

Victoria F. Sheehan Commissioner





William Cass, P.E. Assistant Commissioner

Asset Management Performance and Strategies (AMPS) -December 10, 2019

His Excellency, Governor Christopher T. Sununu and the Honorable Council State House Concord, New Hampshire 03301

# **REQUESTED ACTION**

- Authorize the Department of Transportation to enter into an Agreement with AssetWorks LLC (Vendor #175682) of Wayne, Pennsylvania for an amount not to exceed \$2,922,076.00, for the procurement of SaaS services to provide and install a Work Order, Fleet and Inventory System for the period of Governor and Council approval through February 1, 2026. 68% Capital Funds, 32% IT for Transportation funds.
- 2. Further authorize the Department of Transportation to allow the option to renew the agreement for (1) four (4) year period, effective upon Governor and Council approval.

Funding is available as follows for Fiscal Year 2020 and Fiscal Year 2021 and is contingent upon the availability and continued appropriation of funds for FY 2022, FY 2023, FY 2024 and FY 2025, with the ability to adjust encumbrances through the Budget Office between each Fiscal Year if needed and justified:

Funding is available as follows:

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
04-96-96-960030-1353 NHDOT Work order 034-500161 Capital Projects	\$1,088,671.00	\$911,325.12				
01-03-03-030010-76960000 IT for Transportation 038-509038 Technology Software Activity Code 03960020			\$221,982.14	\$227,561.59	\$233,308.45	\$239,227.70

# **EXPLANATION**

The Department of Transportation (DOT), Commissioner's Office of Asset Management, Performance, and Strategy (AMPS), seeks to procure services to acquire a new Work Order, Fleet and Inventory System. The Department currently uses a combination of existing software, which is outdated, and manual entry of data. The current process for managing work, fleet and inventory is inconsistent between bureaus, often requiring manual intervention to complete Federally mandated reporting requirements.

The new Work Order, Fleet and Inventory System will allow the Department to replace older computer systems, used in Federal reporting and in-house support of Department projects. The replacement of the older systems with newer technology will result in: time savings spread across multiple work groups within DOT; increased

efficiencies; and will provide web-based tools which will allow the Department to better track and report accomplishments.

RSA Chapter 146:2-II, I includes an appropriation for NHDOT Work Order System Phase 1 and \$2,000,000 has been approved to fund this project. The vendor selection process for this contract was initiated by a solicitation for information technology services through a Request for Proposals (RFP #2018-122), which was posted on the State's Department of Administrative Services (DAS) website from October 31, 2018 to December 17, 2018. Answers to vendor's questions regarding clarification of the solicitation were posted to the DAS website on December 3, 2018. An addendum was published on December 5, 2018 to clarify issues raised by the vendor questions and to correct formatting inconsistencies.

As a result of the solicitation, six firms submitted proposals: AgileAssets Inc., Austin, TX; AssetWorks LLC, Wayne, Pennsylvania; Data Transfer Solutions, LLC, Orlando, FL; Grant Thornton LLP., Alexandria VA; VEOCI, New Haven, CT; Tech Mahindra, Wilmington DE.

The selection process for this contract consisted of review and ranking of solicited written technical proposals and cost proposals by a selection panel comprised of six members representing the Department of Transportation and the Department of Information Technology. The selection panel included: Project Manager/Civil Engineer VI, (Commissioner's Office); Business Systems Analyst (Department of Information Technology); Business Systems Analyst (Operations, Highway Maintenance); Business Systems Analyst (Operations, Mechanical Services); Senior Engineer (Operations, Bridge Maintenance); Financial Analyst (Finance, Finance and Contracts).

The selection panel members reviewed the proposals individually and met on Wednesday, May 16, 2019 to recommend a vendor. The Committee by consensus rated each firm based on the solution and services proposed, qualifications of the Proposer and any subcontractors, experience, qualifications of proposed candidates, and cost. Having assessed all of the aforementioned factors, the selection panel scored and ranked AssetWorks LLC the highest of the six firms. The Scoring Summary is as follows:

Firm	Score 210 Points (%)	Overall Rank
AssetWorks LLC	181.9 (87%)	1
Data Transfer Solutions	149.3 (71%)	2
AgileAssets	100.5 (48%)	3
VEOCI	89.3 (43%)	-4
Grant Thornton	65.2 (31%)	5
Tech Mahindra	54.8 (26%)	6

AssetWorks LLC was selected and is highly regarded in the field of Fleet and Transportation EAM Systems. Their software has recently been implemented by several large transportation departments including the cities of New York, NY; Seattle, WA and Manchester, NH. They have similar system implementations for State Transportation agencies in Iowa and New York, as well as numerous metropolitan planning organizations, counties and municipalities. The selection panel's ranking was submitted to the DOT Work Order, Fleet and Inventory oversight committee; Marie Mullen, Director of Finance; Dave Rodrigue, Director of Operations and, Victoria Sheehan, Commissioner, DOT, for consideration and approval.

AssetWorks LLC has agreed to furnish the required implementation and maintenance services in a six (6) year agreement for a total amount not to exceed \$2,922,076.00. The contract has a completion date of February 1, 2026, with a State option to extend annually for one (1) Four (4) year extension, up to, but not beyond February 1, 2030, for ongoing software support, maintenance, and hosting. The hourly rates, software, and annual software maintenance and technical support expenses are commensurate with the complexity and technical services to be furnished.

The agreement has been approved by the Attorney General as to form and execution. The Department of Information Technology (DoIT) has reviewed and approved the agreement. The Department of Transportation has certified that the necessary funds are available. Copies of the fully executed agreement are on file at the Secretary of State's Office and the Department of Administrative Services Office, and subsequent to Governor and Council approval will be on file at the Department of Transportation.

Your approval of this resolution is respectfully requested.

Sincerely,

Victoria F. Sheehan Commissioner, Department of Transportation

DURN FOR

Denis Goulet Commissioner, Department of Information Technology

Attachments DoIT RID # 46844



Denis Goulet Commissioner STATE OF NEW HAMPSHIRE DEPARTMENT OF INFORMATION TECHNOLOGY 27 Hazen Dr., Concord, NH 03301

Fax: 603-271-1516 TDD Access: 1-800-735-2964 www.nh.gov/doit

December 9, 2019

Victoria Sheehan, Commissioner Department of Transportation State of New Hampshire 7 Hazen Drive Concord, NH 03301

Dear Commissioner Sheehan:

This letter represents formal notification that the Department of Information Technology (DoIT) has approved your agency's request to enter into a contract with AssetWorks LLC of Wayne, PA as described below and referenced as DoIT No. 2018-122. This project is a result of RFP# 2018-122.

This is a request to enter into a contract for the procurement of SaaS services to provide and install a Work Order, Fleet and Inventory system. The new Work Order, Fleet and Inventory system will allow the Department to replace older computer systems, used in Federal reporting and in-house support of Department projects. The replacement of the older systems with newer technology will result in: time savings spread across multiple work groups within DOT; increased efficiencies; and will provide web-based tools which will allow the Department to better track and report accomplishments.

The amount of the contract is \$2,922,076.00 and shall be effective upon Governor and Executive Council approval through February 1, 2026.

A copy of this letter should accompany the Department of Transportation's submission to the Governor and Executive Council for approval.

Sincerely,

Sum For

**Denis Goulet** 

DG/tkv DoIT #2018-122

cc: Charles Burns, DoIT IT Lead, Department of Transportation

"Innovative Technologies Today for New Hampshire's Tomorrow"

AMPS – Office of Asset Management, Performance, and Strategy NH Department of Transportation John O. Morton Building, Room 280 7 Hazen Drive, Room 280 Concord NH

RESULTS OF BID RFP: 2018-122

## PROJECT: Work Order, Fleet, and Inventory (WOFI) Hosted Management Solution

#### **DESCRIPTION:**

The State of New Hampshire is seeking to implement a comprehensive fleet, work order and inventory management solution that eliminates redundancy, enhances data collection and reporting, and provides for efficient tracking throughout the entire department fleet, work order and inventory life cycle. The goal is to replace existing outdated information systems with a streamlined solution that utilizes newer technologies, complies with Federal guidelines, and simplifies the collection and processing of information.

## **EVALUATION OF PROPOSALS:**

Scoring consisted of Two Rounds. Round 1, Part 1 graded the functionality of the software. Round 1, Part 2 evaluated the cost. The top three proposals moved on to Round 2, Part 3 which consisted of an onsite demonstration of the software.

	AssetWorks	DTS (VUEWorks)	AgileAssets
Part   Score (90)	78.3	39.3	59.3
Part 2 Score (120)	103.6	110.0	41.2
Subtotal (210 Points)	181.9 (87%)	149.3 (71%)	100.5 (48%)
Part 3 Score (90)	45.0	· 59.55	27.05
Total Score (300)	226.9 (75.6%)	208.85 (69.6%)	127.55 (42.5%)

#### COST:

	AssetWorks	DTS VUEWorks	AgileAssets
SFY 2020	\$179,410	\$1,156,520	\$1,684,332
SFY 2021	\$1,072,445	\$464,800	\$1,762,840
SFY 2022	\$549,866	\$130,000	<b>\$6</b> 45,750
SFY 2023	\$322,224	\$114,000	\$645,750
SFY 2024	\$214,309	\$114,000	\$645,750
SFY 2025	\$223,224	\$114,000	\$645,750
Total Costs	\$2,561,478	\$2,093,320	\$6,030,172

The difference of \$350,598.00 between the proposal cost of \$2,561,478.00 and the contracted price of \$2,922,076.00 includes software components that were listed as optional in the RFP. This additional functionality was negotiated to take advantage of the rates provided in the proposal and were include in the final negotiated agreement.

#### Summary

The score consists of user functionality, technical, Proposer and staff qualifications, implementation and ongoing maintenance. The Scoring Team agrees with the final scores as presented and identified AssetWorks as the best provider.

Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

# AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

## **GENERAL PROVISIONS**

.

1. IDENTIFICATION.			•	
1.1 State Agency Name		1.2 State Agency Address		
Department of Transportation		7 Hazen Drive		
· .		Concord, NH 03310		
	·····		· · · · · ·	
1.3 Contractor Name		1.4 Contractor Address	1016	
AssetWorks LLC		99 Old Eagle School Road, Suite	1215	
		Wayne, PA 19087		
1.5 Contractor Phone	1.6 Account Number	1.7 Completion Date	1.8 Price Limitation	
Number		February 1, 2026, with an		
585-733-5454	04-96-96-960030-1353	option to extend to February 1,	\$2,922,076.00	
	01-03-03-030010-76960000	2030		
1.9 Contracting Officer for Stat	te Agency	·1.10 State Agency Telephone Nu	ımber	
·				
, √ark Bogacz		AMPS Project Manager		
	,		Ci-material	
1.11 Contractor Signature	1 1	1.12 Name and Title of Contractor Signatory		
h, A		Gore m srice	5	
Loran Mm		Portfolio m	m la	
1.13 Acknowledgement: State of PA, County of Chaster				
On 4 Dec 2019, before the undersigned officer, personally appeared the person identified in block 1.12, or satisfactorily				
proven to be the person whose name is signed in block 1.11, and acknowledged that s/he executed this document in the capacity				
indicated in block 1.12.				
1.13.1 Signature of Notary Public or Justice of the Peace				
Commonwealth of Pennsylvanla		/		
NOTARIAL SEAL JUDITH, L. SONS, NOTARY PUE	He hilith a	Am		
Tredyfterfieltownship, Chester Co	bunty	<u> </u>		
Myigozinisaline Englist Rond Partea Bo of ORIstice of the Peace				
Judith L. Sons, Notary				
1.14 State Agency Signature 1.15 Name and Title of State Agency Signatory			gency Signatory	
17 the Date: 12/6/19 PLTUL STAWWAS Director of Project Development			ctor of Project Development	
1.16 Approval by the N.H. Department of Administration, Division of Personnel (if applicable)				
By:		Director, On:		

٢

1.17	App	roval by the Attorney General (Form, Substance and Exec	utior	) (if applicable)	
	By:	Allin B greenstin (	Dn:	12/12/2019	
1.18	Арр	roval by the Governor and Executive Council (if applicab	le)	, <b></b>	
	By:	C	Dn:		
		Page 1	of	•	

2. EMPLOYMENT OF CONTRACTOR/SERVICES TO

**BE PERFORMED.** The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT A which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.

3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement as indicated in block 1.18, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block

1.14 ("Effective Date").

3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed. Contractor must complete all Services by the Completion Date specified in block 1.7.

#### 4. CONDITIONAL NATURE OF AGREEMENT.

Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds, and in no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to terminate this Agreement immediately upon giving the Contractor notice of such termination. The State shall not be required to transfer funds from any other account to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

#### 5. CONTRACT PRICE/PRICE LIMITATION/ PAYMENT.

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT B which is incorporated herein by reference.

5.2 The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services. The State shall have nc liability to the Contractor other than the contract price.

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.

5.4 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8.

#### COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/ EQUAL EMPLOYMENT OPPORTUNITY.

6.1 In connection with the performance of the Services, the Contractor shall comply with all statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal opportunity laws. This may include the requirement to utilize auxiliary aids and services to ensure that persons with communication disabilities, including vision, hearing and speech, can communicate with, receive information from, and convey information tr

Page 2 of 5

Contractor Initials \_GS\_\_\_\_\_ Date\_4 December 2019\_\_\_\_\_ the Contractor. In addition, the Contractor shall comply with all applicable copyright laws.

During the term of this Agreement, the 6.2 Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination. 6.3 If this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all the provisions of Executive Order No. 11246 ("Equal Employment Opportunity"), as supplemented by the regulations of the United States Department of Labor (41 C.F.R. Part 60), and with any rules, regulations and guidelines as the State of New Hampshire or the United States issue to implement these regulations. The Contractor further agrees to permit the State or United States access to any of the Contractor's , books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders, and the covenants, terms and conditions of this Agreement.

#### 7. PERSONNEL.

7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.

7.2 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this Agreement. This provision shall survive termination of this Agreement.

7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event of any dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

#### 8. EVENT OF DEFAULT/REMEDIES.

8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"): 8.1.1 failure to perform the Services satisfactorily or on schedule;

8.1.2 failure to submit any report required hereunder; and/or 8.1.3 failure to perform any other covenant, term or condition of this Agreement.

8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely remedied, terminate this Agreement, effective two (2) days after giving the Contractor notice of termination; 8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any

Event of Default; and/or

8.2.4 treat the Agreement as breached and pursue any of its remedies at law or in equity, or both.

#### 9. DATA/ACCESS/CONFIDENTIALITY/ PRESERVATION.

9.1 As used in this Agreement, the word "data" shall mean all information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

9.2 All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

9.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data requires prior written approval of the State.

Contractor Initials \_GS\_\_\_\_\_ Date \_4 December 2019\_\_\_\_\_ 10. TERMINATION. In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall deliver to the Contracting Officer, not later than fifteen (15) days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. The form, subject matter, content, and number of copies of the Termination Report shall be identical to those of any Final Report described in the attached EXHIBIT A.

## 11. CONTRACTOR'S RELATION TO THE STATE. In

the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

## 12. ASSIGNMENT/DELEGATION/SUBCONTRACTS.

The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written notice and consent of the State. None of the Services shall be subcontracted by the Contractor without the prior written notice and consent of the State.

13. INDEMNIFICATION. The Contractor shall defend , indemnify and hold harmless the State, its officers and employees, from and against any and all losses suffered by the State, its officers and employees, and any and all claims, liabilities or penalties asserted against the State, its officers and employees, by or on behalf of any person, on account of, based or resulting from, arising out of (or which may be claimed to arise out of) the acts or omissions of the Contractor. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

## 14. INSURANCE.

14.1 The Contractor shall, at its sole expense, obtain and maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 comprehensive general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$1,000,000per occurrence and \$2,000,000 aggregate ; and 14.1.2 to special cause of loss coverage form covering all property subject to subparagraph 9.2 herein, in an amount not less than 80% of the whole replacement value of the property.

14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in

the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement.. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than thirty (30) days prior to the expiration date of each of the insurance policies. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference. Each certificate(s) of insurance shall contain a clause requiring the insurer to provide the Contracting Officer identified in block 1.9, or his or her successor, no less than thirty (30) days prior written notice of cancellation or modification of the policy.

## 15. WORKERS' COMPENSATION.

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A

("Workers' Compensation").

- 15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.
- 16. WAIVER OF BREACH. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.

17. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a

Page 4 of 5

Contractor Initials \_GS\_\_\_\_\_ Date\_4 December 2019\_\_\_\_\_ United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

. AMENDMENT. This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire unless no such approval is required under the circumstances pursuant to State law, rule or policy.

19. CONSTRUCTION OF AGREEMENT AND TERMS. This Agreement shall be construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party.

20. THIRD PARTIES. The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.

21. HEADINCS. The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of e provisions of this Agreement.

22. SPECIAL PROVISIONS. Additional provisions set forth in the attached EXHIBIT C are incorporated herein by - reference.

23. SEVERABILITY. In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

24. ENTIRE AGREEMENT. This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire Agreement and understanding between the parties, and supersedes all prior Agreements and understandings relating hereto.

> Contractor Initials \_GS\_ Date\_4 December 2019\_

.

# TABLE OF CONTENTS

TER	MS AND DEFINITIONS2
1.	CONTRACT DOCUMENTS12
2.	CONTRACT TERM
3.	COMPENSATION
4.	CONTRACT MANAGEMENT14
5.	DELIVERABLES
6.	SOFTWARE
7.	SERVICES
8.	WORK PLAN DELIVERABLE19
9.	CHANGE ORDERS/PROJECT CHANGE CONTROL
10.	INTELLECTUAL PROPERTY
11	USE OF STATE'S INFORMATION; CONFIDENTIALITY
12	LIMITATION OF LIABILITY
13	TERMINATION
14	CHANGE OF OWNERSHIP27
15	ASSIGNMENT, DELEGATION AND SUBCONTRACTS
16	DISPUTE RESOLUTION

2018-122 IT Provisions – Part 2PageContractor Initials:GSDate:4 Dcember 2019

Page 1 of 34

# TERMS AND DEFINITIONS

The following general contracting terms and definitions apply except as specifically noted elsewhere in this document.

Acceptance	Notice from the State that a Deliverable has satisfied Acceptance Test or Review.
Acceptance Letter	An Acceptance Letter provides notice from the State that a Deliverable has satisfied Acceptance Tests or Review.
Acceptance Period	The timeframe during which the Acceptance Test is performed
Acceptance Test Plan	The Acceptance Test Plan provided by the Vendor and agreed to by the State that describes at a minimum, the specific Acceptance process, criteria, and Schedule for Deliverables.
Acceptance Test and Review	Tests performed to determine that no Defects exist in the application Software or the System
Access Control	Supports the management of permissions for logging onto a computer or network
Agreement	A contract duly executed and legally binding.
Appendix	Supplementary material that is collected and appended at the back of a document
Audit Trail Capture and Analysis	Supports the identification and monitoring of activities within an application or system
Authorized Persons/Users	The Contractor's employees, contractors, subcontractors or other agents who need to access the State's personal data to enable the Contractor to perform the services required.
Best and Final Offer (BAFO)	For negotiated procurements, a final offer following the conclusion of discussions.
Breach or Breach of Security	Unlawful and unauthorized acquisition of unencrypted computerized Data that materially compromises the security, confidentiality or integrity of personal information maintained by a person or commercial entity.
Business Hours	Contracted Vendor personnel shall work normal business hours between 8:00 a.m. and 5:00 p.m. EST, eight (8) hour days, forty (40) hour weeks, excluding State of New Hampshire holidays. Changes to this Schedule may be made upon agreement with the State Project Manager.
ССР	Change Control Procedures
Certification	The Vendor's written declaration with full supporting and written Documentation (including without limitation test results as applicable) that the Vendor has completed development of the Deliverable and certified its readiness for applicable Acceptance Testing or Review.
Change Control	Formal process for initiating changes to the proposed Solution or process once development has begun.

 2018-122 IT Provisions – Part 2
 F

 Contractor Initials:
 GS

 Date:
 4 Dcember 2019

Page 2 of 34

Change Order	Formal documentation prepared for a proposed change in the
Completion Date	Specifications. End date for the Contract
Confidential Information	Information required to be kept Confidential from unauthorized
	disclosure under the Contract
Contract	This Agreement between the State of New Hampshire and a Vendor,
Contract	which creates binding obligations for each party to perform, as
	specified in the Contract Documents.
Contract Agreement	Part 1, 2, and 3 The documentation consisting of both the General
÷	Provisions and the Exhibits which represents the understanding and
	acceptance of the reciprocal legal rights and duties of the parties with
	respect to the Scope of Work
Contract Conclusion	Refers to the conclusion of the Contract, for any reason, including but
	not limited to, the successful Contract completion, termination for
	convenience, or termination for default.
Contract Documents	Documents that comprise this Contract (See Contract Agreement,
	Section 1.1)
Contract Managers	The persons identified by the State and the Vendor who shall be
5	responsible for all contractual authorization and administration of the
	Contract. These responsibilities shall include but not be limited to
	processing Contract Documentation, obtaining executive approvals,
•	tracking costs and payments, and representing the parties in all
	Contract administrative activities. (See Section 4: Contract
· · · · · · · · · · · · · · · · · · ·	Management)
Contract Price	The total, not to exceed amount to be paid by the State to the
	Contractor for product and services described in the Contract
	Agreement. This amount is listed in the General Provisions Section
	1.8 (P-37).
Contractor	The Vendor and its employees, subcontractors, agents and affiliates
	who are providing the services agreed to under the contract.
Contracted Vendor/Vendor	The Vender where receased or every sweeted the Contract with
Contracted vendor/vendor	The Vendor whose proposal or quote was awarded the Contract with the State and who is responsible for the Services and Deliverables of
	the Contract.
Conversion/Migration	A test to ensure that a Data conversion process correctly takes Data
Validation Test	from a legacy system and successfully converts it to a form that can
·	be used by the new System.
COTS	Commercial Off the Shelf Software
Cure Period	The thirty (30) day period following written notification of a default
	within which a contracted vendor must cure the default identified.
CR	Change Request
Custom Code	Code developed by the Vendor specifically for this project for the
	State of New Hampshire

Custom Software	Software developed by the Vendor specifically for this Project for the	
Customer	State of New Hampshire See STATE.	
Customer	State's records, files, forms, Data and other documents or	
Data	information, in either electronic or paper form, that will be used	
	/converted by the Vendor during the Contract Term	
Data Breach	The unauthorized access by a non-authorized person/s that results in	
Data Ditach	the use, disclosure or theft of a the State's unencrypted non-public	
	i data.	
Data Warehouse	NHDOT's enterprise Oracle data repository	
DBA	Database Administrator	
Deficiencies/Defects	A failure, deficiency or defect in a Deliverable resulting in a	
	Deliverable, the Software, or the System, not conforming to its	
	Specifications.	
	Class A Deficiency - Software - Critical, does not allow System to	
	operate, no work around, demands immediate action; Written	
	Documentation - missing significant portions of information or	
	unintelligible to State; Non Software - Services were inadequate and	
	require re-performance of the Service.	
· .	Class B Deficiency - Software - important, does not stop operation	
	and/or there is a work around and user can perform tasks; Written	
	Documentation - portions of information are missing but not enough	
	to make the document unintelligible; Non Software - Services were	
	deficient, require reworking, but do not require re-performance of the	
	Service.	
	<b>Class C Deficiency</b> – Software - minimal, cosmetic in nature,	
	minimal effect on System, low priority and/or user can use System;	
	Written Documentation - minimal changes required and of minor	
	editing nature; <i>Non Software</i> - Services require only minor reworking	
	and do not require re-performance of the Service.	
Deliverable	A Deliverable is any Written, Software, or Non-Software Deliverable	
Denverable	(letter, report, manual, book, other), provided by the Vendor to the	
	State or under the terms of a Contract requirement.	
Department	An agency of the State	
Department of Information	The Department of Information Technology established under RSA	
Technology (DoIT)	21-R by the Legislature effective September 5, 2008.	
Digital Signature	Certification that guarantees the unaltered state of a file, also known	
	as "code signing."	
Documentation	All information that describes the installation, operation, and use of	

Effective Date	The Contract and all obligations of the parties hereunder shall become
	effective on the date the Governor and the Executive Council of the
	State of New Hampshire approves the Contract
Encryption	Supports the transformation of data for security purposes
Enhancements	Updates, additions, modifications to, and new releases for the
	Software, and all changes to the Documentation as a result of
	Enhancements, including, but not limited to, Enhancements produced
	by Change Orders
Event of Default	Any one or more of the following acts or omissions of a Contracted
	Vendor shall constitute an Event of Default hereunder ("Event of
	Default"):
	a. Failure to perform the Services satisfactorily or on
	Schedule;
	b. Failure to submit any report required; and/or
	c. Failure to perform any other covenant, term or condition
	of the Contract. Firm
Firm Fixed Price Contract	A Firm-Fixed-Price Contract provides a price that is not subject to
· · ·	increase, i.e., adjustment on the basis of the Vendor's cost experience
	in performing the Contract
Fully Loaded	Rates are inclusive of all allowable expenses, including, but not
· · · · ·	limited to: meals, hotel/housing, airfare, car rentals, car mileage, and
	out of pocket expenses
GAAP	Generally Accepted Accounting Principles,
Governor and Executive Council	The New Hampshire Governor and Executive Council.
GUI	Graphical user interface.
Harvest	Software to archive and/or control versions of Software.
Hosted Solution	A hosted solution is a software as a service (SaaS) solution that
	allows users to execute and operate a software application entirely
	from the cloud on a recurring subscription.
	Hosted applications are hosted and powered from the remote cloud
	infrastructure and are accessed globally through the Internet. They
	provide the same functionality as locally installed software but can
	be updated more easily.
	Hosted applications may also be known as interest hand
	Hosted applications may also be known as Internet-based
	applications, Web applications and online applications, although these terms often have a larger scope
Identification and	Supports obtaining information about those parties attempting to log
Authentication	on to a system or application for security purposes and the validation
Authentication	of those users
Implementation	The process for making the System fully operational for processing
Implementation	the Data.

 2018-122 IT Provisions – Part 2
 Page 5 of 34

 Contractor Initials:
 GS

 Date:
 \_\_4 Dcember 2019

Implementation Plan	Sets forth the transition from development of the System to full
	operation, and includes without limitation, training, business and
	technical procedures.
Information Technology (IT)	Refers to the tools and processes used for the gathering, storing, manipulating, transmitting, sharing, and sensing of information
	including, but not limited to, Data processing, computing,
	information systems, telecommunications, and various audio and
	video technologies.
Input Validation	Ensure that the values entered by users or provided by other
	applications meets the size, type and format expected. Protecting the
	application from cross site scripting, SQL injection, buffer overflow,
	etc.
Intrusion Detection	Supports the detection of illegal entrance into a computer system
Invoking Party	In a dispute, the party believing itself aggrieved.
Key Project Staff	Personnel identified by the State and by the Contractor as essential
	to work on the Project.
Licensee	The State of New Hampshire
Non Exclusive Contract	A contract executed by the State that does not restrict the State from
· ·	seeking alternative sources for the Deliverables or Services provided
	under the Contract.
Non-Public Information	Data, other than personal data, that is not subject to distribution to
· · · · · ·	the public as public information. It is deemed to be sensitive and
i i	confidential by the State because it contains information that is
	exempt by statute, ordinance or administrative rule from access by
	the general public as public information.
Non-Software Deliverables	Deliverables that are not Software Deliverables or Written
	Deliverables, e.g., meetings, help support, services, other
Normal Business Hours	Normal Business Hours – 8:00 a.m. to 5:00 p.m. EST, Monday
•	through Friday excluding State of New Hampshire holidays. State
	holidays are: New Year's Day, Martin Luther King Day, President's
	Day, Memorial Day, July 4 <sup>th</sup> , Labor Day, Veterans Day, Thanksgiving Day, the day after Thanksgiving Day, and Christmas
	Day. Specific dates will be provided
Notice to Proceed (NTP)	The State Contract Manager's written direction to the Vendor to
	begin work on the Contract on a given date and time
OFC	Office of Federal Compliance
OJT	On-The-Job Training
Open Data Formats	A data format based on an underlying Open Standard.
Open Source Software	Software that guarantees the user unrestricted use of the
	Software as defined in RSA 21-R:10 and RSA 21-R:11.
Open Standards	Specifications for the encoding and transfer of computer data
	that is defined in RSA 21-R:10 and RSA 21-R:13.
Operating System	System is fully functional, all Data has been loaded into the System,
	is available for use by the State in its daily operations.

2018-122 IT Provisions – Part 2 Contractor Initials: GS Date: 4 Dcember 2019

Page 6 of 34

١

Operational	The System is operating and fully functional, all Data has been	
	loaded; the System is available for use by the State in its daily	
	operations, and the State has issued an Acceptance Letter.	
Order of Precedence	The order in which Contract/Documents control in the event of a	
· · · · · · ·	conflict or ambiguity. A term or condition in a document controls	
	over a conflicting or ambiguous term or condition in a document that	
	is lower in the Order of Precedence	
Personal Data	Data that includes information relating to a person that identifies the	
	person by name and has any of the following personally identifiable	
	information (PII): government-issued identification numbers (e.g.,	
	Social Security, driver's license, passport); financial account	
	information, including account number, credit or debit card	
	numbers; or protected health information (PHI) relating to a person.	
Project	The planned undertaking regarding the entire subject matter of an	
	RFP and Contract and the activities of the parties related hereto.	
Project Team	The group of State employees and contracted Vendor's personnel	
	responsible for managing the processes and mechanisms required	
	such that the Services are procured in accordance with the Work Plan	
	on time, on budget and to the required specifications and quality	
Project Management Plan	A document that describes the processes and methodology to be	
	employed by the Vendor to ensure a successful Project.	
Project Managers		
	Vendor's representative with regard to Review and Acceptance of	
	Contract Deliverables, invoice sign off, and review and approval of	
	Change Requests (CR) utilizing the Change Control Procedures	
	(CCP)	
Project Staff	State personnel assigned to work with the Vendor on the Project	
Proposal	The submission from a Vendor in response to the Request for a	
	Proposal or Statement of Work	
Proposer	An entity including subcontractor(s) and other related affiliates	
	submitted a proposal.	
Regression Test Plan	A plan integrated into the Work Plan used to ascertain whether fixes	
	to Defects have caused errors elsewhere in the application/process.	
Review	The process of reviewing Deliverables for Acceptance	
Review Period	The period set for review of a Deliverable. If none is specified then	
	the Review Period is five (5) business days.	
RFP (Request for Proposal)	A Request For Proposal solicits Proposals to satisfy State functional	
	requirements by supplying data processing product and/or Service	
	resources according to specific terms and conditions	
Role/Privilege Management	Supports the granting of abilities to users or groups of users of a	
	computer, application or network	
SaaS	Software as a Service. Occurs where the COTS application is hosted	
	but he State does not own the license or the code.	

Schedule	The dates described in the Work Plan for deadlines for performance
Schedule	
	of Services and other Project events and activities under the Contract
Security Incident	The potentially unauthorized access by non-authorized persons
	to personal data or non-public data the Contractor believes could
	reasonably result in the use, disclosure or theft of a State's
	unencrypted personal data or non-public data within the
	possession or control of the Contractor. A security incident may
	or may not turn into a data breach.
Service Level Agreement (SLA)	"A signed agreement between the Contracted Vendor and the State
	specifying the level of Service that is expected of, and provided by,
	the Contracted Vendor during the term of the Contract."
Service	The work or labor to be performed by the Vendor on the Project as
· · · · · · · · · · · · · · · · · · ·	- described in the Contract.
Software	All custom Software and COTS Software provided by the Vendor
	under the Contract
Software-as-a-Service (SaaS)	The capability provided to the State to use the Contractor's
	applications running on a cloud infrastructure. The applications are
	accessible from various client devices through a thin-client interface
	such as a Web browser (e.g., Web-based email) or a program
•	interface. The State does not manage or control the underlying
·	cloud infrastructure including network, servers, operating systems,
. * .**	storage or even individual application capabilities, with the possible
	exception of limited user-specific application configuration settings.
Software Deliverables	COTS Software and Enhancements developed or provided by the
,	Contracted Vendor to the State in accordance with the terms of this
,	Contract.
Software License	Licenses provided to the State under this Contract
Solution	The Solution consists of the total Solution, which includes, without
	limitation, Software and Services, addressing the requirements and
	terms of the Contract Specifications. The off-the-shelf Software and
	configured Software customized for the State provided by the
	Vendor in response to this RFP.
Specifications	The written provisions that set forth the requirements which include,
	without limitation, this RFP, the Proposal, the Contract, any
	performance standards, Documentation, applicable State and federal
	policies, laws and regulations, State technical standards, subsequent
	State-approved Deliverables, and other Specifications and
	requirements described in the Contract Documents. The
	Specifications are, by this reference, made a part of the Contract as
	though completely set forth herein.
State	STATE is defined as:
~	State of New Hampshire
	Departmentof Transportation
	7 Hazen Drive

2018-122 IT Provisions – Part 2 Contractor Initials: <u>GS</u> Date: <u>4 Dcember 2019</u>

Page 8 of 34

	Concord, NH 03301
	Reference to the term "State" shall include applicable agencies
Statement of Work (SOW)	A Statement of Work clearly defines the basic requirements and objectives of a Project. The Statement of Work also defines a high
· · · · · · · · · · · · · · · · ·	level view of the architecture, performance and design requirements, the roles and responsibilities of the State and the Vendor. The
	Contract Agreement SOW defines the results that the Vendor
	remains responsible and accountable for achieving.
State's Confidential Records	State's information regardless of its form that is not subject to public disclosure under applicable state and federal laws and regulations,
	including but not limited to <u>RSA Chapter 91-A</u>
State Data	For SaaS applications means all data created or in any way
	originating with the State, and all data that is the output of computer
	processing of or other electronic manipulation of any data that was
	created by or in any way originated with the State, whether such data
	or output is stored on the State's hardware, the Contractor's hardware or exists in any system owned, maintained or otherwise controlled
	by the State or by the Contractor.
State Fiscal Year (SFY)	The New Hampshire State Fiscal Year extends from July 1 <sup>st</sup> through
State Fiscal Tear (SF I)	June 30 <sup>th</sup> of the following calendar year
State Identified Contact	The person or persons designated in writing by the State to receive
	security incident or breach notification.
State's Project Manager (PM)	State's representative with regard to Project management and
	technical matters. Agency Project Managers are responsible for
	review and Acceptance of specific Contract Deliverables, invoice
	sign off, and Review and approval of a Change Proposal (CP).
Subcontractor	A person, partnership, or company not in the employment of, or owned by, the Vendor, which is performing Services under this
	Contract under a separate Contract with or on behalf of the Vendor
System	All Software, specified hardware, and interfaces and extensions,
	integrated and functioning together in accordance with the
	Specifications.
TBD	To Be Determined
Technical Authorization	Direction to a Vendor, which fills in details, clarifies, interprets, or
	specifies technical requirements. It must be: (1) consistent with
	Statement of Work within statement of Services; (2) not constitute a
•	new assignment; and (3) not change the terms, documents of
T 4 DI	specifications of the Contract Agreement
Test Plan	A plan, integrated in the Work Plan, to verify the code
	(new or changed) works to fulfill the requirements of the Project. It
	may consist of a timeline, a series of tests and test data, test scripts
<b>T</b>	and reports for the test results as well as a tracking mechanism.
Term	Period of the Contract from the Effective Date through termination.

2018-122 IT Provisions – Part 2 Contractor Initials: <u>GS</u> Date: <u>4 Dcember 2019</u>

4

.

Transition Services	Services and support provided when Contractor is supporting System changes.		
UAT	User Acceptance Test		
Unit-Test	Developers create their own test data and test scenarios to verify the code they have created or changed functions properly as defined.		
User Acceptance Testing (UAT)	Tests done by knowledgeable business users who are familiar with the scope of the Project. They create/develop test cases to confirm the System was developed according to specific user requirements. The test cases and scripts/scenarios should be mapped to business requirements outlined in the user requirements documents.		
UNSAT	Unsatisfactory Field Audit		
USDOL ·····	- US Department of Labor		
User Management	Supports the administration of computer, application and network accounts within an organization		
User Friendly	User-friendly describes a hardware device or software interface that is easy to use. It is "friendly" to the user, meaning it is not difficult to learn or understand. While "user-friendly" is a subjective term, the following are several common attributes found in user-friendly interfaces. I. Simple. A user-friendly interface is not overly complex, but instead is straightforward, providing quick access to common features or commands. 2. Clean. A good user interface is well- organized, making it easy to locate different tools and options. 3. Intuitive. In order to be user-friendly, an interface must be make sense to the average user and should require minimal explanation for how to use it. 4. Reliable. An unreliable product is not user-friendly, since it will cause undue frustration for the user. A userfriendly product is reliable and does not malfunction or crash.		
	The goal of a user-friendly product is to provide a good user experience (or "UX"). This may look different depending on the end user for whom the product is designed. For example, a userfriendly kid's game will have a much different interface than a professional CAD program. However, the rules above apply to both types of software. Even if a program has many advanced features, it is still possible to make it user-friendly by designing a simple, clean, and intuitive interface.		
	User-friendly products are typically more successful than those with complex, convoluted interfaces that are difficult to use. Additionally, customers often avoid unreliable products, such as software programs that are full of bugs. In order to ensure a good user experience, companies often thoroughly test their products before releasing them to the public (Source: https://techterms.com/definition/user-friendly)		

2018-122 IT Provisions – Part 2 Contractor Initials: GS Date: 4 Dcember 2019 Page 10 of 34

Vendor/ Contracted Vendor	The Vendor whose proposal or quote was awarded the Contract with the State and who is responsible for the Services and Deliverables of
	the Contract.
Verification	Supports the confirmation of authority to enter a computer system,
· · · · · ·	application or network
Virtual Private Network (VPN)	Extends a private network across a public network, and enables users
	to send and receive Data across shared or public networks as if their
	computing devices were directly connected to the private network
Walk Through	A step-by-step review of a Specification, usability features or design
waik intougn	before it is handed off to the technical team for development
Warranty Period	A period of coverage during which the Contracted Vendor is
warranty renou	responsible for providing a guarantee for products and Services
· · · · · · · ·	delivered as defined in the Contract.
Warranty Releases	Code releases that are done during the warranty period
Warranty Keleases	The Services to be provided by the Contracted Vendor during the
warranty services	Warranty Period
WDF	Women's Business Enterprise
WBE	
WIM	Weigh-in-Motion
Work Hours	Vendor personnel shall work normal business hours between 8:00
	am and 5:00 pm, eight (8) hour days, forty (40) hour weeks,
	excluding State of New Hampshire holidays. Changes to this
۰ ·	schedule may be made upon agreement with the State Project
	Manager.
Work Order	Tasks and activities required to be completed that need to be properly
	scoped, approved to be worked on, and resourced.
Work Plan	The overall plan of activities for the Project created in accordance
	with the Contract. The plan and delineation of tasks, activities and
	events to be performed and Deliverables to be produced under the
	Project as specified in Appendix C. The Work Plan shall include a
	detailed description of the Schedule, tasks/activities, Deliverables,
	critical events, task dependencies, and the resources that would lead
	and/or participate on each task.
Work Request	Requests for tasks and activities required to be completed.
Written Deliverables	Non-Software written deliverable Documentation (letter, report,
	manual, book, other) provided by the Vendor either in paper or
	electronic format.

2018-122 IT Provisions – Part 2 Contractor Initials: <u>GS</u> Date: <u>4 Dcember 2019</u>

#### INTRODUCTION

This Contract is by and between the State of New Hampshire, acting through New Hampshire Department of Transportation ("State"), and AssetWorks LCC, a Delaware Limited Liability Corporation, ("Contractor"), having its principal place of business at 998 Old Eagle School Road #1215, Wayne, PA 19087.

The State of New Hampshire is seeking to implement a comprehensive fleet, work order and inventory management solution that eliminates redundancy, enhances data collection and reporting, and provides for efficient tracking throughout the entire department fleet, work order and inventory life cycle. The goal is to replace existing outdated information systems with a streamlined solution that utilizes newer technologies, complies with Federal guidelines, and simplifies the collection and processing of information.

#### RECITALS

Whereas the State desires to have the Contractor provide a vendor-hosted comprehensive enterprise asset management software solution, and associated Services for the State;

Whereas the Contractor wishes to provide a vendor-hosted comprehensive enterprise asset management software solution.

The parties therefore agree as follows:

## 1. CONTRACT DOCUMENTS

#### **1.1 CONTRACT DOCUMENTS**

This Contract Agreement (2018-122) is comprised of the following documents:

- A. Part 1 Form P-37 General Provision
- B. Part 2 Information Technology Provisions
- C. Part 3 Exhibits

Exhibit A- Contract Deliverables

Exhibit B- Price and Payment Schedule

**Exhibit C- Special Provisions** 

**Exhibit D- Administrative Services** 

- **Exhibit E- Implementation Services**
- Exhibit F- Testing Services

Exhibit G- Maintenance and Support Services

**Exhibit H- Requirements** 

Exhibit I- Work Plan

Exhibit J- Software Agreement

- Exhibit K- Warranty and Warranty Services
- Exhibit L- Training Services

2018-122 IT Provisions – Part 2Page 12 of 34Contractor Initials:GSDate:4 Dcember 2019

Exhibit M- Agency RFP with Addendums, by reference Exhibit N- Vendor Proposal, by reference Exhibit O- Certificates and Attachments

## **1.2 ORDER OF PRECEDENCE**

In the event of conflict or ambiguity among any of the text of the Contract Documents, the following Order of Precedence shall govern:

- a. State of New Hampshire, Department of Transportation Contract Agreement 2018-122, including Parts 1, 2, and 3.
- b. State of New Hampshire, Department of Transportation RFP 2018-122.
- c. Vendor Proposal Response to RFP 2018-122 dated December 17, 2018.

# 2. CONTRACT TERM

The Contract and all obligations of the parties hereunder shall become effective after full execution by the parties, and the receipt of required governmental approvals, including, but not limited to, Governor and Executive Council of the State of New Hampshire approval ("Effective Date").

The Contract shall begin on the Effective Date and extend through February 1, 2026. The Term may be extended up to February 1, 2030, ("Extended Term") at the sole option of the State, -subject to the parties prior written agreement on applicable fees for each extended term.

The Contractor shall commence work upon issuance of a Notice to Proceed by the State. Performance of the Contractor's obligation will be in accordance with the agreed upon project schedule and the terms herein.

## 3. COMPENSATION

}

## 3.1 CONTRACT PRICE

The Contract Price, Part 1, P37, block 1.8 price limitation, method of payment, and terms of payment are identified and more particularly described in section 5 of P-37 Agreement and Part 3 Contract Exhibit B: *Price and Payment Schedule*.

## 3.2 NON-EXCLUSIVE CONTRACT

The State reserves the right, at its discretion, to retain other vendors to provide any of the Services or Deliverables identified under this procurement or make an award by item, part or portion of an item, group of items, or total Proposal. The Contractor shall not be responsible for any delay, act, or omission of such other vendors, except that the Contractor shall be responsible for any delay, act, or omission of the other vendors if such delay, act, or omission is caused by or due to the fault of the Contractor.

2018-122 IT Provisions – Part 2Page 13 of 34Contractor Initials: \_\_GS\_\_\_\_Date: \_\_\_4 Dcember 2019\_\_\_\_\_

## 4. CONTRACT MANAGEMENT

The Project will require the coordinated efforts of a Project Team consisting of both the Contractor and State personnel. The Contractor shall provide all necessary resources to perform its obligations under the Contract. The Contractor shall be responsible for managing the Project to its successful completion.

#### 4.1 THE CONTRACTOR'S CONTRACT MANAGER

The Contractor shall assign a Contract Manager who shall be responsible for all Contract authorization and administration. The Contractor's Project Manager is identified in paragraph 4.2.5 below.

Orlando Barrett National Accounting Manager 998 Old Eagle School Road #1215, Wayne, PA 19087 Tel: 610-263-2001 Orlando.Barrett@assetworks.com

## 4.2 THE CONTRACTOR'S PROJECT MANAGER

#### 4.2.1 Contract Project Manager

The Contractor shall assign a Project Manager who meets the requirements of the Contract. The Contractor's selection of the Contracted Vendor Project Managershall be subject to the prior written approval of the State. The State's approval process may include, without limitation, at the State's discretion, review of the proposed Contractor's Project Manager's resume, qualifications, references, and background checks, and an interview. The State may require removal or reassignment of the Contractor's Project Manager who, in the sole judgment of the State, is found unacceptable or is not performing to the State's satisfaction.

- **4.2.2** The Contractor's Project Manager must be qualified to perform the obligations required of the position under the Contract, shall have full authority to make binding decisions under the Contract, and shall function as the Contractor's representative for all administrative and management matters. The Contractor's Project Manager shall perform the duties required under the Contract, including, but not limited to, those set forth in Exhibit I, Section 2. The Contractor's Project Manager must be available to promptly respond during Normal Business Hours. The Contractor's Project Manager must work diligently and use his/ her best efforts on the Project.
- **4.2.3** The Contractor shall not change its assignment of the Contractor's Project Manager without providing the State written justification and obtaining the prior written approval of the State. State approvals for replacement of the Contractor's Project Manager shall not be unreasonably withheld. The replacement Project Manager shall have comparable or greater skills than of the Contractor's Project

2018-122 IT Provisions – Part 2 Contractor Initials: GS Date: 4 Dcember 2019 Page 14 of 34

Manager being replaced; meet the requirements of the Contract; and be subject to reference and background checks described above in General Provisions, Section 4.2.1: Contract Project Manager, and in Contract Agreement General Provisions, Section 4.6: Reference and Background Checks, below. The Contractor shall assign a replacement of the Contractor's Project Manager within ten (10) business days of the departure of the prior Contractor's Project Manager, and the Contractor shall continue during the ten (10) business day period to provide competent Project management Services through the assignment of a qualified interim Project Manager.

- **4.2.4** Notwithstanding any other provision of the Contract, the State shall have the option, at its discretion, to terminate the Contract, declare the Contractor in default and pursue its remedies at law and in equity, if the Contractor fails to assign a Contractor Project Manager meeting the requirements and terms of the Contract.
- 4.2.5 CONTRACTOR Project Manager is: Brian Bouffard Brian.bouffard @assetswork.scom

# 4.3 CONTRACTOR KEY PROJECT STAFF

- 4.3.1 The\_Contractor shall\_assign Key\_Project Staff\_who\_meet\_the\_requirements of the\_ Contract, and can implement the Software Solution meeting the requirements set forth in RFP Appendix C: System Requirements and Deliverables, Table C.2: General System Requirements-Proposer Response Checklist. The State may conduct reference and background checks on the Contractor's Key Project Staff. The State reserves the right to require removal or reassignment of the Contractor's Key Project Staff who are found unacceptable to the State. Any background checks shall be performed in accordance with General Provisions Section 4.6: Background Checks.
  - **4.3.2** The Contractor shall not change any of the Contractor's Key Project Staff commitments without providing the State written justification and obtaining the prior written approval of the State. State approvals for replacement of the Contractor's Key Project Staff will not be unreasonably withheld. The replacement of the Contractor's Key Project Staff shall have comparable or greater skills than of the Contractor's Key Project Staff being replaced; meet the requirements of the Contract, including but not limited to the requirements set forth in RFP Appendix C: *System Requirements and Deliverables* and be subject to reference and background checks described in Contract Agreement-General Provisions, Section 4.6: *Reference and Background Checks*,
  - **4.3.3** Notwithstanding any other provision of the Contract to the contrary, the State shall have the option to terminate the Contract, declare the Contractor in default and to pursue its remedies at law and in equity, if the Contractor fails to assign Key Project

 2018-122 IT Provisions – Part 2
 Page 15 of 34

 Contractor Initials:
 GS

 Date:
 \_\_4 Dcember 2019

Staff meeting the requirements and terms of the Contract or if it is dissatisfied with the Contractor's replacement Project staff.

**4.3.3.1** The Contractor Key Project Staff shall consist of the following individuals in the roles identified below:

The Contractor's Key Project Staff:

Blake Mize	Sr. Implementation Consultant
Joe Foster	Implementation Consultant
Marion Specer	EAM Product Manager

#### 4.4 STATE CONTRACT MANAGER

The State shall assign a Contract Manager who shall function as the State's representative with regard to Contract administration. The State Contract Manager is:

Mark Bogacz AMPS Project Manager 7 Hazen Drive Concord, NH 03301 Tel: 603-27:1-8259

Email: Mark.Bogacz@dot.nh.gov

## 4.5 STATE PROJECT MANAGER

The State shall assign a Project Manager. The State Project Manager's duties shall include the following:

- a. Leading the Project;
- b. Engaging and managing all Contractors;
- c. Managing significant issues and risks.
- d. Reviewing and accepting Contract Deliverables;
- e. Invoice sign-offs;
- f. Review and approval of change proposals; and
- g. Managing stakeholders' concerns.

The State Project Manager is:

Mark Bogacz AMPS Project Manager Office of Asset Management, Performance, and Strategy 7 Hazen Drive Concord, NH 03301 Tel: 603-271-8259

.

Email: Mark.Bogacz@dot.nh.gov

#### 4.6 REFERENCE AND BACKGROUND CHECKS

The Contractor-shall conduct criminal-background-checks and not-utilize-any-staff, including subcontractors, to fulfill the obligations of the contract who have been convicted of any crime of dishonesty, including but not limited to criminal fraud, or otherwise convicted of any felony or misdemeanor offense for which incarceration for up to 1 year is an authorized penalty. The Contractor shall promote and maintain an awareness of the importance of securing the State's information among the Contractor's employees and agents.

The State may, at its sole expense, conduct reference and background screening of the Contracted Vendor Project Manager and the Contractor Key Project Staff. The State shall maintain the confidentiality of background screening results in accordance with the Contract Agreement – General Provisions-Section 11: Use of State's Information, Confidentiality.

## 5. DELIVERABLES

#### 5.1 CONTRACTOR RESPONSIBILITIES

The Contractor shall be solely responsible for meeting all requirements, and terms and conditions specified in this Contract, regardless of whether or not a subcontractor is used.

The Contractor may subcontract Services subject to the provisions of the Contract, including but not limited to, the terms and conditions in the Contract Agreement. The Contractor must submit all information and documentation relating to the Subcontractor, including terms and conditions consistent with this Contract. The State will consider the Contractor to be wholly responsible for the performance of the Contract and the sole point of contact with regard to all contractual matters, including payment of any and all charges resulting from the Contract.

#### **5.2 DELIVERABLES AND SERVICES**

The Contractor shall provide the State with the Deliverables and Services in accordance with the time frames in the Work Plan for this Contract, and as more particularly described in Contract Exhibit A: *Contract Deliverables*.

# 5.3 NON-SOFTWARE AND WRITTEN DELIVERABLES REVIEW AND ACCEPTANCE

After receiving written Certification from the Contractor that a Non-Software or Written Deliverable is final, complete, and ready for Review, the State will Review the Deliverable to determine whether it meets the Requirements outlined in Contract Exhibit A: *Contract Deliverables.* The State will notify the Contractor in writing of its Acceptance or rejection of the Deliverable within five (5) business days of the State's receipt of the Contractor's written Certification. If the State rejects the Deliverable, the State shall notify the Contractor of the nature and class of the Deficiency and the Contractor shall correct the Deficiency within the period identified in the Work Plan. If no period for the Contractor's correction of the Deliverable is identified, the Contractor shall correct the Deficiency in the Deliverable within five (5) business

2018-122 IT Provisions - Part 2Page 17 of 34Contractor Initials: GS\_\_\_\_\_Date: 4 Dcember 2019\_\_\_\_\_

days. Upon receipt of the corrected Deliverable, the State shall have five (5) business days to review the Deliverable and notify the Contractor of its Acceptance or rejection thereof, with the option to extend the Review Period up to five (5) additional business days. If the Contractor fails to correct the Deficiency within the allotted period of time, the State may, at its option, continue reviewing-the Deliverable and-require-the Contractor-to continue-until-the-Deficiency is corrected, or immediately terminate the Contract, declare the Contractor in default, and pursue its remedies at law and in equity.

#### 5.4 SOFTWARE REVIEW AND ACCEPTANCE

System/Software Testing and Acceptance shall be performed as set forth in the Test Plan and more particularly described in Exhibit F: *Testing Services*.

#### 6. SOFTWARE

The Contractor shall provide the State with access to the Software and Documentation set forth in the Contract, and particularly described in Exhibit J: License Grant (*Software Agreement*).

## 7. SERVICES

The Contractor shall provide the Services required under the Contract Documents. All Services shall meet, and be performed, in accordance with the Specifications.

## 7.1 ADMINISTRATIVE SERVICES

The Contractor shall provide the State with the administrative Services set forth in the Contract, and particularly described in Exhibit D: Administrative Services.

#### 7.2 IMPLEMENTATION SERVICES

The Contractor shall provide the State with the Implementation Services set forth in the Contract, and particularly described in Exhibit E: Implementation Services.

#### 7.3 TESTING SERVICES

The Contractor shall perform testing Services for the State set forth in the Contract, and particularly described in Exhibit F: Testing Services.

#### 7.4 TRAINING SERVICES

The Contractor shall provide the State with training Services set forth in the Contract, and particularly described in Exhibit L: Training Services.

#### 7.5 MAINTENANCE AND SUPPORT SERVICES

The Contractor shall provide the State with Maintenance and support Services for the Software set forth in the Contract, and particularly described in Exhibit G: System Maintenance and Support.

#### 7.6 WARRANTY SERVICES

2018-122 IT Provisions – Part 2 Contractor Initials: GS Date: 4 Dcember 2019

Page 18 of 34

The Contractor shall provide the State with warranty Services set forth in the Contract, and particularly described in Exhibit K: Warranty & Warranty Services.

## 8. WORK PLAN DELIVERABLE

The Contractor shall provide the State with a Work Plan that shall include, without limitation, a detailed description of the Schedule, tasks, Deliverables, major milestones, task dependencies, and payment Schedule.

The initial Work Plan shall be a separate Deliverable and is set forth in Contract Exhibit I: Work Plan. The Contractor shall update the Work Plan as necessary, but no less than every two weeks, to accurately reflect the status of the Project, including without limitation, the Schedule, tasks, Deliverables, major milestones, task dependencies, and payment Schedule. Any such updates to the Work Plan must be approved by the State, in writing, prior to final incorporation into Contract Exhibit 1: Work Plan. The updated Contract Exhibit I: Work Plan, as approved by the State, is incorporated herein by reference.

Unless otherwise agreed in writing by the State, changes to the Contract Exhibit I: *Work Plan* shall not relieve the Contractor from liability to the State for damages resulting from the Contractor's failure to perform its obligations under the Contract, including, without limitation, performance in accordance with the Schedule.

In the event of any delay in the Schedule, the Contractor must immediately notify the State in writing, identifying the nature of the delay, i.e., specific actions or inactions of the Contractor or the State causing the problem; its estimated duration period to reconciliation; specific actions that need to be taken to correct the problem; and the expected Schedule impact on the Project.

In the event additional time is required by the Contractor to correct Deficiencies, the Schedule shall not change unless previously agreed in writing by the State, except that the Schedule shall automatically extend on a day-to-day basis to the extent that the delay does not result from the Contractor's failure to fulfill its obligations under the Contract. To the extent that the State's execution of its major tasks takes longer than described in the Work Plan, the Schedule shall automatically extend on a day-to-day basis.

Notwithstanding anything to the contrary, the State shall have the option to terminate the Contract for default, at its discretion, if it is dissatisfied with the Vendor's Work Plan or elements within the Work Plan.

## 9. CHANGE ORDERS/PROJECT CHANGE CONTROL

Change orders/project change control shall adhere to the following project procedures to address changes, which may potentially impact the project scope, schedule, and/or budget.

• A formal group will be defined to oversee potential scope, schedule, and budget changes, this will include the NHDOT PM and other designated staff (TBD by NHDOT) and the AssetWorks PM, PMO Manager, and Account Manager.

- When a potential change is identified the PMs for both NHDOT and AssetWorks will discuss and seek initial agreement that the change is needed
- Once this occurs, the change will be escalated to the change control group for discussion and agreement. This will include agreement that the change is needed, a formal understand of the impact of the change, as well as a discussion of not executing the change.
- Once the change has been deemed necessary, AssetWorks will prepare a formal project change request to document the scope of the change, as well as the potential costs associated with the change. All changes will be budgeted using the AssetWorks standard rate of \$205/hr.
- The change control group will review the change request and determine whether to proceed.
- Once the decision to proceed is made, the change request will be executed and integrated into the project scope, schedule and budget.

This process should facilitate a better understanding of potential changes to the scope, impacts to the project when scope changes are not made, and the effective project planning updates required to formally integrate potential changes into the project.

## **10. INTELLECTUAL PROPERTY**

## **10.1 SOFTWARE TITLE**

Title, right, and interest (including all ownership and intellectual property rights) in the Software, and its associated Documentation, shall remain with the Contractor.

Upon successful completion and/or termination of the Implementation of the Project, the Contracted Vendor shall own and hold all, title, and rights in any Software modifications developed in connection with performance of obligations under the Contract, or modifications to the Contracted Vendor provided Software, and their associated Documentation including any and all performance enhancing operational plans and the Vendors' special utilities. The Contracted Vendor shall license back to the State the right to produce, publish, or otherwise use such software, source code, object code, modifications, reports, and Documentation developed under the Contract.

In no event shall the Vendor be precluded from developing for itself, or for others, materials that are competitive with, or similar to Custom Software, modifications developed in connection with performance of obligations under the Contract. In addition, the Vendor shall be free to use its general knowledge, skills, experience, and any other ideas, concepts, know-how, and techniques that are acquired or used in the course of its performance under this agreement.

## **10.2 STATE'S DATA AND PROPERTY** (

All rights, title and interest in State Data shall remain with the State. All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason. The Contractor shall not access State user accounts or State data, except (1) in the course of data center operations, (2) in response to service or technical issues, (3) as required by the express terms of this contract or (4) at the State's written request.

2018-122 IT Provisions - Part 2Page 20 of 34Contractor Initials: GSGSDate: 4 Dcember 2019GS

#### **10.3 CONTRACTOR'S MATERIALS**

Subject to the provisions of this Contract, the Contractor may develop for itself, or for others, materials that are competitive with, or similar to, the Deliverables. In accordance with the provision of this Contract, the Contractor shall not distribute any products containing or disclose any State Confidential Information. The Contractor shall be free to use its general knowledge, skills and experience, and any ideas, concepts, know-how, and techniques that are acquired or used in the course of its performance under this Contract, provided that such is not obtained as the result of the deliberate memorization of the State Confidential Information by the Contractor employees or third party consultants engaged by the Contractor.

Without limiting the foregoing, the parties agree that the general knowledge referred to herein cannot include information or records not subject to public disclosure under New Hampshire RSA Chapter 91-A, which includes but is not limited to the following: records of grand juries and petit juries; records of parole and pardon boards; personal school records of pupils; records pertaining to internal personnel practices, financial information, test questions, scoring keys and other examination data use to administer a licensing examination, examination for employment, or academic examination and personnel, medical, welfare, library use, video tape sale or rental, and other files containing personally identifiable information that is private in nature.

## 10.4 STATE WEBSITE COPYRIGHT

#### WWW Copyright and Intellectual Property Rights

All right, title and interest-in-the State WWW site <NH.GOV, etc.>, including copyright to all Data and information, shall remain with the State. The State shall also retain all right, title and interest in any user interfaces and computer instructions embedded within the WWW pages. All WWW pages and any other Data or information shall, where applicable, display the State's copyright.

#### **10.5 CUSTOM SOFTWARE SOURCE CODE**

Changes to the source code remain the intellectual property of the Contractor. Any code changes made as a result of State of New Hampshire requirements shall be applied universally by Contractor within its application and incorporated with all future enhancements at no addition cost to the State.

#### 10.6 SURVIVAL

This Contract Agreement Section 10: Intellectual Property shall survive the termination of the Contract.

## 11 USE OF STATE'S INFORMATION, CONFIDENTIALITY

#### **11.1 USE OF STATE'S INFORMATION**

In performing its obligations under the Contract, the Contractor may gain access to information of the State, including State Confidential Information. "State Confidential Information" shall include, but not be limited to, information exempted from public disclosure under New Hampshire RSA Chapter 91-A: Access to Public Records and Meetings (see e.g. RSA Chapter 91-A: 5 Exemptions). The Contractor shall not use the State Confidential Information developed or obtained during the performance of, or acquired, or

2018-122 IT Provisions - Part 2Page 21 of 34Contractor Initials:GSDate:4 Dcember 2019

developed by reason of the Contract, except as directly connected to and necessary for the Contractor's performance under the Contract.

## **11.2 STATE CONFIDENTIAL INFORMATION**

The Contractor shall maintain the confidentiality of and protect from unauthorized use, disclosure, publication, and reproduction (collectively "release"), all State Confidential Information that becomes available to the Contractor in connection with its performance under the Contract, regardless of its form.

Subject to applicable federal or State laws and regulations, Confidential Information shall not include information which: (i) shall have otherwise become publicly available other than as a result of disclosure by the receiving party in breach hereof; (ii) was disclosed to the receiving party on a non-confidential basis from a source other than the disclosing party. which the receiving party believes is not prohibited from disclosing such information as a result of an obligation in favor of the disclosing party; (iii) is developed by the receiving party independently of, or was known by the receiving party prior to, any disclosure of such information made by the disclosing party; or (iv) is disclosed with the written consent of the disclosing party. A receiving party also may disclose Confidential Information to the extent required by an order of a court of competent jurisdiction.

Any disclosure of the State Confidential Information shall require the prior written approval of the State. The Contractor shall immediately notify the State if any request, subpoena or other legal process is served upon the Contractor regarding the State Confidential Information, and the Contractor shall cooperate with the State in any effort the State undertakes to contest the request, subpoena or other legal process, at no additional cost to the State.

In the event of the unauthorized release of State Confidential Information, the Contractor shall immediately notify the State, and the State may immediately be entitled to pursue any remedy at law and in equity, including, but not limited to, injunctive relief.

#### 11.3

#### CONTRACTOR CONFIDENTIAL INFORMATION

Insofar as the Contractor seeks to maintain the confidentiality of its confidential or proprietary information, the Contractor must clearly identify in writing all information it claims to be confidential or proprietary. Notwithstanding the foregoing, the State acknowledges that the Contractor considers the Software and Documentation to be Confidential Information. The Contractor acknowledges that the State is subject to State and federal laws governing disclosure of information including, but not limited to, RSA Chapter 91-A. The State shall maintain the confidentiality of the identified Confidential Information insofar as it is consistent with applicable State and federal laws or regulations, including but not limited to, RSA Chapter 91-A. In the event the State receives a request for the information identified by the Contractor as confidential, the State shall notify the Contractor and specify the date the State will be releasing the requested information. At the request of the State, the Contractor shall cooperate and assist the State with the collection and review

2018-122 IT Provisions - Part 2 Page 22 of 34 Contractor Initials: GS Date: \_\_\_\_4 Dcember 2019

of the Contractor's information, at no additional expense to the State. Any effort to prohibit or enjoin the release of the information shall be the Contractor's sole responsibility and at the Contractor's sole expense. If the Contractor fails to obtain a court order enjoining the disclosure, the State shall release the information on the date specified in the State's notice

to the Contractor, without any liability to the Contractor.

## 11.4 SURVIVAL

This Contract Agreement Section 11, Use of State's Information, Confidentiality, shall survive termination or conclusion of the Contract.

## **12 LIMITATION OF LIABILITY**

#### 12.1 STATE

Subject to applicable laws and regulations, in no event shall the State be liable for any consequential, special, indirect, incidental, punitive, or exemplary damages. Subject to applicable laws and regulations, the State's liability to the Contractor shall not exceed the total Contract price set forth in Contract Agreement – General Provisions, Block 1.8.

#### 12.2 CONTRACTOR

Subject to applicable laws and regulations, in no event shall the Contractor be liable for any consequential, special, indirect, incidental, punitive or exemplary damages, including, but not limited to lost revenue, lost profits, replacement goods, loss of technology rights or services, or loss or corruption of data, and the Contractor's liability to the State shall not exceed the greater of: (a) \$2 million dollars or (b) two times (2x) the amount spent under the Agreement.

Notwithstanding the foregoing, this limitation of liability shall not apply to the Contractor's indemnification obligations for third party claims set forth in the Contract Agreement-General Provisions Section 13: *Indemnification* and confidentiality obligations in Contract Agreement-General Provisions Section 11: Use of State's Information, Confidentiality, which shall be unlimited.

#### **12.3 STATE'S IMMUNITY**

Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant shall survive termination or Contract conclusion.

#### 12.4 SURVIVAL

This Section 12: Limitation of Liability shall survive termination or Contract conclusion.

#### 13 TERMINATION

This Section 13 shall survive the termination or Contract Conclusion.

2018-122 IT Provisions - Part 2	Page 23 of 34
Contractor Initials:GS	-
Date: 4 Dcember 2019	

#### **13.1 TERMINATION FOR DEFAULT**

Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default")

- a. Failure to perform the Services satisfactorily or on schedule;
- b. Failure to submit any report required; and/or
- c. Failure to perform any other covenant, term or condition of the Contract
  - **13.1.1** Upon the occurrence of any Event of Default, the State may take any one or more, or all, of the following actions:
    - a. Unless otherwise provided in the Contract, the State shall provide the Contractor written notice of default and require it to be remedied within, in the absence of a greater or lesser specification of time, within thirty (30) days from the date of notice, unless otherwise indicated within by the State ("Cure Period"). If the Contractor fails to cure the default within the Cure Period, the State may terminate the Contract effective two (2) days after giving the Contractor notice of termination, at its sole discretion, treat the Contract as breached and pursue its remedies at law or in equity or both.
    - **b.** Give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under the Contract and ordering that the portion of the Contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor.
    - c. Set off against any other obligations the State may owe to the Vendor any damages the State suffers by reason of any Event of Default;
    - d. Treat the Contract as breached and pursue any of its remedies at law or in equity, or both.
    - e. Procure Services that are the subject of the Contract from another source and the Contractor shall be liable for reimbursing the State for the replacement Services, and all administrative costs directly related to the replacement of the Contract and procuring the Services from another source, such as costs of competitive bidding, mailing, advertising, applicable fees, charges or penalties, and staff time costs; all of which shall be subject to the limitations of liability set forth in the Contract.
  - 13.1.2 The Vendor shall provide the State with written notice of default, and the State shall cure the default within thirty (30) days.

#### **13.2 TERMINATION FOR CONVENIENCE**

2018-122 IT Provisions – Part 2Page 24 of 34Contractor Initials:GSDate:4 Dcember 2019

- 13.2.1 The State may, at its sole discretion, terminate the Contract for convenience, in whole or in part, by thirty (30) days written notice to the Contractor. In the event of a termination for convenience, the State shall pay the Contractor the agreed upon price, if separately stated in this Contract, for Deliverables for which Acceptance has been given by the State. Amounts for Services or Deliverables provided prior to the date of termination for which no separate price is stated under the Contract shall be paid, in whole or in part, generally in accordance with Contract Exhibit B, *Price and Payment Schedule*, of the Contract. Pre-paid amounts for Services shall not be refunded for termination under this Section.
- 13.2.2 During the thirty (30) day period, the Contractor shall wind down and cease Services as quickly and efficiently as reasonably possible, without performing unnecessary Services or activities and by minimizing negative effects on the State from such winding down and cessation of Services.

# 13.3 TERMINATION FOR CONFLICT OF INTEREST

13.3.1 The State may terminate the Contract by written notice if it determines that a conflict of interest exists, including but not limited to, a violation by any of the parties hereto of applicable laws regarding ethics in public acquisitions and procurement and performance of Contracts.

In such case, the State shall be entitled to a pro-rated refund of any current development, support, and maintenance costs. The State shall pay all other contracted payments that would have become due and payable if the Contractor did not know, or reasonably did not know, of the conflict of interest.

13.3.2 In the event the Contract is terminated as provided above pursuant to a violation by the Contractor, the State shall be entitled to pursue the same remedies against the Contractor as it could pursue in the event of a default of the Contract by the Contractor.

## **13.4 TERMINATION PROCEDURE**

- 13.4.1 Upon termination of the Contract, the State, in addition to any other rights provided in the Contract, may require the Contractor to deliver to the State any property, including without limitation, Software and Written Deliverables, for such part of the Contract as has been terminated.
- **13.4.2** After receipt of a notice of termination, and except as otherwise directed by the State, the Contractor shall:
  - a. The State shall be entitled to any post-termination assistance generally made available with respect to the services, unless a unique data retrieval arrangement has been established as part of the SLA.

2018-122 IT Provisions – Part 2Page 25 of 34Contractor Initials:GS\_\_\_\_\_Date:4 Dcember 2019\_\_\_\_\_

- b. Stop work under the Contract on the date, and to the extent specified, in the notice;
- c. Promptly, but in no event longer than thirty (30) days after termination, terminate its orders and subcontracts related to the work which has been terminated and settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the State to the extent required, which approval or ratification shall be final for the purpose of this Section;
- d. Take such action as the State directs, or as necessary to preserve and protect the property related to the Contract which is in the possession of the Contractor and in which the State has an interest;
- e. During any period of service suspension, the Contractor shall not take any action to intentionally erase any State data.
  - 1. In the event of termination of any services or agreement in entirety, the Contractor shall not take any action to intentionally erase any State data for a period of:
    - 10 days after the effective date of termination, if the termination is in accordance with the contract period
    - 30 days after the effective date of termination, if the termination is for convenience
    - 60 days after the effective date of termination, if the termination is for cause
  - 2. After such period, the Contractor shall have no obligation to maintain or provide any State data and shall thereafter, unless legally prohibited, delete all State data in its systems or otherwise in its possession or under its control.
- f. Transfer title to the State and deliver in the manner, at the times, and to the extent directed by the State, any property which is required to be furnished to the State and which has been accepted or requested by the State; and
- g. The Contractor shall implement an orderly return of State data in a CSV or another mutually agreeable format at a time agreed to by the parties and the subsequent secure disposal of State data;
- h. The Contractor shall securely dispose of all requested data in all of its forms, such as disk, CD/ DVD, backup tape and paper, when requested by the State. Data shall be permanently deleted and shall not be recoverable, according to National Institute of Standards and Technology (NIST)-approved methods. Certificates of destruction shall be provided to the State.
- i. Provide written Certification to the State that the Contractor has surrendered to the State all said property.

2018-122 IT Provisions – Part 2Page 26 of 34Contractor Initials: GS\_\_\_\_\_\_Date: 4 Dcember 2019\_\_\_\_\_\_

## 14 CHANGE OF OWNERSHIP

In the event of an assignment or novation of this Agreement to an affiliate pursuant to an internal corporate reorganization, the Contractor shall provide the State at least 10 days' advanced notice of such assignment or novation and shall not require State's prior written consent. In the event that the Contractor should change ownership as described herein or assign the contract for any reason whatsoever, the State shall have the option of continuing under the Contract with the Contractor, its successors or assigns for the full remaining term of the Contract; continuing under the Contract with the Contract with the Contractor, its successors or assigns for such period of time as determined necessary by the State; or immediately terminate the Contract without liability to the Contractor, its successors or assigns.

# 15 ASSIGNMENT, DELEGATION AND SUBCONTRACTS

15.1 The Contractor shall not assign, delegate, subcontract, or otherwise transfer any of its interest, rights, or duties under the Contract without the prior written consent of the State. Such consent shall not be unreasonably withheld. Any attempted transfer, assignment, delegation, or other transfer made without the State's prior written consent shall be null and void, and may constitute an event of default at the sole discretion of the State.

15.2 The Contractor shall remain wholly responsible for performance of the entire Contract even if assignees, delegates, Subcontractors, or other transferees ("Assigns") are used, unless otherwise agreed to in writing by the State, and the Assigns fully assumes in writing any and all obligations and liabilities under the Contract from the Effective Date. In the absence of a written assumption of full obligations and liabilities of the Contract, any permitted assignment, delegation, subcontract, or other transfer shall neither relieve the Contractor of any of its obligations under the Contract nor affect any remedies available to the State against the Contractor that may arise from any event of default of the provisions of the contract. The State shall consider the Contractor to be the sole point of contact with regard to all contractual matters, including payment of any and all charges resulting from the Contract.

**15.3** Notwithstanding the foregoing, nothing herein shall prohibit the Contractor from assigning the Contract to the successor of all or substantially all of the assets or business of the Contractor provided that the successor fully assumes in writing all obligations and responsibilities under the Contract. In the event that the Contractor should change ownership, as permitted under Section 15: *Change of Ownership*, the State shall have the option to continue under the Contract with the Contractor, its successors or assigns for the full remaining term of the Contract; continue under the Contract with the Contract of time as determined necessary by the State; or immediately terminating the Contract without liability to the Contractor, its successors or assigns.

## **16 DISPUTE RESOLUTION**

Prior to the filing of any formal proceedings with respect to a dispute (other than an action seeking injunctive relief with respect to intellectual property rights or Confidential Information), the party believing itself aggrieved (the "Invoking Party") shall call for progressive management involvement in the dispute negotiation by written notice to the other party. Such notice shall be without prejudice to the Invoking Party's right to any other remedy permitted under the Contract.

2018-122 IT Provisions – Part 2Page 27 of 34Contractor Initials: GSGSDate: 4 Dcember 2019

The parties shall use reasonable efforts to arrange personal meetings and/or telephone conferences as needed, at mutually convenient times and places, between negotiators for the parties at the following successive management levels, each of which shall have a period of allotted time as specified below in which to attempt to resolve the dispute:

### **Dispute Resolution Responsibility and Schedule Table**

LEVELS	CONTRACTOR>	STATE	CUMULATIVE
Primary	Brian Bouffard (PM)	Mark Bogacz State Project Manager (PM)	5 Business Days
First	Doug Henstridge (PM Manager)	David Rodrigue Director	10 Business Days
Second	Pamela Chow (VP Operations)	Victoria Sheehan Commissioner	15 Business Days

The allotted time for the first level negotiations shall begin on the date the Invoking Party's notice is received by the other party. Subsequent allotted time is days from the date that the original Invoking Party's notice is received by the other party.

### 17 SAAS GENERAL TERMS AND CONDITIONS

#### **17.1 COMPUTER USE**

In consideration for receiving access to and use of the computer facilities, network, licensed or developed software, software maintained or operated by any of the State entities, systems, equipment, Documentation, information, reports, or data of any kind (hereinafter "Information"), the Contractor understands and agrees to the following rules:

- a. Every Authorized User has the responsibility to assure the protection of information from unauthorized access, misuse, theft, damage, destruction, modification, or disclosure.
- **b.** That information shall be used solely for conducting official State business, and all other use or access is strictly forbidden including, but not limited to, personal, or other private and non-State use and that at no time shall the Contractor access or attempt to access any information without having the express authority to do so.
- c. That at no time shall the Contractor access or attempt to access any information in a manner inconsistent with the approved policies, procedures, and /or agreements relating to system entry/access.

Page 28 of 34

- d. That all software licensed, developed, or being evaluated by the State cannot be copied, shared, distributed, sub-licensed, modified, reverse engineered, rented, or sold, and that at all times the Contractor must use utmost care to protect and keep such software strictly confidential in accordance with the license or any other Agreement executed by the State.
   Only equipment or software owned; licensed; or being evaluated by the State; can be used by the Contractor. Personal software (including but not limited to palmtop sync software) shall not be installed on any equipment.
- e. That if the Contractor is found to be in violation of any of the above-stated rules, the User may face removal from the State Contract, and/or criminal or civil prosecution, if the act constitutes a violation of law.

#### **17.2 EMAIL USE**

EMail and other electronic communication messaging systems are State of New Hampshire property and are to be used for business purposes only. Email is defined as "internal Email systems" or "State-funded Email systems." the Contractor understand and agree that use of email shall follow State standard policy (available upon request).

#### **17.3 INTERNET/INTRANET USE**

The Internet/Intranet is to be used for access to and distribution of information in direct support of the business of the State of New Hampshire according to State standard policy (available upon request).

#### **17.4 REGULATORY GOVERNMENT APPROVALS**

The Contractor shall obtain all necessary and applicable regulatory or other governmental approvals necessary to perform its obligations under the Contract.

#### **17.5 INSURANCE CERTIFICATE**

The Insurance Certificate should note the Certificate Holder in the lower left hand block including State of New Hampshire, Department Name, name of the individual responsible for the funding of the contracts and his/her address.

#### **17.6 EXHIBITS**

The Exhibits referred to, in and attached to the Contract are incorporated by reference as if fully included in the text.

#### **17.7 VENUE AND JURISDICTION**

Any action on the Contract may only be brought in the State of New Hampshire, Merrimack County Superior Court.

#### 17.8 SURVIVAL

The terms, conditions and warranties contained in the Contract that by their context are intended to survive the completion of the performance, cancellation or termination of the Contract shall so survive, including, but not limited to, the terms of the Exhibit E Section 3: Records Retention and Access Requirements, Exhibit E Section 4: Accounting Requirements,

2018-122 IT Provisions – Part 2	N	Page 29 of 34
Contractor Initials:GS	ï	
Date: 4 Dcember 2019		

and General Provisions-Section 11: Use of State's Information, Confidentiality and General Provisions- Section 14: Termination which shall all survive the termination of the Contract.

#### **17.9 FORCE MAJEURE**

-Neither the Contractor-nor-the-State shall-be responsible for delays or-failures in performance resulting from events beyond the control of such party and without fault or negligence of such party. Such events shall include, but not be limited to, acts of God, strikes, lock outs, riots, and acts of War, epidemics, acts of Government, fire, power failures, nuclear accidents, earthquakes, and unusually severe weather.

Except in the event of the foregoing, Force Majeure events shall not include the Contractor's inability to hire or provide personnel needed for the Contractor's performance under the Contract.

#### **17.10 NOTICES**

Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the following addresses.

#### TO THE CONTRACTOR

ASSETWORKS LLC: ATTN LEGAL 998 OLD EAGLE SCHOOL ROAD SUITE 1215 WAYNE, PA 19087 TO STATE

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION AMPS, ASSET MANAGEMENT, PERFORMANCE, AND STRATEGY 7 HAZEN DRIVE CONCORD, NH 03301

#### **17.11 DATA PROTECTION**

Protection of personal privacy and data shall be an integral part of the business activities of the Contractor to ensure there is no inappropriate or unauthorized use of State information at any time. To this end, the Contractor shall safeguard the confidentiality, integrity and availability of State information and comply with the following conditions:

a. The Contractor shall implement and maintain appropriate administrative, technical and organizational security measures to safeguard against unauthorized access, disclosure or theft of State data and non-public data. Such security measures shall be in accordance with recognized industry practice and not less stringent than the measures the Contractor applies to its own personal data and non-public data of similar kind.

b. All data obtained by the Contractor in the performance of this contract and all personal data shall be encrypted at rest and in transit with controlled access. Unless otherwise stipulated, the Contractor is responsible for encryption of the personal data.

2018-122 IT Provisions – Part 2Page 30 of 34Contractor Initials:GS\_\_\_\_\_Date:4 Dcember 2019\_\_\_\_\_

c. Unless otherwise stipulated, the Contractor shall encrypt all non-public data at rest and in transit. The State shall identify data it deems as non-public data to the Contractor. The level of protection and encryption for all non-public data shall be identified and made a part of this contract.

-----

d. State agrees that non-public data provided to Contractor shall not include any data that exceeds the Low/Mediium data classification as defined under FIPS199 publication (Federal Information Processing Standards Pub 199).

e. At no time shall any data or processes — that either belong to or are intended for the use of the State or its officers, agents or employees — be copied, disclosed or retained by the the Contractor or any party related to the Contractor for subsequent use in any transaction that does not include the State.

f.. The Contractor shall not use any information collected in connection with the service issued from this proposal for any purpose other than fulfilling the service.

#### **17.12. DATA LOCATION**

The Contractor shall provide its Services to the State and its end users solely from data centers within the Continental United States. All storage, processing and transmission of State data shall be restricted to information technology systems within the Continental United States. The Contractor shall not allow its personnel or sub-contractors to store State data on portable devices, including personal computers, except as specified and allowed by the contract, and then only on devices that are used and kept at its data centers within the Continental United States. The Contractor shall permit its personnel and Contractors to access State data remotely only to provide technical support and as specified or required by the contract.

#### **17.13. SECURITY INCIDENT OR DATA BREACH NOTIFICATION**

The Contractor shall inform the State of any security incident or data breach in accordance with NH RSA 359-C.

a. Incident Response: the Contractor may need to communicate with outside parties regarding a security incident, which may include contacting law enforcement, fielding media inquiries and seeking external expertise as mutually agreed upon, defined by law or contained in the contract. Discussing security incidents with the State should be handled on an urgent as-needed basis, as part of the Contractor communication and mitigation processes as mutually agreed upon, defined by law or contained in the contract.

b. Security Incident Reporting Requirements: the Contractor shall report a security incident to the appropriate State identified contact immediately if it reasonably believes there has been a security incident.

c. Breach Reporting Requirements: If the Contractor has actual knowledge of a confirmed data breach that affects the security of any State content that is subject to applicable data

breach notification law, the Contractor shall (1) promptly notify the appropriate State identified contact within 24 hours or sooner, unless shorter time is required by applicable law, and (2) take commercially reasonable measures to address the data breach in a timely manner.

#### **17.14. BREACH RESPONSIBILITIES**

This section only applies when a data breach occurs with respect to personal data within the possession or control of the Contractor.

a. The Contractor, unless stipulated otherwise, shall immediately notify the appropriate State identified contact by telephone in accordance with the agreed upon security plan or security procedures if it reasonably believes there has been a security incident.

b. The Contractor, unless stipulated otherwise, shall promptly notify the appropriate State identified contact within 24 hours or sooner by telephone, unless shorter time is required by applicable law, if it confirms that there is, or reasonably believes that there has been a data breach. the Contractor shall (1) cooperate with the State as reasonably requested by the State to investigate and resolve the data breach, (2) promptly implement necessary remedial measures, if necessary, and (3) document responsive actions taken related to the data breach, including any post-incident review of events and actions taken to make changes in business practices in providing the services, if necessary.

c. Unless otherwise stipulated, if a data breach is solely and a direct result of the Contractor's breach of its contract obligation to encrypt personal data or otherwise prevent its release, the Contractor shall bear the costs associated with:

(1) the investigation and resolution of the data breach;

(2) notifications to individuals, regulators or others required by State law;

(3) a credit monitoring service required by State (or federal) law;

(4) a website or a toll-free number and call center for affected individuals required by State law NH RSA 359-C:19-C:20, all not to exceed the average per record per person cost calculated for Data Breaches in the United States (currently \$148 per record/person) in the most recent "Cost of a Data Breach Study: Global Overview" published by the Ponemon Institute at the time of the Data Breach; and (5) complete all corrective actions as reasonably determined by the Contractor based on root cause; all [(1) through (5)] subject to this Contract's limitation of liability.

#### **17.15. NOTIFICATION OF LEGAL REQUESTS**

The Contractor shall contact the State upon receipt of any electronic discovery, litigation holds, discovery searches and expert testimonies related to the State's data under this contract, or which in any way might reasonably require access to the data of the State. the Contractor shall not respond to subpoenas, service of process and other legal requests related to the State without first notifying the State, unless prohibited by law from providing such notice.

### 17.16. ACCESS TO SECURITY LOGS AND REPORTS

2018-122 IT Provisions – Part 2 Contractor Initials: GS Date: 4 Dcember 2019 Page 32 of 34

The Contractor shall provide reports to the State in a format as agreed to by both the Contractor and the State. Reports shall include latency statistics, user access, user access IP address, user access history and security logs for all State files related to this contract.

### 17.17. CONTRACT AUDIT

The Contractor shall allow the State to audit conformance to the contract terms. The State may perform this audit or contract with a third party at its discretion and at the State's expense.

### **17.18. DATA CENTER AUDIT**

The Contractor shall perform an independent audit of its data centers at least annually at its expense, and provide a redacted version of the audit report upon request. The Contractor may remove its proprietary information from the redacted version. A Service Organization Control (SOC) 2 audit report or approved equivalent sets the minimum level of a third-party audit.

### **17.19. ADVANCE NOTICE**

The Contractor shall give advance notice to the State of any upgrades (e.g., major upgrades, minor upgrades, system changes) that may impact service availability and performance. A major upgrade is a replacement of hardware, software or firmware with a newer or better version in order to bring the system up to date or to improve its characteristics. It usually includes a new version number.

#### **17.20. SECURITY**

The Contractor shall disclose its non-proprietary security processes and technical limitations to the State such that adequate protection and flexibility can be attained between the State and the Contractor. For example: virus checking and port sniffing — the State and the Contractor shall understand each other's roles and responsibilities.

### **17.21. NON-DISCLOSURE AND SEPARATION OF DUTIES**

The Contractor shall enforce separation of job duties, require commercially reasonable nondisclosure agreements, and limit staff knowledge of State data to that which is absolutely necessary to perform job duties.

### **17.22. IMPORT AND EXPORT OF DATA**

The State shall have the ability to import or export data in piecemeal or in entirety at its discretion without interference from the Contractor. This includes the ability for the State to import or export data to/from other service providers.

### **17.23. RESPONSIBILITIES AND UPTIME GUARANTEE**

The Contractor shall be responsible for the acquisition and operation of all hardware, software and network support related to the services being provided. The technical and professional activities required for establishing, managing and maintaining the environments are the responsibilities of the Contractor. The system shall be available 24/7/365 (with agreed-upon maintenance downtime), and provide service to customers as defined in this agreement.

2018-122 IT Provisions - Part 2Page 33 of 34Contractor Initials:GS\_\_\_\_\_\_Date:\_\_\_\_4 Dcember 2019\_\_\_\_\_

J

### **17.24. RIGHT TO REMOVE INDIVIDUALS**

The State shall have the right at any time to require that the Contractor remove from interaction with State any the Contractor representative who the State believes is detrimental to its working relationship with the Contractor. The State shall provide the Contractor with notice of its determination, and the reasons it requests the removal. If the State signifies that a potential security violation exists with respect to the request, the Contractor shall immediately remove such individual. the Contractor shall not assign the person to any aspect of the contract or future work orders without the State's consent.

2018-122 IT Provisions – Part 2 Contractor Initials: GS Date: 4 Dcember 2019 Page 34 of 34

6

EXHIBIT A - SYSTEM REQUIREMENTS AND DELIVERABLES	4
EXHIBIT B - PAYMENT SCHEDULE	7
EXHIBIT C – SPECIAL PROVISIONS	11
EXHIBIT D – ADMINISTRATIVE SERVICES	13
EXHIBIT E – IMPLEMENTATION SERVICES	15
EXHIBIT F – TESTING SERVICES	19
EXHIBIT G – MAINTENANCE AND SUPPORT SERVICES	27
EXHIBIT H – REQUIREMENTS	29
EXHIBIT I – WORK PLAN	37
EXHIBIT J LICENSE GRANT	45
EXHIBIT K WARRANTIES	47
EXHIBIT L – TRAINING SERVICES	49
EXHIBIT M – AGENCY RFP WITH ADDENDUMS, BY REFERENCE	51
EXHIBIT N – VENDOR PROPOSAL, BY REFERENCE	53
EXHIBIT – CERTIFICATES AND ATTACHMENTS	55

3

THIS PAGE INTENTIONALLY LEFT BLANK.

State of NH Contract 2018-122 Part 3 Exhibits Table of Contents Date: \_4 December 2019 Contractor's Initials \_\_GS\_\_\_\_

#### **EXHIBIT A - SYSTEM REQUIREMENTS AND DELIVERABLES**

### 1. Scope of Work

The State of New Hampshire is contracting with Vendor to purchase a comprehensive fleet, work order and inventory management solution that eliminates redundancy, enhances data collection and reporting, and provides for efficient tracking throughout the entire department fleet, work order and inventory life cycle. The goal is to replace existing outdated information systems with a streamlined solution that utilizes newer technologies, complies with Federal guidelines, and simplifies the collection and processing of information.

The existing fleet management software is a commercial solution that has been in place through multiple versions for the past 20 years. The current inventory software comprises two separate systems independent of fleet management and each other. Each of these systems were developed in-house using VB.Net with an Oracle database. One tracks equipment inventory while the second tracks consumable inventory. The proposed Work Order system will replace a work accomplishment system developed in VB.Net with an Oracle database.

The existing fleet management software has approximately 75 users and 20,000 inventory items. Consumables and Durable inventory systems have approximately 36 and 68 users respectively. NHDOT would like to combine these systems into the Proposed Solution that will provide fleet management, work order functionality, equipment inventory management, and consumable inventory management, including, at a minimum, procurement, billing, processing, tracking, analysis, reporting, and data management functions. The solution will be a commercial, off-the-shelf software, configured as necessary, web based, and hosted off-site by the Proposer.

### 2. Definition and Understanding of the Term Configurable

Throughout this RFP and subsequent project documentation, the term "configurable" and "user configurable" is and will be used. To provide clarity and avoid misinterpretation, NHDOT has defined the terms of User Configurable and Configurable as:

User Configurable – shall mean that users of the system such as operations staff, management staff, etc., with appropriate user rights may make changes to the system in accordance with those business requirements documented in Exhibit H - Requirements where the Contractor has indicated the delivery method is user configurable. User Configurable items shall not be dependent on Proposer's development staff, programmers, etc., nor shall it be subject to code changes, requests for extra work, considered out of scope work or require additional system and/or regression testing.

5

**Configurable** – shall mean that the System is capable of being configured to adapt to changes throughout the term of the contract. Configurable items may be limited to the Proposer's development staff, programmers, etc. Configurable changes, either directed by NHDOT or at the Proposer's discretion shall be considered part of the Proposer's scope of work and not subject to code changes, requests for extra work, or considered out of scope work.

## 3. Requirements

Vendor shall deliver each of the system requirements identified in Exhibit H – Requirements.

## 4. Deliverables

The schedule of Activities, Deliverables, and Milestones is included in Exhibit B. Pricing for Deliverables are set forth in Exhibit B: *Price and Payment Schedule*. Pricing will be effective for the Term of this Contract, and any extensions thereof.

### 5. General

Unless otherwise noted or instructed by NHDOT, document deliverables require a draft, final draft, and final submission with time (minimum 15 business days) allocated for NHDOT review and approval of each deliverable (draft, final draft, and final).

- Draft draft submittals shall be completed by the Contracted Vendor with an intent to represent a 90% completion. NHDOT's review of the Draft shall serve as the initial review and to resolve any outstanding issues and/or clarifications needed for the Contracted Vendor to complete the document and submit a Final Draft.
- Final Draft The Final Draft shall be considered 100% complete taking into consideration and applying all comments and resolutions from the Draft submittal. NHDOT's review of the Final Draft is intended to verify that all comments and resolutions have been appropriately applied.
- Final Submittal Upon NHDOT review of the Final Draft and verification that all
  outstanding comments and resolutions have been applied, NHDOT will issue a final
  approval of the submittal. Contracted Vendor shall then finalize the submittal and provide
  to NHDOT as such.
- Each of these submittals along with all corresponding drafts shall be clearly represented in the Project Schedule. Contracted Vendor shall ensure that the scheduling and submittal of all drafts take into account the required review and resubmittal times to meet the milestone deliverable date.

NHDOT will review and approve all deliverables required under the Contract. In the event the Contracted Vendor fails to receive approval of any document prior to "Go-Live" as indicated in Table C-3 *Project Deliverables*, NHDOT may withhold, in its entirety, monthly operations payments until such documents are satisfactorily submitted and approved.

Contracted Vendor shall take into consideration the review and response times of both the NHDOT and the Contracted Vendor in preparing and managing the timeliness of the document deliverables.

As part of each review process, NHDOT will provide the Contracted Vendor with a consolidated set of comments on the deliverable submitted for review within the 15 business day period.

Contracted Vendor shall respond in writing to all NHDOT provided comments. A comment resolution meeting may be conducted to clarify and resolve any remaining questions and issues concerning the comments and/or responses provided.

Based on NHDOT comments and the results of the comment resolution meeting, the Contracted Vendor shall prepare a final version of the deliverable for NHDOT approval.

# 6. General Project Assumptions

- A. The Contractor will provide project tracking tools and templates to record and manage Issues, Risks, Change Requests, Requirements, and other documents used in the management and tracking of the project. The State of New Hampshire and the Contractor's Project Managers will review these tools and templates and determine which ones will be used for the project. Training on these tools and templates will be conducted at the start of each phase in which they will be used.
- B. Prior to the commencement of work on Non-Software and Written Deliverables, the Contractor shall provide to the State a template, table of contents, or agenda for Review and prior approval by the State.
- C. The Contractor shall ensure that appropriate levels of security are implemented and maintained in order to protect the integrity and reliability of the State's Information Technology resources, information, and services. Security requirements are defined in Appendix C-2 of the Request for Proposal. The Contractor shall provide the State resources, information, and Services on an ongoing basis, with the appropriate infrastructure and security controls to ensure business continuity and to safeguard the confidentiality and integrity of State networks, Systems and Data.
- D. The Deliverables are set forth in the Schedule described above in Table C-3 Project Deliverables. By unconditionally accepting a Deliverable, the State reserves the right to reject

any and all Deliverables in the event the State detects any Deficiency in the System, in whole or in part, through completion of all Acceptance Testing, including but not limited to, Software/System Acceptance Testing, and any extensions thereof.

### **EXHIBIT B - PAYMENT SCHEDULE**

### 1. Firm Fixed Price

This is a Firm Fixed Price (FFP) Contract for the period between the Effective Date through February 1, 2026. The Contractor shall be responsible for performing its obligations in accordance with the Contract. This Contract will allow the Contractor to invoice the State for the following activities, Deliverables, or milestones at fixed pricing/rates appearing in the price and payment tables below:

### 2. Payment and Delivery Schedule

#### NHDOT WOFI Milestone Billing Schedule

Milestone	WBS #	Planned Delivery	Final Milestone Lump Sum Amount	Holdback
Net Proposal Software Costs	0A	04/10/20	\$415,500.00	
Crystal Reports Full CPU Lic	OB	04/10/20	\$2,900.00	
Maintenance Service Agreements	0Ć	Per Module Acceptance	\$1,133,951.06	
Hosting Fee	OE	See Paragraph 2.1 Reoccurring Prices	\$216,000.00	
Conference Training		As incurred	\$14,000.00	
Project Kick-off and Orientation	1.0	02/24/20	\$38,026.36	
Initial Requirements Assessment	2.0	04/24/20	\$48,809.96	
Business Process Validation	2.0	07/31/20	\$50,512.62	
Change Management Planning	2.0	12/10/20	\$27,242.76	
System Setup Consulting Services	3.0	12/18/20	\$58,458.43	
Data Conversion and Migration Services	4.0	06/18/21	\$70,377.14	,
Integration Services	5.0	06/26/20	\$17,026.73	
System Configuration Services	6.0	08/06/21	\$51,647.74	
System Testing Services	7.0	01/21/22	\$77,187.83	Applies
Training Preparation	8.0	03/01/22	\$74,350.04	
Implementation Support Services	9.0	05/24/22	\$133,943.60	
Post Implementation Audit	10.0	08/30/22	\$17,026.73	
Travel – To be billed as incurred		As incurred	\$63,000.00	
Allocation & Assignment Setup Service	6E	08/06/21	\$13,000.00	

Milestone	WBS #	Planned Delivery	Final Milestone Lump Sum Amount	Holdback
NHDOT Data Warehouse Integration		As Incurred	\$76,045.00	Applies
NH FIRST RQ/PO/AP/AR Integrations (TBD)		As incurred	\$189,000.00	Applies
CAM Configuration & Implementation Services	11.0	06/26/20	\$49,200.00	Applies
Oprak/Gasboy Interface	5AB	06/30/21	\$11,070.00	
Skipline Data	5CD	06/30/21	\$18,040.00	
SkyHawk Data	SEF	06/30/21	\$16,810.00	
Timesheet Module Leave Time Enhancement	5GH	12/30/20	\$10,660.00	Applies
HR Interface	51,	12/30/20	\$14,350.00	Applies
Timekeeping Interface	5KL	12/30/20	\$13,940.00	Applies

The price and payment scheduled documented herein is based up the Pricing Narrative included with Contractor's RFP Response to RFP 2018-122, Work Order Fleet and Inventory Management.

\* Prices for deliverables with annual reoccurrences are detailed in section 2.1

2.1.	Reoccur	ring	Prices
------	---------	------	--------

								•
Annual Deliverables	Due .	Y1 Cost	Y2 Cost	Y3 Cost	Y4 Cost	Y5 Cost	Y6 Cost	Total
Maintenance Service Agreements	Annually 2021-2026	\$175,306.00	\$180,565.18	\$185,982.14	<b>\$</b> 191,561.60	\$197,308.45	<b>\$</b> 203,227.70	<b>\$</b> 1,133,951.06
Hosting Fcc	Annually 2021-2026	\$36,000.00	\$36,000.00	<b>\$</b> 36,000.00	\$36,000.00	\$36,000.00	\$36,000.00	\$216,000.00

# 3. Future Vendor Rates Worksheet

The State may request additional Services from the selected Vendor and requires rates in the event that additional Service is required. The following format must be used to provide this information. "SFY" refers to State Fiscal Year. The New Hampshire State Fiscal Year runs from July 1 of the preceding calendar year through June 30 of the applicable calendar year. Positions not identified in the Proposed Position Worksheet may be included in the Future Vendor Rates Worksheet.

Position Title	₽÷SI	FY-2020	-#SF	¥ 2021	<sup>44</sup> SF	Y-2022+	*SF	Y 2023	r SF	Y-2024
Project Manager	\$	205	\$	211	\$	217	\$	224	\$	231
Implementation Specialist	\$	205	\$	211	\$	217	\$	224	\$	231

## **Table 1.3: Future Vendor Rates Worksheet**

State of NH Contract 2018-122 Exhibit B – Price and Payment Schedule – Part 3 Date: \_4 December 2019\_\_\_\_\_ Contractor's Initials GS Page

Position Title	SFY	( 2020 ·	SF	Ŷ-2021·∙	SF	Y 2022	\$'SF	¥ 2023	SFY	2024
Trainer	\$	205	\$	211	\$	217	\$	224	\$	231
Technical Lead	\$	205	\$	211	\$	217	\$	224	\$	231
SW Developer	\$	205	\$	211	\$	217	\$	224	\$	231
Report Developer	\$	205	\$	211	\$	217	\$	224	\$	231
	1									/
Position Title	SF	2025	SF	Y 2026 <sup>1</sup> ,	SF	Y 2027	ŚF	<b>Y.2028</b>	ŜĘĬ	2029
Project Manager	\$	231	\$	240	\$	250	\$	260	\$	270
Implementation Specialist	\$	231	\$	240	\$	250	\$	260	\$	270
Trainer	\$	231	\$	240	\$	250	\$	260	\$	270 <sup>.</sup>
Technical Lead	\$	231	\$	240	\$	250	\$	260	\$	270
SW Developer	\$	231	\$	240	\$	250	\$	260.	\$	270
Report Developer	\$	231	\$	240	\$	250	\$	260	\$	270

# 4. Contract Price

Notwithstanding any provision in the Contract to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments made by the State exceed the amount indicated in the P-37 General Provisions Block 1.8 ("Price Limitation"). The payment by the State of the total Contract price shall be the only, and the complete reimbursement to the Contractor for all fees and expenses, of whatever nature, incurred by the Contractor in the performance hereof.

The State will not be responsible for any out of pocket expenses incurred in the performance of the Services performed under this Contract.

## 5. Invoicing

The Contractor shall submit correct invoices to the State for all amounts to be paid by the State. All invoices submitted shall be subject to the State's prior written approval, which shall not be unreasonably withheld. The Contractor shall only submit invoices for Services or Deliverables as permitted by the Contract. Invoices must be in a format as determined by the State and contain detailed information, including without limitation: itemization of each Deliverable and identification of the Deliverable for which payment is sought, and the Acceptance date triggering such payment; date of delivery and/or installation; monthly maintenance charges; any other Project costs or retention amounts if applicable.

Upon Acceptance of a Deliverable, and a properly documented and undisputed invoice, the State will pay the correct and undisputed invoice within thirty (30) days of invoice receipt. Invoices will not be backdated and shall be promptly dispatched.

Invoices shall be sent to:

Mark Bogacz, AMPS Project Manager STATE OF NEW HAMPHSIRE DEPARTMENT OF TRANSPORTATION 7 Hazen Drive Concord, NH 03302

### 6. Payment Address

Payments shall be made via ACH. Use the following link to enroll with the State Treasury for ACH payments: https://www.nh.gov/treasury/state-vendors/index.htm

### 7. Overpayments to the Contractor

The Contractor shall promptly, but no later than fifteen (15) business days, return to the State the full amount of any overpayment or erroneous payment upon discovery or notice from the State.

### 8. Credits

The State may apply credits due to the State arising out of this Contract, against the Contractor's invoices with appropriate information attached.

### 9. Project Holdback

The State shall withhold ten percent (10%) of the first year annual fee for a period of 60 days after first productive use of the System as identified in Paragraph 2, Payment Schedule, above.

### EXHIBIT C – SPECIAL PROVISIONS

- 1. The terms in Part 2, Section 10 shall control over Part 1, P-37, Section 9.
- 2. Nothing in Part 1- P-37, Section 9 shall be construed to require AssetWorks to release, or indemnify for, the actions of the State or a third party.
- 3. Part 1 P-37, Section 14.1.2 shall only apply should AssetWorks take possession of the physical tangible property of the State.

# THIS PAGE INTENTIONALLY LEFT BLANK

State of NH Contract 2018-122 Exhibit C – Special Provisions – Part 3 Date: \_4 December 2019\_\_\_\_ Contractor's Initials <u>GS\_\_\_\_</u>

### EXHIBIT D – ADMINISTRATIVE SERVICES

#### 1. TRAVEL EXPENSES

Travel expenses will be reimbursed as they are incurred. Travel expenses will be billed in accordance with U.S. Government Services Administration per diem rates as documented at <u>https://www.gsa.gov/</u>.

### 2. SHIPPING AND DELIVERY FEE EXEMPTION

The State will not pay for any shipping or delivery fees unless specifically itemized in the Contract.

## 3. ACCESS/COOPERATION

As applicable, and subject to the applicable laws and regulations, the State will provide the Contractor with access to all program files, libraries, personal computer-based systems, software packages, network systems, security systems, and hardware as required to complete the contracted Services.

The State will use reasonable efforts to provide approvals, authorizations, and decisions reasonably necessary to allow the Contractor to perform its obligations under the Contract.

# 4. STATE-OWNED DOCUMENTS AND COPYRIGHT PRIVILEGES

The Contractor shall provide the State access to all State-owned documents, materials, reports, and other work in progress relating to this RFP. Upon expiration or termination of the Contract with the State, the Contractor shall turn over all State-owned documents, material, reports, and work in progress relating to this RFP to the State at no additional cost to the State. Documents must be provided in both printed and electronic format.

### 5. RECORDS RETENTION AND ACCESS REQUIREMENTS

The Contractor shall agree to the conditions of all applicable State and federal laws and regulations, which are incorporated herein by reference, regarding retention and access requirements, including without limitation, retention policies consistent with the Federal Acquisition Regulations (FAR) Subpart 4.7 Contractor Records Retention.

The Contractor and its Subcontractors shall maintain books, records, documents, and other evidence of accounting procedures and practices, which properly and sufficiently reflect all direct and indirect costs invoiced in the performance of their respective obligations under the Contract. The Contractor and its Subcontractors shall retain all such records for three (3) years following termination of the Contract, including any extensions. Records relating to any litigation matters regarding the Contract shall be

State of NH Contract 2018-122 Exhibit D – Administrative Services – Part 3 Date: \_4 December 2019\_\_\_\_\_ Contractor's Initials \_\_GS\_\_\_\_\_

Page 12 of 53

kept for one (1) year following the termination of all litigation, including the termination of all appeals or the expiration of the appeal period.

Upon prior notice and subject to reasonable time frames, all such records shall be subject to inspection, examination, audit and copying by personnel so authorized by the State and federal officials so authorized by law, rule, regulation or Contract, as applicable. Access to these items shall be provided at AssetWorks' main place of business. Access to such records shall be at no cost to the State during the three (3) year period following termination of the Contract and one (1) year term following litigation relating to the Contract, including all appeals or the expiration of the appeal period, however, State shall bear all costs associated with the examination. The Contractor shall include the record retention and review requirements of this section in any of its subcontracts.

The State agrees that books, records, documents, and other evidence of accounting procedures and practices related to the Contractor's cost structure and profit factors shall be excluded from the State's review unless the cost of any other Services or Deliverables provided under the Contract is calculated or derived from the cost structure or profit factors.

### 6. ACCOUNTING REQUIREMENTS

· .

The Contractor shall maintain an accounting system in accordance with Generally Accepted Accounting Principles. The costs applicable to the Contract shall be ascertainable from the accounting system and the Contractor shall maintain records pertaining to the Services and all other costs and expenditures.

State of NH Contract 2018-122 Exhibit D – Administrative Services – Part 3 Date: \_4 December 2019\_\_\_\_ Contractor's Initials \_\_GS\_\_\_\_

Page 13 of 53

### **EXHIBIT E – IMPLEMENTATION SERVICES**

Attachment 2 – Statement of Work is incorporated herein.

### 1. PROJECT MANAGEMENT

The State believes that effective communication and reporting are essential to Project success.

The Contractor Key Project Staff shall participate in meetings as requested by the State, in accordance with the requirements and terms of this Contract.

- a. Introductory Meeting: Participants will include the Contractor's Key Project Staff and State Project leaders from both Department of Justice and the Department of Information Technology. This meeting will enable leaders to become acquainted and establish any preliminary Project procedures.
- b. Kickoff Meeting: Participants will include the State and the Contractor's Project Team and major stakeholders. This meeting is to establish a sound foundation for activities that will follow.
- c. Status Meetings: Participants will include, at the minimum, the Contractor's Project Manager and the State Project Manager. These meetings will be conducted at least bi-weekly and address overall Project status and any additional topics needed to remain on schedule and within budget. A status and error report from the Contractor shall serve as the basis for discussion.
- d. The Work Plan: must be reviewed at each Status Meeting and updated, at minimum, on a biweekly basis, in accordance with the Contract.
- e. **Special Meetings**: Need may arise for a special meeting with State leaders or Project stakeholders to address specific issues.
- f. Exit Meeting: Participants will include Project leaders from the Contractor and the State. Discussion will focus on lessons learned from the Project and on follow up options that the State may wish to consider.

The State expects the Contractor to prepare agendas and background for and minutes of meetings. Background for each status meeting must include an updated Work Plan. Drafting of formal presentations, such as a presentation for the kickoff meeting, will also be the Contractor's responsibility.

The Contractor's Project Manager or the Contractor's Key Project Staff shall submit monthly status reports in accordance with the Schedule and terms of this Contract. All status reports shall be prepared in formats approved by the State. The Contractor's Project Manager shall assist the State's Project Manager, or itself produce reports related to Project Management as reasonably requested by the State, all at no additional cost to the State. The Contractor shall produce Project status reports, which shall contain, at a minimum, the following:

- 1. Project status related to the Work Plan;
- 2. Deliverable status;
- 3. Accomplishments during weeks being reported;
- 4. Planned activities for the upcoming two (2) week period;
- 5. Future activities; and
- 6. Issues and concerns requiring resolution.
- 7. Report and remedies in case of falling behind Schedule

As reasonably requested by the State, the Contractor shall provide the State with information or reports regarding the Project. The Contractor shall prepare special reports and presentations relating to Project Management, and shall assist the State in preparing reports and presentations, as reasonably requested by the State, all at no additional cost to the State.

## 2. IMPLEMENTATION STRATEGY

## 2.1. Key Components

The Contractor shall employ an industry-standard Implementation strategy with a timeline set forth in accordance with the Work Plan;

The Contractor and the State shall adopt a change management approach to identify and plan key strategies and communication initiatives.

The Contractor's team will provide training templates as defined in the Training Plan, which will be customized to address the State's specific requirements. Decisions regarding format, content, style, and presentation shall be made early on in the process, by the State, providing sufficient time for development of material as functionality is defined and configured.

The Contractor shall manage Project execution and provide the tools needed to create and manage the Project's Work Plan and tasks, manage and schedule Project staff, track and manage issues, manage changing requirements, maintain communication within the Project Team, and report status.

# 2.2. Timeline

The timeline is set forth in the Work Plan. During the initial planning period Project task and resource plans will be established for: the preliminary training plan, the change management plan, communication approaches, Project standards and procedures finalized, and team training initiated. Timing will be structured to recognize interdependencies between applications and structure a cost effective and timely execution. Processes will be documented, training established, and the application will be ready for Implementation in accordance with the Work Plan.

### 2.3. Change Management and Training

The Contractor's change management and training services shall be focused on developing change management and training strategies and plans. Its approach relies on State resources for the execution of the change management and end user training.

### THIS PAGE INTENTIONALLY LEFT BLANK.

### **EXHIBIT F - TESTING SERVICES**

Attachment 2 – Statement of Work is incorporated herein. Attachment 2 takes precedence over this Exhibit F.

The Contractor shall provide the following Products and Services described in this Exhibit F, including but not limited to:

## 1. TESTING AND ACCEPTANCE

The Contractor shall bear all responsibilities for the full suite of Test Planning and preparation throughout the Project. The Contractor will also provide training as necessary to the State staff responsible for test activities. The Contractor shall be responsible for all aspects of testing contained in the Acceptance Test Plan including support, at no additional cost, during User Acceptance Test conducted by the State and the testing of the training materials.

The Test Plan methodology shall reflect the needs of the Project and be included in the finalized Work Plan. A separate Test Plan and set of test materials will be prepared for each Software function or module.

All Testing and Acceptance (both business and technically oriented testing) shall apply to testing the System as a whole, (e.g., software modules or functions, and Implementation(s)). This shall include planning, test scenario and script development, Data and System preparation for testing, and execution of Unit Tests, System Integration Tests, Conversion Tests, Installation tests, Regression tests, Performance Tuning and Stress tests, Security Review and tests, and support of the State during User Acceptance Test and Implementation.

In addition, the Contractor shall provide a mechanism for reporting actual test results vs. expected results and for the resolution and tracking of all errors and problems identified during test execution. The Contractor shall also correct Deficiencies and support required re-testing.

## 1.1. Test Planning and Preparation

The Contractor shall provide the State with an overall Test Plan that will guide all testing. The Contractor provided, State approved, Test Plan will include, at a minimum, identification, preparation, and Documentation of planned testing, a requirements traceability matrix, test variants, test scenarios, test cases, test scripts, test Data, test phases, unit tests, expected results, and a tracking method for reporting actual versus expected results as well as all errors and problems identified during test execution.

As identified in the Acceptance Test Plan, and documented in accordance with the Work Plan and the Contract, State testing will commence upon the Contractor's Project Manager's Certification, in writing, that the Contractor's own staff has successfully executed all prerequisite Contractor's testing, along with reporting the actual testing results, prior to the start of any testing executed by State staff. The State will be presented with a State approved Acceptance Test Plan, test scenarios, test cases, test scripts, test data, and expected results.

The State will commence its testing within <five (5) business days> of receiving Certification from the Contractor that the State's personnel have been trained and the System is installed, configured, complete, and ready for State testing. The testing will be conducted by the State in an environment independent from the Contractor's development environment. The Contractor must assist the State with testing in accordance with the Test Plan and the Work Plan, utilizing test and live Data to validate reports, and conduct stress and performance testing, at no additional cost.

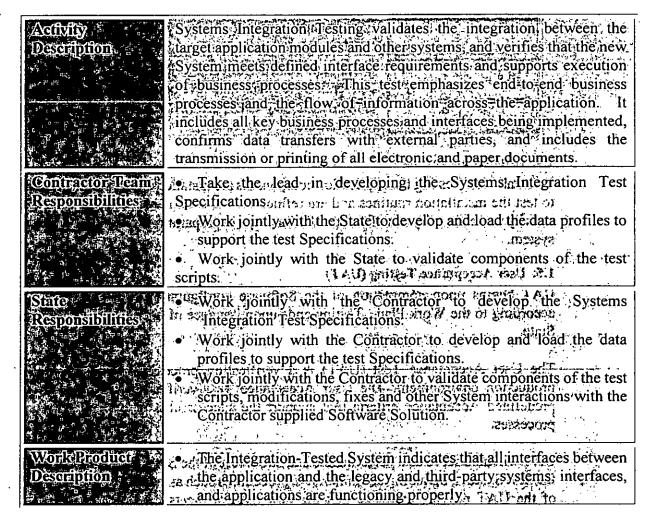
Testing begins upon completion of the Software configuration as required and user training according to the Work Plan. Testing ends upon issuance of a letter of UAT Acceptance by the State.

The Contractor must demonstrate that their testing methodology can be integrated with the State standard methodology.

## **1.2.** System Integration Testing (if applicable)

The new System is tested in integration with other application systems (legacy and service providers) in a production-like environment. System Integration Testing validates the integration between the individual unit application modules and verifies that the new System meets defined requirements and supports execution of interfaces and business processes. The System Integration Test is performed in a test environment.

Thorough end-to-end testing shall be performed by the Contractor team(s) to confirm that the Application integrates with any interfaces. The test emphasizes end-to-end business processes, and the flow of information across applications (IF APPROPRIATE). It includes all key business processes and interfaces being implemented, confirms data transfers with external parties, and includes the transmission or printing of all electronic and paper documents.



# 1.3. Conversion Validation Testing

In Conversion Validation Testing, target application functions are validated.

	The conversion validation test should replicate the entire flow of the converted data through the Software Solution. As the Software Solution is interfaced to legacy or third-party applications/interfaces, testing verifies that the resulting flow of the converted data through these interface points performs correctly.
Connectator Denm Responsibilities	For conversions and interfaces, the Contractor's team will execute the applicable validation tests and compare execution results with the documented expected results test.

State Extract and cleanse; if necessary, the legacy data to be converted	in
Responsibilities the data conversions have a set of	
WorkProduct Validation-Tested Conversion Programs These programs inclu	ide
Description conversion programs that have been tested to verify that the resulti	
converted legacy data performs correctly in the entire suite of t	ihe
Application of the about ris in the starts	

## 1.4. Installation Testing

In Installation Testing the application components are installed in the System Test environment to test the installation routines and are refined for the eventual production environment. This activity serves as a dry run of the installation steps in preparation for configuring the production system.

### 1.5. User, Acceptance Testing (UAT)

UAT begins upon completion of the Software configuration as required and user training according to the Work Plan. Testing ends upon issuance of a letter of UAT Acceptance by the State.

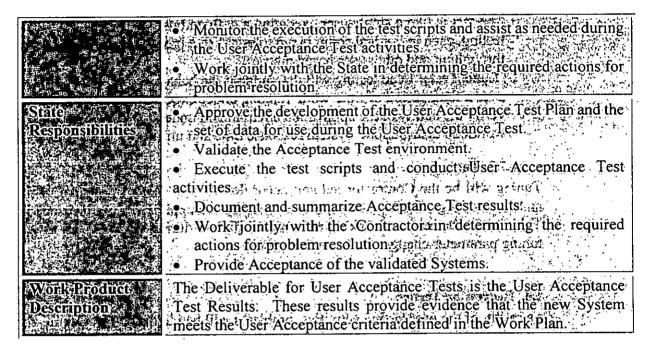
The User Acceptance Test (UAT) is a verification process performed in a copy of the production environment. The User Acceptance Test verifies System functionality against predefined Acceptance criteria that support the successful execution of approved business processes.

UAT will also serve as a performance and stress test of the System. It may cover any aspect of the new System, including administrative procedures such as backup and recovery. The results of the UAT provide evidence that the new System meets the User Acceptance criteria as defined in the Work Plan.

The results of the User Acceptance Test provide evidence that the new System meets the User Acceptance criteria as defined in the Work Plan.

Upon successful conclusion of UAT and successful System deployment, the State will issue a letter of UAT Acceptance and the respective Warranty Period shall commence

Description	The System User Acceptance Tests verify System functionality against predefined Acceptance criteria that support the successful execution of approved processes.
Contractors Reamine	• Provide the State an Acceptance Test Plan and selection of test scripts for the Acceptance Test



## 1.6. Performance Tuning and Stress Testing

The Contractor shall develop and document hardware and Software configuration and tuning of <SOFTWARE> infrastructure as well as assist and direct the State's System Administrators and Database Administrators in configuring and tuning the infrastructure to support the software throughout the Project

### 1.7. Scope

The scope of Performance Testing shall be to measure the System level metrics critical for the development of the applications infrastructure and operation of the applications in the production environment. It will include the measurement of response rates of the application for end-user transactions and resource utilization (of various servers and network) under various load conditions. These response rates shall become the basis for changes and retesting until optimum System performance is achieved. Performance testing and tuning shall occur in the final production environment and shall use a copy of the final production database to provide the best results.

### 1.7.1. Test Types

Performance testing shall use two different types of testing to determine the stability of the application. They are baseline tests and load tests.

a) **Baseline Tests:** Baseline tests shall collect performance data and load analysis by running scripts where the output is broken down into business transactions or functions.

The test is like a single user executing a defined business transaction. During baseline testing, each individual script is run to establish a baseline for transaction response time, throughput and other user-based metrics.

b) Load Tests: Load testing will determine if the behavior of the System can be sustained over a long period of time while running under expected conditions. Load test helps to verify the ability of the application environment under different load conditions based on workload distribution. System response time and utilization is measured and recorded.

### 1.7.2. Tuning

Tuning will be the Contractor led and occur during both the development of the application and load testing. Tuning is the process whereby the application performance is maximized. This can be the result of making code more efficient during development as well as making tuning parameter changes to the environment.

### 1.8. Regression Testing

As a result, of the user testing activities, problems will be identified that require correction. The State will notify the Contractor of the nature of the testing failures in writing. The Contractor will be required to perform additional testing activities in response to State and/or user problems identified from the testing results. Regression testing means selective re-testing to detect faults introduced during the modification effort, both to verify that the modifications have not caused unintended adverse effects, and to verify that the modified and related (possibly affected) System components still meet their specified requirements.

In designing and conducting such regression testing, the Contractor will be required to assess the risks inherent to the modification being implemented and weigh those risks against the time and effort required for conducting the regression tests. In other words, the Contractor will be expected to design and conduct regression tests that will identify any unintended consequences of the modification while taking into account Schedule and economic considerations.

#### 1.9. Security Review and Testing

IT Security involves all functions pertaining to the securing of State Data and Systems through the creation and definition of security policies, procedures and controls covering such areas as identification, authentication and non-repudiation.

All components of the Software shall be reviewed and tested to ensure they protect the State's hardware and software and its related Data assets. Tests shall focus on the technical, administrative and physical security controls that have been designed into the System architecture in order to provide the necessary confidentiality, integrity and availability. Tests shall, at a minimum, cover each of the service components. Test procedures shall include penetration tests and application vulnerability scanning.

Service	Defines the set of capabilities that:
Component	
Identification and Authentication	Supports obtaining information about those parties attempting to log onto a system or application for security purposes and the validation of users
Access Control	Supports the management of permissions for logging onto a computer or network
Encryption	Supports the encoding of data for security purposes
Intrusion Detection	Supports the detection of illegal entrance into a computer system
Verification	Supports the confirmation of authority to enter a computer system, application or network
Digital Signature	Guarantees the unaltered state of a file
User Management	Supports the administration of computer, application and network accounts within an organization.
Role/Privilege Management	Supports the granting of abilities to users or groups of users of a computer, application or network
Audit Trail Capturc and Analysis	Supports the identification and monitoring of activities within an application or system
Input Validation	Ensures the application is protected from buffer overflow, cross- site scripting, SQL injection, and unauthorized access of files and/or directories on the server.

Tests shall focus on the technical, administrative and physical security controls that have been designed into the System architecture in order to provide the necessary confidentiality, integrity and availability. Tests shall, at a minimum, cover each of the service components. Test procedures shall include third party penetration tests and application vulnerability scanning.

Prior to the System being moved into production the Contractor shall provide results of all security testing to the Department of Information Technology for review and Acceptance. All Software and hardware shall be free of malicious code (malware).

## 1.10. Penetration Testing (Non-PCI Environment)

The Contractor shall provide certification that their Software and System environment has undergone penetration testing in accordance with current recommendations from a recognized industry standards organization, such as the U.S. Department of Commerce National Institute of Standards Technology (NIST). The State requires that the Contractor has this testing performed annually by a qualified third-party vendor, and after every major upgrade.

1

THIS PAGE INTENTIONALLY LEFT BLANK.

ł,

### EXHIBIT G – MAINTENANCE AND SUPPORT SERVICES

Maintenance and support shall be provided by AssetWorks while customer is under an active maintenance agreement in according with the provisions in this Exhibit G and Attachment 4 - Hosting Services Agreement. Attachment 4 takes precedence over this Exhibit G.

### 1. SYSTEM MAINTENANCE

The Contractor shall maintain and support the System in all material respects as described in the applicable program Documentation through the contract end date.

### 1.1. Contractor's Responsibility

The Contractor shall maintain the System in accordance with the Contract.

# 1.1.1.Maintenance Releases

The Contractor shall make available to the State the latest program updates, general maintenance releases, selected functionality releases, patches, and Documentation that are generally offered to its customers, at no additional cost.

### 1.1.2.Standard Agreement

The State will adopt the Contractor's standard maintenance agreement modified to address terms and conditions inconsistent with State Statutes and general State information technology practices.

### 2. SUPPORT OBLIGATIONS AND TERM

2.1. The Contractor shall repair or replace Software, and provide maintenance of the Software in accordance with the Specifications and terms and requirements of the Contract, including but not limited to S1.1 through S1.10 of the Support and Maintenance Requirements in Exhibit H Requirements, Attachment 1.

f

THIS PAGE INTENTIONALLY LEFT BLANK.

### EXHIBIT H – REQUIREMENTS

Appendix C: System Requirements and Deliverables from Contractor's RFP response is hereby incorporated as Attachment 1: *Project Requirements*.

In addition to the requirements documented in Attachment 1, Contractor shall also meet the requirements documented herein. If there is any discrepancy between a requirement documented herein and the same requirement documented in Attachment 1: *Project Requirements*, requirements documented herein shall take precedence.

## 1. Asset Chooser Filter Sharing Functionality

In anticipation of NHDOT's contract finalization, AssetWorks EAM will provide functionality for sharing user created filters with User Groups within the system at or before the time of NHDOTs scheduled Go Live, tentatively scheduled for 2021. This will apply to Asset Chooser filters as well as basic Work Management filters.

2. Key Performance Indicators (KPIs)

### 2.1. Web Application

The Map in the map within the Work Management portal will not take more than 5 seconds to render 95% of the time,

## **Provided:**

- A. Asset Category layers are showing less than 1000 assets
- B. The user has a connection speed of at least 250Mbps
- C. The user is connected to the AssetWorks hosting environment
- D. The user is not showing additional layers (including Work Orders, Service Requests, Inspections, etc.)
- E. If also showing assignment items (Work Orders, Service Requests, Inspections, PMs, etc.)
  - i. Showing 100 or fewer additional points
  - ii. Map will not take more than an additional 3 seconds to load

### 2.2. Mobile Application

### 2.2.1.Download KPI:

Map will take less than 2 minutes to perform the download for offline use action 95% of the time,

## Provided:

- A. Asset Category layers are showing less than 2000 assets
- B. The user is using a supported device (iOS, Android, Windows)
- C. The user has at least a 50 Mbps connection
- D. The user is connected to our hosting environment
- E. The environment does not include more than 1000 pieces of material for download
- F. The environment does not include and 500 pieces of equipment for download
- G. The total number of assignment items (Work Orders, Service Requests, Inspections, PMs, etc.) assigned to the user does not exceed 100 unique items
- H. The total size of attachments on all assignment items (Work Orders, Service Requests, Inspections, etc.) will not exceed 50 MB
- I. The downloading of attachments associated directly with Assets is turned off
- J. The total amount of data needed to be downloaded does not exceed 300 mb

## 2.2.2.Upload KPI:

Uploading from the device to the AssetWorks hosting environment will not take longer than the original day's download

### 2.3. KPI for downloading and installing the App

- 2.3.1. The AssetWorks EAM Connect app will not take more than 1 minute to download and install on a new device, provided the device is connected to the internet with at least a 50 Mbps connection.
- 2.3.2. The device will be at least an 11 inch iPad Pro (2019) with 64 GB of memory.

### 2.4. KPI for loading the App

- 2.4.1. The AssetWorks EAM Connect app will not take more than 10 seconds to start up, provided that the device is not running any other apps
- 2.4.2. The device will be at least an 11 inch iPad Pro (2019) with 64 GB of memory

#### 3. Explanation on how AssetWorks handles Crash Reporting

- 3.1. When a crash happens while using EAM Connect, the app will automatically log the crash in the AssetWorks database. These crash reports will include device information, environment information, usage information as well as information about the what happened in the minutes immediately preceding the crash.
- 3.2. If the app is offline during a crash, the log will be saved locally and uploaded the next time the device is online.
- 3.3. This crash report will not be automatically sent to AssetWorks, but can be provided to AssetWorks by an administrator by going to the administrator console in the web application and selecting "View Logs."
- 3.4. From there, the relevant log file can be copied and sent to AssetWorks for review.

#### 4. Requesting a Delay of a Scheduled Outage

In the event the hosted customer anticipates a weather emergency that requires the postponement of the Schedule Outage, notice should be given no later than 5 p.m. Eastern Time on the Friday before the outage or at the earliest decision time.

The request for postponement must be made by the customer's designated key user(s) via email to <u>fasupport@assetworks.com</u> with a subject line that states, 'REQUEST FOR POSTPONEMENT OF SCHEDULE OUTAGE" and the body of the email with the following content:

"Due to expected weather emergency, State of New Hampshire requests a postponement of our scheduled outage for this Sunday, {date}.

The Customer Designated Key User will receive confirmation of receipt of the request.

In the unlikely event that a 'high' security patch is to be applied on the scheduled outage date, the customer will be advised of the risks of postponement.

Postponement of outage is valid for PRODUCTION instance only

\*\*AssetWorks does not anticipate issues arising from these requests. However, we must reserve the right to deny the request if the security of the data center, network or other hosted customers will be compromised by the postponement. A full explanation and reason for the denial will be supplied to the State of New Hampshire.

State of NH Contract 2018-122 Exhibit H – Requirements – Part 3 Date: \_4 December 2019\_\_\_\_ Contractor's Initials \_\_\_GS\_\_\_\_

# 5. Reduction in RTO as part of DRP for Hosted Customer

AssetWorks confirms that the range for the RTO in the event of an unscheduled outage will be 24 to 48 hours as of January 2021.

#### 6. Allocation and Assignment

Vendor is providing the Allocation and Assignment module, which includes the software and set up services.

#### 7. CAM Module

Services associated with the CAM module are being increased to include full implementation of the software and set up services.

#### 8. Data Warehouse Integration

Data warehouse interface design and setup services will be provided.

#### 9. Interface design and setup services for the following will be provided

#### 9.1. Fuel Management - Oprak/GasBoy

This integration will bring fuelling information from the Oprak fuelling system into the AssetWorks solution. This will include data association with the vehicle taking fuel, mileage, fuel quantities and price, etc. This is anticipated to be a one-way integration from the Data Warehouse to the AssetWorks EAM solution.

#### 9.2. Assumptions

- 9.2.1. One-way In to FA/EAM
- 9.2.2. Pass data to FASuite via web service
- 9.2.3. Update 2 screens with ~10-20 fields being sent-
- 9.2.4. All FA/EAM settings OOTB, no additional rules outside of application logic
- 9.2.5. Standard MAXQueue error handler, no additional processing rules for errors

#### 9.3. NHDOT Skipline Data Interface

This interface will send information on line painting/marking to AssetWorks to document the amount of paint put down, what the paint was for (i.e. center line, shoulder marking, the color, and the quantity). It will tie back to a work order (possibly a MAWO should the painting stretch further than a single defined linear asset), and will tier back to the work order based on the Skip Line project number attached as an attribute.

State of NH Contract 2018-122 Exhibit H – Requirements – Part 3 Date: \_4 December 2019\_\_\_\_ Contractor's Initials \_\_\_\_GS\_\_\_\_

#### 9.4. Assumptions

- 9.4.1. This could be a file or web service integration
- 9.4.2. Should be able to align the paint put down with the linear length of the asset associated with the work order.
- 9.4.3. The paint should be setup as a material item, which enables fractional issue
- 9.4.4. 8 to 10 special rules will be included to account for the needs of the interface
- 9.4.5. All FASuite settings OOTB, no additional rules outside of application logic
- 9.4.6. Standard MAXQueue error handler, no additional processing rules for errors

#### 9.5. MATS Integration of Non-Timecard Work Order Related Elements

#### 9.6. Enhance Timesheet Module to Support tracking available leave time:

This enhancement will enable the current Timesheet Module to track available leave time and determine whether an employee has adequate leave time available when posting a future request for time-off to the shop calendar, or timesheet. The key requirements include:

- 9.6.1. Ability to track user definable multiple types of leave time, including but not limited to:
- 9.6.1.1. Floater days
- 9.6.1.2. PTO time
- 9.6.1.3. Sick leave
- 9.6.1.4. Comp time.
- 9.6.2. The types of leave time will be linkable to indirect tasks to facilitate the tracking and validation of available leave time
- 9.6.3. The system will validate that the leave time to be posted is available, and validate that it does not exceed the available amount
- 9.6.4. The workflow will have the ability to require an approval before posting to the timesheet, this could be done through the standard approval notification process with MAXQueue, which would send a request for approval to the appropriate supervisor, who would be required to approve the time prior to finalizing the timesheet posting

State of NH Contract 2018-122 Exhibit H – Requirements – Part 3 Date: \_4 December 2019\_\_\_\_ Contractor's Initials \_\_\_GS\_\_\_\_

- 9.6.5. It is anticipated that the leave time will be tracked on the Employee Primary Information screen.
- 9.6.6. The tracking will include:
- 9.6.6.1. available hours (i.e. hours available minus pending and spent hours)
- 9.6.6.2. pending hours (i.e. hours posted on a timesheet, but not yet used)
- 9.6.6.3. hours spent.
- 9.6.7. Minimum usable hours will be linked to the type of leave time request, i.e. PTO time in minimum 4 hour increments, floater days in minimum 8 hours increments, etc. and will be user definable.

#### 9.6.8.Assumptions

- 9.6.8.1. The leave time values will be updated via an integration to the DOT's data warehouse for HR/payroll information
- 9.6.8.2. Leave time balances should deduct within AssetWorks once they are posted to the timesheet, even for postings in the future

. .

- 9.6.8.3. The system should validate that the minimum posting amount is being followed and require correction when an error is made.
- 9.6.8.4. The system should validate available for each posting made, and generate a warning message (or blocking error) when a requested posting exceed available hours.
- 9.6.8.5. The enhancement would be delivered as part of the next available formal release of the FA/EAM software. The version number is subject to agreement between AssetWorks and NHDOT

#### 9.7. HR Interface:

- 9.7.1. The interface will maintain synchronization between AssetWorks and the HR data in the DOT data warehouse for employee information and to bring over new employees
- 9.7.2. The interface will maintain the status and location assignment of employees that were batch loaded at the start of live operation, and as employees are added would create those records in AW as appropriate.
- 9.7.3. The interface may need to run at different times for different data.

- 9.7.4. The key requirements to be addressed, include:
- 9.7.4.1. This will include up to 20 fields of employee defining information Name, location, job classification, pay rate, and leave time, .etc.
- 9.7.4.2. This interface will create and update both employee and operator records for the person.
- 9.7.4.3. The interface should also create an AW User account for the employee and link it to the employee and operator record.
- 9.7.4.4. The interface should deactivate employees when the data supports this, including the employee record, operator record, and user account
- 9.7.4.5. When the employee is deactivated the record should also be removed from any crews it is associated with, or asset assignments..
- 9.7.4.6. This interface may run either as triggered, or nightly depending on the user organization's needs.

#### 9.7.5.Assumptions

- 9.7.5.1. Data will flow from the DOT data warehouse via a web service
- 9.7.5.2. Will include up to 20 fields of data
- 9.7.5.3. Up to 5 special rules will be included to account for the needs of the interface
- 9.7.5.4. All FASuite settings OOTB, no additional rules outside of application logic
- 9.7.5.5. Standard MAXQueue error handler, no additional processing rules for errors

#### 9.8. Timekeeping Interface:

This interface would enable the transfer of labor hours posted either to a work order (PM, Repair, or Rebuild) or to a timesheet as indirect time to the data warehouse system. The objective would be to increase the accuracy of the reporting in the two systems, and eliminate the potential for duplicate entry into each system. The key requirements to be addressed, include:

9.8.1. This will include up to 10 fields of employee defining information

9.8.2. This interface will run on a schedule, either daily or weekly, and will summarize the posting based on rules defined by NHDOT.

١

9.8.3. The interface should allow for adjustments to previous posting in accordance with the time posting rules on NHDOT

#### 9.8.4.Assumptions

- 9.8.4.1. Data will flow to the DOT data warehouse via a web service
- 9.8.4.2. Will include up to 10 fields of data
- 9.8.4.3. Up to 5 special rules will be included to account for the needs of the interface
- 9.8.4.4. All FASuite settings OOTB, no additional rules outside of application logic
- 9.8.4.5. Standard MAXQueue error handler, no additional processing rules for errors

#### 9.9. Migration of data from the existing DTS- View Works within the Solution.

State of NH Contract 2018-122 Exhibit H – Requirements – Part 3 Date: \_4 December 2019\_\_\_\_ Contractor's Initials \_\_\_GS\_\_\_\_

Page 34 of 53

:

#### EXHIBIT I – WORK PLAN

Attachment 2 – Statement of Work is incorporated herein.

The Contractor's Project Manager and the State Project manager shall finalize the Work Plan for Implementation within ten (10) days of the Effective Date and further refine the tasks required to implement the Project. The elements of the preliminary Work Plan are documented in accordance with the Contractor's plan to implement the System. Continued development and management of the Work Plan is a joint effort on the part of the Contractor and State Project Managers.

The preliminary Work Plan for Implementation created by the Contractor and the State is set forth at the end of this Exhibit.

In conjunction with the Contractor's Project Management methodology, which shall be used to manage the Project's life cycle, the Contractor team and the State shall finalize the Work Plan at the onset of the Project. This plan shall identify the **tasks**, **Deliverables**, **major milestones**, **task dependencies**, **and a payment Schedule** required to implement the Project. It shall also address intratask dependencies, resource allocations (both State and Contractor's team members), refine the Project's scope, and establish the Project's Schedule. The Plan is documented in accordance with the Contractor's Work Plan and shall utilize Microsoft Project to support the ongoing management of the Project.

#### 1. ASSUMPTIONS

#### A. General

.

- The State shall provide team members with decision-making authority to support the Implementation efforts, at the level outlined in the Request for Proposal Document State Staffing Matrix.
- All State tasks must be performed in accordance with the revised Work Plan.
- All key decisions will be resolved within five (5) business days. Issues not resolved within this initial period will be escalated to the State Project Manager for resolution.
- Any activities, decisions or issues taken on by the State that affect the mutually agreed upon Work Plan timeline, scope, resources, and costs shall be subject to the identified Change Control process.
- The Contractor shall maintain an accounting system in accordance with Generally Accepted Accounting Principles (GAAP).

#### **B.** Project Management

- The State shall approve the Project Management Methodology used for the Project.
- The State shall provide the Project Team with reasonable access to the State personnel as needed to complete Project tasks.

- A Project folder created within the State system shall be used for centralized storage and retrieval of Project documents, work products, and other material and information relevant to the success of the Project and required by Project Team members. This central repository is secured by determining which team members have access to the Project folder and granting either view or read/write privileges. The Contractor's Project Manager will establish and maintain this folder. The State Project Manager shall approve access for the State team. Documentation can be stored locally for the Contractor and State team on a "shared" network drive to facilitate ease and speed of access. Final versions of all Documentation shall be loaded to the State System.
- The Contractor assumes that an Alternate Project Manager may be appointed from time to time to handle reasonable and ordinary absences of the Project Manager.

# C. Conversions

- The Contractor Team's proposal is based on the assumption that the State's technical team is capable of implementing, with assistance from the Contractor's technical team, a subset of the conversions. The Contractor's Team shall lead the State with the mapping of the legacy Data to the Contractor's applications.
- Additionally, the Contractor's Team shall:
  - 1. Provide the State with Contractor's application data requirements and examples, of data mappings, conversion scripts, and data loaders. The Contractor's Team shall identify the APIs the State should use in the design and development of the conversion.
  - 2. Provide guidance and assistance with the use of the data loaders and conversion scripts provided.
  - 3. Lead the review of functional and technical Specifications.
  - 4. Assist with the resolution of problems and issues associated with the development and Implementation of the conversions.

## D. Project Schedule

• Deployment is planned to begin on April, 2020 with a planned go-live date of May 22, 2020.

## E. Reporting

• The Contractor shall conduct weekly status meetings, and provide reports that include, but are not limited to, minutes, action items, test results, and Documentation.

## F. User Training

- The Contractor's Team shall lead the development of the end-user training plan.
- A train the trainer approach shall be used for the delivery of end-user training.
- The State is responsible for the delivery of end-user training.
- The State shall schedule and track attendance on all end-user training classes.

## G. Performance and Security Testing

- The Contractor's Team shall provide a performance test workshop to identify the key scenarios to be tested, the approach and tools required, and best practices information on performance testing.
- The State shall work with the Contractor on all testing as set forth in Contract Exhibit F Testing Services.

#### 2. ROLES AND RESPONSIBILITIES

#### A. Contractor Team Roles and Responsibilities

#### 1) Contractor Team Project Executive

The Contractor Team's Project Executives (Contractor and Subcontractor Project Executives) shall be responsible for advising on and monitoring the quality of the Services throughout the Project life cycle. The Project Executive shall advise the Contractor Team Project Manager and the State's Project leadership on the best practices for implementing the Contractor Software Solution within the State. The Project Executive shall participate in the definition of the Project Plan and provide guidance to the State's Team.

#### 2) Contractor Team Project Manager

The Contractor Team Project Manager shall have overall responsibility for the day-to-day management of the Project and shall plan, track, and manage the activities of the Contractor Implementation Team. The Contractor Team Project Manager will have the following responsibilities:

- Maintain communications with the State's Project Manager;
- Work with the State in planning and conducting a kick-off meeting;
- Create and maintain the Work Plan;
- Assign the Contractor Team consultants to tasks in the Implementation Project according to the scheduled staffing requirements;
- Define roles and responsibilities of all the Contractor Team members;
- Provide weekly and monthly update progress reports to the State Project Manager;
- Notify the State Project Manager of requirements for State resources in order to provide sufficient lead time for resources to be made available;
- Review task progress for time, quality, and accuracy in order to achieve progress;
- Review requirements and scheduling changes and identify the impact on the Project in order to identify whether the changes may require a change of scope;
- Implement scope and Schedule changes as authorized by the State Project Manager and with appropriate Change Control approvals as identified in the Implementation Plan;
- Inform the State Project Manager and staff of any urgent issues if and when they arise;
- Provide the State completed Project Deliverables and obtain sign-off from the State's Project Manager.

- Manage handoff to the Contractor operational staff;
- Manage Transition Services as needed.

#### 3) Contractor Team Analysis

The Contractor Team shall conduct analysis of requirements, validate the Contractor Team's understanding of the State business requirements by application, and perform business requirements mapping:

- Construct and confirm application test case scenarios;
- Produce application configuration definitions and configure the applications;
- Conduct testing of the configured application;
- Produce functional Specifications for extensions, conversions, and interfaces;
- Assist the State in the testing of extensions, conversions, and interfaces;
- Assist the State in execution of the State's Acceptance Test;
- Conduct follow-up meetings to obtain feedback, results, and concurrence/approval from the State;
- Assist with the correction of configuration problems identified during system, integration and Acceptance Testing; and
- Assist with the transition to production.

## 4) Contractor Team Tasks

The Contractor team shall assume the following tasks:

• Development and review of functional and technical Specification to determine that they are at an appropriate level of detail and quality;

·. .

- Development and Documentation of conversion and interface programs in accordance with functional and technical Specifications;
- Development and Documentation of installation procedures; and
- Unit testing of conversions and interfaces developed; and
- System Integration Testing.

#### **B.** State Roles and Responsibilities

The following State resources have been identified for the Project. The time demands on the individual State team members will vary depending on the phase and specific tasks of the Implementation. The demands on the Subject Matter Experts' time will vary based on the need determined by the State Leads and the phase of the Implementation.

#### 1) State Project Manager

The State Project Manager shall work side-by-side with the Contractor Project Manager. The role of the State Project Manager is to manage State resources (IF ANY), facilitate completion of all tasks assigned to State staff, and communicate Project status on a regular basis. The State Project Manager represents the State in all decisions on Implementation

Project matters, provides all necessary support in the conduct of the Implementation Project, and provides necessary State resources, as defined by the Work Plan and as otherwise identified throughout the course of the Project. The State Project Manager has the following responsibilities:

- Plan and conduct a kick-off meeting with assistance from the Contractor team;
- Assist the Contractor Project Manager in the development of a detailed Work Plan;
- Identify and secure the State Project Team members in accordance with the Work Plan;
- Define roles and responsibilities of all State Project Team members assigned to the Project;
- Identify and secure access to additional State end-user staff as needed to support specific areas of knowledge if and when required to perform certain Implementation tasks;
- Communicate issues to State management as necessary to secure resolution of any matter that cannot be addressed at the Project level;
- Inform the Contractor Project Manager of any urgent issues if and when they arise; and
- Assist the Contractor team staff to obtain requested information if and when required to perform certain Project tasks.
- Manage handoff to State operational staff;
- Manage State staff during Transition Services as needed.

#### 2) State Subject Matter Expert(s) (SME)

The role of the State SME is to assist application teams with an understanding of the State's current business practices and processes, provide agency knowledge, and participate in the Implementation. Responsibilities of the SME include the following:

- Be the key user and contact for their Agency or Department;
- Attend Project Team training and acquire in-depth functional knowledge of the relevant applications;
- Assist in validating and documenting user requirements, as needed;
- Assist in mapping business requirements;
- Assist in constructing test scripts and data;
- Assist in System Integration, and Acceptance Testing;
- Assist in performing conversion and integration testing and Data verification;
- Attend Project meetings when requested; and
- Assist in training end users in the use of the Contractor Software Solution and the business processes the application supports.

## 3) State Technical Lead and Architect

The State's Technical Lead and Architect reports to the State's Project Manager and is responsible for leading and managing the State's technical tasks. Responsibilities include:

- Attend technical training as necessary to support the Project;
- Assist the State and the Contractor Team Project Managers to establish the detailed Work Plan;
- Manage the day-to-day activities of the State's technical resources assigned to the Project;
- Work with State IT management to obtain State technical resources in accordance with the Work Plan;
- Work in partnership with the Contractor and lead the State technical staff's efforts in documenting the technical operational procedures and processes for the Project. This is a Contractor Deliverable and it will be expected that the Contractor will lead the overall effort with support and assistance from the State; and
- Represent the technical efforts of the State at <WEEKLY or EVERY TWO WEEKS> Project meetings.

## 4) State Testing Administrator

The State's Testing Administrator will coordinate the State's testing efforts. Responsibilities include:

- Coordinating the development of system, integration, performance, and Acceptance Test plans;
- Coordinating system, integration, performance, and Acceptance Tests;
- Chairing test review meetings;
- Coordinating the State's team and external third parties involvement in testing;
- Ensuring that proposed process changes are considered by process owners;
- Establish priorities of Deficiencies requiring resolution; and
- Tracking Deficiencies through resolution.

#### 3. SOFTWARE APPLICATION

Solution is hosted by Contractor, so no additional software will be required of Customer.

#### 4. CONVERSIONS

Planned Conversions are documented in Attachment 2 – Statement of Work.

#### A. Conversion Testing Responsibilities

• The Contractor Team and the State, based on their assigned conversion responsibilities, as set forth in Contract Exhibit F: *Testing Services* shall identify applicable test scripts and installation instructions, adapt them to the Project specifics, test the business process, and compare with the documented expected results.

- The Contractor Team and the State, based on their assigned conversion responsibilities, shall execute the applicable test scripts that complete the conversion and compare execution results with the documented expected results.
- The State is responsible for documenting the technical Specifications of all programs that extract and format Data from the legacy systems for use by the conversion processes.
- The Contractor Team and the State, based on their assigned conversion responsibilities, shall develop and unit test their assigned conversions.
- The State and the Contractor Teams shall jointly conduct System and Integration Testing, verifying and validating the accuracy and completeness of the conversions.
- The State and the Contractor Teams shall jointly verify and validate the accuracy and completeness of the conversions for Acceptance Testing and production.

## 5. INTERFACES

Interfaces shall be implemented in cooperation with the State.

In-Scope Interfaces are documented in Attachment 2 - Statement of Work.

# A. Interface Responsibilities (DEPENDENT ON WHO IS WORKING ON THIS THE CONTRACTOR, THE STATE OR BOTH)

- The Contractor Team shall provide the State Contractor Application Data requirements and examples, of data mappings and interfaces implemented on other Projects. The Contractor Team shall identify the APIs the State should use in the design and development of the interface.
- The Contractor Team shall lead the State with the mapping of legacy Data to the Contractor Application.
- The Contractor Team shall lead the review of functional and technical interface Specifications.
- The Contractor Team shall assist the State with the resolution of problems and issues associated with the development and Implementation of the interfaces.
- The Contractor Team shall document the functional and technical Specifications for the interfaces.
- The Contractor Team shall create the initial Test Plan and related scripts to Unit Test the interface. The State shall validate and accept.
- The Contractor Team shall develop and Unit Test the interface.
- The State and the Contractor Team shall jointly verify and validate the accuracy and completeness of the interface.
- The State is responsible for documenting the procedures required to run the interfaces in production.

- The State shall document the technical changes needed to legacy systems to accommodate the interface.
- The State shall develop and test all legacy application changes needed to accommodate the interface.
- The State and the Contractor Teams shall jointly construct test scripts and create any data needed to support testing the interfaces.
- The State is responsible for all data extracts and related formatting needed from legacy systems to support the interfaces.
- The State is responsible for the scheduling of interface operation in production.

**EXHIBIT J -- LICENSE GRANT** 

Attachment 5 – Software License Agreement is incorporated herein.

State of NH Contract 2018-122 Exhibit J – License Grant – Part 3 Date: \_4 December 2019\_\_\_\_ Contractor's Initials \_\_\_GS\_\_\_\_

Page 43 of 53

THIS PAGE INTENTIONALL LEFT BLANK.

State of NH Contract 2018-122 Exhibit J – License Grant – Part 3 Date: \_4 December 2019\_\_\_\_ Contractor's Initials \_\_\_GS\_\_\_\_

#### **EXHIBIT K -- WARRANTIES**

#### 1.1 System

The Contractor warrants that the System will operate to conform to the Specifications and terms of the Contract.

#### 1.2 Software

The Contractor warrants that the Software, including but not limited to the individual modules or functions furnished under the Contract is properly functioning within the System, compliant with the requirements of the Contract, including but not limited to S2.1 through S2.7 of Exhibit H, Project Requirements and will operate in accordance with the Specifications and terms of the Contract.

During the warranty period, in the event that the Customer encounters an error and/or malfunction whereby the Software does not conform to the Specifications and terms of the contract, AssetWorks will respond as follows:

(a) In the event that, in the mutual and reasonable opinion of Contactor and the Customer, there exists an error or nonconformance to the Specifications and terms of the Contract, Contractor will take such steps as are reasonably required to correct the error with due dispatch.

(b) In the event that, in the mutual and reasonable opinion of the Contractor and the Customer, the error or nonconformance to the Specifications and terms of the Contact does not constitute a serious impediment to the normal intended use of the Software, Contactor will correct the error and distribute the correction to the Customer in accordance with the Contractor's normal Software revision schedule.

(c) If the Contractor cannot substantially correct a breach in a commercially reasonable manner, the Customer may end the relevant Services and recover the fees paid to the Contractor for the deficient Services.

#### 1.3 Non-Infringement

The Contractor warrants that it has good title to, or the right to allow the State to use, all Services, equipment, and Software ("Material") provided under this Contract, and that such Services, equipment, and Software do not violate or infringe any patent, trademark, copyright, trade name or other intellectual property rights or misappropriate a trade secret of any third party.

# 1.4 Viruses; Destructive Programming

The Contractor warrants that the Software shall not, at time of installation, contain any viruses, destructive programming, or mechanisms designed to disrupt the performance of the Software in accordance with the Specifications.

#### 1.5 Services

The Contractor warrants that all Services to be provided under the Contract will be provided expediently, in a professional manner, in accordance with industry standards and that Services will comply with performance standards, Specifications, and terms of the Contract.

## 2. WARRANTY PERIOD

The warranty period for the Software shall commence immediately upon acceptance of the module in a go live environment and shall extend for a period of 90 days The Warranty Period for Noninfringement and Services above shall remain in effect until the conclusion or termination of this Contract and any extensions, except for the warranty for non-infringement, which shall remain in effect in indefinitely.

# 3. WARRANTY EXCLUSIONS

Except as provided in this Exhibit K, AssetWorks makes no other representations, warranty, or guarantees, express or implied, with respect to the accuracy, completeness, or usefulness of the Software, INCLUDING EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In the event the Software fails to conform to the description contained in the Documentation, AssetWorks' sole obligation shall be to correct the errors. This limited warranty is in lieu of all liabilities or obligations of AssetWorks for damages arising out of or in connection with the delivery, use or performance of the Software.

State of NH Contract 2018-122 Exhibit K – Warranty and Warranty Services – Part 3 Date: \_4 December 2019\_\_\_\_\_ Contractor's Initials <u>GS</u> Page 46 of 53

#### **EXHIBIT L – TRAINING SERVICES**

The Contractor shall provide the Training Services as outlined in Attachment 2 – Statement of Work.

.

# THIS PAGE INTENTIONALLY LEFT BLANK

State of NH Contract 2018-122 Exhibit L – Training Services – Part 3 Date: \_\_4 December 2019\_\_\_\_ Contractor's Initials \_\_GS\_\_\_\_\_

## STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION WORK ORDER, FLEET AND INVENTORY MANAGEMENT HOSTED/SAAS CONTRACT 2018-122 PART 3 - EXHIBIT M AGENCY RFP WITH ADDENDUMS, BY REFERENCE

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION Request for Proposal #DOT 2018-122 Fleet, Work Order & Inventory System DATE: 17 December 2018

is hereby incorporated by reference as fully set forth herein.

# STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION WORK ORDER, FLEET AND INVENTORY MANAGEMENT HOSTED/SAAS CONTRACT 2018-122 PART 3 - EXHIBIT M AGENCY RFP WITH ADDENDUMS, BY REFERENCE

THIS PAGE INTENTIONALLY LEFT BLANK.

State of NH Contract 2018-122Exhibit M – Agency RFP with Addendums, by Reference – Part 3Date: \_4 December 2019\_\_\_\_\_Contractor's Initials \_\_GS\_\_\_\_\_Page 50 of 53

#### AssetWorks Response to:

STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION Request for Proposal #DOT 2018-122 Fleet, Work Order & Inventory System DATE: 17 December 2018

is hereby incorporated by reference as fully set forth herein.

State of NH Contract 2018-122 Exhibit N – Vendor Proposal, by Reference – Part 3 Date: \_4 December 2019\_\_\_\_\_ Contractor's Initials \_\_GS\_\_\_\_ Page 51 of 53

THIS PAGE INTENTIONALLY LEFT BLANK

State of NH Contract 2018-122Exhibit N – Vendor Proposal, by Reference – Part 3Date: \_4 December 2019\_\_\_\_Contractor's Initials \_\_GS\_\_\_\_Page 52 of 53

.

## STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION WORK ORDER, FLEET AND INVENTORY MANAGEMENT **HOSTED/SAAS CONTRACT 201X-XXX** PART 3 - EXHIBIT O CERTIFICATES AND ATTACHMENTS

Attached are:

- A. Exhibit H Requirements Attachment 1
- B. Statement of Work Attachment 2
- C. Software Maintenance Agreement Attachment 3
- D. Hosting Services Agreement Attachment 4
- E. Contractor's Certificate of Good Standing Attachment 6 F. Contractor's Certificate of Vote/Authority Attachment 7

1

G. Contractor's Certificate of Insurance - Attachment 8

H. Software License Agreement - Attachment 5

ATTA	CHMENT 1 – PROJECT REQUIREMENTS			
ATTACHMENT 2 - STATEMENT OF WORK				
1.	Introduction			
2.	WBS 1.0 Project Management Approach			
3.	WBS 2.0 Business Process and Requirements Validation 16			
4.	WBS 3.0 System Setup Services			
5.	WBS 4.0 Data Conversion Design Services			
6.	WBS 5.0 Interface Design and Development Services			
7.	WBS 6.0 System Configuration Services			
8.	WBS 7.0 System Testing Services			
9.	WBS 8.0 Training Preparation and Delivery			
10.	WBS 9.0 Implementation Support Services			
11.	CAM Implementation 41			
12.	Preliminary Timeline			
13.	Assumptions			
14.	Appendix: Attachment H65			
ATTACHMENT 3 – SOFTWARE MAINTENANCE AGREEMENT 69				
ATTA	CHMENT 4 – HOSTING AGREEMENT			
ATTA	CHMENT 4-1: SERVICE LEVEL AGREEMENT			
ATTACHMENT 4-2 - SCOPE OF SERVICES				
ATTA	CHMENT 5 – SOFTWARE LICENSE AGREEMENT			

THIS PAGE INTENTIONALLY LEFT BLANK

State of NH Contract 2018-122Part 3 Exhibits Attachments Table of ContentsDate: \_4 December 2019\_\_\_\_Contractor's Initials \_GS\_\_\_\_\_Page 2 of 82

# ATTACHMENT 1 – PROJECT REQUIREMENTS

Appendix C: System Requirements and Deliverables from Contractor's RFP response is hereby incorporated as Attachment 1: Project Requirements.

 State of NH Contract 2018-122

 Part 3 Exhibits Attachment 1 Project Requirements

 Date: \_4 December 2019\_\_\_\_\_

 Contractor's Initials \_GS\_\_\_\_\_

 Page 3 of 82

PAGE INTENTIONALLY LEFT BLANK.

 State of NH Contract 2018-122

 Part 3 Exhibits Attachment 1 Project Requirements

 Date: \_4 December 2019\_\_\_\_\_

 Contractor's Initials \_GS\_\_\_\_\_

 Page 4 of 82

## **ATTACHMENT 2 – STATEMENT OF WORK**

#### 1. Introduction

AssetWorks is pleased to partner with the State of New Hampshire, Department of Transportation (NHDOT) for a successful implementation of the AssetWorks Enterprise Asset Management (EAM) system. This Statement of Work identifies the tasks required for the implementation of the AssetWorks EAM solution and is based on AssetWorks' current understanding of the requirements and AssetWorks' previous experience with similar engagements.

AssetWorks recommends NHDOT use AssetWorks' project management, subject matter expertise, and consulting resources to ensure a timely and cost effective implementation. AssetWorks offers a variety of services ranging from workflow re-engineering to general business and technical consulting.

This section includes our complete response to the scope of work associated with the implementation of the proposed solution. This scope addresses the following items as they relate to the DOT's RFP documents.

- Project management approach
- Project team discussion, including roles and responsibilities
- Detailed overview of our standard implementation approach
- Detailed activity/task timeline
- Discussion of training approach
- Discussion of data conversion approach
- Discussion of interface development approach
- Discussion of testing approach
- Listing of milestone deliverables and documentation for each task

To best facilitate the implementation, AssetWorks urges NHDOT to formally identify a focal point for each of the critical business groups who will participate in or be affected by the project implementation. This involvement must come from all parties. These focal points should be both technically qualified and knowledgeable of their groups' business practices. These individuals will be responsible for spearheading the system configuration, data mapping, and workflow tasks to ensure a feasible and effective production roll-out.

The AssetWorks team will provide NHDOT with expertise in industry consulting, technical consulting for integration and data conversion, effective training for a wide variety of roles and functions, and project management and documentation to ensure the highest quality implementation.

Circumstances may necessitate changes to the tasks and/or time estimates, at which time AssetWorks and NHDOT will discuss these changes in good faith at their earliest opportunity.

## **Implementation Approach**

In this document, AssetWorks has provided a detailed Statement of Work, which outlines our proposed implementation approach for the initial implementation of the AssetWorks EAM solution for the DOT. AssetWorks implementation approach is built around industry and business standards for software implementation and project management. This standards based approach allows us to focus on implementing the solution and focusing on those aspects of the project that represent the biggest challenges. This flexibility facilitates adjustments to the project implementation to accommodate the nuanced needs of our various customers, and has yielded successful implementations for all of our current and past customers.

AssetWorks follows a collaborative approach to the implementation effort, engaging NHDOT staff in each step of the process. This approach is built upon a foundation of knowledge transfer. As we work through the implementation together, NHDOT staff will become increasingly knowledgeable and experienced with the product, how and why configuration decisions were made, how the data was organized and loaded, and how to manage and execute workflows within the system. In our experience this approach leads to the quicker adoption of the solution by the organizations staff, and results in a much smoother transition from implementation to operations and enables the customer to take full ownership of the solution.

One of the important aspects of the proposed AssetWorks implementation methodology is the inclusion of business process discovery sessions and workshops to explore current and desired processes. AssetWorks will teamed with NHDOT to validate and define process, configure these processes into the proposed solution and prepare NHDOT staff to effectively operate the new AssetWorks solution.

#### 2. WBS 1.0 Project Management Approach

#### **Project Management Philosophy**

AssetWorks has a Project Management Office (PMO) to guide the application of project management best practices and standards for the execution of all projects. The objective of this organization is to facilitate the application of project management in a scalable manner to all projects executed by the AssetWorks professional services organization. Within the AssetWorks PMO, AssetWorks applies best practices and standards consistent with those advocated by the Project Management Institute (PMI through their Project Management Book of Knowledge (PMBOK). Project managers at AssetWorks are encouraged to obtain their PMP and many project managers within our PMO currently carry their PMP.

As part of our organizational focus on effective project management, AssetWorks has developed best practices and standards around all aspects of project life-cycle management. Project execution begins with effective planning and initiation of project, including project planning, scope and schedule finalization, risk and quality planning, and a formal project kick-off. Once initiated AssetWorks follows a structured and standards-based process throughout the execution of the project, including risk and issue management, scope management and control, schedule and cost management and control, and quality assurance for all work activities associated with project execution. Finally, AssetWorks follows a structured project close-out process, which facilitates a smooth transition of the live production system to our customer care organization for the long-term success of the implemented solution.

## **Project Team and Kick-off Activities**

AssetWorks recommends NHDOT appoint a core project team with representatives from all functional or operational areas of NHDOT's business. This core group must have the authority and charter to make appropriate decisions regarding the implementation. The core group representatives should have complete knowledge and familiarity with NHDOT's operations and objectives, and will form the majority of the roll-out team later in the project. The NHDOT project team will define their roles and responsibilities and establish project standards and controls.

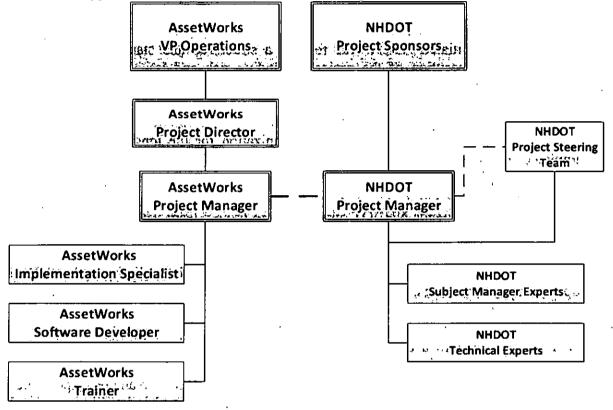
NHDOT will appoint a dedicated Project Manager, Subject Matter Project Leads, and supporting personnel from the designated NHDOT functional and operational areas. The NHDOT Project Manager will lead the overall NHDOT project team and be responsible for the NHDOT personnel and resources on the project. The Project Leads will be responsible for the configuration and implementation of AssetWorks EAM and for facilitating decisions among the core maintenance group.

AssetWorks will work with the NHDOT project manager to review AssetWorks' standard project management processes, which are based on the Project Management Institute's PMBOK® guides and standards. The process will include tools used for status reporting along the lines of integration, scope, time, resource, communications, cost, risk, quality, and procurement. The Project Managers will also define the schedule for project status meetings and communication channels.

#### **Project Team**

AssetWorks will assign a dedicated Project manager, who will work with the NHDOT project manager and technical staff to guide the DOT through a successful implementation. In addition, AssetWorks will provide the necessary consulting and technical resources to complete all aspects of the project. This will include consulting and technical implementation staff to facilitate interface and data migration design, development staff to

facilitate the development of system interfaces, custom reports, and custom notification, and trainers to support train the trainer and end user training.



## NHDOT Resources

AssetWorks assumes that all NHDOT project team resources will be committed to the project as of the project start date.

AssetWorks further assumes that NHDOT will provide the following resources to insure a successful implementation.

<u>**Project Steering Committee**</u> –The role of the Project Steering Committee will be to participate in setting the goals and scope of the project and to participate in periodic status meetings with the project team.

<u>**Project Manager</u>** - The Project Manager will be assigned with appropriate decision-making authority. This person will be the primary point of contact for the DOT with AssetWorks and will be engaged in all aspects of the implementation effort. This person should be able to access and organize NHDOT resources, schedule workshops and meeting, commit to</u>

dates and time lines, and facilitate completing the activities require NHDOT staff participation.

<u>Subject Matter Experts</u> - These resources will be considered part of the core project team and will participate in tasks including data clean-up and migration, system configuration, and project team training. Often these experts consist of functional Leads in their respective areas of expertise (e.g., maintenance), as well as other supporting personnel from the various departments. The resources designated for these roles should have a good working knowledge of how NHDOT processes are performed and understand the reasons for the current processes.

<u>**Technical Experts**</u> – A team of technical experts will be involved in the technical duties that come with an AssetWorks implementation. Examples include:

- System Administrator who will support basic IT administrative functions, including server administration, web server administration, network and security for the web, application, and database server, etc.
- Application Administrator who will be the leading key user of the system, and will facilitate data loading, user training, and once the system is live, be the first point of contact for all user issues in operating the system.
- GIS Specialist to facilitate the integration with the existing GIS database environment
- Database Administrator to provide standard database administrative functions for the database and database server.

#### Anticipated NHDOT Staff Time Commitment

The following table provides an estimate of the time commitment for NHDOT staff. These estimates are to be used as a guideline for project staffing purposes, and are derived from AssetWorks experience with other customers implementing the solution in a similar sized organization.

Resource	Estimate Time Commitment (in)percent)	Discussion				
Project Manager	50% or more	This individual will be the lead for the				
		project in NHDOT, and will be engaged in				
		all aspects. They will be facilitating				
		workshops and meeting, managing the				
,		delivery and preparation of legacy data,				
	•	facilitating the review and feedback on				
		deliverables, and interacting closely with				
		the AssetWorks PM.				

State of NH Contract 2018-122Part 3 Exhibits Exhibit Attachment 2 – Statement of WorkDate: \_4 December 2019\_\_\_\_\_Contractor's InitialsGSPage 9 of 82

Resource .	(Estimatel4, Time) (Commitment) ((Inipercent))	Discussion 2 1 28 Alterative and state
Subject Matter	20 to 40%	The involvement of subject matter experts
Experts		in each service area to be part of the
		implementation. The involvement with be
		higher at some points and lower in other,
		but as a rule of thumb it is useful to plan to
		spend between one day and 2 days per
		week during the implementation phase of the project.
		Key responsibilities for the
		implementation will include:
		Providing guidance and feedback on
		reviewing existing documented workflows
		and requirements to align these with
		AssetWorks EAM functionality
		Provide review, extraction, and cleansing
	<u>.</u>	of legacy data
		Participating in design session for mapping
		data and workflow needs into the
		AssetWorks system
		Providing review and feedback of all
		relevant deliverables
		Participate in system and user acceptance
		testing
System	Up to 5%	The system administrator would perform
Administrator <sup>1</sup>		the same type of standard activities for the
		AssetWorks EAM system as with other
·		Enterprise software solutions. This would
		also include providing access to the server
		for AssetWorks technical support, to
		AssetWorks staff for interface deployment
		and configuration, and other
		troubleshooting activities during
		implementation

.\*

<sup>1</sup> Not required for AW hosted solutions.

Resource	Baimade Illine Commitment (Inspacent)	Discussion
EAM User	50% during	The EAM User Administrator would be a
Administrator	implementation	key point for executing the
	25% during live	implementation. This will include
	operations	activities such as:
		Inputting system configurations
		Providing review and feedback
		Executing data loading
		Facilitating initiate functional testing
		Facilitating and assisting in trainer and
		user training
		Facilitating in live system cut-over
		activities and on-going user support.
Database	Up to 5%	The data administrator would perform the
Administrator <sup>2</sup>		same type of standard activities for the
		AssetWorks EAM system as with other
		Enterprise software solutions. This would
		also include facilitating with the database
		sizing and setup, and providing standard database support services similar to the
		services to support other enterprise
		business applications.
GIS Specialist	5-10%	This individual's role will be focused on
		facilitating the integration of the existing
		geospatial database with the AssetWorks
		EAM database. During the implementation
		of the system the engagement will be
		sporadic, but then more involved with
		some long periods of inaction. Once the
		system is live, this individual will be
		engaged in the on-going quality assurance
		of spatial data being shared between the
	l	two systems, which may not represent a

<sup>2</sup> Not required for AW hosted solutions.

Resource	Estimate clime Commitment (inpercent)	
		significant increase in effort over their current role.

## Project Kick-Off

Prior to scheduling the project kick-off meeting, the AssetWorks account manager and assigned project manager will meet to formally transition the project for implementation, at this time the AssetWorks project manager will be formally assigned and the AssetWorks project manager will reach out to the NHDOT team to plan and schedule the project kick-off meeting and other activities.

Once the project kick-off schedule is defined, AssetWorks will prepare and facilitate a project kick-off meeting. The kick-off meeting will consist of an introduction to the project for NHDOT's core implementation team. The meeting will review the project scope and time line as well as review the roles of each team member and expectations for project participation.

Following the project introduction, AssetWorks will host an initial product training and orientation session to review the software with the NHDOT project team and appropriate NHDOT asset management and maintenance staff. The goal of this training session is to prepare NHDOT staff to effectively participate in all aspects of the implementation effort. After the kick-off meeting, AssetWorks will work with NHDOT's project manager to finalize the project plan based on information that was discussed at the kick-off meeting.

# **Technical System Review**

As part of the kick-off activities, and prior to setting up the hosted environment, AssetWorks will conduct and technical review meeting to review key technical question regarding the AssetWorks installation and environment. This will include:

- Provide documentation and a briefing in Desktop and Network Configuration recommendations
- Provide documentation and recommendation for data security
- Provide a briefing on testing procedures and support review and response procedures, including issues resolution procedures and issue closure process
- Provide recommendations and documentation on business continuity and disaster recovery

- Provide documentation and software configuration
- Provide recommendations for end user support, both internally at NHDOT and with AssetWorks customer care during implementation and post go-live.

This documentation will be provided to NHDOT prior to the system being installed in the designated environment.

#### **Deliverable for Project Kick-off**

- Project Management Plan, including
- Draft project plan/schedule for the initial implementation with WBS tasks per the SOW
- Scope management plan, including change control, action, and decision log
- Project roster
- Communication plan
- Change management plan
- Risk plan and register
- Issue tracking log
- Responsibility matrix
- Project kick-off meeting
- Project orientation training session
- Technical Briefs, including:
- Desktop and Network Configuration Brief
- Security Brief
- High-level testing plan
- Business Continuity Brief
- Software Configuration Brief
- Software Configuration Brief
- End User Support Plan
- Revised/finalized project plan/schedule for the initial implementation with WBS tasks per the SOW

## **Project Management - Monitoring and Controlling Services**

AssetWorks will provide project management monitoring and control services to execute the project plan. The AssetWorks' project manager will coordinate all AssetWorks project activities. AssetWorks will provide the following project management services:

- Coordination of project resources and work so that milestones are met in an efficient manner; tasks will be designed so as to reasonably minimize implementation time and cost while taking into consideration resource and time constraints such as NHDOT staff availability
- Serve as the main point of contact for the NHDOT project manager
- · Provide updates to the work plan and project budget every month
- Ensure quality deliverables

#### • Communicate and resolve project related issues and risks

The AssetWorks PMO Manager will serve as the project director to provide additional project oversight and guidance to help the assigned project manager monitor the project resources and budget, and ensure quality delivery of services. This manager is NHDOT's first escalation point for any issues arising during the project.

The AssetWorks Project Manager will monitor the project resources to ensure quality delivery of services and that the deliverables are completed on time and in accordance with the project requirements.

#### Scope Management

As part of the overall project management approach, AssetWorks will implement and follow specific scope change control procedures. This will include both regular status updates, which may vary in frequency throughout the project as deemed necessary by the AW and DOT project managers, as well as formal status meetings, typically monthly, to review progress, issues, and potential requirement changes throughout the project. As identified issues or requirement changes occur, these will be documented in the project issue log for tracking and auctioning throughout the project. If an issue requires a change to the scope, or will introduce additional requirements to the project, these will be documented in the project change log, and the AssetWorks PM will review these potential changes with the NHDOT PM to determine the need and priority for the change. If the change is something that will be required, then the next determination would be who will be responsible for executing the change, if the change will result in a change of scope requiring additional support or effort from AssetWorks and formal change order request will be developed and provided to NHDOT for review and approval to be added to the scope of work. Any changes to the scope of work will be reflected in the project decision log, and will result in updates to the project scope of work, schedule, and budget, including the additional of any additional milestones. Only after all parties agree on the need for the change, and the plan for integrating the change into the overall implementation project plan, would AssetWorks begin work on this change.

#### **Schedule Management**

As with the scope management, changes to the schedule will following the same change control process outlined above. All potential changes to the schedule, either as a result of scope changes, or other internal/external factors will be documented in the project issues log, if a change is necessary the decision will be documented in the decision log and recorded in the project change log. Only after the project team formally agrees to the change will it be implemented in the schedule.

## **Risk Management**

AssetWorks follows PMI best practices as it relates to project Risk management. As part of the project kick-off activities potential areas of risk will be documented in the project risk register, which will be subject to review at all project status meeting and discussions. Risks will be monitored for their triggering events, and mitigation strategies will be defined ahead of time to be able to effectively address risk as they become issues. IN the register Risks will always be documented using the structure Cause – Risk – Effect to effectively understand the risk at its impact, and to define effective mitigation strategies in advance of the project risk occurring.

## Quality Management

AssetWorks will provide for both collaborative development and draft review with the NHDOT project team for all consulting deliverables, once the draft deliverable process is complete, all deliverables undergo an internal peer review process to validate both the content of the deliverable, as well as the form of the deliverable to facilitate the delivery of quality in for content and form. To ensure product quality, AssetWorks performs detailed manual testing of enhancements and fixes included in each release before the release is made available, as well as regression testing to ensure continued quality of stable areas of functionality. AssetWorks also continues to expand automated testing cases to cover more areas of the application to further reduce defects or configuration issues.

## **Communication Management**

As part of the overall project management plan, AssetWorks will provide a communication management plan, which will include guidance on the most adequate forms of communications for the project team, this will include protocols for use of email, meeting, and verbal communications. It will define the schedule for the regular status meeting and check-ins. Typically, AssetWorks and regular weekly status check-in meeting for the project management team, as well as regular formal status meeting.

## **Change Management**

Change Management is an integral part of the overall AssetWorks implementation approach. Our approach is proactive and begins with the business process review and recommendation phase through the system configuration effort, system testing and training portion. AssetWorks pursues a mentoring and knowledge transfer approach to training, which endeavors to make our customers self-sufficient within the system through the implementation process.

Thus, throughout the process, AssetWorks will work with NHDOT users to define changed business process, test and validate the recommendation through interactive and continual testing, and then once implemented train key users to be trainers for the future, as well as train all users to use the system within the framework of the changed business processes. In

this way, AssetWorks believes that our customers gradually take ownership of the system and the new workflows and processes during implementation and are prepared to work independently and effectively once the system is in live production use.

#### **Deliverable for Project Management Services**

- Relevant status reports, issues log, and meetings regarding AssetWorks EAM.
- Phased project plan
- Change management plan

### 3. WBS 2.0 Business Process and Requirements Validation

#### Initial Requirements Validation

AssetWorks will conduct workshops with each of the major asset management and maintenance groups within the DOT, who are participating on this implementation to review the requirements listed within the RFP documents. The review of requirements will be a precursor to the Functional Design process to follow. After reviewing the DOT's requirements matrix with NHDOT staff, AssetWorks will map the requirements to existing functionality of the AssetWorks EAM application. AssetWorks will document which modules, screens, reports or Ad Hoc Queries will satisfy each requirement. This process will enable AssetWorks to either validate our assumptions from our initial review of the RFP documentation, or to make revisions and refinements. Further, this review will enable AssetWorks and the DOT to agree on the potential for custom reports, development of custom, pre-defined ad hoc queries, and the configuration of out of the box notifications or custom notifications. These recommendation can then be aligned to the specific user group and associated project phase.

As a result of this review AssetWorks will be in a position to work with NHDOT to finalize the priorities for certain requirements, determine which requirements will be addressed with the out-of-the-box capabilities, or which requested capabilities may be satisfied with changes to work flow by the DOT. The result of this effort with be a revised requirements matrix, which will facilitate the tractability of requirements to support the functional and user testing phases later in the implementation effort.

Further, as part of this process AssetWorks will review the possible points of integration with other DOT systems, and work with the DOT to finalize the specific needs and priorities for interfaces. This process will enable AssetWorks to validate assumptions and work with the DOT to finalize the scope of interface development, and prepare a final scope and budget for integrations for the new AssetWorks system.

AssetWorks will prepare a report that identifies the primary requirements, provides recommendation on how to accomplish those with the available software, will identify

specific needs for legacy data, and data development to support system configuration, and will document the required integrations for the future system.

## Deliverable for Requirements Definition and Review Services

- Requirements Traceability Matrix
- Fit/Gap Report
  - o Recommendations for data migration and configuration
  - o Recommendations for reports and defined queries
  - o Recommendations for interfacing to other system
  - o Summary and recommendations for notifications and potential software modifications to be incorporated into the project

#### Task Assumption

AssetWorks will conduct 2 (two) on-site working sessions to support the review and completion of this WBS elements.

#### **Business Process Validation**

Following the completion of the Requirements validation and prioritization, AssetWorks will NHDOT staff to understand the "As Is" environment, including current spatial data, operational and management procedures and work flows, business processes, and reporting requirements. Additionally, AssetWorks will observe NHDOT's existing operations and work with the NHDOT team to identify where improvements can be made. This process will build on the requirements validation and is designed to align the implementation with the capabilities and tools available through the AssetWorks solution.

The Business Process report will identify and document practices and procedures that can be adapted to the capabilities of the AssetWorks EAM software to provide a more effective operation and a smoother implementation and operation of AssetWorks EAM. AssetWorks will perform the following tasks as part of the BPA:

## **Conduct Workshop Sessions**

AssetWorks will review the DOT's current processes documentation with the various asset management and operational maintenance groups participating in the implementation. These sessions will provide the AssetWorks project team with the opportunity to assess the current NHDOT business practices, specific requirements, both fulfilled and unfulfilled, and areas for improvement identified by NHDOT staff. The AssetWorks project team will observe efficiencies and redundancies in the system, and propose new processes. These sessions will provide AssetWorks with the following:

- Awareness of how NHDOT works and processes data
- Review and understanding of current user stories developed by the various functional groups as defined in the NHDOT RFP documents
- Ability to define information processes, functions, and functional areas

• Assessment of the likely adoption of future state processes and recommendations AssetWorks will review the following with each of NHDOT service areas.

- Data Creation and Management, which will address topics including discussion of data development methods, application of best practices for spatial data management, data network management, integrated maintenance strategies for asset inventory information.
- Asset Management, which will address topics including discussion of asset organization and hierarchies, asset acquisition, disposal, depreciation, state of good repair scoring/capital planning, and total lifecycle management
- Maintenance Operations, which will address topics including maintenance organization, reporting structure, and areas of responsibility, opening work orders, work assignment, labour hour tracking, indirect time, reviewing work orders, requesting parts, and other work management functions such as PM scheduling, PM programs, inspections, and the development of PM/inspection checklist items
- Inventory and Purchasing Management, which will address topics including inventory management, charging materials, creating purchase requests, replenishment, handling parts warranties, dealing with serialized parts, and other inventory management functions

These sessions will be conducted with key staff from the various identified functional areas at NHDOT.

After completing these sessions, AssetWorks will compile the results of the interviews and document the recommended future state processes and workflows. AssetWorks will present these recommendations to NHDOT in a "Conference Room Pilot" format to review the recommended workflows and processes and gather final feedback from NHDOT.

Based on the results of the working sessions and the Conference Room Pilot, AssetWorks will prepare a future state report and submit the final version to NHDOT. This report will be a document of approximately 100 pages. The documented processes and workflows will identify recommendations for changes to existing work flows and business processes with the objective being the:

- Elimination of non-value added administrative activities such as manual re-entry of data and paper based maintenance management processes.
- Identification of the information that needs to be captured within the data to support the maintenance management programs and business processes to be supported with the AssetWorks EAM solution.
- Identification of the information that needs to be captured within the data to support the required performance metrics.

## **Deliverable for Business Process Assessment**

• Workshops Sessions with Key Staff

t

- Functional Future State Report
- Conference Room Pilot

## **Change Management Assistance**

Building on the results of the business process evaluation process, AssetWorks will work with NHDOT to facilitate an organizational change management approach. Early in the implementation process, AssetWorks will host several change management workshops with key users, who in turn will work with NHDOT staff to prepare them for the change to their daily work activities associated with the new system implementation. AssetWorks expects that NHDOT will appoint change management leaders for each of the users groups associated with the implementation effort. These leader will be AssetWorks primary point of contact throughout the implementation to facilitate adoption of the new solutions and the association work flows. As part of this effort, AssetWorks will prepare change management training materials conduct training workshop with the NHDOT change management leaders to provide support and guidance to them in their change management efforts. This group will also collaborate with AssetWorks on the organization training plan, assist in the execution of user acceptance testing, and help prepare the end user training materials.

#### **Deliverable for Change Management Assistance**

Workshop Sessions with Change Management Leaders, including training materials

#### Task Assumption

AssetWorks will conduct up to 4 (four) one day on-site working sessions to support the review and completion of this WBS elements.

#### 4. WBS 3.0 System Setup Services

#### Software Installation and Setup<sup>3</sup>

AssetWorks assumes that it will be working within an AssetWorks hosted/SaaS environment. This will include the setup of 2 environments, the database, reporting and MAXQueue servers. This work will be completed following the project kick-off, but prior to the start of system setup activities.

#### **Deliverable for Software Installation Services**

• Installation of two environments of AssetWorks software

<sup>&</sup>lt;sup>3</sup> Should the DOT opt for an on premise hosted solution, AssetWorks will augment the statement of work to include the service associated with initial software installation for 2 software environments (Test and Production) to be deployed on DOT provided hardware and using a DOT provided database environment in either SQL Server, or Oracle.

## System Set-up Training

NHDOT should involve key users within the DOT participating in the implementation to provide input on the critical implementation decisions related to the setup of the system configuration elements needed to make the EAM components of the system active. Decisions made during this phase of the project will have a *direct effect* on the work flow in the roll-out of AssetWorks EAM.

This group must have the authority and charter to make appropriate configuration decisions regarding the AssetWorks EAM implementation. The group representatives should have complete knowledge and familiarity with the operation. All decisions made during these session will be documented as part of the decision log and the data loading sequence progress document, which will be maintained by AssetWorks throughout the system setup and data migration process to track progress and facilitate the inclusion of all relevant data elements.

AssetWorks will lead a three-day session to train the NHDOT staff to effectively define and gather the appropriate coding conventions for asset numbering, asset classes, repair codes, PM schedules, PM parameters, PM checklists, and other items. Following the initial setup training session, AssetWorks will facilitate the loading of this information with NHDOT staff through a series of on-site and remote working sessions. The set-up tasks will facilitate the work flows in NHDOT's operation. System set-up consulting is very much a dialogue and exchange of information where NHDOT's project team will plan the overall integration of AssetWorks EAM into NHDOT operation under the guidance of AssetWorks' application experts.

NHDOT's preparation for this engagement includes the assimilation and distribution of relevant asset, inventory and maintenance data prior to the initial session. The goal for these working sessions is to achieve at least 90% of the standard coding schemes and business practices required for system roll-out.

#### Finalize data definition, and processes

As part of the initial implementation, NHDOT staff will take action items from the System Setup Training Workshop to finalize the definition of all relevant AssetWorks EAM data elements and work processes, including asset management, maintenance, parts management, procurement, and other job functions. NHDOT's deliverable for this task is complete documentation of NHDOT's definitions for all applicable AssetWorks EAM data elements. This deliverable is a critical prerequisite to the development of the training material for the roll-out. AssetWorks will work with NHDOT to prepare this documentation.

AssetWorks will work with the team to configure AssetWorks EAM per the discussed work flow. This configuration will build on the setup defined with the NHDOT core team and will focus on specific decisions, such as location options, department settings, etc. This task will occur as soon as possible after the System Setup Consulting engagement.

#### **Task Assumption**

In order to facilitate the identification and input of the coding conventions, NHDOT will have all existing coding convention information available at the start of the system setup workshop. These conventions will include reason and fault codes, work accomplished codes, task codes, location codes, employee information, user groups, and authorizations, etc.

# **Deliverable for System Setup Consulting Services**

- Coding structure and data definition workshop(s)
- Documented coding value lists loaded to the test environment

#### 5. WBS 4.0 Data Conversion Design Services

#### **Data Conversion Preparation**

As with the Setup activities, data migration activities will rely on the specific subject matter expertise from the NHDOT project team. Thus, DOT asset, historical, and configuration data will be migrated to support those groups participating in the implementation.

The objective of these data loading services is to process data from the applicable NHDOT asset data sources and map the data into AssetWorks EAM. It is anticipated that this will include data from the existing systems and data stored in stand-alone databases, Excel data tables, and the NHDOT GIS database. NHDOT will provide samples of the data as soon as possible. Using these samples, the team will define exactly what data will be loaded and define a data mapping approach to bring the data into AssetWorks EAM. AssetWorks will help NHDOT finalize the data mapping and identify the specific sources for each data element.

#### **Data Conversion Procedures and Assumptions**

AssetWorks will determine the necessary data required to make the system operational (e.g., asset data, current assignments and locations, etc.) and then identify, in conjunction with NHDOT staff, what data will be available from current systems, and what data NHDOT may have to develop or enter. Once the data conversion specifications are completed, AssetWorks will be provide guidance and facilitation to NHDOT staff in cleansing and preparing the data for migration into the AssetWorks EAM database.

ł

It is anticipated that the data migration will include:

- HEI Durable Equipment Inventory
- CIMS Consumable Inventory
- MATS Work accomplishment / time entry
- DTS VueWorks Asset data associated with Traffic Division
- M5 Fleet (maintenance records & inventory)

Additionally, AssetWorks anticipates working with NHDOT to migrate up to 3 years of past maintenance historical details for the assets loaded to the AssetWorks EAM solution. It is anticipated that this will include historic work orders, materials issues, and commercial (3<sup>rd</sup> party vendor) charges. It is further anticipated that NHDOT will review and clean-up these historical transactions, work with AssetWorks to define historic coding structures, and generic values for codes and employee labor, as appropriate.

## Format of Loaded Data

AssetWorks assumes that the bulk of the NHDOT asset data will be loaded using the AssetWorks data loading tools. Files will be formatted to facilitate uniform electronic loading. AssetWorks requires that NHDOT supply all non-spatial data initially in a tabular Microsoft XML Spreadsheet 2003 format, which will be used for loading the cleansed and reconciled information into the AssetWorks database as part of a batch loading process. AssetWorks will provide the appropriate XML data loading templates to NHDOT, and will provide training and guidance to NHDOT staff on how to populate the legacy data into the template to ensure successful loading of the data to the AssetWorks EAM database.

AssetWorks will work with NHDOT to map existing data values to the appropriate fields within the AssetWorks data, as well as collaborate with NHDOT to identify gaps in the existing data as it relates to either system required values within AssetWorks, or to newly identified business needs. This mapping exercise will guide the development of the appropriate data loading templates, which will be provided by AssetWorks. As part of this effort, it is anticipated that NHDOT will migrate and apply as many of the legacy data coding values as appropriate to facilitate the commonality of data organization between the legacy and the new systems, and to facilitate future asset history reporting.

AssetWorks will provide guidance to NHDOT on the population of the loading template in advance of the conversion of those data elements that map into AssetWorks EAM. This will include both the legacy Asset data as well as data developed to support system setup and configuration. Data that does not map into AssetWorks EAM will be evaluated for need and usefulness. If the data is required, AssetWorks will work with the Agency to identify the

appropriate associations of the data elements, and define and load this data as additional attributes, or as subsystem component information for the associated asset records. Further, only data elements that can be entered on an AssetWorks EAM screen are part of this loading.

Data that is already formatted and managed within the Agency's GIS database may be loaded directly from GIS. This will include relevant Feature Class information, spatial location information, or other location relevant information managed within the GIS database. AssetWorks will work with the DOT to configure the Feature Class mapping in AssetWorks based on the data mapping defined above to automate the loading of asset information directly from the GIS database. This process will include both the spatial features – lines, points, and polygons – as well as the associated attributes of the spatial data features.

#### Data Loading Testing

After AssetWorks and NHDOT have jointly documented the data mapping and data load process, AssetWorks will facilitate the testing of NHDOT's data. These tests will validate the data migration strategy that the team defined in earlier stages. This process may require involvement from the staff at the NHDOT staff.

AssetWorks will guide and train NHDOT to load samples of the data for review and validation purposes. AssetWorks will assist the NHDOT Project Manager and Team in the validation process. AssetWorks will guide NHDOT in loading the data based on the rules defined earlier in the project. Data will be loaded into the development environment and validated by NHDOT before being converted into the production environment.

#### **Task Assumptions**

In order to facilitate the loading of data, and train NHDOT staff to administer and operate the AssetWorks system in the future, Assetworks will provide guidance to NHDOT staff throughout the data compilation, loading, and validation process. NHDOT staff will perform the bulk of the tasks to complete this effort. AssetWorks will not clense any NHDOT data, but may provide guidance to NHDOT on an appraoch to prepare data for loading into the AssetWorks database.

Data that is already current, correct, and managed within the DOT's GIS database will be loaded directly from GIS. This will include relevant Feature Class information, spatial location information, or other location relevant information managed within the GIS database.

State of NH Contract 2018-122Part 3 Exhibits Exhibit Attachment 2 – Statement of WorkDate: \_4 December 2019\_\_\_\_\_Contractor's Initials \_GS\_\_\_\_\_Page 23 of 82

The sample data for each of the data elements to be batch loaded to the new system will be provided to AssetWorks at the project kick-off meeting. This is necessary to facilitate the development of the data loading plan and data mapping templates. Should the provision of the sample data sets be delayed, this will result in a delay to the delivery of the project.

#### **Deliverables for Data Conversion Services**

- Data Conversion Plan
- Data Mapping of Legacy Data to AssetWorks Database Environment
- Data Loading Templates
- Data Loading Training and Loaded Data Validation

#### 6. WBS 5.0 Interface Design and Development Services

#### **Interface Development Preparation**

AssetWorks standard procedures for developing interface design specifications include the following tasks:

- Create a preliminary specification/interface design plan including data mapping and interface rules and testing scenarios (use cases)
- NHDOT project team reviews the preliminary specification/interface design plan
- AssetWorks reworks the specification/interface design plan as required
- NHDOT project team provides final approval of the specification/interface design plan

AssetWorks and the NHDOT project team will develop a mutually acceptable plan and schedule for the work to be completed and identify the resources and timeframe required for the development efforts. AssetWorks assumes NHDOT will involve the appropriate staff to reach consensus and decisions on all interface specifications during the discussion and according to the proposed timeline. When interfacing to applications such as GIS or ERP systems, AssetWorks makes use of XML data streams. Using XML, external applications access MAXQueue, the AssetWorks EAM integration module, to interact directly with the AssetWorks EAM components in real-time, applying all of the standard AssetWorks EAM business rules and processing logic. This has the same effect on the data as if it was manually keyed into a standard AssetWorks EAM page.

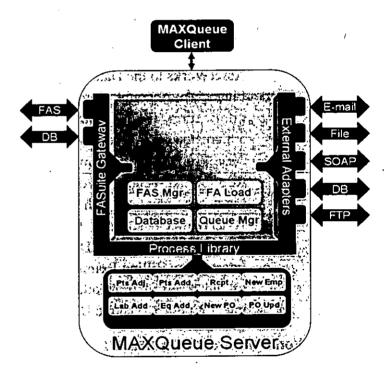
AssetWorks can create an on-demand or scheduled batch interface that uses text files to update or extract records in AssetWorks EAM. When AssetWorks EAM has been interfaced to export data to flat file legacy systems, programs are created that insert rows into the target transaction file. In some cases, intermediary staging tables are used in lieu of file transfers. Using MAXQueue, users can setup recurring schedules to execute individual interfaces. For inbound batch integrations, AssetWorks EAM looks in a standard file directory or to a staging table for incoming data. When data is found, AssetWorks EAM processes the data through MAXQueue in the same manner as the real-time interfaces. For

outbound data, when the interface is executed, AssetWorks extracts the data into either a data file or a staging table.

In general, MAXQueue supports a wide range of communication methods and protocols and the ability for different topic subscribers to use different protocols and processes (example: a real-time purchasing interface connecting to a SOAP server and pulling down XML documents, side-by-side with a batch-driven interface that uses FTP to pass a formatted text file). MAXQueue is separate from the base application code of AssetWorks EAM, allowing it to be installed in a customer's DMZ, allowing communication between internal databases and external vendor systems without compromising network security.

MAXQueue includes a user interface which may allow interfaces to be configured by customers and typically provides the customer with the flexibility to control when and how often interfaces are processed.

When a business event occurs in an AssetWorks product or in the external system, the other product receives pertinent data for further processing. storage. ог both. Typically, the data has been completely processed in the initiating product before being passed and it is simply stored in the receiving product for reference purposes.



AssetWorks is willing to discuss alternative, more extensive integration options and designs with NHDOT to ensure the optimum design for the interfaces. However, for the basis of this proposal, the following assumptions and designs have been incorporated as the basis for the quotes provided. The project team will define a detailed specification for each interface before any work begins.

## **Included Interfaces**

NHDOT has identified several specific required interfaces to the proposed AssetWorks EAM solution, other than the GIS integration discussed below. It is anticipated each of these

distinct interfaces will support various operational activities, including Inventory, Purchasing and Receiving, Financial Data Management, Maintenance Operations, and Spatial Data Integration. However, AssetWorks does anticipate that additional interfaces may be needed. As part of the initial proposal, AssetWorks has included a preliminary budget for the interfaces called out in the RFP documents, based on our initial assumptions of how those are anticipated to be integrated with the DOT's work flows. These integrations include:

- NHDOT Data Warehouse Interface It is anticipated that this integration to the DOT's financial system will include the following interfaces:
  - Project integration, which will facilitate keeping project information in sync between the data warehouse and the AssetWorks EAM solution. This is possibly a two-way integration, bringing new or updated project information into AssetWorks and sending project cost and progress information from AssetWorks to the Data Warehouse.
  - o Financial Account information, which will keep accounting code information, financial strings, in sync between the two systems. This is anticipated to be a one-way integration from the Data Warehouse to the AssetWorks EAM solution.
  - Receipt and Vendor Invoice information, which will track the receipt and invoice association with the delivery of goods and equipment from the AssetWorks system to the Data Warehouse. This may be a two-way integration between the Data Warehouse and the AssetWorks solution.
  - Interagency Billing/Reimbursement information, which will track payments to and received from other agencies. This is anticipated to be a one-way integration between the Data Warehouse and AssetWorks.

AssetWorks will work with NHDOT to review, define, and prioritize the interfaces to be included in the final scope of the implementation effort during the Requirements Validation activities defined under WBS element 2.0 above. Below are several optional integration called out in the RFP, which AssetWorks will work with NHDOT to review and prioritize. Once this review is completed, AssetWorks and NHDOT will define a scope and budget to add these into the project, as appropriate.

## • Oprak/Gasboy Interface:

This integration would bring fuelling information from the Oprak fuelling system into the AssetWorks solution. This would be data association with the vehicle taking fuel, mileage, fuel quantities and price, etc. This is anticipated to be a one-way integration from the Data Warehouse to the AssetWorks EAM solution.

#### **Assumptions**

- o One-way In to FA/EAM
- o Pass data to FASuite via web service
- $o^{\dagger}$  Update 2 screens with ~10-20 fields being sent
- o All FA/EAM settings OOTB, no additional rules outside of application logic
- o Standard MAXQueue error handler, no additional processing rules for errors

#### • SkyHawk (AVL)

This interface would send the location, hour meter reading, trouble codes, and the materials distributed by location from the DOT data warehouse to the AssetWorks system. This would facilitate the tracking of vehicle information, and gathering the other information collected by the Skyhawk system. Additionally, this interface would send operational information back to AWEAM, including Salt/Brine distribution and in terms of quantities and locations. This could either flow to a work order, if a linkable attribute could be assigned in both systems, or to the linear asset and a direct issue, as needed.

## <u>Assumptions</u>

- o Data will flow from the DOT data warehouse via a web service
- Up to 10 special rules will be included to account for the needs of the interface
- Location data may be integrated through the AW Telematics module for the vehicles and through the mapping/LRS tools for linear assets
- o All FASuite settings OOTB, no additional rules outside of application logic
- o Standard MAXQueue error handler, no additional processing rules for errors

#### • Skipline Data Integration:

This interface would send information on line painting/marking to AW to document the amount of paint put down, what the paint was for, i.e. center line, shoulder marking, the color, and the quantity. It should tie back to a work order (possibly a MAWO should the painting stretch further than a single defined linear asset, and will tier back to the work order based on the Skip Line project number attached as an attribute.

## Assumptions

- This could be a file or web service integration
- Should be able to align the paint put down with the linear length of the asset associated with the work order.
- o The paint should be setup as a material item, which enables fractional issue
- o 8 to 10 special rules will be included to account for the needs of the interface
- o All FASuite settings OOTB, no additional rules outside of application logic

o Standard MAXQueue error handler, no additional processing rules for errors

# • MATS Integration of Non-Timecard Work Order Related Elements

## Enhance Timesheet Module to Support tracking available leave time:

This enhancement would enable the current Timesheet Module to track available leave time and determine whether an employee has adequate leave time available when posting a future request for time-off to the shop calendar, or timesheet. The key requirements to be addressed, include:

- 1. Ability to track multiple types of leave time, including but not limited to: Floater days, PTO time, Sick leave, Comp time. These should be user definable.
- 2. The types of leave time should be linkable to indirect tasks to facilitate the tracking and validation of available leave time
- 3. The system should validate that the leave time to be posted is available, and validate that it does not exceed the available amount
- 4. The workflow should have the ability to require an approval before posting to the timesheet, this could be done through the standard approval notification process with MAXQueue, which would send a request for approval to the appropriate supervisor, who would be required to approve the time prior to finalizing the timesheet posting
- 5. It is anticipated that the leave time would be tracked on the Employee Primary Information screen.
- 6. The tracking should include available hours (i.e. hours available minus pending and spent hours), pending hours (i.e. hours posted on a timesheet, but not yet used), hours spent.
- 7. Minimum usable hours should be linked to the type of leave time request, i.e. PTO time in minimum 4 hour increments, floater days in minimum 8 hours increments, etc. This should be user definable.

#### Assumptions

- The leave time values will be updated via an integration to the DOT's data warehouse for HR/payroll information
- Leave time balances should deduct within AssetWorks once they are posted to the timesheet, even for postings in the future
- The system should validate that the minimum posting amount is being followed and require correction when an error is made.
- The system should validate available for each posting made, and generate a warning message (or blocking error) when a requested posting exceed available hours.

• The enhancement would be delivered as part of the next available formal release of the FA/EAM software. The version number is subject to agreement between AssetWorks and NHDOT

#### HR Interface:

This interface would maintain synchronization between AW and the HR data in the DOT data warehouse for employee information, or to bring over new employees. This would maintain the status and location assignment of employees that were batch loaded at the start of live operation, and as employees are added would create those records in AW as appropriate. May need to have this run at different times for different data. The key requirements to be addressed, include:

- 1. This will include up to 20 fields of employee defining information Name, location, job classification, pay rate, and leave time, .etc.
- 2. This interface will create and update both employee and operator records for the person.
- 3. The interface should also create an AW User account for the employee and link it to the employee and operator record.
- 4. The interface should deactivate employees when the data supports this, including the employee record, operator record, and user account
- 5. When the employee is deactivated the record should also be removed from any crews it is associated with, or asset assignments..
- 6. This interface may run either as triggered, or nightly depending on the user organization's needs.

## <u>Assumptions</u>

- o Data will flow from the DOT data warehouse via a web service
- o Will include up to 20 fields of data
- o Up to 5 special rules will be included to account for the needs of the interface
- All FASuite settings OOTB, no additional rules outside of application logic
- o Standard MAXQueue error handler, no additional processing rules for errors

## **Timekeeping Interface:**

This interface would enable the transfer of labor hours posted either to a work order (PM, Repair, or Rebuild) or to a timesheet as indirect time to the data warehouse system. The objective would be to increase the accuracy of the reporting in the two systems, and eliminate the potential for duplicate entry into each system. The key requirements to be addressed, include:

- 1. This will include up to 10 fields of employee defining information
- 2. This interface will run on a schedule, either daily or weekly, and will summarize the posting based on rules defined by NHDOT.

3. The interface should allow for adjustments to previous posting in accordance with the time posting rules on NHDOT

## <u>Assumptions</u>

- o Data will flow to the DOT data warehouse via a web service
- o Will include up to 10 fields of data
- Up to 5 special rules will be included to account for the needs of the interface
- o All FASuite settings OOTB, no additional rules outside of application logic
- Standard MAXQueue error handler, no additional processing rules for errors

#### GIS Integration

The AssetWorks EAM solution offers out-of-the-box geospatial data management capabilities, which will enable NHDOT to effectively load and use their current GIS information into the AssetWorks EAM asset inventory. AssetWorks EAM's spatial data management tools will enable NHDOT to load their linear and location-based stationary assets, and effectively manage those assets, generate preventive maintenance plans, execute inspections, and create repair work requests and work orders as needed.

As part of our implementation effort, the AssetWorks team will work with NHDOT to review the current GIS data management environment and collaborate to design processes and procedures to enhance spatial data management, identify additional spatial data needs for assets, and develop more enhanced tools for creating a comprehensive and synchronized spatial data maintenance program to facilitate the accuracy and consistency of information across both the current spatial data environment and the future AssetWorks EAM asset inventory.

In this manner AssetWorks would work with NHDOT to enhance our compliance with the DOT's requirements, and identify best practices and strategies for enhancing the geospatial capabilities into the future as the system matures and more assets types are brought on-line and integrated into the asset management and maintenance work flows.

A further part of the implementation effort will include the design of processes, workflows, and tool for accessing, sharing, viewing, and reporting on asset information through a GISbased portal. AssetWorks offers a built in spatial data viewing and query tool, which facilitates simple queries and map views within the AssetWorks portal environment. Additionally, the AssetWorks team will work with NHDOT to define GIS-based tools for viewing spatial data, conducting more advanced queries, and for spatial reporting and thematic map viewing.

In this manner AssetWorks will provide options to the DOT users, once the solution is implemented for viewing and working with asset information by facilitating both simply

viewing and querying, and enabled advanced spatial data operations against data stored both in the GIS database as well as within the AssetWorks EAM database.

#### Deliverable for Interface Design Services

- Interface priority list
- GIS Interface and Data Processing Configuration

#### 7. WBS 6.0 System Configuration Services

#### **Configure Modules**

AssetWorks will provide an orientation for the modules included within the software licensing portion of the proposal.

In addition, AssetWorks will consult with NHDOT to configure the modules to facilitate the workflows for the maintenance, back office functions, and standard interfaces. Configuration includes, but is not limited to:

- Defining user groups and user access rights
  - o Defining screen based user roles and rights
  - o Defining field level rights
  - Assigning user groups for specific functions
- Creating automatic report schedules and distribution lists
- Work with DOT to define depreciation schedules
- Mobile application support for iOS/Android
- Establish process for deploying MobileFocus.
- Deploy standard reports, which require no additional modifications or enhancement
- Initializing notifications to facilitate business processes
- Assisting with Dashboard layout and design
- Create custom, reusable ad hoc queries
- Modifying screen naming conventions and field data entry requirements
- Creating custom menus for specific user groups

#### **Configure Mobile Users**

As part of the configuration of the web portals, AssetWorks will work with the DOT to identify those users, who will be using the MobileFocus software, and identifying on which platform those users will be using the MobileFocus platform. This will include the configuring of the mobile users to be able to user the table application, and to configure the web administrative tool to identify, which user groups will have access to which MobileFocus functions.

#### **Configure Notifications**

AssetWorks offers several out of the box notifications, which can be integrated into the module work flows to facilitate more effective use of the system. As part of this proposal AssetWorks will work with the DOT to configure up to 5 of the out of the box notifications for use.

## **Configure GIS Integration**

AssetWorks will provide technical development services to provide configuration for the integration of the NHDOT GIS environment and the AssetWorks system. These configuration activities will be based on the results of the GIS Design activities. It should be noted that any changes or modification to the AssetWorks EAM system to support the development and configurations are not software customizations specifically for NHDOT, but reflect an integration configuration design to support the unique data management work flows in use by NHDOT. Thus, these changes would be made to the base software and would be part of all future releases of the AssetWorks EAM software, thus facilitating future software upgrades.

#### **Deliverable for System Configuration Services**

- Configured modules
- Configured notification (up to 5)
- Configured GIS data management

NHDOT is responsible for all deliverables not specifically included above.

## 8. WBS 7.0 System Testing Services

#### **Prepare Integrated Test Plan**

AssetWorks will prepare a standard System Test Plan. The final test plan for NHDOT will be developed based on the requirements identified within the Requirements Traceability Matrix delivered under WBS 2.0, and the data and work flow configuration defined in the functional design and initial configuration process. The test plan will include three basic components.

- 1. It will provide an overview of the testing process, including participants, required test data configuration, testing user accounts and rights, and alignment with the organizational change management strategy, as defined under WBS A2.3.
- 2. It will include a discussion of the testing scenarios, i.e. a define roles performing a valid operation work flow within the system.

3. Each scenario will include a step by step script with notations for pass/fail and comments to be made by the tester.

The objective will be to verify that the system is ready for final user testing and to validate that roles and rights are setup correctly, data is properly configured, integrations feed data at the appropriate point in a work flows, etc. It is anticipated that some of the testing scenarios will include, but not be limited to:

- Verify the security and access control functions for several User Groups
- Add and modify asset primary information
- Add and modify parts primary information
- Open a repair order and a PM order/inspection for an asset
- Charge labor to the work orders and verify the charges/credits of hours and costs
- Charge inventory parts to the work orders and verify the charges/credits of quantity and cost as well as proper inventory relief
- Charge commercial charges to the work orders and verify the charges of labor and parts
- Configuration of capital asset plans
- Validate integration of external system data with operational work flows
- Trigger maintenance schedules based on calendar and meter readings
- Validate service schedules and checklists
- Verify and validate mobile user work flows
- Verify work order charges
- Adjust parts inventory both upward and downward
- Generate a sampling of standard reports
- Verify a sample of asset master records
- Managing materials inventory

The test plan will define a testing process to be conducted in two (2) stages.

- 1. AssetWorks will work with the project team to develop testing scenarios and scripts to support functional testing. These scripts will be somewhat generic to the planned work flows, and will include a walk-through of all potential work flows both those defining standard asset, work, and inventory management processes, as well as those linked to interfaces with external systems. This functional testing is designed to verify the that configuration options have been setup correctly, that all required coding values are in place, and that user role based security setting are correct. This testing is designed to be iterative, with AssetWorks and NHDOT project administrative staff (project team and designated key users for each division) working through work flow scenarios, identifying issues, making corrections, and re-testing the scenarios. Once the project administrative team is satisfied that the configurations and user rights are correct the system will be released for the second phase User Acceptance Testing.
- 2. User Acceptance Testing (UAT) will be conducted by select staff in each of the participating divisions within the DOT. UAT participants will be selected by the designated key users in each division, and they will follow testing scenarios and scripts created by the Key Users. It is anticipated that the NHDOT key users will use the

functional testing scripts and develop UAT scripts to be used for each division. These scripts should be more specific to the specific division. This may include the addition of specific data and coding elements to be tested, the use of different portal screens by division, or work flows unique to the division. For example, fleet management may have test scripts specific to process maintenance against fleet assets, while other divisions would not need to test that specific scenario. The goal is to have NHDOT staff take ownership of the system work flow and process, and thus they need to define and maintain the user testing scripts. Once these scripts are defined, they would be available for testing in the future when the software is upgraded, or new users are added to the system. The AssetWorks functional lead will provide guidance and review to NHDOT staff as they complete their UAT testing scripts to verify their correctness and validity.

## Execute Test Plan

AssetWorks will work with NHDOT to prepare and load sample sets of NHDOT data to facilitate integration and workflow testing. The objective is to be able to run through the various testing scenarios, validate the data and system configuration, identify areas for adjustments, and facilitate retesting.

AssetWorks will guide the designated NHDOT system users through the various testing scenarios, to facilitate an effective test, and to validate and document any adjustments to configuration, or potential missing data elements. This test plan will be executed according to the schedule in the project plan.

.

As part of the testing effort AssetWorks will guide NHDOT through system testing. This will include preparing testing scripts for system testing, making updates to the test plan following the system testing, and providing a testing report for both system testing and UAT, as well as developing a testing issues tracking log to facilitate configuration and data corrections based on the results of the testing, and facilitating retesting until all scenarios pass.

#### **Document and provide test results**

AssetWorks will provide documented test results that include the test criteria and note the outcome of each test. The document will be in the form of an issues and actions log, which will facilitate making any corrections and retesting the scenarios requiring correction.

## Deliverable for System Testing Services

AssetWorks will provide the following deliverables:

- Written Test Plan.
- System Test scripts for AssetWorks EAM system testing.
- Test results for AssetWorks EAM system testing.

State of NH Contract 2018-122 Part 3 Exhibits Exhibit Attachment 2 – Statement of Work Date: \_4 December 2019\_\_\_\_\_ Contractor's Initials \_GS\_\_\_\_\_ Page 34 of 82

## 9. WBS 8.0 Training Preparation and Delivery

## **Training Preparation**

The AssetWorks project team will develop and deliver a training program to provide AssetWorks EAM training for various types of NHDOT users. The training session proposed here and designed to be conducted in a classroom-style setting on-site in NHDOT. The training will be role-based and will differ for trainees from the various organizational and functional areas. Each NHDOT trainee will have the basic skills in the overall use of AssetWorks EAM and strong knowledge of how to use the application in his or her specific job function or area of expertise.

After the initial training, NHDOT will provide all subsequent user training required in connection with new members entering the user community and on an ongoing basis. Any training materials, including presentation materials, delivered to NHDOT will be delivered as electronic media in Microsoft Word or Microsoft PowerPoint format.

#### **Develop Training Plan**

AssetWorks will develop a training plan that describes training that will be delivered. The training plan will be developed in collaboration with the NHDOT change management leaders, and will define the overall approach to preparing the DOT to adopt the new solution. This will include both events and activities design to facilitation acceptance by the broad community of users, as well as define the structured training curriculum and agenda for training sessions. Both for the AssetWorks lead Train-the-Trainer sessions, as well as the NHDOT led end user training. AssetWorks will develop a plan that addresses the following topics:

- · Change manage strategies for the organization leading to adoption of the new solution
- Assessment of required levels of training for NHDOT's current Operations user roles and Trainer roles (see below)
- Samples of training media for each type of role described below (e.g., handouts, practice exercises, and screenshots with step-by-step instructions).

#### **Prepare Training Materials**

Once NHDOT approves the Training Plan, the AssetWorks project team will prepare standard training material aligned with the general workflows defined for NHDOT. The materials for the general role-based training sessions will be provided to NHDOT in both PDF and Microsoft PowerPoint formats. Once the training sessions are complete, it is anticipated that NHDOT staff will modify and customize these materials for the various groups to be trained, and will include specific workflow rules and guidance for the different operational user groups. Further, NHDOT will retain the training materials will be free to edit, update, and repurpose them for internal NHDOT use in the future. AssetWorks training

materials assume all users are familiar with a Windows or tablet computing environment; the AssetWorks training will not include any Windows or mobile device remedial computer training.

The training will cover work order functions; parts and labor posting functions; and other common features and transactions. The topics and work flows included in the training will be those finalized by the NHDOT team during the functional design and configuration activities. Any deviations in the defined and agreed upon work flow will cause delays and added costs to the training. The DOT will be notified in advance of any potential costs it may incur prior to providing additional training services due to changes.

AssetWorks will provide a master electronic version to NHDOT in current MS PowerPoint or similar format acceptable to the DOT. NHDOT will be authorized to use training materials for ongoing training within NHDOT. All courses will consist of a combination of classroom and hands-on instruction. Training will include classroom and hands-on instruction through the use of the actual application.

#### **Training Delivery Services**

AssetWorks will provide on-site training to NHDOT (as outlined above) in a classroom environment suitable for training. NHDOT will be responsible for providing and preparing the training facility. AssetWorks will deliver the following training.

## System Administrator Training

AssetWorks will provide System Administrator training for up to 5 users assuming NHDOT's training facility has a sufficient number of workstations for this training. These trainees will be responsible for supporting the AssetWorks EAM application from a technical or "back office" perspective. The training will cover the following areas of AssetWorks EAM:

IT and System Administrator	
Application logging and troubleshooting	Mobile device hardware and software setup
Report and Dashboard Development	System and User Interface Configuration
Set-up Options	Interface troubleshooting
Users and User Groups	Table Management

Batch ProcessingWeb portal setup and configurationGIS/Mapping configuration and managementNotification setup and management

## **Train the Trainer Training**

AssetWorks will provide Operational training to the NHDOT trainers. The topics and work flows included in the training will be those finalized by the NHDOT team during the BPA. The DOT should remain especially sensitive to necessary last-minute procedural changes or clarifications based on end user feedback.

Asset Management	
System login	Warranty Management
Multi-Unit Projects and Campaigns	Class/Task information and inspection planning
Asset Acquisition and Disposal	State of Good Repair/Capital Planning functionality
Asset Attribute Updates	Asset Relationship Management
Depreciation setup	End of period Processing
Asset inventory management	Asset financial reporting
Use of selected standard reports	Basic troubleshooting

Maintenance	
System login	Work order look-up functions
Work Order Creation	Service Request Creation
Work Order Management	Service Request Processing
Work Order Postings	Basic troubleshooting
Materials and Parts Functions for Managers	Labor and Time Entry and Management
Use of Selected Standard Reports	Executing Scheduled Services and Inspections

# **Inventory Management**

State of NH Contract 2018-122Part 3 Exhibits Exhibit Attachment 2 – Statement of WorkDate: \_4 December 2019\_\_\_\_Contractor's Initials \_GS\_\_\_\_Page 37 of 82

System Login	Fulfilling Parts Requests
Parts/materials Management	Inventory Taking, Adjustments, Transfers
Purchase Requisitions	Purchase Order Management
Purchase Order Receiving	Parts/Materials Issues and Returns
Equipment/Material Check-in and Check-out	Direct Parts/Materials Issues
Commercial Services Procurement	Commercial Services Receiving
Use of Selected Standard Reports	Basic Troubleshooting

NHDOT will identify at least one "key user" at each group to closely support the cut-over, particularly after the training concludes. These individuals will be responsible for answering initial end user questions and, most importantly, implementing subsequent changes or alterations to the documented procedures. AssetWorks recommends that these "key users" be those that attended the trainer training sessions described above.

Option: As an optional service AssetWorks may provide End User Training, if the DOT desires AssetWorks to provide and execute this level of training. This will be provided in place of the Train-the-Trainer training, and would be provided at a higher cost. If the DOT wishes for AssetWorks to provide End User training, AssetWorks and the DOT would negotiate and agree upon a change in scope and budget to support this.

## **Deliverable for Training Delivery Services**

AssetWorks will provide the following deliverables:

- Training Plan
- Training Plan for administrators, trainers and end users
- Training materials for trainers and end users
- Train the Trainer training classes
- System administrator training classes

# 10. WBS 9.0 Implementation Support Services

## **Operational Roll-Out**

## Prepare for Cut-over

AssetWorks will work with NHDOT to stage and prepare for the system roll-out/cutover. This time includes final site testing of hardware and system readiness and review of procedures with user personnel. It is anticipated that there will be separate production rollouts for the participating user groups, meaning AssetWorks will support a separate

production cut-over for different part of the organization over multiple weeks. It is possible that these separate go-lives may combined into groups, or be closely spaced, i.e. over several consecutive weeks, or could be separated by a greater amount of time, i.e. possibly spread out of a multiple month timeframe. The schedule for the production roll-out should be determined in collaboration with the NHDOT change management leaders, and documented in the Production Roll-Out plan as well as in the overall project plan and schedule. For the purposes of this proposal and the preliminary time line presented below, AssetWorks assumes three separate go-live weeks with a one week gap between each asset production cut over.

As part of this effort, AssetWorks will work with the DOT to prepare a Production Roll-Out to document the specific cut-over steps, transition to operations within the new system, and a go-live checklist to verify that all items have been completed and the system is ready for production roll-out.

## Cutover support

When NHDOT commences live operations using AssetWorks EAM, AssetWorks will be on-site to provide "go live" assistance for the NHDOT maintenance operations. This step is critical to success. AssetWorks staffing will be on-site for the go-live for each of the class group to provide any guidance and mentoring of administrative staff. The AssetWorks and NHDOT team will provide refresher training and help to technicians, supervisors, inventory personnel and back office functions to make sure the transition is as smooth as possible. This on-site support could include data imports, report development, hands-on help for the users, etc.

Following the first week of on-site go live support, AssetWorks will be available for remote support via phone and WebEx sessions. It is anticipated that NHDOT would be adequately self-sufficient with the system to be able to operate and administer the system independently, with only very limited or no hands-on support from AssetWorks. This would include the ability to troubleshoot issues, and determine when appropriate to reach out to AssetWorks technical support (Help Desk) staff.

Approximately 1(one) month following the final production cut-over, the AssetWorks project manager will be on-site to lead an project close-out meeting. The goal of this meeting is to review the project, verify that the system is operationally effective, and to obtain operational sign-off for the system. This meeting will represent the final step in the transition of the live system from the project implementation team to the AssetWorks Customer Care team.

#### **Deliverable for Operational Roll-Out**

- Production Roll-Out Plan
- Operational Transition Plan

- System Documentation provided as part of the standard software documentation and other developed project artifacts.
- Live production environment and operations
- Project Close Out Meeting

#### **Post Implementation Support**

Following the commencement of live operations, AssetWorks professional services staff will be available for a period of 30 days to facilitate the transition to the AssetWorks technical support team. This support will include troubleshooting of work flow issue, facilitating some additional remote training, and guidance on creating new assets, or executing the system interfaces.

#### **Post Implementation Audit**

Approximately 3 (three) months (90 days) following the project close out meeting, AssetWorks will come on site to meet with the Key User for each NHDOT user group to discuss the operational use of the system, identify potential additional training, identify enhancements to processes and work flows, and review other operational activities. As a result of this on-site workshop, AssetWorks will prepare a report outlining specific recommendation for NHDOT to refine the production environment.

#### Deliverable for Post-Implementation Audit

• Audit Report and Recommendations

## **11. CAM Implementation**

#### **Project Management**

In addition to the project management activities defined as part of the broader implementation effort, AssetWorks recommends DOT appoint a core project team for the CAM implementation with Subject Matter Experts (SME) familiar with DOT's asset management business processes and procedures. The SMEs will serve as the functional lead and Key Users for their business area and will have responsibility for leading discussions and making decisions regarding the implementation and configuration of the functionality relevant to its operation. The core group representatives should have complete knowledge and familiarity with DOT's operations and objectives, and will form the majority of the roll-out team later in the project.

Once the AssetWorks EAM's underway, AssetWorks will initiate the CAM Start-Up with DOT's designated Project Manager to discuss how to kick-off the CAM implementation. Key points for this initial call include:

- Introducing key members of the AssetWorks and DOT project teams.
- Scheduling of the Project Kickoff meeting.
- Reviewing key project deliverables, terms, and conditions.
- Distributing the CAM Implementation Questionnaire.
- Forming the core team.

The execution of the CAM implementation will be integrated into the overall project plan.

#### AssetWorks Deliverables for Project Management Services

- Relevant Project Status Meetings and Reports
- Management of action items, issues and risks
- Facilitation of status meetings
- Scheduling and execution of all AssetWorks' deliverables
- Preparation and execution of any project change orders
- Project Start-Up Conference Call
- Scheduling of the Project Kick-Off Meeting and target Installation date
- Maintain and update the overall Project Plan
- Project billing and administration

#### DOT Responsibility

Assign Project Manager

- Identify Core Project Team, their responsibilities and ensure their participation throughout the project life-cycle
- Coordinate DOT resources in order to maintain the project schedule and minimize delay
- Schedule Project Team meetings; provide meeting facilities, including teleconferencing; and ensure appropriate DOT attendance
- Schedule Project Steering Committee Meetings; provide meeting facilities, including teleconferencing; and ensure appropriate DOT attendance
- Ensure appropriate management and project team members attend.
- Coordinate Project Start-Up Conference Call
- Coordinate with the AssetWorks to schedule the kick-off meeting
- Provide meeting facilities
- Review the Issue Log
- Provide Change Control Procedure
- Review (and facilitate approval, as required) the Project Plan
- Review the Project Status Report
- Provide project-related documentation and identify project resource constraints
- Answer AssetWorks' questions related to DOT's project material
- Promptly review and process all AssetWorks submitted invoices and notify the AssetWorks Project Manager of any discrepancies
- Pay all approved invoices in accordance to the agreed upon payment terms.

# **CAM System Design**

# CAM Questionnaire

Once notice to proceed is received, AssetWorks will provide DOT with our standard CAM Implementation Questionnaires. The Questionnaires are separated by module/functionality and are intended to gather basic information regarding DOT asset management's current processes and procedures. DOT will have the responsibility of completing the questionnaires by the schedule start of the Business Process workshops.

# CAM Sandbox Installation

AssetWorks maintains a sandbox environment during the implementation phase for all customers, including those that will maintain their own production environment. The purpose of the Sandbox is to allow the customer and AssetWorks to jointly setup and configure the CAM application in a mutually accessible environment before applying the settings to the final production environment.

As soon as receiving notice to proceed, AssetWorks will setup a Sandbox in our Wayne, PA data center to begin the project. Each customer has their own Sandbox environment with a specific URL. AssetWorks will install our CAM Starter Database instance in our shared CAM database server to support the environment. An initial DOT Administrator User will be created to allow the customer access to the Sandbox. AssetWorks will also have a user that we will use to access the environment. This will allow logs to note which user updated the database.

Once the Sandbox environment installation is completed, AssetWorks will send to DOT the URL link and the username and password of the initial Administrator user. AssetWorks and DOT will test the link and once completed CAM will be ready for loading and training.

## **Project Kick-Off**

The Project Kick-Off Meeting is devoted to introducing the core project team to the AssetWorks team, the project implementation methodology, and the AssetWorks EAM application. After completing this session, the project team will have an understanding of the implementation process and will be prepared to start collecting the data required to setup and configure the system.

This meeting is typically about one day and includes discussion and review of the following topics:

- Project plan tasks and timeline,
- System Implementation Steps (Jump Start Implementation document)
- Assignment of customer responsible tasks,
- Assigning the Implementation Questionnaire,
- Contract deliverables,
- Change management procedures,
- The data loading process, and
- Orientation on the CAM system.

Based on discussions during the Kick-off Meeting, the AssetWorks Project Manager will revise the project plan and assign AssetWorks and DOT project resources to various tasks in the plan. Following the Kick-off Meeting, an updated project schedule will be delivered to DOT by AssetWorks.

DOT will assist in facilitating this session. DOT will provide a suitable meeting facility, with a projector and will be responsible for inviting attendees. AssetWorks will DOT with soft copies of the orientation materials, which will include presentation materials outlining the project objectives and product information. DOT will be responsible for producing and distributing any hard copies of orientation materials.

## Asset Management Business Process Workshops

In the Asset Management Business Process Workshops, AssetWorks will review the completed questionnaires with DOT and develop a high-level outline of current asset management processes. The Workshop will be a series of interviews with DOT staff responsible for the various areas of asset management. Among the workshops to be held and topics to be discussed include:

- Life-Cycle Analysis
- Replacement Planning
- Capital Budget Development
- Budget Tracking and Management
- Asset Specification and Design
- Asset Disposal

AssetWorks will also review DOT use of AssetWorks EAM to manage assets. AssetWorks will review how assets are created in AssetWorks EAM, how assets records are maintained during their life, and how assets are disposed of in AssetWorks EAM. Asset coding schemes in place to identify and classify assets will be reviewed.

AssetWorks will use the Implementation Questionnaire and what is learned during the Business process workshops to develop an outline of key business processes CAM will support. These outlines will be in the form of presentations, documents, and/or flow-charts showing, from a high-level, key steps in each of the key CAM processes.

#### CAM Asset Design Workshop

# AssetWorks will conduct an Asset Design Workshop for DOT's Core Team, system administers, and asset management SME.

CAM is designed to support a variety of different asset types, from vehicles and equipment, to infrastructure. The CAM Asset Model is configurable to allow users to define the structure of assets based on how each user manages how they plan, order, procure, track, and dispose of the assets. Because of this flexibility and that the model differs from the most legacy maintenance system, designing assets becomes a critical task in configuring CAM and must be completed before the Asset Register can be populated. The purpose of this task is to review the Asset Model, discuss how assets will be setup in CAM and to develop sample templates that can be used to setup assets in CAM.

The Asset Design Workshop will review the CAM Asset Model and provide instructions on how assets are to be designed. AssetWorks will develop several examples during the training that can be used as templates by DOT as it designs and builds the assets in CAM.

The complexity of this task may depend on which functionalities will be deployed in CAM and how DOT treats old and new assets. Legacy assets may be configured with a generic code, while new assets may be linked to a more detailed configuration.

<u>Task Assumption</u>: The design, ordering, and receipting of equipment assets will not be included in the workflows, or the design of the initial CAM implementation.

#### Sandbox Pilot

. .

AssetWorks will pilot CAM asset, planning, budget, procurement, and disposal functions with a limited set of DOT data loaded into the Sandbox environment. This limited pilot configuration will serve as a proof-of-concept, demonstration of the CAM application, and the proposed to-be functionality. Focus will be on the setup of asset data to determine and validate the proposed Asset Design in support of the application functionality.

The Pilot will be limited in scope to include selected categories of assets: a light-duty, single-component type asset; a heavy-duty complex asset that is made up of multiple component types; and a piece of equipment or other off-road asset.

For the Pilot, AssetWorks will use the setup sample Departments, Locations and Vendors, as well as other key references. AssetWorks will setup recommended system flags, sample user roles and application users.

Selected specifications will have sample Attributes and Options added to the Component Type and loaded on the Specification. Sample approval rules and rules sets will be setup to test the approval and notification process. Depending on how the assets are to be produced and assembled, AssetWorks will configure sample Production steps and dates for each Category.

For each category, AssetWorks will setup the proposed Component Types that will be the foundation for each Category and load the Categories and Component Types into the Sandbox. The current historic specifications will be loaded and mapped to a CAM Component Type and Category based on how the Specifications and Assets are setup now.

AssetWorks will also setup a generic and new model year specification for each category. Sample approval rules and rules sets will be setup to test the approval and notification process. A limited number of historic specifications and assets will be setup using the template process to verify the source data and test the data loading process.

Once the Pilot configuration is complete, AssetWorks will hold a Sandbox Pilot Workshop with DOT key users to walk through the configuration, test the proposed business processes and verify the propose setup. AssetWorks will use feedback collected from the workshop to modify the proposed configuration as needed. Changes in the configuration and proposed settings will be documented and applied to the templates before they are loaded into the Production database.

## Deliverable for CAM System Design

- Sandbox Environment Setup
- Facilitate project kick-off and orientation meeting
- Soft copy of Kick-Off meeting and orientation materials
- CAM Implementation Questionnaire
- Asset Management Process Review Workshops
- Asset Design Workshop
- Load data into sandbox templates
- Load templates into Sandbox environment
- Sandbox Pilot Workshop

## DOT's Responsibility for System Design

- Complete CAM Implementation Questionnaire.
- Participation in Asset Management Process Workshops.
- Collect and assemble asset management related sample documents
- Asset Management operating procedures and process documentation
- Assist in the documentation of process flow-charts.
- Review and approve documented business processes.
- Provide training facility for the key-user training, to include PC workstations for each trainee.
- Identify Key-Users, System Administrations and Trainers responsible for configuring the application.
- Attendance and participation in the Asset Design Workshops.
- Design and loading of Asset model structures.
- Assist with supplying data for the Pilot configuration, including populating data templates as needed.
- Extract template data from data sources
- Training facility for Pilot Configuration Workshop
- Participation in Pilot Configuration Workshop

## CAM Data Loading and Configuration

Following the Business Process Review, DOT and AssetWorks will begin to setup up the CAM module. The set of tasks in this phase will focus on setting up the CAM production environment in preparation for deployment. The first task will be to install the production environment. The CAM data loader and its templates will be used to load the production

database. The CAM application will be configured and the interfaces between CAM and the maintenance management system configured and tested.

## AssetWorks Hosted Production Installation

. . .

CAM will be deployed as a cloud-based solution; hosted and maintained in an AssetWorks managed data center.

AssetWorks will deploy CAM in AssetWorks' shared virtual application environment. Each CAM customer has a Production and 'Sandbox' environment. In the shared environment, all CAM customers will be on the same version of the application in a common loadbalanced server environment. DOT will be deployed on the latest production release installed on the shared Production environment.

While CAM customers share web application servers, each has its own production and 'sandbox' database instances. DOT will access the application over the Internet, accessing CAM through a web-browser via a DOT-specific, secured URL. The URL will direct the user to one of its own instances. Access to the application will be managed by DOT maintenance of roles assigned to DOT users. Support for Active Directory and other single sign-on protocols will only be available once the full production version is deployed.

AssetWorks will have direct responsibility for managing the application including: maintaining the environment, tuning the databases, and applying all patches and upgrades. AssetWorks will work to maintain a high-level of application availability. The application environment is monitored on a 24-hour basis and AssetWorks staff are assigned to respond to any after-hour or emergency environment issue. AssetWorks maintains a published outage schedule for conducting routine data center maintenance. All environment outages will be communicated with DOT and regular status updates posted on the support site.

AssetWorks will have responsibility for setting up each of the environments; and for the initial population of the database instances with data extracted from the AssetWorks EAM application – see Data Loading. Once DOT deploys CAM, a regularly scheduled extract of the Production instance will be made and used to update the Sandbox instance. The Sandbox will serve as both a test and training environment, enabling DOT to train users, test new functionality and test configurations without impacting the Production data.

Because CAM is undergoing continuous development, regularly scheduled monthly updates will occur outside normal business hours to apply new application code and patches. Database maintenance scripts will also be applied. Effort will be made to minimize downtime and impact to CAM operations. All new functionality updates will be first applied to the Sandboxes, and after agreed upon time for testing, that functionality will be applied to the production environment at the next scheduled update.

DOT's only responsibility for the environment will be to maintain firewalls and manage any methods used to secure direct communications with DOT's network and applications.

AssetWorks employs SSL-based security certification and complies with SSAE16 industry standards for data center operations. Standard data center security protocols are employed and access to the data center is limited to designated AssetWorks staff.

AssetWorks provides Level One Disaster Recovery (DR). Level One DR is a tape-based strategy that uses a third-party to archive off-site routine tape backups. In the event of a catastrophic failure the tapes will be used to rebuild a new production environment. Level One DR may result in the application being down for a day or more as the new environment is brought on-live. Higher level of disaster recovery can be provided for an additional cost.

#### Application/Key-User Training Workshop

The purpose of this workshop is two-fold: one is to provide general training on the application workflows so that users can understand how the application should be configured to support their planned processes; and second to familiarize the principal users and system managers how the application is setup and configured, so that DOT can ready the application for loading of data from AssetWorks EAM and other legacy asset management systems.

AssetWorks will conduct Application/Key-User Training Workshop sessions for DOT system administrators, core project team members and key system users in the various CAM module functions. This workshop will also serve as initial training for most of the principal CAM users, except for those field and end users that will have limited use of CAM. AssetWorks recommends that DOT designate internal CAM module Trainers that will participate in this training and will provide training and support to new users and to casual CAM user.

The Sandbox pilot will be used to conduct the application training workshop. While this setup may not represent final system settings and work-flows, it can be used to illustrate the functionality and work-flow processes in CAM with DOT data.

For the application training portion of the workshop, AssetWorks will walk-through the following functions and processes:

- Life-cycle Cost Modeling
- Generating replacement forecasts and baseline plans
- Building and modifying capital plans
- Building and managing budgets
- Generating projects and planned requests
- Requesting assets and approvals
- Ordering assets
- Managing asset production and assembly

State of NH Contract 2018-122 Part 3 Exhibits Exhibit Attachment 2 – Statement of Work Date: \_4 December 2019\_\_\_\_ Contractor's Initials \_GS\_\_\_\_\_ Page 48 of 82

• Asset disposal

# During the setup portion of the workshop, AssetWorks and DOT will review:

- Application Security
- Code Maintenance
- Configuring Events
- Building the Approval Matrix
- Key reference objects: Departments, Locations, Vendors
- Designing Assets
  - Determine which assets will be maintained in CAM
  - Categorize asset types into groups with a common component structure, lifecycles, and vocation.
  - o Determine the component structure of each asset type
  - o Create the Component Types to define the components and assign to categories
  - Load and configure the Attributes that are common to the component and specific to the unit
  - Create component Specifications (year, make, model, or generic description)
  - o Assign Options to Specifications
  - o Assign Specifications to Component Types
  - o Create valid Component/Specification combinations by Category

AssetWorks will walk through each of the setup and configuration screens to instruct DOT on the purpose of the reference, its role in the application and work-flows, key decisions and assumptions that must be made in the definition of codes, and how to configure the data to support desired future-state outcomes.

During the setup phase, AssetWorks and DOT may setup and configure some settings and load sample codes with recommended configurations in the test environment. It will be DOT's responsibility to make the corresponding setup and configuration in the production environment.

AssetWorks has developed a template based data loader process to load CAM. Because CAM will be integrated with AssetWorks EAM, many of the reference codes (i.e.: Departments, Vendors and Locations) and asset related records will be loaded through the data loading process; while other, smaller code sets will be setup manually. AssetWorks will review with DOT the source of all references and data objects to determine which can be loaded electronically using templates and which must entered manually. For data that can be loaded with a template, AssetWorks will review the templates, discuss the data that needs to be loaded into the templates and what DOT must do to populate and prepare the templates for loading.

 State of NH Contract 2018-122

 Part 3 Exhibits Exhibit Attachment 2 – Statement of Work

 Date: \_4 December 2019\_\_\_\_\_

 Contractor's Initials
 GS

 Page 49 of 82

# **CAM** Application Configuration

DOT will learn to setup and load the CAM module during Key-User Training. DOT will take action items from the Key-User training to finalize the definition of all relevant data elements and references and to use these definitions to configure the application. This configuration will build on the setup defined with DOT core team during the Key-User Workshop and will focus on setting system flags, setting up new codes, configuring code attributes and loading references. Among the general items that must be setup and configured:

- Security: System Flags, User Roles and Users
- Codes and References: Departments, Locations, Vendors, System-Assembly
- Events: Notifications and Tasks
- Asset Model: Category, Component Types, Specification
- Attributes: Asset and Specification
- Specification Options
- Production Steps and Dates
- Disposal Steps and Dates
- Category Life-Cycle and Planning Defaults
- Approval Rules and Matrix
- Request Profiles
- Category Production and Disposal Step Setup

CAM enforces referential integrity at the database level; any electronic data conversion cannot be executed until all referenced data elements are loaded. The method used for loading the data will often depend on the number and type of records to be loaded, the availability of electronic sources to convert from, and the complexity of the reference. For many references, it is far easier to simply key in the code and required description.

AssetWorks will be available to consult with DOT remotely on decisions related to the definition of references and record configuration. AssetWorks will not be responsible for loading or configuring data in CAM unless mutually agreed to and incorporated into the project budget.

AssetWorks and DOT will identify which references can loaded through templates filled with records extracted from the legacy system (AssetWorks EAM). Those records that can be loaded electronically must be reviewed and configured to support the CAM functionality. DOT will have responsibility for loading all manually entered records that cannot be sourced from a legacy system in both test and production environments. AssetWorks will work with DOT to define the configuration for the interfaces between CAM and the legacy system for loading the Asset Register and Data Mart. DOT will be responsible for making changes to the legacy asset application to support an integration.

#### **Prepare Production Templates**

State of NH Contract 2018-122Part 3 Exhibits Exhibit Attachment 2 – Statement of WorkDate: \_4 December 2019\_\_\_\_Contractor's Initials \_GS\_\_\_\_\_Page 50 of 82

The CAM module has an Asset Register that contains records for each asset managed in CAM and a Data Mart that has several journals containing historical transactions: maintenance, usage, energy and capital. The Data Mart is linked to AssetWorks EAM or the legacy maintenance system and is updated on regular basis via interfaces. To facilitate the data loading and setup CAM, AssetWorks will provide to DOT a series of templates that will be populated with data extracted from its legacy system. DOT will use these templates to map the legacy assets to the CAM asset model as well as other reference codes.

The source of data will depend on the completeness of data in the maintenance system(s) that CAM will integrate with to populate the Data Mart. For AssetWorks EAM customers most data required in CAM can be sourced directly from AssetWorks EAM, assuming the data is loaded in AssetWorks EAM. If key data is missing in AssetWorks EAM, other sources can be used to populate CAM conversion templates for loading into CAM. For example, if components and purchase costs are not in AssetWorks EAM, but exist in a fixed asset system, data extracted from the fixed asset system could be used to populate CAM.

For the initial production database load, AssetWorks recommends that DOT export a copy of its AssetWorks EAM production database to AssetWorks so that we can run the preproduction SQL extracts to generate the Templates. Once the templates are populated, DOT will be responsible for reviewing each template and completing all required fields. AssetWorks will provide a description of the contents of each field, its format and valid values (depends on field type and rules). Fields that are not required can be populated to provide additional detail to the record.

Where references are modified or new references are introduced, it will be DOT's responsibility to update the other templates where the references are found, or for providing AssetWorks with a cross-walk table showing the old value and the new value for the field. For example, if a new Category code is being used, the Category on the Asset Template record must be updated to the new code, or an 'IS-WAS' mapping on separate table must be provided. It is highly recommended that once CAM is deployed, the Category codes in CAM be synchronized with the source codes in the legacy system, and that the CAM Category code be assigned to the units in the legacy system.

Once the templates have been reviewed and updated by DOT, AssetWorks will run the templates using the data loader to update the preproduction database maintained in the AssetWorks data center. After all templates have been executed, AssetWorks will export the preproduction tables to DOT who will have responsibility for importing the tables into the CAM schema.

If DOT cannot export the data to AssetWorks to run the CAM data loader, then DOT will have responsibility for running the SQL to extract data from AssetWorks EAM and any

other source application that will be used to populate the templates. AssetWorks will provide the SQL to extract from AssetWorks EAM. DOT will have responsibility for developing the scripts to extract data from non-AssetWorks sources. DOT will also have the responsibility for executing the data loader process to populate the preproduction database.

AssetWorks will provide DOT with the CAM Data Loader application which it must install on a local PC that has Excel installed on it. DOT will have responsibility for running any additional templates after the delivery of the pre-production database; this includes updates to the production database before go-live, future updates to reference records, or loading new records.

The following describes the various templates that will be used to load CAM.

#### Template 1 - Entities

The first template (Template 1 – Entities) is used to load CAM with references need to support the creation of Assets: Departments, Locations, Vendors and Contacts. This data is typically extracted from the AssetWorks EAM application and entered into the specific worksheet for each data type. CAM utilizes a central Contacts table that is populated with Contacts from each of the entities. This table can be setup separately or populated from the contacts entered directly on the other entity worksheets.

#### Template 2 – Asset Structures

The Asset Register must be loaded initially with data extracted from AssetWorks EAM, or other legacy system. Because the CAM asset model and structure is different from most maintenance systems, a conversion process must be used to build the assets in CAM. During the Key User training, DOT users will be trained how to design assets and before the data loading begins, DOT will construct the Asset structures in CAM against which an Asset will be loaded.

- **Category Hierarchy** Template is used to create the category hierarchy which is assigned to Category codes: Category Group, Category Types, and Category Subtypes.
- Category Extracts from legacy system the basic code and description from the source table that will be used to determine which Category the asset will be assigned. AssetWorks will provide a template to pre-load the CAM Category (Template 2 Asset Structures) from one of the primary Asset references in the legacy system. Or DOT can have the option of developing an entirely new code set for the CAM Category and through a mapping template translate each asset to a new Category Code. Each Category will have one or more Component Types assigned that make up the structure of the asset. These are also setup on Template 2.

### Templates 3 & 11 – Attribute Master/Option Master

This template creates the master list of attributes and options.

- Attributes User Defined Fields (Unit Items and Spec Items in AssetWorks EAM) will be extracted from the legacy system and populated in a template. DOT will review each field/item and select which ones will be used to load information in CAM from the legacy system. Where a restricted list of valid values will be used, DOT will be responsible for populating an Attribute Validation template with valid options. Template 3 will load the CAM master attributes table.
- **Options** CAM maintains an Option Catalog that defines a list of options that can be linked to a Specification. Options require a number, description and cost. Template 3 is used to load the Option Catalog

# Templates 12 & 4 – Manufacturer/Make/Model & Specifications

These templates load the manufacture/make/model reference table and component specifications.

- Manufacturer/Make/Model CAM has a table to maintain and validate manufacturers, makes and models. This supports validating these values against the same values in AssetWorks EAM. The AssetWorks EAM values are extracted to Template 11 and used to load the CAM version of the table.
- Component Groups and Component Types The CAM Component is the building block of categories and determines the standard structure for specifications linked to that component. A Component can be a type of asset that is purchased as completed asset: Pickup, Sedan, Bulldozer; or it can be separate pieces of an asset that are purchased and assembled into a finished asset: Chassis, Body, and Engine. Component Groups are ( used to easily identify similar Component Types for filtering and reporting. Component Types are not typically found in most AssetWorks EAM installations and are developed during the Asset Design process. These are entered in Template 4 Specifications.
- Specifications Extracts from the legacy system the various specifications describing an asset. In AssetWorks EAM this would be the Tech Spec and/or Manufacturer, Make and Model. Each AssetWorks EAM Specification will be mapped to a CAM Specification. DOT will review each Specification and update the mapping as necessary. Specifications in CAM are also assigned to a CAM Component type. Specifications are loaded from Template 4.
- Specification Options Specifications can have options that user may select when requesting a new asset. These options come from the Option Catalog and are assigned to Specifications using Template 4.

#### Templates 5 & 7 – Specification/Assets Attributes

These templates load the attributes or user-defined fields that are assigned to specific specifications and assets.

- **Component Attributes** Components are assigned Attributes from the Master Attribute list using Template 5. Once Components are assigned Attributes, all specifications inherit the Components list of attributes. Attributes can also have a list of valid values. For AssetWorks EAM customers, this involves mapping the Tech Spec Items to the Master Attribute list (Template 3) and assigning appropriate attributes to the Components. Both the assignment of attributes to components and the setup of valid values are done on Template 5.
- Asset Attributes Assets can have user defined fields (Unit Items in AssetWorks EAM). The Asset's list of attributes is inherited from its Category. Attributes and their values are assigned to the Category using Template 7 in the same manner that Attributes are assigned to Components.

#### Template 6 – Assets

This template populates the Asset Register with assets.

Assets – Extracts Units from the legacy system, the specification and source category. DOT will review each asset to validate that the specification and source category are accurate and will make adjustments to the mapping. Based on the source specification and category, the asset will be mapped to a CAM Specification and Category. If the Asset has components or other assets associated with the parent asset, these components will be loaded into CAM and linked to the parent. Based on the source specification and category, the asset will be mapped to a CAM Specification. Additionally, Unit Association will be used to link the component to a parent asset, creating a complex asset made up of multiple Spec Types. The Specifications of the Parent and all children will be joined to form valid complex asset combinations. Options that were assigned to the asset in AssetWorks EAM can be mapped to the Specification Options in CAM. This does require that the AssetWorks EAM options be setup on the Option Catalog in CAM and assigned to the Specification. Template 6 – Asset Register is used to load Asset, Components and Options in CAM.

#### Templates 8/9 – Specification/Assets Attribute Values

These templates load the values against the assigned component and category attributes.

- Specification Attribute Values The values for Tech Spec Items or for newly created Attributes assigned to Specifications are loaded using Template 8. This assigns the value to the Specification in CAM.
- Asset Attribute Values The values for Unit Items or for newly created Attributes assigned to Categories (Assets) are loaded using Template 9. This assigns the value to

the Asset component in CAM.

#### Template 10 – External Production

Production is a CAM functionality that creates a work-flow of user defined steps to track the external production of Assets. This functionality can be setup manually from the Category screen. When the steps and dates are used across multiple Categories, Template 10 is used to load the Production setup in bulk. This load is only required if Production is used to track the assembly and delivery of Assets during procurement.

#### Template 13 – System-Assembly Codes

A template is used to copy the System-Assembly codes from the AssetWorks EAM database into CAM. These are used to support the setup of Warranty Profiles in CAM and as a reference to maintenance tasks in the data mart.

#### Load Production Asset History

The CAM History Journal contains a series of journal tables containing historic transaction data from the legacy system. The History Journal is used to support Life-Cycle calculations and other analytic functions in CAM. Once CAM is in production, an interface with the legacy system will be used to update the CAM History Journal. While the interface can also be used to initially load the History Journal, it is may be more efficient to initially populate the application through a conversion process. AssetWorks will review DOT' historical records and make recommendations on what the best approach to populate the initial data may be.

The following considerations and assumptions will apply to each of the journals in the CAM History Journal:

**Maintenance Journal** – The Maintenance Journal includes individual job-level transactions loaded from the legacy system. Each journal transaction will include at a minimum the asset, system-assembly, location, date, reason, labor hours, labor cost, part cost and commercial cost. These transactions are typically loaded from the legacy maintenance system and generally do not require manipulation before processing. A review of reason codes will be made to determine which costs are maintenance and repair, non-maintenance, accident/damage, or capital improvements. This will be used to classify the costs in CAM. If detailed transactions are not available from the legacy system, periodic or life-to-date costs can be used to load historical values.

Usage Journal – The Usage Journal capture historic meter readings by type of meter and reading date. In AssetWorks EAM this comes directly from the Meter Journal and is converted based on the meter type to one of the Usage Journals in CAM: Distance, Time,

or Count. If detailed transactions are not available from the legacy system, or if the meter journal only contains recent history, periodic or life-to-date meter or usage amounts can be used to construct a Usage Journal in CAM.

**Energy Journal** – The Energy Journal in CAM is made up of fuel transactions, containing the asset, date, meter if available, type (diesel, NCG, electricity, etc.), quantity and cost. The transactions would come from either the legacy maintenance system or a fuel management system. If detailed transactions are not available from the legacy system, or if the fuel system only contains recent history, periodic or life-to-date fuel quantity and cost amounts can be used to construct an Energy Journal in CAM.

**Capital Journal** – The Capital Journal contains historical purchase and capital improvement costs. This includes asset or component number, purchase cost, date, vendor plus some additional attributes about the transaction. The Capital Journal may also contain depreciation, adjustments and disposal data as well. The journal should have at a minimum the original purchase cost of the asset, but if available any capitalized improvements and a breakdown of costs by asset or component. This data may come from the legacy system if captured, but may also come from a fixed asset or procurement system. A template may be used to capture data not contained in AssetWorks EAM and used to establish the historic purchase cost of assets not created in CAM. Once CAM is implemented, the Capital Journal will be populated as units are acquired and disposed in CAM.

# CAM-AssetWorks EAM Integration Configuration

Once CAM has been setup and the loading of all categories, specifications and assets is completed, AssetWorks will assist DOT with the configuration of the CAM to AssetWorks EAM integrations. AssetWorks will provide instruction to DOT on how to setup and configure the interfaces. DOT will be responsible for configuring CAM Categories to determine how each Category and Asset will be set from CAM to AssetWorks EAM. Specific AssetWorks EAM codes will be setup as Attributes in CAM and assigned to Components and Categories as needed. Transformations will be setup to map CAM data elements in CAM to AssetWorks EAM. Within AssetWorks EAM, the CAM integrations will be setup in MAXQueue. The CAM-AssetWorks EAM integrations are initiated from AssetWorks EAM.

The CAM Sandbox will be setup to test the integration linked to a AssetWorks EAM test environment. Once the test interface is setup, AssetWorks will review the setup with DOT. A test of the interfaces will be made and review of the loaded data in each application made to determine if the configuration loaded all data as expected. After the test, the CAM Production environment will be fully configured. AssetWorks and DOT will conduct a final review of the interface configuration before declaring the application ready to deploy.

#### **Deliverables for Data Loading and Configuration**

- Creation of DOT Production database instances and web-sites
- Publication of DOT specific URL linked to DOT Production sites
- Installation of all application upgrades and patches
- Data Element Mapping document
- Deliver CAM Data Loader Templates
- Assist with the extraction of source data
- Consulting support with asset model design, setup and configuration.
- Support with CAM setup and configuration
- Application/Key-User Training Workshop
- Production Data Templates
- Production data loader execution
- Loaded production data from templates
- Load Asset History
- Instruct DOT how to configure the CAM-AssetWorks EAM interfaces
- Review the test and production CAM-AssetWorks EAM integrations

# DOT Responsibility for Data Loading and Configuration

- Open and maintain firewall access to the CAM URL and server IP addresses
- Test the published URLs for accessibility
- Provide workstations with suitable browsers to users that can access the CAM URL
- Maintain DOT communication, network and security infrastructure
- Workstations with HTML5 compliant browsers: IE10, IE11, Edge, Chrome
- Participation in the data mapping design discussions
- Document configuration updates
- Entry, setup and configuration of all security roles and settings.
- Data collection and entry, setup and configuration of reference and codes.
- Review and acceptance of the Data Element Mapping Document
- Extraction of data from the legacy system into the agreed upon format
- Loading of legacy data on to the Data Templates
- Update data templates with missing and new data elements
- Timely review and validation of loaded data
- Documentation of data errors
- Setup the CAM-AssetWorks EAM interface in Test and Production.

# **CAM Production Deployment**

This phase includes the final set of tasks needed to bring the CAM production environment live. The phase begins with a test of the application's readiness for deployment. When the

application is ready to deploy the production database will have the asset register and history updated. AssetWorks will provide training support to end users/trainers, and DOT will deploy the application. After the application is live, AssetWorks will provide post-implementation support.

#### **Application Readiness Review**

A Readiness Review is used to verify CAM is ready for deployment. The purposes of this review is to walk through the work-flow process using a test environment to verify that the processes and system are functioning in accordance to the specifications for the tested function.

During this review, the focus will be on:

- Data Loading/Conversions Was the legacy data correctly mapped and transformed into CAM? Are there missing data elements that have not been converted that are available from an electronic source, or that need to be manually loaded?
- Application Configuration Has the application been configured correctly to support planned work flows and is the data processed according to the expected configuration? Are the user roles correctly defined and authorizations assigned to meet expected work flows?
- **Proposed Workflow** Do the proposed workflows efficiently support real-life operations? Are the proper procedures in place to support the collection and entry of information?

A pre-production test environment will be established to test application settings and functionality in a controlled environment using DOT data and configuration settings. This approach assumes that all data entered will be test information and that the test environment will not be the system of record.

AssetWorks will provide a standard basic test plan that consists of executing the primary functional and data validation tests that are part of the standard CAM test plan. DOT will modify the standard test plan to include any specific processes not addressed in the standard scripts. AssetWorks will review and recommend methods to test the additional requirements

The actual testing will be the responsibility of DOT with AssetWorks participating in a review of the results at the end of the task. DOT will be responsible for executing the test plan using sample DOT data. DOT will document for each item the data used during the test and the outcome of the test.

Where the results of the test did not meet expectations, these items will be reviewed with AssetWorks to determine if the data entered was invalid; if the application requires additional configuration; if the application must be reconfigured and if the failure was

caused by a failure in the application code. Any items requiring modification to the application code will be scheduled into a planned patch or release depending on the severity of the issue and its impact to DOT's ability to go-live.

# **User Training Workshop**

AssetWorks will conduct Application Workshop sessions for DOT system administrators, core project team members and key system users in the various CAM module functions. The goal of these sessions is to familiarize DOT CAM end-users with application functionality and work-flows that the application can support.

Application Training will also serve as primary training for most of the principal CAM users, including those field users that will have limited use of CAM. AssetWorks recommends that DOT designate internal CAM module Trainers that will participate in the training and will provide training and support to new users and to casual CAM users that do not attend one of the AssetWorks led workshops.

The actual topics of this training will depend on the functionality that is deployed and will be utilized by DOT. Before the training is scheduled, the AssetWorks Project Manager will provide a training agenda agreed to by the Project Team that will detail the specific topics for each day of training, as well as schedule for the training session. AssetWorks will provide DOT with our standard user training guides for the CAM module in Word format. AssetWorks will utilize standard documentation during the training.

It will be DOT's responsibility to customize the documentation and distribute the documentation to users following the training.

#### Production Update Data Load

DOT will update the Templates 4 to 9 to update the production database with new assets, specifications and attributes added from the legacy source database since the last execution of the data loader templates. A second run of the templates will update the disposal status on units since the last date of the Asset Register data upload.

#### CAM Go-Live Deployment

The final task is the actual production roll-out for each location. This task requires the completion of Application Training, the completion of any pre-production testing, and the CAM system to be "live" on its production environment.

The CAM module will be rolled out at once for all locations. Prior to the production deployment, AssetWorks will be on site, staging and preparing for the system roll-out/cutover. This time includes final site testing of hardware and system readiness and review of cut-over procedures with user personnel.

The process of bring CAM live will be the publishing of the Production URL to the CAM user community. Users will at that point have the ability to begin using the CAM module to implement work-flows and utilize the data available in the application. AssetWorks will be available during the initial deployment period to respond to user questions and address any issues.

#### **Post Go-Live Support**

During the months following the CAM go-live, AssetWorks will remain in contact with DOT to monitor production deployment and use of CAM. During this phase, support will migrate from the Project Manager and Implementation Analyst to the CAM Support Team. DOT will be responsible for reporting application issues to CAM Support.

#### **Deliverable for Production Deployment Support Services**

- Standard CAM Test Scripts
- Application Readiness Workshop
- Application Training Workshop
- Standard User Training Materials
- Live production environment and operations.

#### DOT's Responsibility

- Approve the Test Plan
- Modify standard test scripts provided by AssetWorks as necessary in time for test execution
- Execute tests during Readiness Review
- Document test results
- Work with AssetWorks to remediate/resolve testing issues
- Identify operations issues and notify the AssetWorks.
- Identify ad-hoc training needs and notify the AssetWorks.
- Provide facilities to conduct User Training workshops.
- Participation in and feedback during User Training Workshops.
- Distribution of standard CAM user guides.
- Conduct User Training sessions for casual CAM users (i.e. Asset Requests)

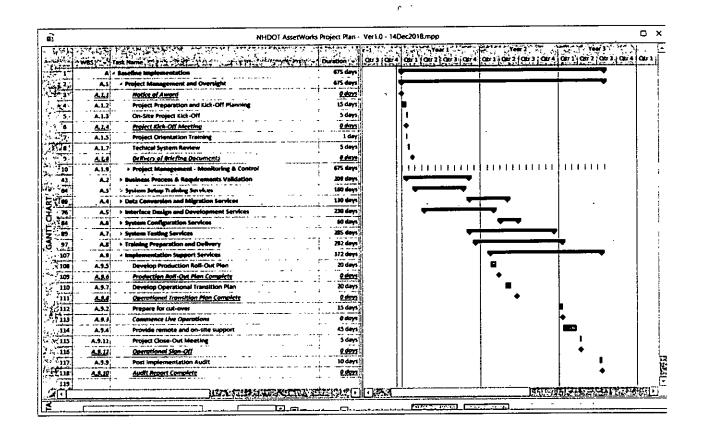
#### **12.** Preliminary Timeline

#### Overview Schedule

The following graph depicts the proposed timeline for this project. AssetWorks has currently estimated the project over a 30 month timeframe – from initial kick-off to

١

completion of the post implementation audit. The final production roll-out is anticipated to be 27 months after project kick-off. Please see the complete Microsoft Project document for a complete project plan, including a Gantt chart. A detailed preliminary project schedule is included at the end of this section. AssetWorks will provide an initial copy and all updates to the project plan in both Microsoft Project and Microsoft Excel formats.



State of NH Contract 2018-122 Part 3 Exhibits Exhibit Attachment 2 – Statement of Work Date: \_4 December 2019\_\_\_\_\_ Contractor's Initials \_GS\_\_\_\_\_ Page 61 of 82

#### 13. Assumptions

The following general assumptions apply to this proposal:

#### General

All estimates have been provided based on a fixed fee effort.

This scope of work relates only to out-of-the-box features and functions for AssetWorks software. No customizations or enhancements are included other than those noted.

AssetWorks' consulting estimates do not include installation and/or configuration of any computer hardware and peripheral equipment. NHDOT will be responsible for installing and configuring computer hardware and peripheral equipment such as printers and bar code equipment (if applicable).

NHDOT will have all of the necessary and appropriate personnel at all of the meetings for the purpose of defining the requirements of the system.

NHDOT will appoint a single point of contact for the duration of the project. This person should have project management responsibilities and decision-making authority. This person will be the focal point of contact for AssetWorks' Customer Support department.

All training sessions will be based on standard application training materials.

NHDOT will implement this solution such that all assets will be in a single production AssetWorks EAM database.

AssetWorks will provide on-site training to NHDOT (as outlined above) in a classroom environment suitable for training. NHDOT will be responsible for providing and preparing the training facility.

This proposal includes only the interfaces stated in this Statement of Work. AssetWorks will provide estimates for other interfaces as may be required on an as-needed basis.

NHDOT will receive all standard, out-of-the-box reports at no extra cost.

This Statement of Work does not include any costs associated with 3rd party vendors or software that may be needed to complete the implementation.

NHDOT commits to training appropriate functional and technical resources as required.

NHDOT is responsible for all manual data entry.

#### **Project Management and Risk Factors**

The NHDOT project manager will be responsible for obtaining any required authorizations, approvals and/or signoffs by NHDOT related to project deliverables and project progression in a timeframe in alignment with the project work plan. Delays to this process as well as any NHDOTtasks within the control of the NHDOT project team not completed within the work plan timeframe will be subject to the Change Order Management process based on the mutual agreement on the cost and time impact of the delay on the project.

This Statement of Work does not include the expenses associated with NHDOT or NHDOT resources assigned to the project.

NHDOT remains responsible for all integration effort not described in this Statement of Work.

The project schedule is contingent upon the timely attainment of external milestones that are outside of AssetWorks control. Examples include but are not limited to the acquisition of the requisite software licenses and hardware and the approval of requisite capital appropriation requests as required.

NHDOT will have a 15 business days to review and accept each deliverable identified in this scope of work. After 15-business days, the deliverable will be deemed accepted. If changes are requested before the 15 days are expired, AssetWorks will make the requested revisions, subject to scope, and then submit the final deliverable providing the DOT with a new 15-day acceptance period. There will not be multiple review cycles, unless otherwise mutually agreed.

Circumstances may necessitate changes to the tasks and/or time estimates, at which time AssetWorks and NHDOT will discuss these changes in good faith at their earliest opportunity. Any changes agreed upon shall be documented in the project log as a decision. If necessary, a change order detailing the understanding may be submitted.

#### Infrastructure

NHDOT will provide a project work area and infrastructure at the centralized implementation location appropriate for the size of the combined NHDOT/AssetWorks

project team. This infrastructure should include desks, chairs, telephones, and workstations with network access to printers and to the applications and implementation databases.

System, server, and workstation backups are the responsibility of NHDOT. This includes the development and execution of the system backups and recovery programs.

NHDOT personnel assume the responsibility for applying software patches.

Acquisition, installation, testing, support, and tuning of any additional required application software, hardware, RDBMS, other software, peripherals and communications infrastructure will be the responsibility of NHDOT.

NHDOT will be responsible for deploying access to the AssetWorks EAM system and for providing all supporting software, hardware, and connectivity for the servers. The Web server must use Microsoft IIS.

The following information technology services are not included in this Statement of Work: network connections; telecommunications network(s); operating system, network and database administration; disaster recovery planning; the acquisition, installation, testing and tuning of any required hardware, operating software, peripherals and communications infrastructure.

#### 14. Appendix: Attachment H

Appendix C: System Requirements and Deliverables from Contractor's RFP response is hereby incorporated as Attachment 1: Project Requirements.

In addition to the requirements documented in Attachment 1, Contractor shall also meet the requirements documented herein. If there is any discrepancy between a requirement documented herein and the same requirement documented in Attachment 1: Project Requirements, requirements documented herein shall take precedence.

# 1. Asset Chooser Filter Sharing Functionality

In anticipation of NHDOT's contract finalization, AssetWorks EAM will provide functionality for sharing user created filters with User Groups within the system at or before the time of NHDOTs scheduled Go Live, tentatively scheduled for 2021. This will apply to Asset Chooser filters as well as basic Work Management filters.

#### 2. Key Performance Indicators (KPIs)

2.1. Web Application

The Map in the map within the Work Management portal will not take more than 5 seconds to render 95% of the time,

#### **Provided:**

- A. Asset Category layers are showing less than 1000 assets
- B. The user has a connection speed of at least 250Mbps
- C. The user is connected to the AssetWorks hosting environment
- D. The user is not showing additional layers (including Work Orders, Service Requests, Inspections, etc.)
- E. If also showing assignment items (Work Orders, Service Requests, Inspections, PMs, etc.)
  - i. Showing 100 or fewer additional points
  - ii. Map will not take more than an additional 3 seconds to load

#### 2.2. Mobile Application

#### 2.2.1. Download KPI:

Map will take less than 2 minutes to perform the download for offline use action 95% of the time,

#### Provided:

- A. Asset Category layers are showing less than 2000 assets
- B. The user is using a supported device (iOS, Android, Windows)
- C. The user has at least a 50 Mbps connection
- D. The user is connected to our hosting environment
- E. The environment does not include more than 1000 pieces of material for download
- F. The environment does not include and 500 pieces of equipment for download
- G. The total number of assignment items (Work Orders, Service Requests, Inspections, PMs, etc.) assigned to the user does not exceed 100 unique items
- H. The total size of attachments on all assignment items (Work Orders, Service Requests, Inspections, etc.) will not exceed 50 MB
- I. The downloading of attachments associated directly with Assets is turned off
- J. The total amount of data needed to be downloaded does not exceed 300 mb
- 2.2.2. Upload KPI:

Uploading from the device to the AssetWorks hosting environment will not take longer than the original day's download

- 2.3. KPI for downloading and installing the App
  - 2.3.1. The AssetWorks EAM Connect app will not take more than 1 minute to download and install on a new device, provided the device is connected to the internet with at least a 50 Mbps connection.
  - 2.3.2. The device will be at least an 11 inch iPad Pro (2019) with 64 GB of memory.
- 2.4. KPI for loading the App
  - 2.4.1. The AssetWorks EAM Connect app will not take more than 10 seconds to start up, provided that the device is not running any other apps
  - 2.4.2. The device will be at least an 11 inch iPad Pro (2019) with 64 GB of memory
- 3. Explanation on how AssetWorks handles Crash Reporting

- 3.1. When a crash happens while using EAM Connect, the app will automatically log the crash in the AssetWorks database. These crash reports will include device information, environment information, usage information as well as information about the what happened in the minutes immediately preceding the crash.
- 3.2. If the app is offline during a crash, the log will be saved locally and uploaded the next time the device is online.
- 3.3. This crash report will not be automatically sent to AssetWorks, but can be provided to AssetWorks by an administrator by going to the administrator console in the web application and selecting "View Logs."
- 3.4. From there, the relevant log file can be copied and sent to AssetWorks for review.
- 4. Requesting a Delay of a Scheduled Outage

In the event the hosted customer anticipates a weather emergency that requires the postponement of the Schedule Outage, notice should be given no later than 5 p.m. Eastern Time on the Friday before the outage or at the earliest decision time.

The request for postponement must be made by the customer's designated key user(s) via email to <u>fasupport@assetworks.com</u> with a subject line that states, 'REQUEST FOR POSTPONEMENT OF SCHEDULE OUTAGE" and the body of the email with the following content:

"Due to expected weather emergency, State of New Hampshire requests a postponement of our scheduled outage for this Sunday, {date}.

The Customer Designated Key User will receive confirmation of receipt of the request.

In the unlikely event that a 'high' security patch is to be applied on the scheduled outage date, the customer will be advised of the risks of postponement.

Postponement of outage is valid for PRODUCTION instance only

\*\*AssetWorks does not anticipate issues arising from these requests. However, we must reserve the right to deny the request if the security of the data center, network or other hosted customers will be compromised by the postponement. A full explanation and reason for the denial will be supplied to the State of New Hampshire.

5. Reduction in RTO as part of DRP for Hosted Customer

AssetWorks confirms that the range for the RTO in the event of an unscheduled outage will be 24 to 48 hours as of January 2021.

6. Allocation and Assignment

Vendor is providing the Allocation and Assignment module, which includes the software and set up services.

7. CAM Module

Services associated with the CAM module are being increased to include full implementation of the software and set up services.

8. Integration Services

Please see WBS Section 5.0 for the detailed on interfaces included within the SOW.

- 8.1. Data Warehouse Integration
- 8.2. Fuel Management Oprak/GasBoy
- 8.3. NHDOT Skipline Data Interface
- 8.4. MATS Integration of Non-Timecard Work Order Related Elements
  - 8.4.1. Enhance Timesheet Module to Support tracking available leave time:
  - 8.4.2. HR Interface:
  - 8.4.3. Timekeeping Interface:
- 9. Migration of data froM the existing DTS- View Works within the Solution.

Identified under WBS Section 4.0

# ATTACHMENT 3 – SOFTWARE MAINTENANCE AGREEMENT

#### 1. Term

Maintenance for each module shall commence immediately upon acceptance of the module in a go live environment and shall have a term through February 1, 2026, with the option to renew for one-year periods, up to, but not beyond February 1, 2030.

# 2. Correction of Deviations

In the event that the Customer encounters an error and/or malfunction ("Deviation") in the Software, it shall communicate the circumstances and any supporting information to AssetWorks. Upon receipt, AssetWorks will respond as follows:

- a. In the event that, in the mutual and reasonable opinion of AssetWorks and the Customer, there exists a Deviation that does not constitute a serious impediment to the normal intended use of the Software, AssetWorks will correct the Deviation and distribute the correction to the Customer in accordance with AssetWorks' normal Software revision schedule.
- b. In the event that, in the mutual and reasonable opinion of AssetWorks and the Customer there exists a Deviation that does constitute a serious impediment to the normal, intended use of the Software, AssetWorks will take such steps as are reasonably required to correct the Deviation.

# 3. Software Revisions and New Versions

- a. The Software may be revised by AssetWorks as a result of the correction of Deviations and/or the release of upgrades or improvements or modifications designed to improve the performance of the Software and/or to increase the capabilities of the Software (hereafter "Revisions"). Revisions shall be of two kinds:
  - i. Revisions that the Customer is obliged to implement ("Mandatory Revisions");
  - ii. Revisions that may be implemented by the Customer at its option ("Optional Revisions").
  - iii. No charge shall be made to the Customer for either Mandatory Revisions or Optional Revisions while under a current Maintenance Agreement.

b. New products ("New Products") may be added to the Software by AssetWorks from time to time. Compared to a Revision, New Products substantially improve the performance of the Software and/or substantially increase its functionality and capability. AssetWorks, in its sole discretion, shall decide which upgrades and improvements will be issued as Revisions without charge and which shall be issued as New Products for which there may be a charge.

# 4. Telephone Hotline Assistance

AssetWorks, at its expense, shall make available technically qualified personnel to respond to all reasonable telephone requests, Monday through Friday, excluding State holidays, during normal business hours, that may be made by the Customer relating to the application and operation of the Software. At other times such personnel are available by pager for emergencies.

# 5. Technical Literature

AssetWorks shall make available to the Customer all technical literature in electronic format that is considered by AssetWorks to be relevant to the Software and its use within the scope of Customer's operations.

#### 6. Transmission

All Revisions and New Products will be made available for download by the Customer via access to the AssetWorks website or other suitable media, at the option of AssetWorks. The Customer shall be solely responsible for executing the appropriate instructions in order to transfer the Revisions or New Products onto to its system.

# 7. Remote Diagnostic Access

The Customer shall provide appropriate remote access capabilities with which AssetWorks may, with the permission of the Customer, remotely access the Software for the purpose of remote diagnostics and support.

# 8. Proper Use

a. Customer shall not modify the Software or Source Code as defined in the Software License Agreement unless specifically authorized by AssetWorks in writing.

- b. The Customer agrees that all reasonable effort shall be taken to ensure that neither the Software nor data files are misused or modified without the express written permission of AssetWorks.
- c. In the event that the Customer or its agents misuses or modifies the Software or data files, including, but not limited to, inserting, updating, deleting or otherwise modifying data through a means other than the Software, although AssetWorks is not obligated to correct such misuse, AssetWorks shall be entitled to attempt to correct the situation, if possible, at Customer's expense.
- d. In the event that diagnostic assistance is provided by AssetWorks, which, in the reasonable opinion of AssetWorks and the Customer, relates to problems not caused by a Deviation in the Software, such assistance shall be at the Customer's expense.

# 9. Software Maintenance Fee – Paid Up License

In consideration of the Maintenance services to be provided by AssetWorks for the initial twelve month period hereunder, Customer shall pay to AssetWorks an amount set forth on Exhibit A. For each twelve month period thereafter, Customer will pay to AssetWorks fees in accordance with this Agreement.

# 10. Additional Software Maintenance Fee – Paid Up License

In the event the Customer acquires AssetWorks Software licenses in addition to the Software that indicated in the Order Form (the "Additional Software"), the Maintenance shall automatically be extended to cover the Additional Software, and the Customer shall pay an additional annual Maintenance fee in an amount equal to twenty percent (20%) of the then current license fee for the Additional Software at the time of acquisition.

In the event that Customer purchases any custom interfaces, APIs or other software (Developed Software), AssetWorks may also charge maintenance on the Developed Software in an amount equal to twenty percent (20%) of the cost of the Developed Software.

#### 11. Other Fces and Expenses

If onsite maintenance is required, Customer will pay reasonable travel and living expenses of AssetWorks' employees or agents, which shall be billed and paid as the expenses are incurred.

#### 12. Payment Terms

- a. Annual payments for Maintenance will be due in advance of the commencement of the initial one-year term of the Maintenance and on each anniversary thereafter.
- b. AssetWorks reserves the right to apply a late payment charge of 1.5% per month to amounts outstanding more than thirty (30) days after the date of the invoice.

# 13. Default and Termination

- a. AssetWorks may cancel Maintenance in the event that the Customer does not implement a Mandatory Revision within sixty (60) days of receipt thereof or such longer period as AssetWorks may consent to in writing. In the event that Customer does not implement a Mandatory Revision within thirty (30) days following receipt of written notice from AssetWorks of Customer's failure to implement a Mandatory Revision, AssetWorks may then cancel Maintenance, effective immediately, by notice in writing to the Customer.
- b. In the event of any breach of the terms and conditions of this Agreement by the Customer, AssetWorks will, by written notice to the Customer, give the Customer a period of thirty (30) days within which to institute remedies to correct such breach. In the event that such breach has not been corrected to AssetWorks' satisfaction within said thirty (30) day period, AssetWorks may then cancel Maintenance, effective immediately, by notice in writing to the Customer.
- c. In the event that Maintenance is terminated by AssetWorks, AssetWorks shall have no continuing obligations to the Customer of any nature whatsoever with respect to Maintenance. Furthermore, termination by AssetWorks pursuant to the provisions of this Agreement shall be without prejudice to any right or recourse available to AssetWorks, and without prejudice to AssetWorks' right to collect any amounts, which remain due to it hereunder.

#### **ATTACHMENT 4 – HOSTING AGREEMENT**

#### **1. AGREEMENT OVERVIEW**

AssetWorks operates a Data Center ("Data Center") and provides associated services to support customers that wish to outsource the operation and maintenance of computer applications.

This Agreement describes the services to be provided by AssetWorks ("Hosting Services") the respective responsibilities of the parties, the service level objectives ("SLOs"), and the problem management process. This Agreement incorporates the following Attachments that shall be considered an integral part of this Agreement:

Attachment 4-1 Service Level Agreement Attachment 4-2 Scope of Services

#### 2. SERVICES

AssetWorks will perform the services ("Services") as described in the Scope of Services, set forth in Attachment 4-2.

The general scope of services addressed by this Agreement includes the operation, maintenance, and support of the Database software for the Applications hosted under this Agreement and Database security.

The scope of services specifically excludes operation and maintenance of the following: Customer hardware, including Customer's servers, printers, network hardware (including routers and switches) and other Customer site computing equipment; Customer application software other than noted in the Scope of Services; and Customer Local Area Networks ("LAN")

Customer network infrastructure for connecting to the Internet and to the AssetWorks Data Center

The Services shall be provided subject to the Terms and Conditions, which follow.

# 3. TERM

The Term of the Agreement shall commence as of the Effective Date and shall have a term through February 1, 2026, with the option to renew for one (1) four-year period, up to, but not beyond February 1, 2030 unless terminated earlier as set forth below.

#### 4. FEES AND PAYMENT

A Customer will be considered delinquent if payment in full is not received forty-five (45) days from the date of the invoice. AssetWorks reserves the right to suspend or terminate this Agreement and Customer access to the Service if the Customer account becomes delinquent and is not cured within ten (10) days. Customer will continue to be charged and hereby agrees to pay for Service during any period of suspension. Customer's failure to pay any invoice after this ten (10) day period shall constitute a material default hereunder and shall entitle AssetWorks to exercise any and all rights and remedies provided herein or at law including a suspension of Services under the Agreement. If Customer or AssetWorks initiate termination under any provision of the Agreement other than under Part 2, Section 13.1 Customer will be obligated to pay the balance due for the remainder of the term for its account computed in accordance with the Fee Schedule in Part 3, Exhibit B. Customer agrees that it shall be billed for such unpaid fees. In the event of a dispute between the parties that does not result in a termination of the Agreement, Customer agrees to make all Monthly Service Fee payments due under the Agreement pending the resolution of the dispute.

Upon termination for whatever reason and regardless of the nature of the default (if any), Customer agrees to pay AssetWorks in full for Services provided to Customer under this Agreement within 30 days of the invoice date.

# 5. CUSTOMER RESPONSIBILITIES

The Customer is responsible for:

Assigning a primary and alternate Customer designated key personnel to coordinate all communications and activities related to AssetWorks services.

Providing user identification data and determining the appropriate security profile for each user. Customer will control security at the Application level.

All printing. No print job will print at the Data Center and all physical printing requirements will be handled by the Customer.

The purchase and installation of printers at Customer's sites for the Application being utilized as defined in the Scope of Services.

Installation, operation and maintenance of all workstation software (and Customer's LAN, existing data communications configuration, hardware, or software required at the Customer's site except as otherwise stipulated in the Scope of Services. AssetWorks network and network responsibility extends from the AssetWorks routers at AssetWorks' sites to all connected equipment at AssetWorks' sites.

Testing updates and fixes applied by AssetWorks to Applications used by Customer. With the exception of emergency fixes, Customer will test updates and fixes prior to

their introduction to the Production environment within a mutually agreed upon time frame.

Testing upgrades. Upgrades will be moved to production by the AssetWorks at the end of the Customer testing period unless specific problems are documented in writing to AssetWorks.

Diligent analysis of suspected problems to determine their specific nature and possible causes before calling the AssetWorks for assistance. Notwithstanding this diligence requirement, Customer is responsible for informing AssetWorks of any problems encountered in a timely manner.

THIS PAGE INTENTIONALLY LEFT BLANK.

State of NH Contract 2018-122 Part 3 Exhibits Attachment 4 – Hosting Agreement Date: \_4 December 2019\_ Contractor's Initials \_GS\_\_\_ Page 76 of 82

# **ATTACHMENT 4-1: SERVICE LEVEL AGREEMENT**

This Service Level Agreement ("SLA") is intended to provide an understanding of the level of service to be delivered by the AssetWorks for the Services specified in Attachment 2. The service levels set forth below apply to the Services provided by AssetWorks under the Agreement.

#### 1. AVAILABILITY

AssetWorks will use commercially reasonable efforts to provide Services with an average of 99% Availability (as such term is hereinafter defined) for each quarter during the Term. For purposes of the Agreement, "Availability" during any quarter refers to an Authorized User's ability to log into the Application during such quarter, and will be calculated in accordance with the following formula:

$$x = (y - z) / y * 100$$

#### Where,

"x" is the Availability of the Application during the quarter;

"y" is the total number of hours in such quarter minus the number of hours during such quarter that the Customer is unable to log into the Application because of (a) regularly scheduled maintenance windows for the Application and for times in which Customer has been notified in writing (including e-mail) by AssetWorks in advance thereof; (b) a Force Majeure Event; (c) non-performance of hardware, software, ISP connections, and other equipment that is not provided by AssetWorks or certified by AssetWorks for use in conjunction with the Services (except as such non-performance is directly or indirectly caused by AssetWorks).

"z" is the number of hours in such month during which the Customer is unable to log into the Application (other than for reasons set forth in the definition of "y" above); provided that AssetWorks has been notified or is otherwise aware (or reasonably should be aware) of Customer's inability to utilize the Application.

#### 2. FEE ADJUSTMENT

In the event that AssetWorks does not meet the Availability levels set forth below, the amount of fees payable by Customer will be reduced as follows:

In the event the average Availability for the Application is less than ninety nine percent (99%) during any two consecutive quarters, Customer will receive a credit to its account with AssetWorks of five percent (5%) of the amount of a quarter's aggregate AssetWorks Hosting Services fees paid or payable by Customer to AssetWorks.

AssetWorks' obligation to provide Customer with fee adjustments as set forth above is conditioned on Customer providing detailed written notice to AssetWorks of its contention that AssetWorks was unable to meet the applicable Availability levels. Upon receipt of such notice, AssetWorks shall have thirty (30) calendar days to investigate the contention. If, at the end of the thirty (30) calendar day period it is determined that AssetWorks did in fact

fail to meet the applicable Availability levels, Customer will receive the appropriate credit to its account during the next invoice cycle.

The remedies set forth in this Section of this Attachment shall be Customer's sole remedy and AssetWorks' entire liability in the event of a breach of this Agreement, including the failure of any Availability measurements to meet the thresholds set forth above.

#### **ATTACHMENT 4-2 - SCOPE OF SERVICES**

All of the services, functions, processes, and activities described below will be collectively described as the "Services" for purposes of this Agreement. All Services will be provided by AssetWorks to and for the Customer's benefit in a manner that will meet the objectives outlined in Attachment 1.

#### 1. Application

Application refers to the Customer's licensed AssetWorks software, and 3rd Party Software hosted by AssetWorks.

Support Software

Support Software includes the operating system, utilities, database software, and all necessary licenses required to operate the Application.

#### 2. Hardwarc

. . .

Server infrastructure using redundant web servers and Oracle RAC database servers is deployed within the primary Data Center located in Wayne, PA, to maximize uptime.

If required by Customer, Customer shall provide the telecommunications equipment (including the routers to be installed at the Data Center), communication line, and services for connection from Customer's site to the Data Center.

#### 3. Database Instances

AssetWorks will maintain a single Production Database instance. This Production Database will provide the daily, real-time transaction data to the Application users.

In addition to the Production Database, AssetWorks will maintain one additional, nonproduction Database (Test). Upon request by Customer, AssetWorks will populate these additional Databases with Customer's Production data up to 4 times in any 12 month period at no additional cost.

For an additional charge, AssetWorks will furnish an Ad-hoc Reporting Database for use with the Customer developed ad-hoc reports. This Database will be updated from the production database every night and will allow the Customer direct access to its data for purposes of ad-hoc reporting.

#### 4. Custom Reports

For an additional charge as defined in Attachment 3, AssetWorks will certify a Customer built Ad-hoc Report for scheduling execution from within the Application directly against

the production database, certifying that the Report performs within appropriate performance guidelines and does not cause unacceptable response time issues. Once certified, AssetWorks will install the Report into Customer's production environment to make it available for execution submission from within the Application.

#### 5. Backups

Backups are taken on a nightly and monthly basis. Monthly backup tapes are rotated to the offsite storage facility and maintained for 12 months before recycling. Database backups are taken each night using Oracle RMAN and a time determined by AssetWorks. File system backups are taken using Tivoli Storage Manager and are taken following the Oracle RMAN backup as part of a scheduled process.

For an additional fee, AssetWorks will schedule other 'Critical Points' for back-up, as defined and required by the Customer (e.g., month-end, year-end and before upgrades.). The Customer retains the right to have copies of back-up tapes mailed to the Customer's site on a schedule determined by AssetWorks.

#### 6. Hours of System Operations

The Application will be accessible and available to the Customer and capable of any and all normal operating functions 24 hours a day, seven days a week except for periods of Scheduled Maintenance and previously approved outages. AssetWorks will not be held responsible for inaccessibility arising from communications problems occurring anywhere beyond the AssetWorks side of the router resident at the Data Center, nor will these hours of unavailability be counted as unavailable.

#### 7. Maintenance

AssetWorks will complete routine maintenance on the Application according to the published schedule. AssetWorks will publish schedules for subsequent years on its Customer Support web site. AssetWorks will provide at least 30 days notice to any changes in the schedule.

If AssetWorks is required to perform additional maintenance outside of the Scheduled Maintenance window, it will notify the Customer in writing of its request. The Customer and the AssetWorks will mutually agree on the downtime, which will then be considered a period of Scheduled Maintenance.

#### ATTACHMENT 5 – SOFTWARE LICENSE AGREEMENT

#### 1. SOFTWARE LICENSE

A. The Contractor grants to Customer a non-exclusive, perpetual (subject to Section 3) non-transferable license for the EAM software for an unlimited number of users (herein "Software") on the hosted environment in accordance with Attachment 4, Hosting Agreement. Customer's license is to use the Software in its own business; Customer has the right to allow its subcontractors and vendors to utilize the software for work performed for Customer. Customer has no right to allow third parties' use of the Software in processing work not associated with Customer.

B. Source Code shall mean software in human-readable form, including all appropriate programmer's comments, data files and structures, header and include files, macros, make files, object libraries, programming tools not commercially available, technical specifications, flowcharts and logic diagrams, schematics, annotations and documentation reasonably required or necessary to enable a competent independent third party programmer to create, operate, maintain, modify and improve such software without the help of any other person, and with data files containing Source Code in standard ASCII format readable by a text editor.

C. Except as expressly authorized under this Agreement, Customer shall not (i) sell, rent, lease, timeshare, encumber, license, sublicense, transfer or assign the Software or Documentation; (ii) attempt to decompile, disassemble or reverse engineer the Software in whole or in part, or otherwise attempt to derive the Source Code of the software.

# 2. FEES AND PAYMENTS

A. Customer shall pay the Contractor fees as specified in the Exhibit B, Pricing and Payment Schedule.

#### 3. TERMINATION

A. The license conveyed pursuant to this Agreement may be terminated by Contractor in the event of breach or default by Customer under this Agreement provided Contractor notifies Customer in writing of the breach or default and Customer does not correct same within thirty (30) days of Contractor's written notice.

B. All Software and Documentation, excluding Deliverables, such as customized Documentation, for Customer, shall be and will remain the property of Contractor. Upon

termination of this Agreement, whatever the reason, such Software and Documentation and any copies thereof made by Customer shall be promptly returned to AssetWorks.

State of NH Contract 2018-122Exhibit Attachment 5 –Software License AgreementDate: \_4 December 2019\_\_\_\_Contractor's Initials \_GS\_\_\_\_\_Page 82 of 82

# State of New Hampshire Department of State

# CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that ASSETWORKS LLC is a Delaware Limited Liability Company registered to transact business in New Hampshire on March 20, 2009. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: 610494

Certificate Number: 0004607510



IN TESTIMONY WHEREOF,

I hereto set my hand and cause to be affixed the Seal of the State of New Hampshire, this 18th day of October A.D. 2019.

William M. Gardner Secretary of State

# AssetW**O**RKS

#### **CERTIFICATE OF AUTHORITY**

I, Brian Beattie, as Secretary of AssetWorks LLC, a corporation organized under the laws of the State of Delaware, hereby certify that the following is a true resolution adopted at the meeting of the Board of Directors at said Company duly held on the 28th day of September 2008

RESOLVED that Gordon Smith, Vice President of AssetWorks LLC is hereby authorized to make, execute and approve on behalf of this Company any and all contracts and to execute and approve on behalf of this Company.

AND I DO FURTHER CERTIFY that the above resolution has not been in any way altered, amended or repealed and is now in full force and effect.

IN WITNESS WHEREOF I have hereunto affixed my signature and the corporate seal of the corporation this 4<sup>th</sup> day of December 2019.

Signature

#### Secretary of AssetWorks LLC

Title

ACO	RD CERTIFIC	CATE OF LIABI	LITY INS	URANC		DATE (MM/DD/YY) 09/27/2019	
PRODUCER Serial # 173745 WILLIS CANADA INC., A WILLIS TOWERS WATSON COMPANY 100 KING STREET WEST, SUITE 4700 TORONTO, ON M5X 1E4 CANADA			NY ONLY AND HOLDER.	THIS CERTIFICATE IS ISSUED AS A MATTER OF IN ONLY AND CONFERS NO RIGHTS UPON THE HOLDER. THIS CERTIFICATE DOES NOT AMEND, ALTER THE COVERAGE AFFORDED BY THE POLI			
			INSURERS A	INSURERS AFFORDING COVERAGE			
INSURED CONSTELLATION SOFTWARE INC. AND ASSETWORKS LLC			INSURER A: FE	INSURER A: FEDERAL INSURANCE COMPANY			
				INSURER B: CHUBB INSURANCE COMPANY OF CANADA			
FLEET DIVISION 998 OLD EAGLE SCHOOL RD.							
WAYNE, PA 19087			INSURER E:				
COVERAGES							
THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES, AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.							
INSR ADD'L	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMIT		
	ENERAL LIABILITY				EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurence)	s 1,000,000	
^	CLAIMS MADE X OCCUR				PREMISES (Éa occurence) MED EXP (Any one person)	s 25,000	
		99504839	09/27/2019	09/27/2020	PERSONAL & ADV INJURY	s 1,000,000	
					GENERAL AGGREGATE	s 2,000,000	
	POLICY PRO-				PRODUCTS - COMP/OP AGG TENANTS LEGAL LIABILITY	<u>s 1,000,000</u> 1,000,000	
					COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000	
	ALL OWNED AUTOS SCHEDULED AUTOS	73600397	09/27/2019	09/27/2020	BODILY INJURY (Per person)	\$	
					BODILY INJURY (Per accident)	\$	
	LEASED TO THE NAMED INSURED				PROPERTY DAMAGE (Per accident)	s	
. 04	ARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	5	
	ANY AUTO				OTHER THAN EA ACC	\$	
- EX			· · · · · · · · · · · · · · · · · · ·		EACH OCCURRENCE	s s 14,000,000	
в х					AGGREGATE	\$ 14,000,000	
	<b>-</b>	78183369	09/27/2019	09/27/2020		\$	
	DEDUCTIBLE RETENTION \$					\$	
WORKER	S COMPENSATION AND				X WC STATU- OTH- TORY LIMITS ER	<u>s</u>	
A EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under		7176-4342	09/27/2019	09/27/2020	EL EACH ACCIDENT	s 1,000,000	
					EL DISEASE - EA EMPLOYEE	s 1,000,000	
	PROVISIONS below				EL DISEASE - POLICY LIMIT	s 1,000,000	
A PROFI	ESSIONAL LIABILITY AND	99504839	09/27/2019	09/27/2020	\$ 5,000,000 PER CLAIM & IN THE	AGGREGATE	
DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS							
RE: SOFTWARE LICENSE AGREEMENT, NUMBER NH09-09-1							
				CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION			
NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION JOHN 0. MORTON BUILDING P.O. BOX 483 - 7 HAZEN DRIVE CONCORD, NEW HAMPSHIRE 03302-0483			DATE THEREOF, NOTICE TO THE ( IMPOSE NO OBLI	DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL <u>30</u> DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE			

•

.

•

,

© ACORD CORPORATION 1988

`

.