**	**164,700**	**82,350**	**658,800**
Other (list):							
Third Party Software (List):							
1 None							
Software Maintenance and Support Cost		**82,350**	**164,700**	**164,700**	**164,700**	**82,350**	**658,800**

Optional Discount Pricing

Recurring Annual Costs	Total Number of License(s)	Annual Cost ($)					Total Cost ($)
		Year 1	Year 2	Year 3	Year 4	Year 5	
COTS Software License Costs		18%	18%	18%	18%	18%	
Commercial Off The Shelf (COTS)	See Table 2 Optional Discount						
Total Software License Purchase		**74,115**	**148,230**	**148,230**	**148,230**	**74,115**	**592,920**
Other (list):							
Third Party Software (List):							
1 None							
Software Maintenance and Support Cost		**74,115**	**148,230**	**148,230**	**148,230**	**74,115**	**592,920**

The pricing table reflects:

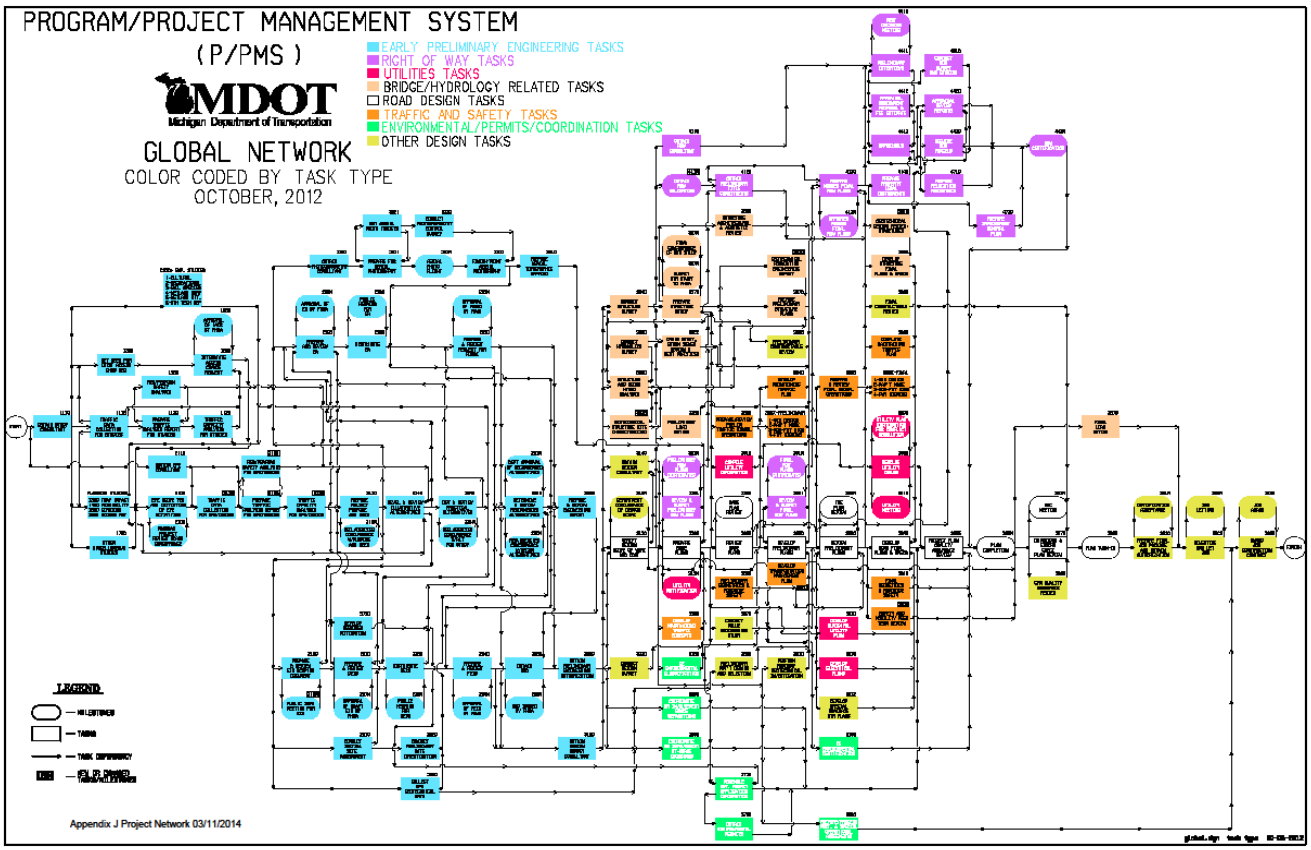
- The Optional Discount Pricing is only available in conjunction with a discounted software purchase (as it is the maintenance fee applied against the purchase price). The Planisware software must be purchased and delivered no later than December 15, 2015 for the client to obtain the reduced M&S pricing.

- Unless otherwise specified, all Annual Maintenance Term periods are based on calendar years with an annual January 1 start date and ending December 31. All fees are due at the start of the maintenance period. The tables reflect the following Annual Maintenance Terms for the specified Year in the above tables:

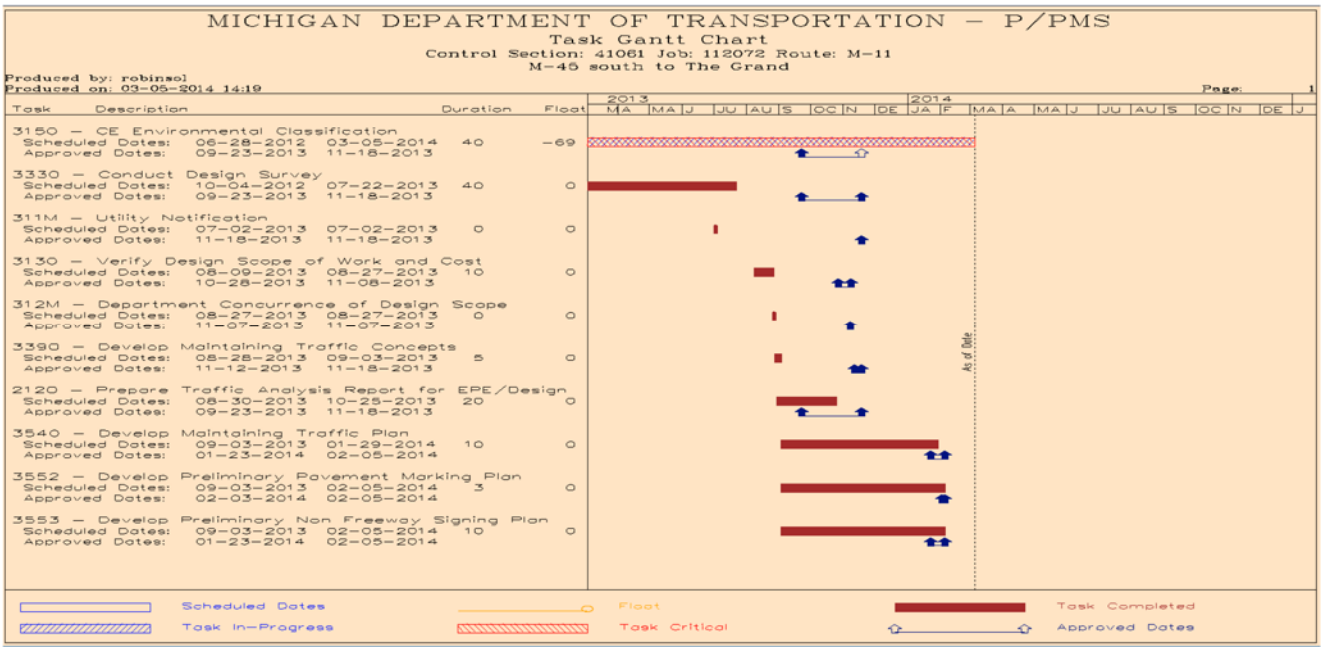
Year	Maintenance Term
1	**7/1/16-12/31/16**
2	**1/1/17-12/31/17**
3	**1/1/18-12/31/18**
4	**1/1/19-12/31/19**
5	**1/1/20-6/31/20**

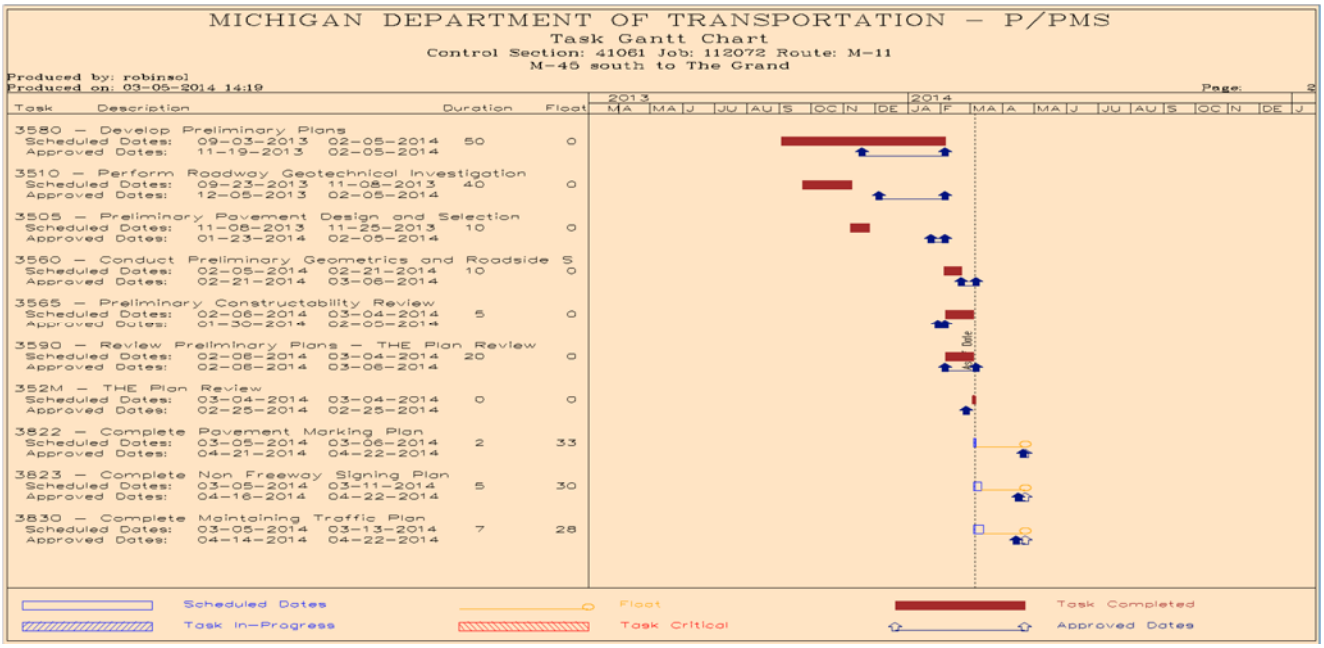
- The initial Maintenance Term (Year 1 in the table) is prorated and shall begin July 1, 2016 and complete on December 31, 2016.
- For Year 2 the Annual Maintenance Term shall be from January 1 through December 31, 2017.
- For Year 3 the Annual Maintenance Term shall be from January 1 through December 31, 2018.
- For Year4 the Annual Maintenance Term shall be from January 1 through December 31, 2019.
- For Year 5 the Annual Maintenance Term shall begin on January 1, 2020 and is prorated to 6 months to coincide with the term of the contract which expires on June 30, 2020.

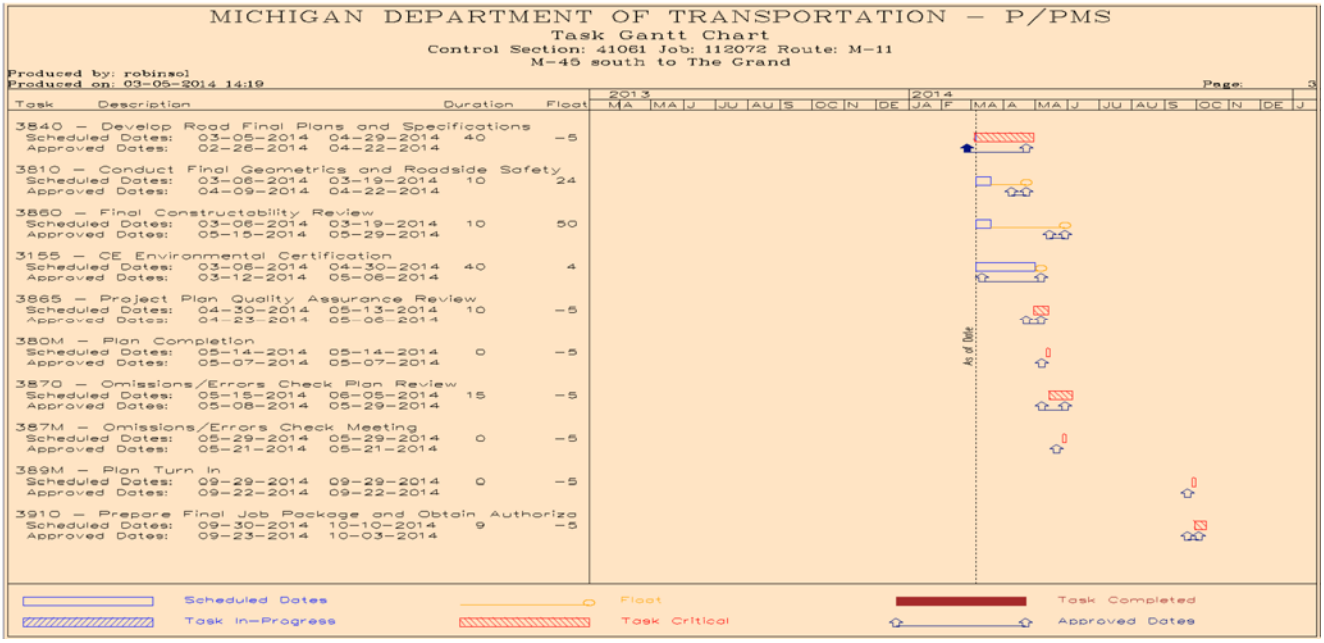
Appendix J. Current Project Network



Appendix K. Representative Project Schedule From Current System







MICHIGAN DEPARTMENT OF TRANSPORTATION — P/PMS

Task Gantt Chart

Control Section: 41061 Job: 112072 Route: M-11

M-45 south to The Grand

Produced by: robinsol

Produced on: 03-05-2014 14:19

Page: 3

Task	Description	Duration	Float
3840	— Develop Road Final Plans and Specifications		
	Scheduled Dates: 03-05-2014 04-29-2014	40	-5
	Approved Dates: 02-26-2014 04-22-2014		
3810	— Conduct Final Geometrics and Roadside Safety		
	Scheduled Dates: 03-06-2014 03-19-2014	10	24
	Approved Dates: 04-09-2014 04-22-2014		
3860	— Final Constructability Review		
	Scheduled Dates: 03-06-2014 03-19-2014	10	50
	Approved Dates: 05-15-2014 05-29-2014		
3155	— CE Environmental Certification		
	Scheduled Dates: 03-06-2014 04-30-2014	40	4
	Approved Dates: 03-12-2014 05-06-2014		
3865	— Project Plan Quality Assurance Review		
	Scheduled Dates: 04-30-2014 05-13-2014	10	-5
	Approved Dates: 04-23-2014 05-06-2014		
380M	— Plan Completion		
	Scheduled Dates: 05-14-2014 05-14-2014	0	-5
	Approved Dates: 05-07-2014 05-07-2014		
3870	— Omissions/Errors Check Plan Review		
	Scheduled Dates: 05-15-2014 06-05-2014	15	-5
	Approved Dates: 05-08-2014 05-29-2014		
387M	— Omissions/Errors Check Meeting		
	Scheduled Dates: 05-29-2014 05-29-2014	0	-5
	Approved Dates: 05-21-2014 05-21-2014		
389M	— Plan Turn In		
	Scheduled Dates: 09-29-2014 09-29-2014	0	-5
	Approved Dates: 09-22-2014 09-22-2014		
3910	— Prepare Final Job Package and Obtain Authoriza		
	Scheduled Dates: 09-30-2014 10-10-2014	9	-5
	Approved Dates: 09-23-2014 10-03-2014		

Appendix L. Interfaces

Projectwise Interface

Projectwise is a file document management system used for storage and retrieval of engineering drawings and related references. Associated with each document is a job number, a state number and an actual date. The current PPM system mapped several documents that corresponded to actual starts and finishes of PPM tasks and milestones. Using the job number, state number and the actual date from projectwise we are able to populate actual start and finish dates in the PPM schedule. This is accomplished by connecting to an oracle view of the projectwise data, searching for the relevant state numbers and if there is an actual date then load the date right into the PPM schedule.

The affected PPM tasks/milestones are:

3590 – actual start and finish date
3880 – actual start date
3910 – actual start and finish date
3920 – actual start date
352M – actual start and finish date
389M – actual start and finish date
391M – actual start and finish date

This interface was created to eliminate duplication of actual start and finish date data entry.

DCDS Interface

DCDS is MDOT's payroll management system. Associated with each payroll entry is a job number, task number, resource code, pay period, user name, actual hours and actual costs. Once a pay period has been completed, a tab delimited flat file that contains each data element is created and sent to the PPM team. The tab delimited flat file is converted into a pipe delimited flat file and then the data is processed and loaded into a temporary table. The job number, task number and resource code are then used to map the actual hours and costs from the temporary table into the PPM schedules. If the job number, task number and resource code record is found, the data is loaded directly onto the existing record. If the job number and task number is found but not the resource code then a resource record is added and the data is loaded onto the new record. If only the job number is found, the data is loaded onto the start task. If no matching record is found, the data is saved and re-processed the next time a payroll flat file is loaded.

This interface was created to load actual hours and costs into the PPM schedules.

MAP Interface

MAP is MDOT's corporate wide database. The current PPM system interfaces with the MAP database in a variety of ways. First, the PPM system loads job details (job number, job section, job route, etc.) from MAP every morning for jobs that do not have a network created. These jobs are then available throughout the day for the assigned Project Managers to create a network. Secondly, once a network has been created and refined, the PPM system sends important milestone dates and Phase start and end dates to MAP. These dates are used to populate the dates in the change request module and to populate the start and end dates in the Phase module. The third way the PPM system interfaces with MAP is by sending task/milestone numbers, start and finish dates and resource assignments whenever a network schedule is baselined. The task/milestone information is used by a variety of systems for status updates, reporting purposes and tracking. The data is stored in two tables in MAP, one for task data and one for milestone data. This interface essentially creates a duplicate of the baselined PPM system network data in MAP. Lastly, every night the PPM system checks the

two task/milestone tables for any actual dates that were triggered there by other data systems. This interface was designed to eliminate duplicate data entry of actual start and finish dates.

Job details loaded from MAP into the PPM system

- Job Number
- Job Section
- Job Route
- Location Description
- Region Code
- RPI Region Code
- Prosperity Region Code
- TSC Code
- Work Type
- Construction Cost
- Plan Completion
- Letting
- Project Manager
- Construction Length
- Letting Indicator

Milestone dates loaded from the PPM system into MAP

Change Request Module: PPM Milestone dates are used to populate the change request form which is the process planning uses to change when important parts of jobs will be done.

- 331M – Preliminary ROW Plans
- 351M – Final ROW Plans
- 442M – ROW Certification
- 380M – Plan Completion
- 392M – Job Letting

Phase Module: PPM Task/Milestone start and finish dates are mapped to the start and finish of job phases

- 0000 – Start (EPE Phase start)
- 2550 – Obtain Record of Decision (EPE Phase finish)
- 3130 – Verify Design Scope of Work (PE Phase start)
- 393M – Job Award (PE Phase finish)
- 411M – Obtain ROW Obligation (ROW Phase start)
- 442M – ROW Certification (ROW Phase finish)
- 392M – Job Letting (Const Phase start) Note: 40 work days is subtracted from the Letting date to arrive at the Const Phase start date.
- 393M – Job Award (Const Phase finish) Note: 1 year is added to the Award date to arrive at the Const Phase finish date.

Task/Milestone information loaded from the PPM system into MAP

MAP Task Table:

- Job number
- Task number
- Task approved start date
- Task approved finish date

- Task actual start date
- Task actual finish date
- Task estimated completion date
- Task resource codes

MAP Milestone table:

- Job number
- Milestone number
- Milestone approved start/finish date
- Milestone actual start/finish date
- Milestone resource code

Actual start and finish dates loaded from MAP into the PPM system

Systems that trigger actual dates into MAP:
- Agreements Management System (AMS)
- Environmental Clearance Organizer (ECO)
- Real Estate Management Information System (REMIS)
- Safety Program Status System (SAFESTAT)
- TRNS*PORT
- MAP Financial Obligation System (MFOS)

Appendix N. Preliminary EASA Worksheet

Enterprise Architecture Solution Assessment	
Contact Info & Purpose (vendor version)	
The purpose of the EA Solution Assessment is to document architectural details of proposed IT solutions in order to determine compatibility with the overall SOM architecture. DTMB/SOM activities which require an Assessment include: the purchase of new licenses, contracting for software development services, purchase of new software components, installation of new software components, the purchase of new hardware components or the use of DTMB staff resources on any project beyond the design phase. All vendor proposals and new contracts must be accompanied by an Assessment, documenting the architectural details of the proposed solution. Vendor should complete all areas except where indicated.	
Vendor Version 2.3	
Solution/Project Name	COTS PPM Solution
RFP Name/Number	Program and Project Management Solution/007114B0002909
Date Submitted	10/3/14
Vendor Name	XRiver Technologies?
Vendor City and State	Chantilly, VA
Vendor Phone No.	703-674-4886
Vendor eMail	emaddox@xrivertech.com
A brief description of the proposed solution and business purpose/process. *(please keep the description brief)*	This RFP is for the installation, customization, configuration, maintenance, and support of a COTS PPM Solution which will be used for scheduling, reporting progress, tracking the status of jobs and tasks, and managing resources. Its primary use will be for jobs to be let as trunkline road and bridge projects/jobs in the Early Preliminary Engineering (Scoping) and Preliminary Engineering (Design) stages. The COTS PPM Solution will function from concept to award in the trunkline pre-construction project life cycle. The product must allow staff to query an aggregate database to conduct real-time ad hoc analysis and customize the new system to accept or transfer data from other systems. MDOT's current tool (P/PMS) usage focuses on the scope, schedule, cost, resource and change management components of the Project Management Methodology. MDOT does not currently utilize P/PMS for automated issue, risk, communication, or quality management. The proposed solution should at a minimum provide for scope, schedule, cost, resource, and change management.
Additional description of the solution and business purpose. *(please expand the row as much as needed)*	XRiver has been working with State DOT's for over 20 years in the area of program and project management. Having designed 9 DOT P/PMS customer solutions, Planisware technology now allows us to provide the same solution incorporated within a COTS application that provides a platform to address current and future needs. Planisware 6 is a true enterprise program and project management solution incorporating top-to-bottom strategic management and cross-enterprise transparency that empowers today's organizations to handle complex strategic and financial decisions. Planisware 6 combines proven best practices along with system configurability to create a "one-stop-shop," enterprise-level solution that can be configured to turn an off-the-shelf COTS solution into a system that is configured to meet the State's needs today, with the ability to evolve with you over time as your needs change. This ideal blend of all financial and cost management, resource allocation, asset management and strategic initiatives enables the fluidity and transparency required for complete realization of a DOT's business objectives.

Select all that apply ✓ (vendor complete)	Enterprise Architecture Solution Assessment **Architecture Overview (vendor version)** ***Vendor**: the technologies listed below are standards used by the State of Michigan. Utilization of existing technology for new solutions is encouraged. Check the left column if the technology can be used with the solution being proposed. Add comments as needed.*	
1	***Server/Application Hosting***	***Comments***
✓	Internally Hosted	
✓	Externally Hosted	
✓	Internally & Externally Hosted	
2	***User Interface Type***	***Comments (e.g. version or release)***
✓	Browser	
	Citrix	
	Client	
✓	Mobile Browser	
	Mobile Client	
	Terminal	
	Other (explain =>)	
3	***Supported Browsers (internet)***	***Comments***
✓	IE 6.0+ (internet, intranet)	V IE 8+
✓	Firefox 3.0.x (internet)	V 18.0+
✓	Chrome 3.0 (internet)	V 30+
✓	Safari 4.x (internet)	
✓	Other (explain =>)	Any browsers supporting HTML 5
4	***Data Exchange Interface***	***Comments (e.g. version or release)***
	EDI (industry protocol)	
✓	Flat File (private protocol)	CSV, TXT
✓	Web Service	Soap client or server
✓	XML	
✓	Other (explain =>)	Direct database connection
5	***System Access***	***Comments***
✓	Internal (SOM only)	
	External (general public)	
✓	External (authorized)	
✓	Mixed (internal-external)	
6	***User Access***	***Comments***
✓	Internet	
✓	Intranet	
	Local Government (LGNet)	
	Public facing internet	
	Kiosk terminal	
	Vendor Net	
✓	VPN	
	Other (explain =>)	

(continued)

Select all that apply ✓ (vendor complete)	Enterprise Architecture Solution Assessment Architecture Overview (continued) ***Vendor**: the technologies listed below are standards used by the State of Michigan. Utilization of existing technology for new solutions is encouraged. Check the left column if the technology can be used with the solution being proposed. Add comments as needed.*	
7	***Data Classification***	***Comments***
✓	Non-sensitive	***Communications 128 bit encrypted***
✓	Sensitive w/ personal ID info	***Database (supplied by State) can also be encrypted***
✓	Sensitive w/ no personal ID info	
✓	Not classified	
	Other (explain =>)	
8	***PCI-DSS Compliance Needed?***	***Comments***
	Yes	
✓	No	
9	***Data Audit Trail Implementation***	***Comments***
✓	Application Code	
✓	Database Audit Files	
	Database Triggers	
	Stored Procedures	
	Other (explain =>)	
10	***IT Services (Centers of Excellence)***	***Comments***
✓	x86 Virtualization	
	Address Verification	
	Business Objects Reporting	
	Digital Electronic Gateway (DEG)	
	Extract Transform Load (ETL)	
	Citrix Virtualization	
11	***Enterprise Data Storage***	***Comments***
✓	<10GB (small)	Data storage will be dependent on use and specifically if documents are stored in the database.
✓	10GB-500GB (medium)	Data storage will be dependent on use and specifically if documents are stored in the database
✓	500GB - 4TB (large)	Data storage will be dependent on use and specifically if documents are stored in the database
✓	>4TB (x-large)	Data storage will be dependent on use and specifically if documents are stored in the database
12	***Database (RDBMS)***	***Comments***
✓	MS SQL Server 2008	
	MySQL 5.1	
✓	Oracle 11g	
	TeraData TD 13.0	
	Other (explain =>)	

(continued)

Select all that apply ✓ (vendor complete)	Enterprise Architecture Solution Assessment **Architecture Overview (continued)** ***Vendor**: the technologies listed below are standards used by the State of Michigan. Utilization of existing technology for new solutions is encouraged. Check the left column if the technology can be used with the solution being proposed. Add comments as needed.*	
13	***Database Modeling Tools***	***Comments***
	Erwin 7.x, 8x	
	MSSQL Server Mgmt Studio (match db)	
	MySQL Workbench (match db)	
	Oracle Designer (match db)	
	TeraData Utilities (match db)	
	Other (explain =>)	
14	***Development Framework***	***Comments***
	.NET Framework 3.5, 4.0	
	Java J2EE 5.x, 6x	
✓	Other (explain =>)	Proprietary development tools
15	***Development Platform***	***Comments***
	Eclipse 3.x, 4.x	
	Hibernate 3.x	
	IBM Websphere Integration Dev 6.x, 7.x	
	Microsoft SilverLight Expression (match VS)	
	Microsoft Team Foundation System 2010	
	Microsoft Visual Studio 2008, 2010	
	Oracle JDeveloper 11g	
	Spring 2.5	
	Struts 2.x	
	XML Spy 2010	
✓	Other (explain =>)	Proprietary development tools
16	***Development Language***	***Comments***
	ASP .NET 2008, 2010	
	CSS Level 3	
	Microsoft C#	
	Microsoft VB.Net	
✓	Java	
✓	JavaScript	
	JDK 6.x, 7x	
	PHP 5.3.x	
✓	Other (explain =>)	C++ and Lisp

(continued)

Select all that apply ✓ (vendor complete)	Enterprise Architecture Solution Assessment Architecture Overview (continued) ***Vendor**: the technologies listed below are standards used by the State of Michigan. Utilization of existing technology for new solutions is encouraged. Check the left column if the technology can be used with the solution being proposed. Add comments as needed.*	
17	***Markup languages***	***Comments***
✓	HTML 4 & 5	
✓	XML Schema 1.1	
	XSLT 2.0	
	XHTML 2.0	
18	***Presentation (Web) Server***	***Comments***
✓	Apache HTTPD 2.x	
	IBM Websphere IHS (match app svr)	
✓	Microsoft IIS 7.0	
	Other (explain =>)	
19	***Application Server***	***Comments***
	.NET Framework 3.5, 4.0	
	Apache Tomcat 7.x	
	IBM WebSphere 7.0, 8.0	
	JBoss 5.x, 6	Not Supported
✓	Other (Explain)	A web server (Apache or IIS)
20	***HW Platform***	***Comments***
✓	Dell	Planisware runs on Linux or Windows, not restricted to hardware brand
✓	HP	
	Sun	
	Unisys Mainframe	
✓	x86 Virtualization	
	Other (explain =>)	
21	***Server OS***	***Comments***
✓	Linux Redhat Enterprise Server 5.x, 6.x	6.x, 7.x
✓	Linux SUSE Enterprise 11.x	
✓	Microsoft Windows 2008	
	Unix HPUX 11i v3	
	Unix Sun Solaris 10.x, 11.x	
✓	VMWare vSphere 4, 5, VCD	
	Other (explain =>)	

(continued)

Select all that apply ✓ (vendor complete)	Enterprise Architecture Solution Assessment **Architecture Overview (continued)** ***Vendor**: the technologies listed below are standards used by the State of Michigan. Utilization of existing technology for new solutions is encouraged. Check the left column if the technology can be used with the solution being proposed. Add comments as needed.*	
22	***Document Management***	***Comments***
	Captaris Alchemy 8.3	
	FileNet Content Services 5.4	
✓	FileNet Document Mgmt P8	Through Filenet WebDav
	HP Trim	
✓	MS SharePoint Server 2007 EE	Standard interface
✓	Other (explain =>)	Any WebDav enabled document management tools
23	***Centralized Printing***	***Comments***
	DMB consolidated print center	
✓	Other (explain =>)	Printing is supported by generating pdf files
24	***Testing Tools***	***Comments***
	Junit 4.x	
	LoadRunner 11.x	
	Microsoft Team Foundation System	
	Quick Test Pro 11.x	
	Selenium 1.x, 2.x	
✓	Other (explain =>)	Proprietary “Planisware Replay” (optional), and JMeter
25	***Identity Management (network)***	***Comments***
✓	Active Directory 2008	
✓	Other (explain =>)	LDAP
26	***Identity Management (application)***	***Comments***
	IBM Tivoli SSO (TIM-TAM)	
✓	Microsoft Active Directory 2008	
✓	Other (explain =>)	LDAP
27	***Project Management***	***Comments***
	Clarity 12.x	
✓	MS Project 2007, 2010	Bi-directional interface
	Rational	
	Other (explain =>)	

(continued)

Select all that apply ✓ (vendor complete)	Enterprise Architecture Solution Assessment Architecture Overview (continued) ***Vendor**: the technologies listed below are standards used by the State of Michigan. Utilization of existing technology for new solutions is encouraged. Check the left column if the technology can be used with the solution being proposed. Add comments as needed.*	
28	***Requirements Gathering***	***Comments***
	Compuware Optimal Trace 5.x	
	Microsoft Office	
	Microsoft Visio	
	SUITE/SEM templates	
	Rational Requisit	
	Serena Dimensions 2009 R1.x, 11.2	
✓	Other (explain =>)	Any document
29	***Design Tools***	***Comments***
	Microsoft Visio	
	MSSQL Server Mgmt Studio (match db)	
	Rational Rose	
	Serena Prototype Composer 2009, 2010	
✓	Other (explain =>)	Planisware (proprietary)
30	***Version Control***	***Comments***
	Microsoft Team Foundation System	
	Serena Dimensions (PVCS Mgr) 2009, 12.1	
	Subversion 1.6	
✓	Other (explain =>)	Planisware (proprietary)
31	***Message Queuing***	***Comments***
	Apache Active MQ 5.3	
	IBM Websphere MQ 6.x, 7.x	
✓	Other (explain =>)	Planisware (proprietary)
32	***Business Integration***	***Comments***
	JBoss SOA	
	Websphere Message Broker 6.x, 7.x	
✓	Other (explain =>)	WSDL

(continued)

Select all that apply ✓ (vendor complete)	Enterprise Architecture Solution Assessment **Architecture Overview (continued)** ***Vendor**: the technologies listed below are standards used by the State of Michigan. Utilization of existing technology for new solutions is encouraged. Check the left column if the technology can be used with the solution being proposed. Add comments as needed.*	
33	***Database Tools***	***Comments***
	DBArtisan 8.6, 8.7	
	Infosphere Information Svr v8.1.x	
	MSSQL Server Mgmt Studio (match db)	
	MySQL Workbench (match db)	
	Oracle Developer Suite (match db)	
	Oracle Enterprise Manager (match db)	
	Oracle SQL Developer (match db)	
	Rapid SQL 7.6 & 7.7	
	TeraData Utilities (match db)	
	Toad 9.x & 10.x	
✓	Other (explain =>)	Planisware (proprietary)
34	***Reporting Tools***	***Comments***
	ActivePDF 2009	
	ActiveReports 4.0	
	Birt 3.7	
	Crystal Reports 2008	
	Crystal Xcelsius 2008	
	Crystal Reports for Eclipse	
	MSSQL Reporting Services (match db)	
	Oracle Reports (match db)	
✓	Other (explain =>)	Proprietary Reporting tool – Planisware Explorer
35	***End-User Tools***	***Comments***
✓	Business Objects (BO) XI R2, 3.x, 4.x	
	Oracle Discoverer (match db)	
✓	Other (explain =>)	Planisware (proprietary)
36	***Deployment Tools***	***Comments***
	Microsoft Team Foundation System 2008	
	Serena Dimen.CM Mover 2009, 2.3, 12.1	
	Other (explain =>)	None required (web)

(continued)

Select all that apply ✓ (vendor complete)	Enterprise Architecture Solution Assessment **Architecture Overview (continued)** ***Vendor**: the technologies listed below are standards used by the State of Michigan. Utilization of existing technology for new solutions is encouraged. Check the left column if the technology can be used with the solution being proposed. Add comments as needed.*	
37	***Build Tools***	***Comments***
	Apache Ant 1.7.x, 1.8.x	
	Apache Maven 2.2, 3.0	
	Microsoft Team Foundation System	
	Serena Dimensions CM Builder 2009 R1.x	
	Other (explain =>)	
38	***Job Schedulers***	***Comments***
	BL/Sched 5.0, 5.2	
	OpCon XPS 4.x, 5.x	
	Tidal Enterprise Scheduler 5.3.1 & 6.x	
	UC4 App Mgr 8.0	
	UC4 Op Mgr 6.0 & 8.0	
✓	Other (explain =>)	Planisware or Cron (Unix)
39	***GIS Technologies***	***Comments***
	ArcIMS 9.3	
	ArcGIS Server 9.3	
	ArcSDE 9.3	
	Erdas ADE Rel. 2	
	ER Mapper Image Server 7.2	
	Oracle Spatial (match db)	
	Oracle MapView (match db)	
	Other (explain =>)	
40	***Issue & Defect Tracking***	***Comments***
	Bugzilla 3.2.5 & 3.4.2	
	BugTracker .Net 3.5	
	Clear Quest Chg Mgmt Suite 7.5	
	Microsoft Team Foundation System	
	Serena Mashup Composer 2009 R1.x	
✓	Other (describe =>)	Planisware client portal

Planisware Open Source Matrix

Third Party/Open Source Software	Licensor Software	License Type and Version	Copyright Holder & Year	Web Site
Planisware server (core)				
xmls (version 1.0)	Planisware	BSD, version 1.0	Miles Egan 2003	URL: http://common-lisp.net/project/xmls/
zpb ttf (version 1.0.2)	Planisware	BSD, version 1.0.2	Zachary Beane 2006	URL: http://www.xach.com/lisp/zpb-ttf/
libcairo (version 1.4.14)	Planisware	LGPL 2.1 /MPL 1.1	2006-2007 Michael Urman	URL: http://www.cairographics.org/
libpng (version 1.2.24)	Planisware	libpng (version 1.2.24)	copyright 1995-2013 contributing authors Guy Eric Schalnat, Andreas Dilger, John Bowler, Glenn Randers-Pehrson (current maintainer)	URL: http://www.libpng.org/pub/png/libpng.html License: http://www.libpng.org/pub/png/src/libpng-LICENSE.txt
zlib (version 1.2.3)	Planisware	Free license granted by copyright holders, version 1.2.3	1995-2012 Jean-loup Gailly and Mark Adler.	URL: http://zlib.net/ License: http://zlib.net/zlib_license.html
randlib (version 1.3)	Planisware	Free license granted by copyright holders, version 1.3	1993, 1998 Microsoft Corporation Scott Field 1996 Jeff Spelman 1996	URL: http://hpux.connect.org.uk/hppd/hpux/Maths/Misc/randlib-1.3/readme.html
Ldap interface				
OpenLDAP (version 2.4.28)	Planisware	OpenLDAP, Version 2.4.28	2013 The OpenLDAP Foundation	URL: http://www.openldap.org/ License: http://www.openldap.org/software/release/license.html
OpenSSL (version 0.9.8m)	Planisware	OpenSSL + SSLeay, Version 0.9.8m	1999-2009 The OpenSSL Project	URL: http://www.openssl.org/ License: http://www.openssl.org/source/license.html
Planisware server (ajax)				
prototype (version 1.7.1)	Planisware	MIT, version 1.7.1	2006–2012 Prototype Core Team	URL: http://www.prototypejs.org/ License: http://prototypejs.org/license.html
prototype version (version 1.0)	Planisware	MIT, version 1.0	2006 Sébastien Gruhier	URL: http://prototype-window.xilinus.com/index.html License: http://prototype-window.xilinus.com/index.html#
script.aculo.us (version 1.9.0)	Planisware	MIT, version 1.9.0	2005-2008 Thomas Fuchs	URL: http://script.aculo.us/ License: http://madrobby.github.com/scriptaculous/license/
TinyMCE (version 3.5.7)	Planisware	LGPL, version 3.5.7	2003-2013 Moxiecode Systems AB.	URL: http://tinymce.moxiecode.com/ License:

Third Party/Open Source Software	Licensor Software	License Type and Version	Copyright Holder & Year	Web Site
				http://www.tinymce.com/js/tinymce/jscripts/tiny_mce/license.txt
Full text search engine				
Tika (version 1.1)	Planisware	Apache, version 1.1	2013 The Apache Software Foundation	URL: http://tika.apache.org/
Lucene (version 3.6.0)	Planisware	Apache, version 1.1	2013 The Apache Software Foundation	URL: http://lucene.apache.org/

Exhibit B. Contact List

Role	Contact	Company	Phone	Email
Primary Technical Support Contact	Jo Ann Reel	XRiver	703-674-4881	jreel@xrivertech.com
Escalation Contact	Diane East	XRiver	703-480-0480	deast@xrivertech.com
Escalation Contact	Ed Maddox	XRiver	703-480-0480	emaddox@xrivertech.com