Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 8(O)(1)(A)

07-24-07

OFFICIAL FILE COPY
CLERK OF THE BOARD
OF COUNTY COMMISSIONERS
MIAMI-DADE COUNTY, FLORIDA

RESOLUTION NO. R-877-07

RESOLUTION AUTHORIZING EXECUTION OF AN AGREEMENT WITH WOOLPERT, INC. TO OBTAIN ENTERPRISE ASSET MANAGEMENT SYSTEM (EAMS) IMPLEMENTATION SERVICES, AUTHORIZING THE COUNTY MAYOR OR HIS DESIGNEE TO EXECUTE AN AGREEMENT FOR AND ON BEHALF OF MIAMI-DADE COUNTY AND TO EXERCISE ANY CANCELLATION AND RENEWAL PROVISIONS, AND TO EXERCISE ALL OTHER RIGHTS CONTAINED THEREIN CONTRACT NO. RFP 511

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated herein by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that this Board approves the selection of WOOLPERT, INC. in substantially the form attached hereto and made a part hereof, and authorizes the County Mayor or his designee to execute same for and on behalf of Miami-Dade County and to exercise any cancellation and renewal provisions and any other rights contained therein.

The foregoing resolution was offered by Commissioner Audrey M. Edmonson, who moved its adoption. The motion was seconded by Commissioner Rebeca Sosa and upon being put to a vote, the vote was as follows:

Bruno A. Barreiro, Chairman	aye		
Barbara J. Jordan, Vice-Chairwoman	aye		
Jose "Pepe" Diaz	aye	Audrey M. Edmonson	aye
Carlos A. Gimenez	aye	Sally A. Heyman	aye
Joe A. Martinez	absent	Dennis C. Moss	aye
Dorrin D. Rolle	aye	Natacha Seijas	aye
Katy Sorenson	aye	Rebeca Sosa	aye
Sen. Javier D. Souto	aye		

The Chairperson thereupon declared the resolution duly passed and adopted this 24th day of July, 2007. This resolution shall become effective ten (10) days after the date of its adoption unless vetoed by the Mayor, and if vetoed, shall become effective only upon an override by this Board.

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF COUNTY
COMMISSIONERS

HARVEY RUVIN, CLERK

By: KAY SULLIVAN
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency.

Hugo Benitez

Memorandum

MIAMI-DADE COUNTY

Date: July 24, 2007

To: Honorable Chairman Bruno A. Barreiro
and Members, Board of County Commissioners

Agenda Item No. 8(O)(1)(A)

From: George M. Burgess
County Manager

Subject: Recommendation for Approval to Award Contract No. RFP511: Enterprise Asset Management System (EAMS) Implementation Services

RECOMMENDATION

It is recommended that the Board of County Commissioners approve Contract No. RFP511: Enterprise Asset Management System (EAMS) Implementation Services to procure implementation services for the Datastream 7i software application for the Miami-Dade Water and Sewer Department.

CONTRACT NO:	RFP511
CONTRACT TITLE:	Enterprise Asset Management System (EAMS) Implementation Services
DESCRIPTION:	This contract will provide the Water and Sewer Department (WASD) with the required implementation and customization services for Datastream 7i, Enterprise Asset Management System (EAMS) software.

WASD is currently utilizing custom built applications running on Oracle, SQL Server, and Microsoft Access platforms to track all maintenance work and warehouse inventory levels. WASD is also using RJN Group's Cassworks application to accomplish these tasks. Once implemented, the EAMS software will replace these antiquated applications to provide a central system for all WASD asset and performance management. This system will support several WASD business functions, including inventory, purchasing, work flow management, and asset definition. The EAMS system will also interface with the County's Peoplesoft Enterprise Resource Planning (ERP) application to assist staff with managing maintenance and inventory activities throughout the County.

The Datastream 7i software package tracks assets, inventory ordering points, maintenance, and warranty information. It will provide WASD with the ability to integrate information specific to all labor associated with work orders, predictive maintenance, along with preventative and scheduled maintenance. The software will interface with County personnel records to support all work orders and metering applications (fuel usage, vibration meters, etc.). The system will allow WASD to implement industry "best practices" across their business

	units. The system also supports billing, complex project management, and budgeting analysis and has a strong analytics module that will interface with the County's Peoplesoft ERP system.
PROJECT MANAGER:	Dag J. Abreu, Procurement Contracting Officer Department of Procurement Management Deborah R. Viera, MIS Division Chief Miami-Dade Water and Sewer Department
APPROVAL TO ADVERTISE:	January 3, 2006
TERM:	Until project completion, a period expected to be no longer than thirty-four (34) months, with two (2), one-year options-to-renew at the County's sole discretion.
CONTRACT AMOUNT:	$6,857,727 million for the initial contract term of 34 months
METHOD OF AWARD:	Single vendor award
VENDORS RECOMMENDED FOR AWARD:	Woolpert, Inc. (Non-Local Vendor) 409 East Monument Avenue Dayton, Ohio 45402-1261 Rex W. Cowden, Chief Executive Officer
VENDORS NOT RECOMMENDED FOR AWARD:	BearingPoint, Inc. (Non-Local Vendor) 1676 International Drive McLean, Virginia 22101 Phillip Daniele, Managing Director
USING/MANAGING AGENCY:	

Department	Allocation	Funding Source
WASD	$6,857,727	Operating Revenue

CONTRACT MEASURES:	The Review Committee of August 10, 2005, recommended a Small Business Enterprise selection factor for this solicitation. (Item # 6-02)
LIVING WAGE:	The services to be provided are not covered under the Living Wage Ordinance.
UAP:	The contract includes the 2% User Access Program provision. The program discount will be collected.

LOCAL PREFERENCE:	Applied in accordance with applicable ordinances, but did not affect the outcome
ESTIMATED CONTRACT COMMENCEMENT DATE:	Ten days after date adopted by the Board of County Commissioners, unless vetoed by the Mayor.

BACKGROUND

In 2003, the County competitively acquired the enterprise licenses for Datastream 7i, EAMS software from Datastream Systems, Inc. through Contract No. RFP351: Enterprise Asset Management System Software. That contract provides software licenses, maintenance, and support services for the EAMS software, which is used by several County departments. The award of this contract will provide the specialized implementation services required to fully implement the Datastream 7i, EAMS software for WASD. The implementation of this software system will assist the Department in meeting a number of important goals and objectives including the following:

- Facilitate regulatory reporting requirements
- Improve business processes by implementing industry "best practices"
- Consolidate existing maintenance management systems
- Provide accurate and comprehensive data for performance measures reporting
- Improve budget planning and activity-based cost reporting
- Reduce maintenance costs by optimizing scheduling and resource efficiency
- Optimize asset efficiency and inventory levels
- Provide management tools for monitoring accountability and integrity in business process and decision making.

An additional allocation of $357,727 is included in the contract to provide funding for optional services and any unforeseen requirements that may arise during implementation. EAMS will interface with the County's Enterprise Resource Planning (ERP) System to ensure cost information related to assets and activities performed involving these assets, are accurately documented. This will facilitate decisions for asset replacement, work flow management, and budgetary planning.

Two proposals were received by Miami-Dade County in response to this solicitation. A Selection Committee of five voting members and seven non-voting technical advisors evaluated proposals and recommended Woolpert, Inc. for negotiations. It is noted that one of the voting members of the Selection Committee is no longer employed by Miami-Dade County. This individual proposer's ratings are consistent with the overall rating of the Selection Committee and their removal would not have affected its outcome.

Assistant County Manager

MEMORANDUM

(Revised)

TO: Honorable Chairman Bruno A. Barreiro and Members, Board of County Commissioners

DATE: July 24, 2007

FROM: R.A. Cuevas, Jr. Acting County Attorney

SUBJECT: Agenda Item No. 8(O)(1)(A)

Please note any items checked.

_____ "4-Day Rule" ("3-Day Rule" for committees) applicable if raised

_____ 6 weeks required between first reading and public hearing

_____ 4 weeks notification to municipal officials required prior to public hearing

_____ Decreases revenues or increases expenditures without balancing budget

_____ Budget required

_____ Statement of fiscal impact required

_____ Bid waiver requiring County Manager's written recommendation

_____ Ordinance creating a new board requires detailed County Manager's report for public hearing

_____ Housekeeping item (no policy decision required)

_____ No committee review

ENTERPRISE ASSET MANAGEMENT SYSTEM (EAMS) IMPLEMENTATION SERVICES

CONTRACT NO. RFP511

THIS AGREEMENT made and entered into as of this _____ day of _____, 2007 by and between **Woolpert, Inc.**, a corporation organized and existing under the laws of the State of Ohio, having its principal office at 409 East Monument Avenue, Dayton, OH 45402-1261 (hereinafter referred to as the "Contractor"), and Miami-Dade County, a political subdivision of the State of Florida, having its principal office at 111 NW 1st Street, Miami, Florida 33128 (hereinafter referred to as the "County"),

WITNESSETH:

WHEREAS, the Contractor has offered to provide Enterprise Asset Management System (EAMS) Implementation services that shall conform to the Scope of Services (Appendix A); Miami-Dade County's Request for Proposals (RFP) No. RFP 511 and all associated addenda and attachments, incorporated herein by reference; and the requirements of this Agreement; and,

WHEREAS, the Contractor has submitted a written proposal dated March 14, 2006, hereinafter referred to as the "Contractor's Proposal" which is incorporated herein by reference; and,

WHEREAS, the County desires to procure from the Contractor such goods and services for the County, in accordance with the terms and conditions of this Agreement;

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, the parties hereto agree as follows:

ARTICLE 1 - DEFINITIONS

The following words and expressions used in this Agreement shall be construed as follows, except when it is clear from the context that another meaning is intended:

a) The words "Contract" or "Contract Documents" or "Agreement" to mean collectively these terms and conditions, the Scope of Services (Appendix A), RFP No. 511 and all associated addenda and attachments, the Contractor's Proposal, and all other attachments hereto and all amendments issued hereto.

b) The words "Contract Date" to mean the date on which this Agreement is effective.

c) The words "Contract Manager" to mean Miami-Dade County's Director, Department of Procurement Management, or the duly authorized representative.

d) The word "Contractor" to mean Woolpert, Inc. and its permitted successors and assigns.

e) The word "Days" to mean Calendar Days.

f) The word "Deliverables" to mean all documentation and any items of any nature submitted by the Contractor to the County's Project Manager for review and approval pursuant to the terms of this Agreement.

g) The words "directed", "required", "permitted", "ordered", "designated", "selected", "prescribed" or words of like import to mean respectively, the direction, requirement, permission, order, designation, selection or prescription of the County's Project Manager; and similarly the words "approved", acceptable", "satisfactory", "equal", "necessary", or words of like import to mean respectively, approved by, or acceptable or satisfactory to, equal or necessary in the opinion of the County's Project Manager.

h) The words "Change Order" or "Extra Work" or "Additional Work" resulting in additions or deletions or modifications to the amount, type or value of the Work and Services as required in this Contract, as directed and/or approved by the County.

i) The words "Project Manager" to mean the County Manager or the duly authorized representative designated to manage the Contract.

j) The words "Proposal" or "Contractor's Proposal" to mean the proposal document dated March 14, 2006, submitted by Woolpert, Inc., to the County, in response to RFP No. 511: EAMS Implementation Services, and all associated documentation, including documents submitted during Oral Presentations, negotiation meetings, etc., in association with said Solicitation.

k) The words "Scope of Services" to mean the document appended hereto as Appendix A, which details the work to be performed by the Contractor.

l) The word "subcontractor" or "subconsultant" to mean any person, entity, firm or corporation, other than the employees of the Contractor, who furnishes labor and/or materials, in connection with the Work, whether directly or indirectly, on behalf and/or under the direction of the Contractor and whether or not in privity of

Contract with the Contractor.

m) The words "Work", "Services" "Program", or "Project" to mean all matters and things required to be done by the Contractor in accordance with the provisions of this Contract.

ARTICLE 2 - ORDER OF PRECEDENCE

If there is a conflict between or among the provisions of this Agreement, the order of precedence is as follows: 1) these terms and conditions, 2) the Scope of Services (Appendix A), 3) the Miami-Dade County's RFP No. 511 and any associated addenda and attachments thereof, to the extent that the Contractor has, in its proposal, taken or asserted exceptions to the contract documents, including the terms of the proposal, those exceptions shall not be deemed incorporated herein unless expressly incorporated into the contract documents; exceptions taken or asserted in the proposal shall otherwise be deemed waived by the Contractor, and the Contractor shall abide by the terms of the contract documents as written, and 4) the Contractor's Proposal.

ARTICLE 3 - RULES OF INTERPRETATION

a) References to a specified Article, section or schedule shall be construed as reference to that specified Article, or section of, or schedule to this Agreement unless otherwise indicated.

b) Reference to any agreement or other instrument shall be deemed to include such agreement or other instrument as such agreement or other instrument may, from time to time, be modified, amended, supplemented, or restated in accordance with its terms.

c) The terms "hereof", "herein", "hereinafter", "hereby", "herewith", "hereto", and "hereunder" shall be deemed to refer to this Agreement.

d) The titles, headings, captions and arrangements used in these Terms and Conditions are for convenience only and shall not be deemed to limit, amplify or modify the terms of this Contract, nor affect the meaning thereof.

ARTICLE 4 - NATURE OF THE AGREEMENT

a) The Contractor shall provide the services set forth in the Scope of Services, and render full and prompt cooperation with the County in all aspects of the Services performed hereunder.

b) The Contractor acknowledges that this Agreement requires the performance of all things necessary for, or incidental to the effective and complete performance of all Work and Services required by the Scope of Services. All things not expressly mentioned in this Agreement but necessary to carrying out its intent are required by this Agreement, and the Contractor shall perform the same as though they were specifically mentioned, described and delineated.

c) The Contractor shall furnish all labor, materials, tools, supplies, and other items required to perform the Work and Services that are required by the Scope of Services. All Work and Services shall be accomplished at the direction of, and to

the satisfaction of the County's Project Manager.

d) The Contractor acknowledges that the County shall be responsible for making all policy decisions regarding the Scope of Services. The Contractor agrees to provide input on policy issues in the form of recommendations. The Contractor agrees to implement any and all changes in providing Services hereunder as a result of a policy change implemented by the County. The Contractor agrees to act in an expeditious and fiscally sound manner in providing the County with input regarding the time and cost to implement said changes and in executing the activities required to implement said changes.

ARTICLE 5 - CONTRACT TERM

This Contract shall become effective on the date set forth above and shall remain effective **until project completion**, a period expected to be no longer than **thirty-four (34) months**. The County, at its sole discretion, reserves the right to exercise the option to renew this Contract for a period of **two (2)** additional years on a yearly basis. The County reserves the right to exercise its option to extend this Contract for up to one hundred-eighty (180) calendar days beyond the current Contract period and will notify the Contractor in writing of the extension. This Contract may be extended beyond the initial one hundred-eighty (180) calendar day extension period by mutual agreement between the County and the Contractor, upon approval by the Board of County Commissioners.

ARTICLE 6 - NOTICE REQUIREMENTS

All notices required or permitted under this Agreement shall be in writing and shall be deemed sufficiently served if delivered by Registered or Certified Mail, with return receipt requested; or delivered personally; or delivered via fax or e-mail (if provided below) and followed with delivery of hard copy; and in any case addressed as follows:

(1) to the County

a) to the Project Manager:

Miami-Dade County
Water and Sewer Department
3071 SW 38 Avenue
Miami, FL 33146

Attention: Deborah Viera, MIS Division Chief
Phone: (786) 552-8288
Fax: (786) 552-8633

and,

b) to the Contract Manager:

Miami-Dade County

Department of Procurement Management
111 NW 1st Street, Suite 1375
Miami, FL 33128-1974

Attention: Dag J. Abreu, Procurement Contracting Officer
Phone: (305) 375-4417
Fax: (305) 375-5688
E-mail: dabreu@miamidade.gov

(2) To the Contractor

Woolpert, Inc.
2121 Ponce de Leon Blvd. Suite 200
Coral Gables, Florida 33134

Attention: Paul Klimas
Phone: 616-560-5871
Fax: 616-975-7893
E-mail: paul.klimas@woolpert.com

Either party may, at any time, designate a different address and/or contact person by giving notice as provided above to the other party. Such notices shall be deemed given upon receipt by the addressee.

ARTICLE 7 - PAYMENT FOR SERVICES/AMOUNT OBLIGATED

The Contractor warrants that it has reviewed the County's requirements and has asked such questions and conducted such other inquiries as the Contractor deemed necessary in order to determine the price the Contractor will charge to provide the Work and Services to be performed under this Contract. The compensation for all Work and Services performed under this Contract, including all costs associated with such Work and Services, shall be in the total amount of **six million, eight hundred fifty-seven thousand, seven hundred twenty-seven dollars ($6,857,727.00)**. The County shall have no obligation to pay the Contractor any additional sum in excess of this amount, except for a change and/or modification to the Contract, which is approved and executed in writing by the Contractor and by the Miami-Dade County Board of County Commissioners or, to the limited extent the Board of County Commissioners has delegated authority to approve limited change orders, by the designee with such delegated authority to approve and execute such change and/or modification to the Contract, and to the extent such change orders are within the scope of such delegated authority.

All Services undertaken by the Contractor before County's approval of this Contract shall be at the Contractor's risk and expense.

The Contractor is responsible for all travel costs and travel related expenses incurred in the process of delivering the goods and services contained in Appendix A - Scope of Services.

The County shall not be liable for any expenses that have not been approved in

advance, in writing, by the County.

ARTICLE 8 - PRICING

Prices shall remain firm and fixed for the term of the Contract, including any option or extension periods; however, the Contractor may offer incentive discounts to the County at any time during the Contract term, including any renewal or extension thereof.

The Contractor agrees that pricing for any goods and services shall be as stipulated in Appendix B - Price Schedule.

ARTICLE 9 - METHOD AND TIMES OF PAYMENT

The Contractor agrees that under the provisions of this Agreement, as reimbursement for those actual, reasonable and necessary costs incurred by the Contractor, which are directly attributable or properly allocable to the Services, the Contractor may bill the County periodically, but not more than once per month, upon invoices certified by the Contractor pursuant to Appendix B – Price Schedule. All invoices shall be taken from the books of account kept by the Contractor, shall be supported by copies of payroll distribution, receipt bills or other documents reasonably required by the County, shall show the County's contract number, and shall have a unique invoice number assigned by the Contractor. It is the policy of Miami-Dade County that payment for all purchases by County agencies and the Public Health Trust shall be made in a timely manner and that interest payments be made on late payments. In accordance with Florida Statutes, Section 218.74 and Section 2-8.1.4 of the Miami-Dade County Code, the time at which payment shall be due from the County or the Public Health Trust shall be forty-five days from receipt of a proper invoice. The time at which payment shall be due to small businesses shall be thirty (30) days from receipt of a proper invoice. All payments due from the County or the Public Health Trust, and not made within the time specified by this section shall bear interest from thirty (30) days after the due date at the rate of one percent (1%) per month on the unpaid balance. Further, proceedings to resolve disputes for payment of obligations shall be concluded by final written decision of the County Manager, or his or her designee(s), not later than sixty (60) days after the date on which the proper invoice was received by the County or the Public Health Trust.

Times of Payment:

Throughout the term of the Contract, Contractor may invoice the County for amounts directly proportional to "percentage of Task complete mutually agreed by County and Contractor." (Refer to Appendix A – Scope of Services, for Task definitions.)

a) Prior to County certification of successful completion and passing of mutually agreed Final System Acceptance and completion of associated training ("Final System Acceptance"), County will pay **90 %** of Contractor invoice amounts for services already rendered.

b) Upon Final System Acceptance, County will release and pay the retained **10%** of all paid invoices.

c) After Final System Acceptance, County will pay invoices in full for any services rendered by Contractor.

Invoices and associated back-up documentation shall be submitted in duplicate by the Contractor to the County as follows:

Miami-Dade County
Water and Sewer Department
3071 SW 38 Avenue
Miami, FL 33146

Attention: Deborah Viera, MIS Division Chief
Phone: (786) 552-8288
Fax: (786) 552-8633

The County may, at any time, designate a different address and/or contact person by providing written notice to Contractor.

ARTICLE 10 - INDEMNIFICATION AND INSURANCE

Contractor shall indemnify and hold harmless the County and its officers, employees, agents and instrumentalities from any and all liability, losses or damages, including reasonable attorneys' fees and costs of defense, which the County or its officers, employees, or instrumentalities may incur as a result of claims, demands, suits, causes of actions or proceedings arising out of the negligent performance of this Agreement by the Contractor or its employees, agents, servants, partners principals or subcontractors. Contractor shall pay all claims and losses in connection therewith and shall investigate and defend all claims, suits or actions of any kind or nature in the name of the County, where applicable, including appellate proceedings, and shall pay all costs, judgments, and attorney's fees which may issue thereon. Contractor expressly understands and agrees that any insurance protection required by this Agreement, or otherwise provided by Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the County or its officers, employees, agents and instrumentalities as herein provided.

Contractor shall furnish to the Vendor Assistance Section, Department of Procurement Management, Administration Division, 111 NW 1st Street, Suite 1300, Miami, Florida 33128, Certificate(s) of Insurance which indicate that insurance coverage has been obtained which meets the requirements as outlined below:

A. Worker's Compensation Insurance for all employees of the vendor as required by Florida Statute 440.

B. Public Liability Insurance on a comprehensive basis in an amount not less than **$300,000** combined single limit per occurrence for bodily injury and property damage. **Miami-Dade County must be shown as an additional insured with respect to this coverage.**

C. Automobile Liability Insurance covering all owned, non-owned, and hired vehicles used in connection with the work, in an amount not less than **$300,000** combined single limit per occurrence for bodily injury and property damage.

D. Professional Liability Insurance in an amount not less than **$250,000** with a deductible per claim not to exceed ten percent **(10%)** of the limit of liability.

All insurance policies required above shall be issued by companies authorized to do business under the laws of the State of Florida, with the following qualifications:

The company must be rated no less than "B" as to management, and no less than "Class V" as to financial strength, by the latest edition of Best's Insurance Guide, published by A.M. Best Company, Oldwick, New Jersey, or its equivalent, subject to the approval of the County Risk Management Division.

or

The company must hold a valid Florida Certificate of Authority as shown in the latest "List of All Insurance Companies Authorized or Approved to Do Business in Florida" issued by the State of Florida Department of Insurance and are members of the Florida Guaranty Fund.

Certificates will indicate that no modification or change in insurance shall be made without thirty (30) days notice in advance to the certificate holder.

NOTE: DADE COUNTY BID NUMBER AND TITLE OF PROPOSAL MUST APPEAR ON EACH CERTIFICATE.

CERTIFICATE HOLDER MUST READ:

MIAMI-DADE COUNTY
111 NW 1st STREET
SUITE 2340
MIAMI, FL 33128

NOTE: MIAMI-DADE COUNTY CONTRACT NUMBER AND TITLE MUST APPEAR ON EACH CERTIFICATE OF INSURANCE.

Compliance with the foregoing requirements shall not relieve the Contractor of this liability and obligation under this section or under any other section in this Agreement.

Award of this Contract is contingent upon the receipt of the insurance documents, as required, within fifteen (15) calendar days after County notification to Contractor to comply before the award is made. If the insurance certificate is received within the specified time frame but not in the manner prescribed in this Agreement, the Contractor shall be verbally notified of such deficiency and shall have an additional five (5) calendar days to submit a corrected certificate to the County. If the Contractor fails to submit the required insurance documents in the manner prescribed in this Agreement within twenty (20) calendar days after County notification to comply, the Contractor shall be in default of the contractual terms and conditions and award of the Contract will be rescinded, unless such time frame for submission has been extended by the County.

The Contractor shall be responsible for assuring that the insurance certificates required

in conjunction with this Section remain in force for the duration of the contractual period of the Contract, including any and all option years or extension periods that may be granted by the County. If insurance certificates are scheduled to expire during the contractual period, the Contractor shall be responsible for submitting new or renewed insurance certificates to the County at a minimum of thirty (30) calendar days in advance of such expiration. In the event that expired certificates are not replaced with new or renewed certificates which cover the contractual period, the County shall suspend the Contract until such time as the new or renewed certificates are received by the County in the manner prescribed herein; provided, however, that this suspended period does not exceed thirty (30) calendar days. Thereafter, the County may, at its sole discretion, terminate this contract.

ARTICLE 11 - MANNER OF PERFORMANCE

a) The Contractor shall provide the Services described herein in a competent and professional manner satisfactory to the County in accordance with the terms and conditions of this Agreement. The County shall be entitled to a satisfactory performance of all Services described herein and to full and prompt cooperation by the Contractor in all aspects of the Services. At the request of the County the Contractor shall promptly remove from the project any Contractor's employee, subcontractor, or any other person performing Services hereunder. The Contractor agrees that such removal of any of its employees does not require the termination or demotion of any employee by the Contractor.

b) The Contractor agrees to defend, hold harmless and indemnify the County and shall be liable and responsible for any and all claims, suits, actions, damages and costs (including attorney's fees and court costs) made against the County, occurring on account of, arising from or in connection with the removal and replacement of any Contractor's personnel performing services hereunder at the behest of the County. Removal and replacement of any Contractor's personnel as used in this Article shall not require the termination and or demotion of such Contractor's personnel.

c) The Contractor agrees that at all times it will employ, maintain and assign to the performance of the Services a sufficient number of competent and qualified professionals and other personnel to meet the requirements to which reference is hereinafter made. The Contractor agrees to adjust its personnel staffing levels or to replace any its personnel if so directed upon reasonable request from the County, should the County make a determination, in its sole discretion, that said personnel staffing is inappropriate or that any individual is not performing in a manner consistent with the requirements for such a position.

d) The Contractor warrants and represents that its personnel have the proper skill, training, background, knowledge, experience, rights, authorizations, integrity, character and licenses as necessary to perform the Services described herein, in a competent and professional manner.

e) The Contractor shall at all times cooperate with the County and coordinate its respective work efforts in accordance with the Project Work Plan to maintain the progress in performing the Services.

f) The Contractor shall comply with all provisions of all federal, state and local laws,

statutes, ordinances, and regulations that are applicable to the performance of this Agreement.

ARTICLE 12 - EMPLOYEES ARE THE RESPONSIBILITY OF THE CONTRACTOR

All employees of the Contractor shall be considered to be, at all times, employees of the Contractor under its sole direction, and not employees or agents of the County. The Contractor shall supply competent employees. Miami-Dade County may require the Contractor to remove an employee it deems careless, incompetent, insubordinate or otherwise objectionable and whose continued employment on County property is not in the best interest of the County. Each employee shall have and wear proper identification.

ARTICLE 13 - INDEPENDENT CONTRACTOR RELATIONSHIP

The Contractor is, and shall be, in the performance of all work services and activities under this Agreement, an independent contractor, and not an employee, agent or servant of the County. All persons engaged in any of the work or services performed pursuant to this Agreement shall at all times, and in all places, be subject to the Contractor's sole direction, supervision and control. The Contractor shall exercise control over the means and manner in which it and its employees perform the work, and in all respects the Contractor's relationship and the relationship of its employees to the County shall be that of an independent contractor and not as employees and agents of the County.

The Contractor does not have the power or authority to bind the County in any promise, agreement or representation other than specifically provided for in this Agreement.

ARTICLE 14 - AUTHORITY OF THE COUNTY'S PROJECT MANAGER

a) The Contractor hereby acknowledges that the County's Project Manager will determine in the first instance all questions of any nature whatsoever arising out of, under, or in connection with, or in any way related to or on account of, this Agreement including without limitations: questions as to the value, acceptability and fitness of the Services; questions as to either party's fulfillment of its obligations under the Contract; negligence, fraud or misrepresentation before or subsequent to acceptance of the Proposal; questions as to the interpretation of the Scope of Services; and claims for damages, compensation and losses.

b) The Contractor shall be bound by all determinations or orders and shall promptly obey and follow every order of the Project Manager, including the withdrawal or modification of any previous order and regardless of whether the Contractor agrees with the Project Manager's determination or order. Where orders are given orally, they will be issued in writing by the Project Manager as soon thereafter as is practicable.

c) The Contractor must, in the final instance, seek to resolve every difference concerning the Agreement with the Project Manager. In the event that the Contractor and the Project Manager are unable to resolve their difference, the Contractor may initiate a dispute in accordance with the procedures set forth in this Article. Exhaustion of these procedures shall be a condition precedent to

any lawsuit permitted hereunder.

d) In the event of such dispute, the parties to this Agreement authorize the County Manager or designee, who may not be the Project Manager or anyone associated with this Project, acting personally, to decide all questions arising out of, under, or in connection with, or in any way related to or on account of the Agreement (including but not limited to claims in the nature of breach of contract, fraud or misrepresentation arising either before or subsequent to execution hereof) and the decision of each with respect to matters within the County Manager's purview as set forth above shall be conclusive, final and binding on parties. Any such dispute shall be brought, if at all, before the County Manager within 10 days of the occurrence, event or act out of which the dispute arises.

e) The County Manager may base this decision on such assistance as may be desirable, including advice of experts, but in any event shall base the decision on an independent and objective determination of whether Contractor's performance or any Deliverable meets the requirements of this Agreement and any specifications with respect thereto set forth herein. The effect of any decision shall not be impaired or waived by any negotiations or settlements or offers made in connection with the dispute, whether or not the County Manager participated therein, or by any prior decision of others, which prior decision shall be deemed subject to review, or by any termination or cancellation of the Agreement. All such disputes shall be submitted in writing by the Contractor to the County Manager for a decision, together with all evidence and other pertinent information in regard to such questions, in order that a fair and impartial decision may be made. Whenever the County Manager is entitled to exercise discretion or judgment or to make a determination or form an opinion pursuant to the provisions of this Article, such action shall be fair and impartial when exercised or taken. The County Manager, as appropriate, shall render a decision in writing and deliver a copy of the same to the Contractor. Except as such remedies may be limited or waived elsewhere in the Agreement, Contractor reserves the right to pursue any remedies available under law after exhausting the provisions of this Article.

ARTICLE 15 - MUTUAL OBLIGATIONS

a) This Agreement, including attachments and appendixes to the Agreement, shall constitute the entire Agreement between the parties with respect hereto and supersedes all previous communications and representations or agreements, whether written or oral, with respect to the subject matter hereto unless acknowledged in writing by the duly authorized representatives of both parties.

b) Nothing in this Agreement shall be construed for the benefit, intended or otherwise, of any third party that is not a parent or subsidiary of a party or otherwise related (by virtue of ownership control or statutory control) to a party.

c) In those situations where this Agreement imposes an indemnity obligation on the Contractor, the County may, at its expense, elect to participate in the defense if the County should so choose. Furthermore, the County may at its own expense defend or settle any such claims if the Contractor fails to diligently defend such claims, and thereafter seek indemnity for costs from the Contractor.

ARTICLE 16 - QUALITY ASSURANCE/QUALITY ASSURANCE RECORD KEEPING

The Contractor shall maintain, and shall require that its subcontractors and suppliers maintain, complete and accurate records to substantiate compliance with the requirements set forth in the Scope of Services. The Contractor and its subcontractors and suppliers, shall retain such records, and all other documents relevant to the Services furnished under this Agreement for a period of three (3) years from the expiration date of this Agreement and any extension thereof.

ARTICLE 17 - AUDITS

The Contractor agrees that the County or its duly authorized representatives or governmental agencies shall, until the expiration of three (3) years after the expiration of this Agreement and any extension thereof, have access to and the right to examine and reproduce any of the Contractor's books, documents, papers and records and of its subcontractors and suppliers which apply to all matters of the County. Such records shall subsequently conform to Generally Accepted Accounting Principles requirements, and shall only address those transactions related to this Agreement.

The Contractor agrees to maintain an accounting system that provides accounting records that are supported with adequate documentation, and adequate procedures for determining the allowability and allocability of costs.

ARTICLE 18 - SUBSTITUTION OF PERSONNEL

In the event the Contractor wishes to substitute personnel for the key personnel identified by the Contractor's Proposal, the Contractor must notify the County in writing and request written approval for the substitution at least ten (10) business days prior to effecting such substitution.

ARTICLE 19 - CONSENT OF THE COUNTY REQUIRED FOR ASSIGNMENT

The Contractor shall not assign, transfer, convey or otherwise dispose of this Agreement, including its rights, title or interest in or to the same or any part thereof without the prior written consent of the County.

ARTICLE 20 - SUBCONTRACTUAL RELATIONS

a) If the Contractor will cause any part of this Agreement to be performed by a Subcontractor, the provisions of this Contract will apply to such Subcontractor and its officers, agents and employees in all respects as if it and they were employees of the Contractor; and the Contractor will not be in any manner thereby discharged from its obligations and liabilities hereunder, but will be liable hereunder for all acts and negligence of the Subcontractor, its officers, agents, and employees, as if they were employees of the Contractor. The services performed by the Subcontractor will be subject to the provisions hereof as if performed directly by the Contractor.

b) The Contractor, before making any subcontract for any portion of the services, will state in writing to the County the name of the proposed Subcontractor, the portion of the Services which the Subcontractor is to do, the place of business of such Subcontractor, and such other information as the County may require. The County will have the right to require the Contractor not to award any subcontract to a person, firm or corporation disapproved by the County.

c) Before entering into any subcontract hereunder, the Contractor will inform the Subcontractor fully and completely of all provisions and requirements of this Agreement relating either directly or indirectly to the Services to be performed. Such Services performed by such Subcontractor will strictly comply with the requirements of this Contract.

d) In order to qualify as a Subcontractor satisfactory to the County, in addition to the other requirements herein provided, the Subcontractor must be prepared to prove to the satisfaction of the County that it has the necessary facilities, skill and experience, and ample financial resources to perform the Services in a satisfactory manner. To be considered skilled and experienced, the Subcontractor must show to the satisfaction of the County that it has satisfactorily performed services of the same general type which is required to be performed under this Agreement.

e) The County shall have the right to withdraw its consent to a subcontract if it appears to the County that the subcontract will delay, prevent, or otherwise impair the performance of the Contractor's obligations under this Agreement. All Subcontractors are required to protect the confidentiality of the County's and County's proprietary and confidential information. Contractor shall furnish to the County copies of all subcontracts between Contractor and Subcontractors and suppliers hereunder. Within each such subcontract, there shall be a clause for the benefit of the County permitting the County to request completion of performance by the Subcontractor of its obligations under the subcontract, in the event the County finds the Contractor in breach of its obligations, the option to pay the Subcontractor directly for the performance by such subcontractor. Notwithstanding, the foregoing shall neither convey nor imply any obligation or liability on the part of the County to any subcontractor hereunder as more fully described herein.

ARTICLE 21 - ASSUMPTION, PARAMETERS, PROJECTIONS, ESTIMATES AND EXPLANATIONS

The Contractor understands and agrees that any assumptions, parameters, projections, estimates and explanations presented by the County were provided to the Contractor for evaluation purposes only. However, since these assumptions, parameters, projections, estimates and explanations represent predictions of future events the County makes no representations or guarantees; and the County shall not be responsible for the accuracy of the assumptions presented; and the County shall not be responsible for conclusions to be drawn therefrom; and any assumptions, parameters, projections, estimates and explanations shall not form the basis of any claim by the Contractor. The Contractor accepts all risk associated with using this information.

ARTICLE 22 - SEVERABILITY

If this Agreement contains any provision found to be unlawful, the same shall be deemed to be of no effect and shall be deemed stricken from this Agreement without affecting the binding force of this Agreement as it shall remain after omitting such provision.

ARTICLE 23 - TERMINATION FOR CONVENIENCE AND SUSPENSION OF WORK

a) The County may terminate this Agreement if an individual or corporation or other entity attempts to meet its contractual obligation with the County through fraud, misrepresentation or material misstatement.

b) The County may, as a further sanction, terminate or cancel any other contract(s) that such individual or corporation or other entity has with the County and that such individual, corporation or other entity shall be responsible for all direct and indirect costs associated with such termination or cancellation, including attorney's fees.

c) The foregoing notwithstanding, any individual, corporation or other entity which attempts to meet its contractual obligations with the County through fraud, misrepresentation or material misstatement may be debarred from County contracting for up to five (5) years in accordance with the County debarment procedures. The Contractor may be subject to debarment for failure to perform and all other reasons set forth in Section 10-38 of the County Code.

In addition to cancellation or termination as otherwise provided in this Agreement, the County may at any time, in its sole discretion, with or without cause, terminate this Agreement by written notice to the Contractor and in such event:

d) The Contractor shall, upon receipt of such notice, unless otherwise directed by the County:

i) stop work on the date specified in the notice ("the Effective Termination Date");

ii) take such action as may be necessary for the protection and preservation of the County's materials and property;

iii) cancel orders;

iv) assign to the County and deliver to any location designated by the County any noncancelable orders for Deliverables that are not capable of use except in the performance of this Agreement and has been specifically developed for the sole purpose of this Agreement and not incorporated in the Services;

v) take no action which will increase the amounts payable by the County under this Agreement; and

e) **In the event that the County exercises its right to terminate this Agreement pursuant to this Article the Contractor will be compensated as stated in the payment Articles, herein, for the:**

i) portion of the Services completed in accordance with the Agreement and the Work Order up to the Effective Termination Date; and

ii) noncancelable Deliverables that are not capable of use except in the performance of this Agreement and Work Order and has been specifically developed for the sole purpose of this Agreement Work Order but not incorporated in the Services.

f) All compensation pursuant to this Article are subject to audit.

ARTICLE 24 - EVENT OF DEFAULT

a) An Event of Default shall mean a breach of this Agreement by the Contractor. Without limiting the generality of the foregoing and in addition to those instances referred to herein as a breach, an Event of Default, shall include the following:

i. the Contractor has not delivered Deliverables on a timely basis.

ii. the Contractor has refused or failed, except in case for which an extension of time is provided, to supply enough properly skilled staff Personnel;

iii. the Contractor has failed to make prompt payment to subcontractors or suppliers for any Services;

iv. the Contractor has become insolvent (other than as interdicted by the bankruptcy laws), or has assigned the proceeds received for the benefit of the Contractor's creditors, or the Contractor has taken advantage of any insolvency statute or debtor/creditor law or if the Contractor's affairs have been put in the hands of a receiver;

v. the Contractor has failed to obtain the approval of the County where required by this Agreement;

vi. the Contractor has failed to provide "adequate assurances" as required under subsection "b)" below;

vii. the Contractor has failed in the representation of any warranties stated herein.

b) When, in the opinion of the County, reasonable grounds for uncertainty exist with respect to the Contractor's ability to perform the Services or any portion thereof, the County may request that the Contractor, within the time frame set forth in the County's request, provide adequate assurances to the County, in writing, of the Contractor's ability to perform in accordance with terms of this Agreement. Until the County receives such assurances the County may request an adjustment to the compensation received by the Contractor for portions of the Services which the Contractor has not performed. In the event that the Contractor fails to

provide to the County the requested assurances within the prescribed time frame, the County may:

i. treat such failure as a repudiation of this Agreement;

ii. resort to any remedy for breach provided herein or at law, including but not limited to, taking over the performance of the Services or any part thereof either by itself or through others.

c) In the event the County shall terminate this Agreement for default, the County or its designated representatives, may immediately take possession of all applicable equipment, materials, products, documentation, reports and data.

ARTICLE 25 - NOTICE OF DEFAULT - OPPORTUNITY TO CURE /TERMINATION

If an Event of Default occurs, in the determination of the County, the County may so notify the Contractor ("Default Notice"), specifying the basis for such default, and advising the Contractor that such default must be cured immediately or this Agreement with the County may be terminated. Notwithstanding, the County may, in its sole discretion, allow the Contractor to rectify the default to the County's reasonable satisfaction within a thirty (30) day period. The County may grant an additional period of such duration as the County shall deem appropriate without waiver of any of the County's rights hereunder, so long as the Contractor has commenced curing such default and is effectuating a cure with diligence and continuity during such thirty (30) day period or any other period which the County prescribes. The default notice shall specify the date the Contractor shall discontinue the Services upon the Termination Date.

ARTICLE 26 - REMEDIES IN THE EVENT OF DEFAULT

If an Event of Default occurs, the Contractor shall be liable for all damages resulting from the default, including but not limited to:

a) lost revenues;

b) the difference between the cost associated with procuring Services hereunder and the amount actually expended by the County for reprocurement of Services, including procurement and administrative costs; and,

c) such other direct damages.

The Contractor shall also remain liable for any liabilities and claims related to the Contractor's default.

The County may also bring any suit or proceeding for specific performance or for an injunction.

ARTICLE 27 - PATENT AND COPYRIGHT INDEMNIFICATION

a) The Contractor warrants that all Deliverables furnished hereunder, including but not limited to: equipment programs, documentation, software, analyses,

applications, methods, ways, processes, and the like, do not infringe upon or violate any patent, copyrights, service marks, trade secret, or any other third party proprietary rights.

b) The Contractor shall be liable and responsible for any and all claims made against the County for infringement of patents, copyrights, service marks, trade secrets or any other third party proprietary rights, by the use or supplying of any programs, documentation, software, analyses, applications, methods, ways, processes, and the like, in the course of performance or completion of, or in any way connected with, the Work, or the County's continued use of the Deliverables furnished hereunder. Accordingly, the Contractor at its own expense, including the payment of attorney's fees, shall indemnify, and hold harmless the County and defend any action brought against the County with respect to any claim, demand, cause of action, debt, or liability.

c) In the event any Deliverable or anything provided to the County hereunder, or portion thereof is held to constitute an infringement and its use is or may be enjoined, the Contractor shall have the obligation to, at the County's option to (i) modify, or require that the applicable subcontractor or supplier modify, the alleged infringing item(s) at its own expense, without impairing in any respect the functionality or performance of the item(s), or (ii) procure for the County, at the Contractor's expense, the rights provided under this Agreement to use the item(s).

d) The Contractor shall be solely responsible for determining and informing the County whether a prospective supplier or subcontractor is a party to any litigation involving patent or copyright infringement, service mark, trademark, violation, or proprietary rights claims or is subject to any injunction which may prohibit it from providing any Deliverable hereunder. The Contractor shall enter into agreements with all suppliers and subcontractors at the Contractor's own risk. The County may reject any Deliverable that it believes to be the subject of any such litigation or injunction, or if, in the County's judgment, use thereof would delay the Work or be unlawful.

e) The Contractor shall not infringe any copyright, trademark, service mark, trade secrets, patent rights, or other intellectual property rights in the performance of the Work.

ARTICLE 28 - CONFIDENTIALITY

a) All Developed Works and other materials, data, transactions of all forms, financial information, documentation, inventions, designs and methods obtained from the County in connection with the Services performed under this Agreement, made or developed by the Contractor or its subcontractors in the course of the performance of such Services, or the results of such Services, or which the County holds the proprietary rights, constitute Confidential Information and may not, without the prior written consent of the County, be used by the Contractor or its employees, agents, subcontractors or suppliers for any purpose other than for the benefit of the County, unless required by law. In addition to the foregoing, all County employee information and County financial information shall be

considered confidential information and shall be subject to all the requirements stated herein. Neither the Contractor nor its employees, agents, subcontractors or suppliers may sell, transfer, publish, disclose, display, license or otherwise make available to others any part of such Confidential Information without the prior written consent of the County. Additionally, the Contractor expressly agrees to be bound by and to defend, indemnify and hold harmless the County, and their officers and employees from the breach of any federal, state or local law in regard to the privacy of individuals.

b) The Contractor shall advise each of its employees, agents, subcontractors and suppliers who may be exposed to such Confidential Information of their obligation to keep such information confidential and shall promptly advise the County in writing if it learns of any unauthorized use or disclosure of the Confidential Information by any of its employees or agents, or subcontractor's or supplier's employees, present or former. In addition, the Contractor agrees to cooperate fully and provide any assistance necessary to ensure the confidentiality of the Confidential Information.

c) It is understood and agreed that in the event of a breach of this Article damages may not be an adequate remedy and the County shall be entitled to injunctive relief to restrain any such breach or threatened breach. Unless otherwise requested by the County, upon the completion of the Services performed hereunder, the Contractor shall immediately turn over to the County all such Confidential Information existing in tangible form, and no copies thereof shall be retained by the Contractor or its employees, agents, subcontractors or suppliers without the prior written consent of the County. A certificate evidencing compliance with this provision and signed by an officer of the Contractor shall accompany such materials.

ARTICLE 29 - PROPRIETARY INFORMATION

As a political subdivision of the State of Florida, Miami-Dade County is subject to the stipulations of Florida's Public Records Law.

The Contractor acknowledges that all computer software in the County's possession may constitute or contain information or materials which the County has agreed to protect as proprietary information from disclosure or unauthorized use and may also constitute or contain information or materials which the County has developed at its own expense, the disclosure of which could harm the County's proprietary interest therein.

During the term of the contract, the Contractor will not use, directly or indirectly, for itself or for others, or publish or disclose to any third party, or remove from the County's property, any computer programs, data compilations, or other software which the County has developed, has used or is using, is holding for use, or which are otherwise in the possession of the County (hereinafter "Computer Software"). All third-party license agreements must also be honored by the Contractor and its employees, except as authorized by the County and, if the Computer Software has been leased or purchased by the County, all hired party license agreements must also be honored by the Contractors' employees with the approval of the lessor or Contractors thereof. This

includes mainframe, minis, telecommunications, personal computers and any and all information technology software.

The Contractor will report to the County any information discovered or which is disclosed to the Contractor which may relate to the improper use, publication, disclosure or removal from the County's property of any information technology software and hardware and will take such steps as are within the Contractor's authority to prevent improper use, disclosure or removal.

ARTICLE 30 - PROPRIETARY RIGHTS

Nothing in this Article, however, shall limit or waive the scope of Chapter 119, Florida Statutes.

a) The Contractor hereby acknowledges and agrees that the County retains all rights, title and interests in and to all materials, data, documentation and copies thereof furnished by the County to the Contractor hereunder or furnished by the Contractor to the County and/or created by the Contractor for delivery to the County, even if unfinished or in process, as a result of the Services the Contractor performs in connection with this Agreement, including all copyright and other proprietary rights therein, which the Contractor as well as its employees, agents, subcontractors and suppliers may use only in connection of the performance of Services under this Agreement. The Contractor shall not, without the prior written consent of the County, use such documentation on any other project in which the Contractor or its employees, agents, subcontractors or suppliers are or may become engaged. Submission or distribution by the Contractor to meet official regulatory requirements or for other purposes in connection with the performance of Services under this Agreement shall not be construed as publication in derogation of the County's copyrights or other proprietary rights.

b) All rights, title and interest in and to certain inventions, ideas, designs and methods, specifications and other documentation related thereto developed by the Contractor and its subcontractors specifically for the County, hereinafter referred to as "Developed Works" shall become the property of the County.

c) Accordingly, neither the Contractor nor its employees, agents, subcontractors or suppliers shall have any proprietary interest in such Developed Works. The Developed Works may not be utilized, reproduced or distributed by or on behalf of the Contractor, or any employee, agent, subcontractor or supplier thereof, without the prior written consent of the County, except as required for the Contractor's performance hereunder.

d) Except as otherwise provided in subsections a, b, and c above, or elsewhere herein, the Contractor and its subcontractors and suppliers hereunder shall retain all proprietary rights in and to all Licensed Software provided hereunder, that have not been customized to satisfy the performance criteria set forth in the Scope of Services. Notwithstanding the foregoing, the Contractor hereby grants, and shall require that its subcontractors and suppliers grant, if the County so desires, a perpetual, irrevocable and unrestricted right and license to use,

duplicate, disclose and/or permit any other person(s) or entity(ies) to use all such Licensed Software and the associated specifications, technical data and other Documentation for the operations of the County or entities controlling, controlled by, under common control with, or affiliated with the County, or organizations which may hereafter be formed by or become affiliated with the County. Such license specifically includes, but is not limited to, the right of the County to use and/or disclose, in whole or in part, the technical documentation and Licensed Software, including source code provided hereunder, to any person or entity outside the County for such person's or entity's use in furnishing any and/or all of the Deliverables provided hereunder exclusively for the County or entities controlling, controlled by, under common control with, or affiliated with the County, or organizations which may hereafter be formed by or become affiliated with the County. No such Licensed Software, specifications, data, documentation or related information shall be deemed to have been given in confidence and any statement or legend to the contrary shall be void and of no effect.

ARTICLE 31 - BUSINESS APPLICATION AND FORMS

Business Application The Contractor shall be a registered vendor with the County – Department of Procurement Management, for the duration of this Agreement. It is the responsibility of the Contractor to file the appropriate Vendor application and to update the application file for any changes for the duration of this Agreement, including any option years.

Section 2-11.1(d) of Miami-Dade County Code as amended by Ordinance 00-1, requires any county employee or any member of the employee's immediate family who has a controlling financial interest, direct or indirect, with Miami-Dade County or any person or agency acting for Miami-Dade County from competing or applying for any such contract as it pertains to this solicitation, must first request a conflict of interest opinion from the County's Ethic Commission prior to their or their immediate family member's entering into any contract or transacting any business through a firm, corporation, partnership or business entity in which the employee or any member of the employee's immediate family has a controlling financial interest, direct or indirect, with Miami-Dade County or any person or agency acting for Miami-Dade County and that any such contract, agreement or business engagement entered in violation of this subsection, as amended, shall render this Agreement voidable. For additional information, please contact the Ethics Commission hotline at (305) 579-2593.

ARTICLE 32 - INSPECTOR GENERAL REVIEWS

Independent Private Sector Inspector General Reviews

Pursuant to Miami-Dade County Administrative Order 3-20, the County has the right to retain the services of an Independent Private Sector Inspector General (hereinafter "IPSIG"), whenever the County deems it appropriate to do so. Upon written notice from the County, the Contractor shall make available to the IPSIG retained by the County, all requested records and documentation pertaining to this Agreement for inspection and reproduction. The County shall be responsible for the payment of these IPSIG services,

and under no circumstance shall the Contractor's prices and any changes thereto approved by the County, be inclusive of any charges relating to these IPSIG services. The terms of this provision herein, apply to the Contractor, its officers, agents, employees, subcontractors and assignees. Nothing contained in this provision shall impair any independent right of the County to conduct an audit or investigate the operations, activities and performance of the Contractor in connection with this Agreement. The terms of this Article shall not impose any liability on the County by the Contractor or any third party.

Miami-Dade County Inspector General Review

According to Section 2-1076 of the Code of Miami-Dade County, as amended by Ordinance No. 99-63, Miami-Dade County has established the Office of the Inspector General which may, on a random basis, perform audits on all County contracts, throughout the duration of said contracts, except as otherwise provided below. The cost of the audit for this Contract shall be one quarter (1/4) of one (1) percent of the total contract amount which cost shall be included in the total contract amount. The audit cost will be deducted by the County from progress payments to the Contractor. The audit cost shall also be included in all change orders and all contract renewals and extensions.

Exception: The above application of one quarter (1/4) of one percent fee assessment shall not apply to the following contracts: (a) IPSIG contracts; (b) contracts for legal services; (c) contracts for financial advisory services; (d) auditing contracts; (e) facility rentals and lease agreements; (f) concessions and other rental agreements; (g) insurance contracts; (h) revenue-generating contracts; (I) contracts where an IPSIG is assigned at the time the contract is approved by the Commission; (j) professional service agreements under $1,000; (k) management agreements; (l) small purchase orders as defined in Miami-Dade County Administrative Order 3-2; (m) federal, state and local government-funded grants; and (n) interlocal agreements. ***Notwithstanding the foregoing, the Miami-Dade County Board of County Commissioners may authorize the inclusion of the fee assessment of one quarter (1/4) of one percent in any exempted contract at the time of award.***

Nothing contained above shall in any way limit the powers of the Inspector General to perform audits on all County contracts including, but not limited to, those contracts specifically exempted above. The Miami-Dade County Inspector General is authorized and empowered to review past, present and proposed County and Public Health Trust contracts, transactions, accounts, records and programs. In addition, the Inspector General has the power to subpoena witnesses, administer oaths, require the production of records and monitor existing projects and programs. Monitoring of an existing project or program may include a report concerning whether the project is on time, within budget and in conformance with plans, specifications and applicable law. The Inspector General is empowered to analyze the necessity of and reasonableness of proposed change orders to the Contract. The Inspector General is empowered to retain the services of independent private sector inspectors general (IPSIG) to audit, investigate, monitor, oversee, inspect and review operations, activities, performance and procurement process, including but not limited to project design, specifications, proposal submittals, activities of the Contractor, its officers, agents and employees, lobbyists, County staff and elected officials to ensure compliance with contract specifications and to detect fraud and corruption.

27

Upon written notice to the Contractor from the Inspector General or IPSIG retained by the Inspector General, the Contractor shall make all requested records and documents available to the Inspector General or IPSIG for inspection and copying. The Inspector General and IPSIG shall have the right to inspect and copy all documents and records in the Contractor's possession, custody or control which, in the Inspector General's or IPSIG's sole judgment, pertain to performance of the contract, including, but not limited to original estimate files, change order estimate files, worksheets, proposals and agreements form and which successful and unsuccessful subcontractors and suppliers, all project-related correspondence, memoranda, instructions, financial documents, construction documents, proposal and contract documents, back-charge documents, all documents and records which involve cash, trade or volume discounts, insurance proceeds, rebates, or dividends received, payroll and personnel records, and supporting documentation for the aforesaid documents and records.

ARTICLE 33 - LOCAL, STATE, AND FEDERAL COMPLIANCE REQUIREMENTS

Contractor agrees to comply, subject to applicable professional standards, with the provisions of any and all applicable Federal, State and the County orders, statutes, ordinances, rules and regulations which may pertain to the Services required under this Agreement, including but not limited to:

a) Equal Employment Opportunity (EEO), in compliance with Executive Order 11246 as amended and applicable to this Contract.

b) Miami-Dade County Florida, Department of Business Development Participation Provisions, as applicable to this Contract.

c) Environmental Protection Agency (EPA), as applicable to this Contract.

d) Miami-Dade County Code, Chapter 11A, Article 3. All contractors and subcontractors performing work in connection with this Contract shall provide equal opportunity for employment because of race, religion, color, age, sex, national origin, sexual preference, disability or marital status. The aforesaid provision shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous place available for employees and applicants for employment, such notices as may be required by the Dade County Fair Housing and Employment Commission, or other authority having jurisdiction over the work setting forth the provisions of the nondiscrimination law.

e) "Conflicts of Interest" Section 2-11 of the County Code, and Ordinance 01-199.

f) Miami-Dade County Code Section 10-38 "Debarment".

g) Miami-Dade County Ordinance 99-5, codified at 11A-60 et. seq. of Miami-Dade Code pertaining to complying with the County's Domestic Leave Ordinance.

h) Miami-Dade County Ordinance 99-152, prohibiting the presentation, maintenance, or prosecution of false or fraudulent claims against Miami-Dade County.

Notwithstanding any other provision of this Agreement, Contractor shall not be required pursuant to this Agreement to take any action or abstain from taking any action if such action or abstention would, in the good faith determination of the Contractor, constitute a violation of any law or regulation to which Contractor is subject, including but not limited to laws and regulations requiring that Contractor conduct its operations in a safe and sound manner.

ARTICLE 34 - NONDISCRIMINATION

During the performance of this Contract, Contractor agrees to: not discriminate against any employee or applicant for employment because of race, religion, color, sex, handicap, marital status, age or national origin, and will take affirmative action to ensure that they are afforded equal employment opportunities without discrimination. Such action shall be taken with reference to, but not limited to: recruitment, employment, termination, rates of pay or other forms of compensation, and selection for training or retraining, including apprenticeship and on the job training.

By entering into this Contract with the County, the Contractor attests that it is not in violation of the Americans with Disabilities Act of 1990 (and related Acts) or Miami-Dade County Resolution No. R-385-95. If the Contractor or any owner, subsidiary or other firm affiliated with or related to the Contractor is found by the responsible enforcement agency or the County to be in violation of the Act or the Resolution, such violation shall render this Contract void. This Contract shall be void if the Contractor submits a false affidavit pursuant to this Resolution or the Contractor violates the Act or the Resolution during the term of this Contract, even if the Contractor was not in violation at the time it submitted its affidavit.

ARTICLE 35 - CONFLICT OF INTEREST

The Contractor represents that:

a) No officer, director, employee, agent, or other consultant of the County or a member of the immediate family or household of the aforesaid has directly or indirectly received or been promised any form of benefit, payment or compensation, whether tangible or intangible, in connection with the grant of this Agreement.

b) There are no undisclosed persons or entities interested with the Contractor in this Agreement. This Agreement is entered into by the Contractor without any connection with any other entity or person making a proposal for the same purpose, and without collusion, fraud or conflict of interest. No elected or appointed officer or official, director, employee, agent or other consultant of the County, or of the State of Florida (including elected and appointed members of the legislative and executive branches of government), or a member of the immediate family or household of any of the aforesaid:

   i) is interested on behalf of or through the Contractor directly or indirectly in any manner whatsoever in the execution or the performance of this Agreement, or in the services, supplies or work, to which this Agreement relates or in any

portion of the revenues; or

ii) is an employee, agent, advisor, or consultant to the Contractor or to the best of the Contractor's knowledge any subcontractor or supplier to the Contractor.

c) Neither the Contractor nor any officer, director, employee, agency, parent, subsidiary, or affiliate of the Contractor shall have an interest which is in conflict with the Contractor's faithful performance of its obligation under this Agreement; provided that the County, in its sole discretion, may consent in writing to such a relationship, provided the Contractor provides the County with a written notice, in advance, which identifies all the individuals and entities involved and sets forth in detail the nature of the relationship and why it is in the County's best interest to consent to such relationship.

d) The provisions of this Article are supplemental to, not in lieu of, all applicable laws with respect to conflict of interest. In the event there is a difference between the standards applicable under this Agreement and those provided by statute, the stricter standard shall apply.

e) In the event Contractor has no prior knowledge of a conflict of interest as set forth above and acquires information which may indicate that there may be an actual or apparent violation of any of the above, Contractor shall promptly bring such information to the attention of the County's Project Manager. Contractor shall thereafter cooperate with the County's review and investigation of such information, and comply with the instructions Contractor receives from the Project Manager in regard to remedying the situation.

ARTICLE 36 - PRESS RELEASE OR OTHER PUBLIC COMMUNICATION

Under no circumstances shall the Contractor without the express written consent of the County:

a) Issue or permit to be issued any press release, advertisement or literature of any kind which refers to the County, or the Work being performed hereunder, unless the Contractor first obtains the written approval of the County. Such approval may be withheld if for any reason the County believes that the publication of such information would be harmful to the public interest or is in any way undesirable; and

b) Communicate in any way with any contractor, department, board, agency, commission or other organization or any person whether governmental or private in connection with the Services to be performed hereunder except upon prior written approval and instruction of the County; and

c) Except as may be required by law, the Contractor and its employees, agents, subcontractors and suppliers will not represent, directly or indirectly, that any product or service provided by the Contractor or such parties has been approved or endorsed by the County.

ARTICLE 37 - BANKRUPTCY

The County reserves the right to terminate this contract, if, during the term of any contract the Contractor has with the County, the Contractor becomes involved as a debtor in a bankruptcy proceeding, or becomes involved in a reorganization, dissolution, or liquidation proceeding, or if a trustee or receiver is appointed over all or a substantial portion of the property of the Contractor under federal bankruptcy law or any state insolvency law.

ARTICLE 38 - GOVERNING LAW

This Contract, including appendices, and all matters relating to this Contract (whether in contract, statute, tort (such as negligence), or otherwise) shall be governed by, and construed in accordance with, the laws of the State of Florida.

ARTICLE 39 - COUNTY USER ACCESS PROGRAM (UAP)

A. User Access Fee

Pursuant to Miami-Dade County Budget Ordinance No. 03-192, this Contract is subject to a user access fee under the County User Access Program (UAP) in the amount of two percent (2%). All sales resulting from this Contract, or any contract resulting from this solicitation and the utilization of the County contract price and the terms and conditions identified herein, are subject to the two percent (2%) UAP fee. This fee applies to all contract usage whether by County Departments or by any other governmental, quasi-governmental or not-for-profit entity.

The Contractor providing goods or services under this Contract shall invoice the contract price and shall accept as payment thereof the contract price less the 2% UAP as full and complete payment for the goods and/or services specified on the invoice. The County shall retain the 2% UAP for use by the County to help defray the cost of the procurement program. Vendor participation in this invoice reduction portion of the UAP is mandatory.

B. Joint Purchase

Only those entities that have been approved by the County for participation in the County's Joint Purchase and Entity Revenue Sharing Agreement are eligible to utilize or receive County contract pricing and terms and conditions. The County will provide to approved entities a UAP Participant Validation Number. The Contractor must obtain the participation number from the entity prior to filling any order placed pursuant to this section. Contractor participation in this joint purchase portion of the UAP, however, is voluntary. The Contractor shall notify the ordering entity, in writing, within 3 work days of receipt of an order, of a decision to decline the order.

For all ordering entities located outside the geographical boundaries of Miami-Dade County, the Contractor shall be entitled to ship goods on an "FOB Destination, Prepaid and Charged Back" basis. This allowance shall only be made when expressly authorized by a representative of the ordering entity prior to shipping the goods.

The County shall have no liability to the Contractor for the cost of any purchase made by an ordering entity under the UAP and shall not be deemed to be a party thereto. All

orders shall be placed directly by the ordering entity with the Contractor and shall be paid by the ordering entity less the 2% UAP.

C. Contractor Compliance

If a Contractor fails to comply with this Article, that Contractor may be considered in default by the County in accordance with Article 24 of this Contract.

ARTICLE 40 - PROJECTS AND SERVICES

The parties anticipate that from time to time they will be in contact regarding the County's needs for assistance on clearly defined Projects ("Projects") in the areas of business strategy, business integration, business process improvement, training, management development, project management, computer programming, systems integration, data processing, software development and other specific activities related to improving the County's computer systems, training or personnel to operate the same, creation or modification of software, and related consulting activities ("Services").

ARTICLE 41 - STATEMENT OF WORK

Prior to the commencement of Services for any Project, the County and the Contractor shall mutually agree upon the terms and conditions required to complete a Statement of Work ("SOW") for the specific Project that shall define in detail the Services to be performed. After the SOW has been accepted a detailed requirements and detailed design document shall be submitted illustrating the complete financial terms that govern the SOW, proposed Project staffing, anticipated Project schedule, and other information relevant to the Project. Each SOW executed hereunder shall automatically incorporate the terms and conditions of this Agreement.

ARTICLE 42 - REVIEWING DELIVERABLES

The Contractor agrees to submit all Deliverables required to be submitted for review and approval by the County in accordance with the specific requirements in the Scope of Services, and as specified herein. The Contractor understands that the County shall have final approval on all Deliverables.

In reviewing the Deliverables, the Contractor understands that the County will provide the Contractor with:

i. a written notification of the County's approval,

ii. a written notification that each Deliverable is approved subject to the Contractor providing prompt correction of a minor deficiency, or,

iii. in the case of a Deliverable that does not meet the requirements of the Agreement, a written notification of the County's disapproval. The County's disapproval notification will state with reasonable detail to

sufficiently advise the Contractor of the basis on which the Deliverable was determined to be unacceptable.

The Contractor understands that failure by the County to provide a notice of approval does not constitute approval.

Furthermore:

a) For each Deliverable made hereunder, the County shall have thirty (30) business days, commencing on the first business day after receipt by the County of the Deliverable, to determine whether the Deliverable is approved as submitted, is approved subject to the correction by the Contractor of minor discrepancies, or whether it is unacceptable and therefore disapproved.

b) Unless an extension of time has been granted by the County pursuant to Article 58 "Extension of Time", within five business days after receipt of the County's notification of "disapproval", the Contractor shall deliver to the County the necessary revisions and/or modifications for a second review by the County.

c) If after the second review period the Deliverable remains unacceptable for the County's approval, the County may direct the Contractor to:

- Proceed with the Work subject to the correction of all outstanding deficiencies which led to the County's determination that a Deliverable was not acceptable for approval on or before a specific date established by the County for correcting such deficiency or deficiencies; or,

- Suspend all Work being performed in regard to the execution of the Agreement, except those services necessary for the correction of outstanding deficiencies, until such time that all such outstanding deficiencies have been corrected by the Contractor and resubmitted to the County for approval. Any suspension of the Work under this provision shall not alter the County's right to assess liquidated damages in the event that the Work is not completed in accordance with other provisions of this Agreement.

d) The County shall have the right to approve or accept part of any Deliverable. Any such approval shall be regarded as partial and conditional upon the County's approval or acceptance of all aspects of the Deliverable. The Contractor must correct any deficiencies within the time the County specifies for such correction in the County's notice concerning a partial approval (including approvals subject to correction of minor deficiencies) or, if no time is given, promptly. If the County does not subsequently approve or accept all aspects of the Deliverable, the earlier conditional acceptance or approval may, in the sole absolute discretion of the County, be regarded

as void and of no effect.

ARTICLE 43 - DELIVERY AND INSTALLATION

a) All Software and/or Deliverables the County ordered shall be delivered F.O.B. Destination. The County shall accept or reject the Software and/or Deliverables within ten (10) days of receipt unless otherwise provided elsewhere in this Agreement.

b) If the Contractor fails to make delivery within the time specified in the applicable Work Order, or if the Software and/or Deliverable delivered fails to conform to the requirements hereof in quality, number or otherwise or are found to be defective in material or workmanship, then the County may reject the delivered Software and/or Deliverable or may accept any item of Software and/or Deliverable and reject the balance of the delivered Software and/or Deliverable. The County shall notify Contractor of such rejection in writing and specify in such notice, the reasons for such rejection. Contractor agrees to deliver replacement Software and/or Deliverables for such items of rejected Deliverables and/or Software within fifteen (15) Days of Contractor's receipt of the County's rejection notice.

c) The County may delay delivery of ordered Software, and/or Deliverables or any portion thereof, for up to sixty (60) days at no additional cost to the County, by giving written notice to the Contractor of its desire to delay delivery at least ten (10) days prior to the Scheduled Delivery Date set forth in the Order. In the event of such delay, the County will provide the Contractor with a new delivery date for such Software and/or Deliverables or portion thereof as soon as reasonably possible, but in no event later than ten (10) Days following the County's receipt of notice of the Contractor's desire to delay delivery.

d) The Contractor shall deliver all ordered Software and/or Deliverables no later than thirty (30) days from the order date.

e) The Contractor shall bear the risk of loss or damage to delivered Software and/or Deliverables until the time the Project Manager certifies that the System(s) has successfully completed the System Acceptance test at the applicable site, whether such loss or damage crises from acts or omissions (whether negligent or not) of the Contractor or the County or from any other cause whatsoever, except loss or damage arising solely from the negligence or willful acts of the County.

f) Contractor agrees to install the Software at the applicable Sites set forth in the Contract. Contractor agrees to commence installation of the Software as soon after delivery as is possible, but in no event later than five (5) Days after delivery, or unless a different time for installation is otherwise mutually agreed

upon by the parties hereto. All installation work will be performed during normal business hours. Contractor shall diligently pursue and complete such installation without interruption and in accordance with the Implementation Schedule, so that such Software is in good working order and ready for use by the Installation Date set forth in the Implementation Schedule.

1. Contractor agrees to do all things necessary for proper installation and to perform its installation obligations hereunder in an orderly, skillful and expeditious manner, with sufficient labor and materials to ensure efficient and timely completion of such obligations. If applicable, Contractor shall coordinate with the Project Manager all work with all other Contractors and/or County personnel performing work at the Site(s) to complete Software installation. The County shall be responsible for resolving all disputes relating to Site access between Contractor and other contractors. Contractor shall provide all materials necessary to proper installation of the Software. The County shall attempt to provide reasonable working and secure storage space for the performance by Contractor of the installation services described herein. Contractor agrees that all installation work will be performed neatly and at all times Contractor shall keep Site(s) free from waste materials and rubbish resulting from the services being performed by Contractor.

2. Unless otherwise agreed to by the County, Contractor agrees as part of the installation process, to perform installation services, including, but not limited to, the following: (a) receipt and inventorying of materials; (b) unloading and uncrating of all Equipment and Software; (c) running of cables; (d) installation and testing of batteries, chargers and power boards; (e) running of power cables; (f) cooperating with all other vendors supplying peripheral or ancillary equipment that will interface with the System; and (g) any additional services necessary to ensure Contractor's compliance with this Article.

g) Installation testing shall consist of the tests described in the Scope of Services which are to be conducted by Contractor and observed by the County. The purpose of these tests is to demonstrate the complete operability of the System(s) in conformance with the requirements of the Contract. This will include an actual demonstration of all required Software features. All tests shall be in accordance with test plans and procedures prepared by Contractor and previously approved by the County. In the event of any outstanding deficiencies at the conclusion of installation testing, as determined by the County, Contractor shall be responsible for instituting necessary corrective measures, and for subsequently satisfactorily demonstrating and/or re-demonstrating system performance.

ARTICLE 44 - SOFTWARE

The Contractor shall provide the County with documentation, satisfactory to the County, confirming that the Contractor has acquired on the County's behalf all software licenses required hereunder.

a. In the event the County purchases a license for Licensed Software, the Contractor shall provide to the County the computer programs (the "Programs"), other materials related thereto (the "Documentation") with the Programs.

b. The Contractor shall, at its own expense, secure and administer for the County, in the County's name, any and all necessary sublicenses or direct licenses for the third party software, which shall be perpetual and irrevocable. The Contractor shall secure such sublicenses and direct licenses upon the same terms and conditions as the license between the Contractor and the County contained herein and additional terms and conditions, which in the County's sole discretion, are acceptable to the County.

ARTICLE 45 - SOFTWARE LICENSE

a. The Contractor hereby grants to the County, and/or its agents, suppliers and vendors, a perpetual, non-exclusive, irrevocable license to use the Contractor's Licensed Software, if purchased by the County, in both source and object code for any purpose not expressly forbidden by the terms hereof and as more fully described in Articles 46 and 49 "Scope of License" and "Software Revisions". Such license shall include, but not be limited to the unrestricted right of the County to provide Licensed Software, including the source code and object code forms thereto, the Documentation and Programs therefore, to any other person(s) or entity(ies) for their use in connection with providing goods and/or services to the County.

b. As used above, "irrevocable" shall include, but not limited to, the right of the County to continue using the Contractor's Licensed Software irrespective of any breach or default pursuant to the terms hereof.

ARTICLE 46 - SCOPE OF LICENSE

The County may use the Licensed Software on any and all equipment configurations of whatever make, manufacture and/or model, owned, controlled or contracted for, by the County or entities controlling, controlled by, under common control with, or affiliated with the County, or organizations which may hereafter be formed by or become affiliated with the County or which may assume the responsibilities of the County or any successors of the County. Irrespective of the number of equipment configuration(s) controlled by the

County upon which the Licensed Software is used, the County shall pay only one license fee, which license fee is set forth herein, provided however that the County orders such Licensed Software.

ARTICLE 47 - SOFTWARE RELATED DOCUMENTATION

The Licensed Software Documentation ("Documentation") will consist of the source code for all Licensed Software for which source code is a Deliverable hereunder, any and all operator's and user's manuals, training materials, guides, listings, design documents, specifications, flow charts, data flow diagrams, commentary, and other materials and documents that explain the performance, function or operation of individual programs and the interaction of programs within the system; control file and scripts used to compile, link, load and/or make the applications and systems; test scripts, test plans and test data and other materials for use in conjunction with the applicable software. The Documentation will, in all cases, be fully applicable to the use of the Programs with the Equipment, and will identify and reflect any particular features of the Equipment which may affect the normal use and operation of the Programs. The Contractor shall deliver to the County three copies of said Documentation. The County will have the right, as part of the license granted herein, to make as many additional copies of the Documentation as it may deem necessary.

ARTICLE 48 - OPERATING ENVIRONMENT FOR INFORMATION SYSTEMS

The Programs, and each module or component and function thereof, will be capable of operating fully and correctly in the operating environment identified in the Scope of Services. The Contractor hereby warrants and represents that each Program will be fully compatible and will interface completely with each other Program provided hereunder with the Software, and with the County's Equipment, such that the Equipment, Software, Licensed Software and Deliverables combined will perform and continuously attain the standards identified in the applicable section of this Agreement, including, but not limited to the performance standards set forth in the Scope of Services and Contractor's Proposal. The addition or connection of other computer equipment to the County's Equipment will not adversely affect performance of the System.

ARTICLE 49 - SOFTWARE REVISIONS

The County will have the right, at its own discretion, to independently modify any Licensed Software through the services of its employees, agents, contractors or subcontractors and, for such purposes, may disclose the Licensed Software, or any portion thereof, to such employees, agents, contractors or subcontractors. As between the County and the Contractor, such modifications shall become the property of the County. Notwithstanding the foregoing, performance of any such modifications shall not compromise the Contractor's warranty obligations as set forth in Article 52 - Software Warranties.

ARTICLE 50 - SOFTWARE ENHANCEMENTS/MODIFICATION

The Contractor understands the County may require changes to the Licensed Software, which is outside the specification of the existing Licensed Software. When requested by the County, the Contractor shall provide the requested system enhancements/modifications including all relevant source code. Upon the County's request for such enhancements/modifications, the County shall prepare a scope of work and the Contractor shall submit a cost proposal including all costs pertaining to furnishing the County with the enhancements/modifications.

Thereafter, the County and the Contractor shall agree to a not-to-exceed number of hours for the requested modification/enhancement. In no event shall the Contractor perform any Services on the task unless the County issues a written notice to the Contractor to proceed with the task. The Contractor shall not be reimbursed for the preparation of proposals.

When the source code is completed, tested, and accepted by the County, the Contractor shall deliver said source code to the County. The County may revise and modify this source code. The Contractor shall, upon the County's request, install the enhancement/modification and shall provide the County with such services as required, at no additional cost, to enable the County to continue the County's intended use of the Licensed Software. Following the County's enhancements/modification acceptance of all enhancements/modification, such enhancements/modification shall thereafter be considered a part of the Licensed Software for all purposes under this Agreement. The Contractor shall provide the County, if so requested with written confirmation of the date the enhancements/modification was applied to the Licensed Software, and any and all Documentation relating to the Licensed Software and or enhancements/modification thereto.

If any such enhancements/modification is not acceptable to the County, the County may refuse to accept same, and, in such event, the Contractor agrees to maintain the Licensed Software in the form in effect on the date the Contractor requested the County to accept such update.

ARTICLE 51 - OWNERSHIP OF LICENSED SOFTWARE

The Contractor hereby warrants and represents that the Contractor possesses all rights to, and interests in the Licensed Software, and all portions thereof, or otherwise has the right to grant to the County the licenses provided in Articles 44, 45, 46 and 47 "Software", "Software License", "Scope of License", and "Software Related Documentation" hereof, without violating any rights of any third party, and there are currently no actual or threatened suits by any such third parties based on an alleged violation of such rights by the Contractor. The Contractor further represents and warrants that the County has the right to modify the Licensed Software as defined in Article 49, "Software Revisions", hereof, for the County's use. The Contractor shall require that all suppliers of third party software hereunder furnish to the County the foregoing warranties of ownership with respect to the third party software.

ARTICLE 52 - SOFTWARE WARRANTIES

The Contractor warrants that (i) all Licensed Software provided by the Contractor will be of a high level language that is commercially available and for which software tools are available; (ii) the Licensed Software shall be capable of being copied by the County; (iii) the Licensed Software shall not contain viruses or pre-programmed devices which will cause any software utilized by the County to be erased or become inoperable; (iv) the Licensed Software and each module and function thereof shall be capable of operating fully and correctly on the combination of the Equipment and Software furnished by the County; and (v) the Licensed Software will process accurately and in accordance with the warranties specified herein and the Scope of Services

ARTICLE 53 - SOFTWARE WARRANTY PERIOD

The Contractor warrants that, for a period of one (1) year from the County's final acceptance of the System at a specific site, all Software Deliverables shall (i) be free from defects in material and workmanship under normal use and remain in good working order; (ii) function properly and in conformity with the warranties in this Agreement, (iii) meet all of the performance standards set forth in the Scope of Services, and Contractor's Proposal.

In the event a Software Deliverable does not satisfy the conditions of performance set forth in the Scope of Services and Contractor's Proposal, the Contractor's obligation is to provide a fix or a work around at the Contractor's cost and expense, or to provide different equipment, software, and/or services required to attain the performance requirements set forth in the Scope of Services and Contractor's Proposal, at the sole discretion of the County. Failure by the Contractor to comply with warranty provisions hereof may be deemed by the County as a breach of the Contractor's obligations hereof. The County may also assess liquidated damages as stated in Article 62 in the event the Software Deliverables are not operational within the specified timeframes.

ARTICLE 54 - SYSTEM(S) WARRANTIES

a) Contractor hereby represents and warrants to the County that Contractor has reviewed and evaluated all information furnished by the County and has made all inquiries necessary such that Contractor is fully aware of the County's business requirements and intended uses of the System(s) as set forth or referenced in this Agreement. Accordingly, the System(s) shall satisfy such requirements in all material respects and will be fit for such intended uses. Based on the Contractor's analysis of the Contract Documents, the Contractor hereby represents and warrants to the County that the System(s), as described in the Scope of Services, will meet the County's objectives as set forth in the Contract and that the Contractor is not aware of any material discrepancies among the County's objectives as set forth in the Scope of Services.

b) Contractor hereby warrants to the County that the System(s) to be furnished hereunder at each Site, shall for a period of one (1) year from the applicable System Acceptance Date for a specific Site, (i) operate at the dependability levels specified in the Scope of Services, on a Site by Site basis; (ii) operate as fully integrated System(s) with each component thereof functioning completely and in conjunction with each of the other components of the System(s).

c) For a period of one (1) year from the applicable System Acceptance Date for a specific Site, Contractor warrants that the portions of the System(s) which were the subject of such System Acceptance Test shall conform to the requirements of the Scope of Services and shall meet the functional performance and reliability requirements of the County as set forth in the applicable portions of the Scope of Services and the Contractor's Proposal. During such one (1) year period for such Site, Contractor will, at no charge to the County, furnish such materials and services as shall be necessary to correct any System(s) defects and maintain the System(s) in accordance with the foregoing System(s) warranty of this subparagraph d).

d) The performance standards for the System(s) are as set forth in the Contract. Contractor represents and warrants that the System(s) have been configured so that such System(s) performance standards are capable of being met. Such System(s) performance standards shall include, but not be limited to, Contractor's warranty that the System(s) has been properly configured to be capable of handling both the current and the anticipated volumes of transactions specified in the Scope of Services.

ARTICLE 55 - EQUIPMENT WARRANTY

a) The Contractor warrants, for a period of one (1) year from the County's Final System Acceptance, that any Equipment, Hardware and related Software provided by the Contractor shall:

(i) Be free from defects in material and workmanship under normal use and remain in good working order, considering normal wear and tear;

(ii) Function properly and in conformity with the warranties in this Agreement;

(iii) Meet the performance standards set forth in the Scope of Services and the Original Equipment Manufacture's published specifications.

b) During the Warranty Period, Contractor agrees to use all reasonable efforts

and resources to provide to the County all corrections and/or modifications necessary to correct problems with the Hardware or Equipment provided by the Contractor that are reported to Contractor, at no additional cost to the price identified in the Price Schedule.

c) During the Warranty Period, Contractor shall enforce the manufacturer's warranty and maintenance obligations relating to the Hardware, Equipment and related software it provides.

d) In the event the Contractor's Hardware or Equipment does not satisfy the conditions of performance, the Contractor's obligation is to provide repair at the Contractor's cost and expense, or to provide different equipment, software and services required to attain the performance requirements. Failure by the Contractor to comply with warranty provisions hereof may be deemed by the County as a breach of the Contractor's obligations hereof.

ARTICLE 56 - THIRD PARTY WARRANTIES

In addition to the foregoing warranties, the Contractor hereby assigns to the County, and the County shall have the benefit of, any and all subcontractors' and suppliers' warranties and representations with respect to the Licensed Software provided hereunder. In the Contractor's agreements with subcontractors and suppliers, the Contractor shall require that such parties (i) consent to the assignment of such warranties and representations to the County; (ii) agree that such warranties and representations are enforceable by the County in its own name; and (iii) furnish to the County, the warranties and obligations as set forth in Articles 52 "Software Warranties", and 53 "Software Warranty Period".

ARTICLE 57 - TESTS

Each System provided to the County and installed at a specific site will be subject to several tests, including a System Acceptance test as further defined in the Scope of Services. In order to assure System performance, the County will require a sequence of tests that shall be conducted at no additional cost the County.

ARTICLE 58 - EXTENSION OF TIME

a. If the Contractor is delayed at any time hereunder due to any of the following, then the affected schedule or the required performance of Work may be extended by the County, in the reasonable exercise of its discretion, for such reasonable time as the County may determine, subject to the following conditions:

i. The cause of the delay is beyond the Contractor's control and arises

without its fault or negligence, and arises after the execution hereof, and neither was, nor could have been anticipated by the Contractor by reasonable investigation; and

ii. The completion of the Work will be actually and necessarily delayed by the causes set forth in "i" above; and

iii. The effect of such cause cannot be avoided or mitigated by the exercise of all reasonable precautions, efforts, and measures, whether before or after the occurrence of the cause of delay; and

iv. The Contractor has provided a written request and other information to the County, as described in subsection (d) below, within ten (10) days after the time the Contractor knows, or reasonably should have known, of any cause which might result in a delay for which the Contractor may request an extension of time. The Contractor shall specifically state in such notice that an extension is or may be requested, and identify the cause of the delay, describing the nature and its effect on the completion of the affected portions of the Work identified in the notice. If the Contractor shall fail to give the foregoing notice, the right to request an extension for such cause shall be waived. All of the conditions of this subsection (a) must be met in order to be deemed an Excusable Delay.

b. All references to the Contractor in this Article shall be deemed to include subcontractors and suppliers, all of whom shall be considered as agents of the Contractor.

c. The period of any extension of time as indicated in this Article shall be only that which is necessary to make up the time actually lost. The County reserves the right to rescind or shorten any extension previously granted if the County subsequently determines that any information provided by the Contractor in support of its request for an extension of time was erroneous or that there has been a material change in the facts stated.

d. The County may require the Contractor to furnish such additional information or documentation as the County shall reasonably deem necessary or helpful in considering an extension request. The Contractor understands that an extension of time will not be granted unless the Contractor affirmatively demonstrates to the County's reasonable satisfaction that the circumstances shown justify such extension.

e. Within thirty (30) days of its receipt of all information and documentation, as may be required by the County, the County shall advise the Contractor of its decision on such requested extension. Notwithstanding the foregoing, where it is not reasonably practicable for the County to render its decision within

such thirty (30) day period, it shall, prior to the expiration of such period, advise the Contractor that it will require additional time and the approximate date upon which it expects to render such decision.

f. Since the granting of an extension of time may materially alter the scheduling plans and other actions of the County and since, with sufficient notice, the County might, if it should so elect, attempt to mitigate the effect of the delay for which an extension of time might be claimed, and since mere oral notice may cause a dispute as to the existence or substance thereof, the giving of written notice as required in subsection (a.) (iv.) above shall be a condition precedent to the Contractor's rights hereunder.

g. Should any person seek a restraining order, preliminary injunction or an injunction, of which the Contractor becomes aware, which may delay the Services, the Contractor shall promptly give the County a copy of all legal papers received or prepared or received by the Contractor in connection with such action or proceeding.

h. Neither permitting the Contractor to proceed with the Work subsequent to any missed schedule or performance of any Work (as such date may have been extended pursuant to Article 59 "Extension of Time Not Cumulative"), nor the making of any payments to the Contractor, shall compromise the County's contractual right to assess liquidated damages or to declare the Contractor in default.

ARTICLE 59 - EXTENSION OF TIME NOT CUMULATIVE

In the event the Contractor shall be delayed concurrently by two or more of the causes identified in Article 58 "Extension of Time" above, the Contractor shall be entitled to a separate extension of time for each one of the causes, but only one period of extension shall be granted for the delay. In addition, the Contractor shall not be entitled, by reason of a delay, to an extension of time for the completion of the overall Work unless the overall Work is necessarily affected by the delay. Accordingly, in the event of a delay, the Contractor shall proceed continuously and diligently with the performance of the unaffected portions of the Work.

ARTICLE 60 - NO DAMAGES FOR DELAY

The Contractor hereby agrees to make no claim for damages for delay, whether contemplated or not contemplated, in the performance hereunder occasioned by any acts or omissions to act of the County, or any of its representatives or other contractors, and agree that any such claim shall be fully compensated for by an extension of time to complete performance of the Work, as provided for in Articles 58, 59, and 60 "Extension of Time", "Extension of Time Not Cumulative", and "No Damages for Delay".

ARTICLE 61 - CHANGES AND EXTRA WORK

a. The County reserves the right to order changes which may result in additions to, reductions to, or deletions from, the amount, type or value of the Work required by this Agreement. Any such work shall be known as "Extra Work". It is understood and agreed by the Contractor that the amount to be paid or deducted from payment by the County for Extra Work shall be computed on the basis of the applicable rates set forth in the Price Schedule for equivalent items as determined by the Project Manager. Extra Work, so ordered, must be performed by the Contractor.

b. No Extra Work shall be performed except pursuant to written orders of the Project Manager expressly and unmistakably indicating his intention to treat the work described therein as Extra Work. In the absence of such an order, if the Project Manager shall direct, order, or require any work which the Contractor deems to be Extra Work, the Contractor shall nevertheless comply therewith and shall promptly, and in no event after beginning the performance thereof, or incurring cost attributable thereto, give written notice to the Project Manager stating why he/she deems such work (hereinafter "Disputed Work") to be Extra Work. Said notice is for the purposes of (1) affording an opportunity to Project Manager to cancel promptly such order, direction, or requirement; (2) affording an opportunity to the Project Manager to keep an accurate record of the materials, labor, and other items involved; and (3) affording an opportunity to the County to take such action as it may deem advisable in light of such disputed work.

c. No change in, or modification, termination, or discharge of this Agreement, in any form whatsoever, shall be valid or enforceable unless it is in writing and signed by the Contractor and by the Miami-Dade County Board of County Commissioners or, to the limited extent the Board of County Commissioners has delegated authority to approve limited change orders, by the designee with such delegated authority to approve and execute such change and/or modification to the Contract, and to the extent such change orders are within the scope of such delegated authority.

d. In the event that the County shall order Extra Work for which there are no applicable rates set forth in the Price Schedule for equivalent items as determined by the Project Manager, it is understood and agreed by the Contractor that the County and the Contractor shall negotiate a mutually agreeable price, to be paid by the County, for the Contractor's performance of such Extra Work.

ARTICLE 62 - LIQUIDATED DAMAGES

The Contractor acknowledges that time is of the essence in the performance of the

Work and that damages in the event of the delays and disruptions set forth below will be difficult to ascertain. The Contractor agrees that the amounts set forth below are fair and reasonable as liquidated damages, as a result of the delays described below:

1. In the event the Contractor's Software does not successfully complete satisfactory delivery of documentation and the installation of software, as set forth in Articles 43 "Delivery and Installation", 47 "Software Related Documentation", and 57 "Tests", of this contract, by the time frame set forth in the Implementation Schedule, Contractor shall be assessed liquidated damages in an amount equal to $1000.00 per day for each day, until delivery of documentation and the installation of software, as set forth in Article 43, and pursuant to the Project Work Plan are successfully completed.

2. In the event Contractor fails to furnish acceptable Deliverables by the time frames set forth in the Implementation Schedule, Contractor shall be assessed liquidated damages in an amount equal to $1000.00 for each day, until the County accepts the Deliverable.

3. In the event testing of each module, training of the test group, data conversion and testing is not completed by the timeframe set forth in Article 43 of this contract and in the Implementation Schedule, Contractor shall be assessed liquidated damages in an amount equal to $1000.00 per day, until testing of each module, training of the test group, data conversion and testing is successfully completed.

4. In the event satisfactory completion of system customization, testing and training is not completed by the timeframe set forth in Article 43 of this contract and in the Implementation Schedule, Contractor shall be assessed liquidated damages in an amount equal to $1000.00 per day, until satisfactory completion of system customization, testing and training is successfully completed.

5. In the event any Software Deliverable fails to successfully pass System Acceptance Testing, software customization is not completed, and in the event complete documentation and installation services are not completed and provided to the County by the timeframe set forth in this contract, and in the Implementation Schedule, Contractor shall be assessed liquidated damages in an amount equal to $1000.00 per day for each day until all Software Deliverables successfully passes System Acceptance Testing, software customization is completed, and complete documentation and installation services are successfully completed.

6. In the event the County does not accept the System because the software does not perform as stipulated in the Scope of Services, the

Contractor shall refund all amounts paid to the Contractor, less any amounts paid for Liquidated Damages.

ARTICLE 63 - SURVIVAL

The parties acknowledge that any of the obligations in this Agreement will survive the term, termination and cancellation hereof. Accordingly, the respective obligations of the Contractor and the County under this Agreement, which by nature would continue beyond the termination, cancellation or expiration thereof, shall survive termination, cancellation or expiration hereof.

ARTICLE 64 - SPECIAL SECURITY REQUIREMENTS AT WATER AND SEWER DEPARTMENT

Miami-Dade County Water and Sewer Department (WASD) operates under strict security regulations. These regulations involve the issuance of special identification (ID) cards after performing complete police background checks of individuals who are employed, hired or who are required to enter the restricted areas of WASD frequently. These ID cards are required for access and are issued by the WASD at the current cost of $20.00 per applicant per year. Therefore, the Contractor shall obtain and pay for ID cards for each of his/her employees and/or agents who will be frequently visiting or performing services at WASD restricted areas. For more information concerning WASD ID cards, contact the Human Resources Section of WASD at (786) 552-8669.

IN WITNESS WHEREOF, the parties have executed this Agreement effective as of the contract date herein above set forth.

Contractor	Miami-Dade County
By: Rex W. Cowden	By: _____
Name: Rex W. Cowden	Name: _____
Title: CEO/President	Title: _____
Date: May 18, 2007	Date: _____
Attest: _____	Attest: _____
Corporate Secretary/Notary Public	Clerk of the Board

Corporate Seal/Notary Seal

VERANIA MARIA HERMIDA
MY COMMISSION # DD488653
EXPIRES: Nov. 7, 2009
(407) 398-0153 Florida Notary Service.com

Approved as to form
and legal sufficiency

_____
Assistant County Attorney

CONTRACT NO. RFP511

ENTERPRISE ASSET MANAGEMENT SYSTEM (EAMS) IMPLEMENTATION SERVICES

APPENDIX A

SCOPE OF SERVICES

TABLE OF CONTENTS

Definitions **5**
Project Vision **5**
Overall Project Assumptions **9**
Scope of Services **11**
Task 1. Project Planning and Management **11**
1.1 Pre-Planning (Project Assessment and Implementation Strategy Development) 11
1.2 Project Work Plan 11
1.3 Executive Goals and Objectives Workshop 13
1.4 Project Core Team Kickoff Workshop 13
1.5 Monitoring/Control Management 14
1.6 Progress Reporting 14
1.7 Project Communication 14
1.8 Project Team Meetings 15
1.9 Risk Management Reporting, Planning, and Mitigation 15
Deliverables 16
WASD Responsibilities 17
Additional Assumptions and Understandings 17
Task 2. Business Analysis Review and Validation **18**
2.1.A Mobilize Core Design Teams 18
2.1.B Mobilize the Business Services Design Teams 19
2.2.A Resource Loading Analysis for "Core" 19
2.2.B Resource Loading Analysis for "Business Services" 19
2.3.A Introduction of Trial Balloons for "Core" 20
2.3.B Introduction of Benchmark "Business Services" 20
2.4 Design Future Practices/Processes 20
2.5 Determine Success Measures 20
2.6 Identify Organizational Changes and Training Requirements 21
2.7 Revise Plans and Finalize Goals 21
Deliverables 21
WASD Responsibilities 22
Additional Assumptions and Understandings 22
Task 3. Inventory Management Evaluation and Implementation **23**
3.1 Assessment of Financial Management Systems 23
3.2 Assessment of Material Management Systems 23
3.3 Assessment of Storeroom Work Practices 23
3.4 Assessment of Technical Environment 24
3.5 Summarization of Findings 24
Deliverables 24
WASD Responsibilities 24
Additional Assumptions and Understandings 25
Task 4. Benchmark Assessment **26**
Core Business Services Performance Strategies 27
Business Services Benchmark Assessment Approach 28
Assessment Task Descriptions 30
4.1 Select Services Assessment Track Teams 30
4.2 Collective Assessment Teams Meeting 30
4.3 Assemble Desk Audit Information 30
4.4 Assessment Team Training 31
4.5 Compute Assessment Results—Identify Savings Opportunities 32
4.6 Presentation and Consolidation of Results 33
Deliverables 33
WASD Responsibilities 33
Additional Assumptions and Understandings 34
Task 5. Standards and Naming Conventions Definition **35**
5.1 Selection of Naming Conventions and Standards Design Team 35

5.2 Development of Work Order Life Cycle Standards 35
5.3 Establishment of Objectives and Rules for Naming Conventions 37
5.4 Establishment of Asset Classifications 37
5.5 Defining of Asset Class Attributes 37
5.6 Creation of Unique Failure Codes by Asset Classifications 38
5.7 Defining of Linked Document Rules 38
Deliverables 38
WASD Responsibilities 38
Additional Assumptions and Understandings 38
Task 6. Optimal Technical Architecture Review and Assessment 39
6.1 IT Strategic Direction Review and Standards 39
6.2 Hardware Requirements Specifications 40
Deliverables 41
WASD Responsibilities 41
Additional Assumptions and Understandings 41
Task 7. Mobile Computing Requirements Definition and Specifications 42
7.1 Mobile Requirements Specifications 42
7.1 Field-Based Hardware Review 42
7.2 Data Transfer 43
7.3 GIS, Images, and Drawings in the Field 43
Deliverables 43
WASD Responsibilities 44
Additional Assumptions and Understandings 44
Task 8. Data Assessment and Conversion 45
8.1 Data Assessment 45
8.2 Data Mapping to Datastream 7i 45
8.3 Documentation for Data Conversion Strategy 45
8.4 Data Conversion Scripts and Programs 46
8.5 Final Data Conversion 46
Deliverables 46
WASD Responsibilities 46
Additional Assumptions and Understandings 47
Task 9. Datastream 7i Product Configuration and Testing 48
9.1 Datastream Design Phase 48
9.2 Datastream Configuration Phase 51
9.3 Datastream Testing and Deployment Phase 52
Deliverables 53
WASD Responsibilities 54
Additional Assumptions and Understandings 54
Task 10. Integration Design and Development 55
10.1 Integration Workshop 55
10.2 Integration Software Requirements Specification (SRS) 56
10.3 Integration Development and Testing 56
10.4 Integration Administrator's Guide 57
Deliverables 57
WASD Responsibilities 57
Additional Assumptions and Understandings 57
Task 11. Web Services Design and Development 59
11.1 Web Services Development 59
11.2 Web Application or Service Development 59
Deliverables 62
WASD Responsibilities 63
Additional Assumptions and Understandings 63
Task 12. Training 64
12.1 e-Training Development 64
12.2 Core Team Training 64
12.3 Training Plan 65
12.4 End User Training 65
Deliverables 66

WASD Responsibilities 66
Additional Assumptions and Understandings 66
Task 13. Support Plan Development 67
13.1 Sustainable Support Plan 67
13.2 Operational Handbook 67
13.3 Organizational Staffing 67
Deliverables 67
WASD Responsibilities 67
Additional Assumptions and Understandings 67
Task 14. System Startup and Post-Implementation Assistance 68
14.1 System(s) Startup 68
14.2 Post-Production Support 70
Deliverables 70
WASD Responsibilities 70
Additional Assumptions and Understandings 70
Task 15. Change Management 71
15.1 Change Design Team 71
15.2 Change Management Plan 72
15.3 Communications Plan for Change Management 72
15.4 Dealing with Internal Culture, Politics, and Resistance 74
Deliverables 74
WASD Responsibilities 75
Additional Assumptions and Understandings 75
Task 16. Upgrade to New Releases 76
Deliverables 76
WASD Responsibilities 76
Additional Assumptions and Understandings 76
Task 17. Asset Management Program Development 77
17.1 Program Overview, Asset Hierarchy and Asset Data 77
17.2 Service Level Definition 78
17.3 Criticality Rating 78
17.4 Condition Assessment 78
17.5 Planned Maintenance 79
17.6 Capital Improvements 79
17.7 Funding Strategy 79
Deliverables 79
WASD Responsibilities 80
Additional Assumptions and Understandings 80

Definitions

Change Design Team – A group of five individuals representing WASD's Divisions of Water, Wastewater, Engineering, Administration, and Finance; this internal Change Design Team will work with the Contractor to facilitate and sustain a culture of change for the EAMS implementation project.

Change Management Plan (CMP) – A written, evolving, "living" document created by the Contractor and the WASD internal Change Design Team in order to foster smooth transition to the EAMS and future sustainability of the EAMS.

Communication Plan for Change Management – An action plan addressing how to communicate the EAMS implementation as well as listen for important feedback from internal sources, with the overall goal of successful, sustainable EAMS implementation throughout WASD.

Contract or **Contract Documents** or **Agreement** – Collectively, Miami-Dade County Contract No. RFP511, including terms and conditions, Scope of Services, Price Schedule, and all associated Appendixes and addenda.

Contractor – The group of professional consulting firms working as one team, with Woolpert, Inc., as the prime contractor to the County.

Conversion and Migration Plan – A detailed set of steps to be followed throughout the conversion process in Task 8, as well as rules that govern the inputs or outputs of the individual steps.

Deployment Plan – A plan to support iterative deployment of technology tools, user engagement, and training for the EAMS

Design Team – A term reserved for a group or groups that may form for a short-duration set of tasks and then disband.

EAMS – Enterprise Asset Management System

Executive Oversight Team – The EAMS project's internal management group, with representatives including the WASD Executive Director, Managers of each WASD division, and the WASD Internal Lead Project Manager assigned to the EAMS project. This team will be responsible for establishing the overall project direction, vision, success criteria, and periodic reviews of project performance.

External (Contractor) Lead Project Manager – The Contractor representative responsible for the EAMS project. This individual will work with the Internal Lead Project Manager in order to implement the project.

Internal (WASD) Lead Project Manager – A full-time employee of WASD designated to be the main project contact with the responsibility of overseeing the entire EAMS implementation project and managing the Contract. This individual will work with the External Lead Project Manager in order to implement the project.

Manual of Practice – A description of work order life cycle.

Mobile Computing Requirements and Specification Document – A Software Requirements Specification (SRS) and recommendations for mobile solutions development and deployment.

Operational Track Team – One of five internal WASD groups responsible for assessing the operations of their respective segments of the organization against best practices, determining how the EAMS is to be configured to support their business needs in line with overall objectives and vision established by the Project Core Team, and generally communicating the project's

progress to their respective organizational segments. Each Operational Track Team will also have a Track Team Leader.

Project Communication Plan – Overall project communication: progress reporting and managing expectations; a plan that will describe weekly communication and monthly project management status meetings with the Project Core Team.

Project Core Team – The day-to-day project management group, responsible for reviewing and commenting on interim deliverables, helping to ensure that the WASD responsibilities as defined in each of the Task descriptions are adhered to, and collaborating with the Contractor to achieve the overall objectives for the program set by the Executive Oversight Team. WASD will provide a full-time Internal Lead Project Manager to oversee the entire project and the deliverables for this Scope of Services.

Project Schedule – A written identification of the major Tasks and their duration as well as Sub-tasks

Project Work Plan – The Project Work Plan is a living document that encompasses this project and other related plans. Communication will be a part of the Project Work Plan. The result is a memorial of project development upon completion of the project

Risk Management Plan – As part of the Project Work Plan, this reporting process will include overall strategy for risk management, and documenting and tracking identified risks and their resolution.

Software Requirement Specifications (SRS) document – A document identifying the following items: functional integration specifications, ownership requirements, maintenance requirements, business rules, data flow diagrams, use cases for each point of integration, other technical design documents—as required—such as database schemas, object models, and class diagrams.

Sub-task – A smaller step within a larger Task

Sustainable Support Plan – A plan for the integration and continued operation of the EAMS, organizational staffing review, and deployment of a problem reporting and tracking toolset.

Task – In Miami-Dade County Request for Proposal (RFP) No. 511, WASD identified 16 major Tasks that need to be executed as part of the EAMS implementation process. These Tasks are steps that must occur in order to achieve project success. The Tasks do not need to occur sequentially, although, for the purposes of this Scope of Services, they are listed in the order in which they appeared on RFP No. 511. The term "task" may also be used to mean a smaller step; a definite piece of work assigned to, falling to, or expected of a person involved in the EAMS.

Task Manager – A member of the Contractor with overview responsibilities for a Task or Tasks in this Scope of Services.

Track – WASD operational units divided into one of five Tracks of similar function and interaction with one another. The Track process will be used to implement the EAMS.

Training Plan – Document outlining Contractor's approach to Datastream 7i end-user training, including training courses, documentation, and simulation software aids.

WASD – Miami-Dade Water and Sewer Department

PROJECT VISION

The Miami-Dade Water and Sewer Department (WASD) is implementing Infor's Datastream 7i Enterprise Asset Management System (EAMS) to support its water and sanitary sewer infrastructure management functions. This Scope of Services will support the analysis of business functions affected by the EAMS and provide professional services to improve those business functions by implementing realistic best practices in conjunction with EAMS development and deployment. Additional services will be provided to consolidate legacy maintenance management systems into the EAMS and integrate existing supporting computer systems.

This project is primarily focused on deployment of the EAMS for maintenance management purposes. Maintenance management may be briefly defined as primarily dealing with the efficient and effective maintenance of existing assets. As an adjunct to the project, WASD has elected to develop a framework for business practices associated with asset management. Asset management may be defined as ensuing sustainable, competitive, long-term delivery of infrastructure-focused services by optimizing aspects of an asset's life cycle. WASD's vision for this program is to first put in place an EAMS to support maintenance management while keeping in sight the needs for a technology platform to support an asset management program in the future.

The deployment of the EAMS project will identify and transform WASD operations and enhance work processes to support the effective, uninterrupted delivery of services.

Project Team – External

A team of professional firms (hereafter referred to as "Contractor") has been assembled to work with WASD on this project:

- **Woolpert, Inc.,** is the Contractor and responsible for technical/administrative aspects of the project, including overall project/program management, quality assurance and quality control, technical strategic design, project documentation, and EAMS configuration and systems integration tasks.
- **EMA** will assist Contractor with design of the EAMS and coordination of the operational/functional aspects of this project.
- **Infor** will participate in an advisory role and assist Contractor in the technical development of this project.

Project Teams – Internal

Throughout the Scope of Services description, several teams of WASD personnel are mentioned. Below is the project organizational structure for the EAMS project and a description of the various team's makeup and responsibilities. The descriptions of the various team memberships are recommendations. The Contractor shall work with WASD management to select specific individuals.

Executive Oversight Team

This is the EAMS project's internal management team. Representatives include WASD Executive Director, Managers of each Division, and the Internal Lead Project Manager. This team will be responsible for establishing the overall project direction, vision, success criteria, and periodic reviews of project performance. Members of the team are required to have the position and authority necessary to commit staff resources and remove roadblocks to the project's success. It is important that this team's support for the EAMS project be visible to WASD staff. With the exception of the Internal Lead Project Manager, this team will not be

involved with the day-to-day execution of the project but, rather, with overall objectives. The team will be provided periodic project updates as it deems necessary.

Project Core Team

This is the day-to-day internal project management team. This team will be responsible for reviewing and commenting on interim deliverables, helping to ensure that the WASD responsibilities as defined in each of the Task descriptions are adhered to, and collaborating with the Contractor to achieve the overall objects for the program set by the Executive Oversight Team.

Operational Track Teams

The Operational Track Teams will be responsible for assessing the operations of their respective segments of the organization against best business practices, determining how the EAMS is to be configured to support their business needs in line with the overall objectives and vision established by the Project Core Team, and generally communicating the project's goals and progress to their respective organizational segments. There are four Operational Track Teams. Each Operational Track Team is made up of representatives of various WASD sections that do similar types of work and consequently will have similar types of EAMS requirements. Each Operational Track Team will consist of up to 15 individuals. The people assigned to a team will need to understand the work done in their sections. The table below shows the Operational Track Teams and sections. Core sections are defined as those segments of the organization that are directly involved with water and wastewater treatment, distribution or collection. Business services are defined generally as groups engaged in administrative functions of the utility. (These definitions were originally developed by best practice research work funded by the Association of Metropolitan Water Agencies and the National Association of Clean Water Agencies, formally known as the Association of Metropolitan Sewer Agencies).

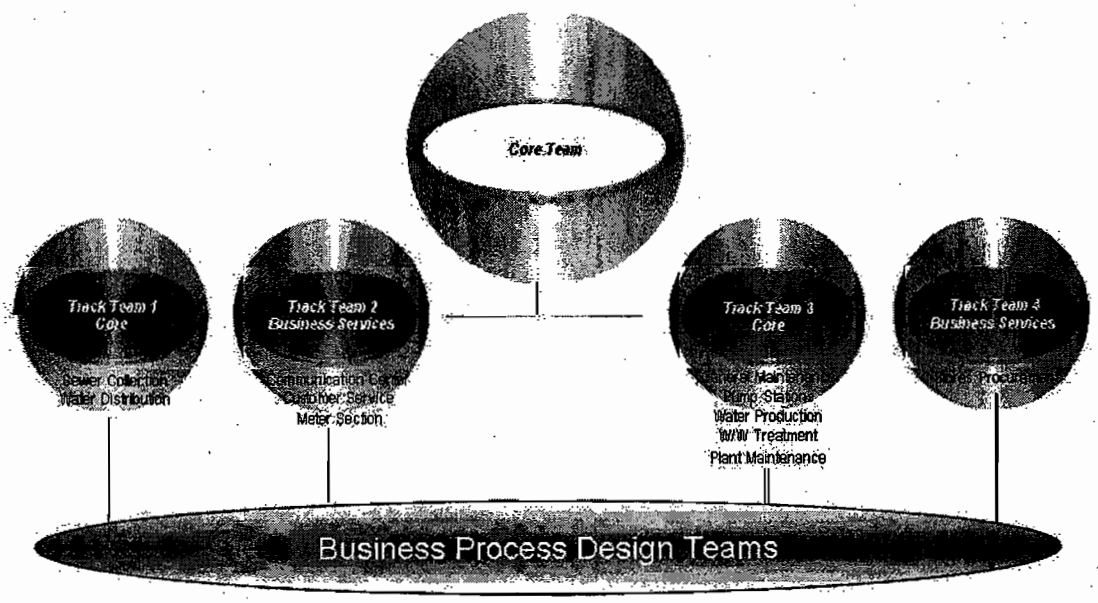

Figure 1. Internal Project Team (recommended)

Table 1. Operational Track Teams and Sections			
Track Number	Division	Section	Assessment Method

1	Wastewater	Sewer Collection Division	Core
	Water	Water Distribution Division	
2	Administration	Communications Center	Business Services
	Finance	Customer Services	
	Water	Meter Section	
3	Administration	General Maintenance	Core
	Wastewater	Wastewater Treatment	
		Pump Stations Plant Maintenance	
	Water	Water Production	
4	Administration	Procurement	Business Services

Design Team(s)
The Design Team category is reserved for teams that may form for a short duration set of tasks and then disband. Examples of Design Teams may be sets of individuals responsible for defining the as-is and to-be work flows for particular Tracks defined above, evaluating the options and recommendations for mobile computing technologies, standards development, developing and adopting asset management frameworks and models, testing of specific EAMS functions, testing of specific interface functionality, train the trainer teams and others. Two already-identified Design Teams for the EAMS project are:

- **Technical Design Team.** A design team to assist in design and deployment of technology development tasks.
- **Change Design Team.** A design team consisting of five individuals representing WASD's Divisions of Water, Wastewater, Plant Maintenance, Administration, and Finance; this internal Change Design Team will work with the Contractor to facilitate and sustain a culture of change for the EAMS implementation project.

Overall Project Assumptions

- The tasks in deployment planning, requirements specification design, solution configuration, integration, testing, training, and deployment of the resulting EAMS development and operational business process reengineering development will occur concurrently. The Project Work Plan will include an agreed-upon resource identification and allocation requirement for WASD staffing involvement. WASD's allocation requirement assumes a 6.5-hour work day, an average of five sick days and 80 hours vacation assumed per full-time employee per year, and a schedule around the established 13 holidays identified by WASD.
- Development and deployment of the EAMS will be iterative, supporting an overall project development-deployment strategy defined in the Project Work Plan.
- Deliverables will include a draft deliverable, which WASD will review and comment on. Comments will be discussed and mutually agreed upon before proceeding in subsequent development and/or deployment of tasks. Final deliverables will include agreed-upon changes.
- Throughout the project, the Contractor shall coordinate schedules and work with WASD staff for the sharing and transferring of knowledge and experience in the development of technical and business tasks.
    - For each design/planning process, the Contractor shall coordinate schedules and work activities with WASD staff member to review the design process and

resulting outcomes. WASD staff will be invited to participate in interview processes. Following this, the Contractor shall meet with the WASD assigned staff member to review the interview and related notes, assumptions, and experiences used and/or related to the development of the design/plan.

- For each development/deployment process, the Contractor shall coordinate schedules with WASD staff member to perform deployment and administrative functions. Before testing/deployment, the Contractor shall review related notes, assumptions, and experiences related to the development.
- As a part of the Project Work Plan development, on-site efforts will be identified. When the Contractor performs on-site efforts, WASD staff will be invited to participate.

SCOPE OF SERVICES

Task 1. Project Planning and Management

Purpose
To provide overall direction in managing the implementation of this project

Method and Approach
The Contractor Lead Project Manager will review initial phase reports, recommend overall direction for the EAMS project (create a Project Work Plan), assist WASD in setting priorities, define schedules for the entire project and in more detail for each of the tasks, identify and manage resource requirements, define milestones, develop a Communication Plan for progress reporting and managing expectations, manage risks, and develop strategy for keeping the WASD Divisions involved throughout this multi-year project, especially in later phases. Additionally, the Contractor Lead Project Manager will monitor project budget and oversee quality assurance/quality control, and work to resolve technical and/or resource conflicts.

1.1 Pre-Planning (Project Assessment and Implementation Strategy Development)

The pre-planning phase for WASD EAMS implementation project will include:

1. Scope of Services definition
2. Project Work Plan and Project Schedule development
    - Review and refinement of the Scope of Services, Project Work Plan, and Project Schedule
3. Executive Goals and Objectives Workshop, WASD critical success factors identification, and review
4. Final Project Work Plan and Project Schedule:
    - Risk management identification and planning
    - Communication planning
    - Resource planning
5. Detailed Project Schedule
6. Project Work Plan deliverable report

1.2 Project Work Plan

The Contractor shall draft a Project Work Plan. The initial Project Work Plan will include:

- A complete Project Schedule with work sequencing, key milestones, critical success factors, and an associated chart of roles and tasks
- A WASD resource and review schedule to complement the Project Schedule
- Known and anticipated risk factors and risk assessment and mitigation procedures
- A detailed Communication Plan (how the Contractor shall communicate with the internal WASD team)

- Project development and deployment strategy reflecting iterative development and deployment of the EAMS within WASD
- A detailed resources and management plan, which includes WASD resource allocation
- A comprehensive list of outputs (deliverables) associated with each Task (with Task percentage complete reference where applicable)

The Contractor shall deliver the Project Work Plan to WASD for review and comment; the Project Work Plan will be considered draft until comments have been reviewed and the Contractor and WASD agree and establish consensus for continued project development.
This Project Work Plan will be a "living document," to be expanded with Software Requirements Specification (SRS) definitions supporting technical and operational development, periodically updated with further project details designed to guide the project, as well as be an accounting of project progress. The results will be a memorial of project development upon completion of the project. Additions proposed to the Project Work Plan will be delivered to WASD independently as draft and will not be included in the Project Work Plan until the Contractor and WASD agree the inclusion has consensus for continued project development.

1.2.1 Project Managers

WASD will designate dual internal Project Managers who will serve as points of contact and a project team consisting of other WASD staff who will participate in meetings at WASD's discretion. These dual Project Managers will consist of a Project Manager to support the technical aspects and a Project Manager to support the operational development deployment of the project. The Contractor shall also provide dual project management to avail themselves for maximum appropriate on-site presence and define on-site schedule for each in the Project Work Plan.

1.2.2 Project Communication

The Contractor shall work with WASD to establish a Project Communication Plan, which will describe weekly communication and monthly project management status meetings with the Project Core Team.
The Contractor shall provide the following services:

- Conduct weekly conference calls with WASD
- Conduct monthly project management status meetings and provide meeting minutes to WASD
- Produce monthly project management reports and update schedules
- Host a Project Website to track project tasks, schedules, documentation, and contact information

The Contractor shall document monthly meetings in an agreed-upon format for meeting minutes determined as a part of the Project Communication Plan. The template of the status report will be accessible from the documents page of a project Web site.

1.2.2.1 Project Website

The Contractor shall provide a password-protected Project Website developed to support the EAMS project, which will include the following:

- Team contact information
- Newly added events
- A current calendar of scheduled events
- An up-to-date Gantt chart showing the Project Schedule and percent completion by task
- A document management section archiving communication and other project deliverables

All information presented on Contractor's Project Website will be made available to WASD.

1.2.3 Project Schedule

- The Contractor shall prepare a detailed Project Schedule to reflect the Project Work Plan. The Project Schedule will:
  - Define project tasks and activities
  - Show the scheduled work start and stop dates and identify Task relationships and precursors
  - Show proposed WASD tasks with proposed durations
  - Isolate major project activities to allow for the objective evaluation and reporting of progress
  - Be structured to achieve and demonstrate implementation, delivery, and acceptance of project tasks
  - Maximize dual Contract Project Management (as defined in 1.2.1) on-site presence.
- This Project Schedule will be reviewed and updated monthly and posted on the Project Website

1.2.4 Administration Procedures

The Contractor shall discuss with WASD and define project billing procedures, establishing an agreed-upon format to document progress and percent complete. Other project administrative practices will be discussed at this time to assist in the professional administration of the project. Additional practices will be defined and documented as a part of the Project Work Plan.

1.3 Executive Goals and Objectives Workshop

Once a draft Project Work Plan is prepared, the Contractor shall meet with WASD leadership in a half-day workshop to review over-arching strategic initiatives for WASD and how this project will affect those initiatives. This workshop will be a forum discussion of the EAMS project, its value to the organization, and how it ties to overall organizational vision, critical success factors, and the perceived associated risks. This workshop will also provide for discussion of Task 15—Change Management—and the issues that affect change management planning (see Task 15 for list of issues).

1.4 Project Core Team Kickoff Workshop

The Contractor shall conduct a one-day kickoff workshop with the Project Core Team to review and refine the draft Project Work Plan, Project Schedule, Project Communication Plan, administrative procedures, training and deployment strategies, critical success factors, and to establish an overall vision for the project. After this workshop, the Contractor shall finalize the

Project Work Plan, with the result of the final Project Work Plan being a detailed roadmap of how the EAMS project will be executed.

1.5 Monitoring/Control Management

- The Contractor shall use Phaser—Woolpert's planning software—to plan and manage the project. Every two weeks, Phaser will be used to show the status and percent complete of each project Sub-task. This new data can then be compared against original estimates and planned delivery/milestone dates. This biweekly project review will allow the Contractor to identify schedule lag or delivery issues such that they can be corrected before affecting the entire Project Schedule.

1.6 Progress Reporting

Project Schedule

The Contractor shall prepare a detailed Project Schedule using Microsoft Project. The Project Schedule will:

- Define project tasks and activities
- Show the scheduled work start and stop dates and identify Task relationships and precursors
- Isolate major project activities to allow for the objective evaluation and reporting of progress
- Be structured to achieve and demonstrate the phased implementation, delivery, and acceptance of project tasks

Each month, the Contractor shall produce an update to the Project Schedule that details activities, milestones, and deliverables.
Using the Project Schedule as a baseline, the Contractor shall prepare a monthly progress statement that documents accomplishments, budget status, and project issues. Situations that could become problematic will be identified in advance and reported in the monthly progress statement along with monthly schedule updates.

Communication with WASD

Communication responsibilities for the duration of the project are assigned to the Contractor Project Managers. Communication will occur through a variety of methods, including in-person meetings and visits, conference calls, file transfer protocol, NetMeetings, progress reports, e-mails, faxes, and an interactive project Web site. See also Sub-task 1.7.

1.7 Project Communication

Weekly Communication

- **Monday Status Report.** Each Task will have a Task Manager who will provide the Project Managers with a status report by end of day each Friday that identifies tasks accomplished during the week and tasks planned for the coming week. The Project Managers will compile Task status reports and submit a weekly report to the WASD Project Managers. WASD will be able to add to this report and post it to the Project Website. At the outset of the project, the Contractor and WASD will select a format for

the weekly report and will use this template each week. The template and the status report will be accessible from the documents page of the Project Website.

- **Project Status Meeting.** A meeting (in person or by phone) will be held with the Project Core Team to review Contractor activities. Regularly scheduled weekly meetings (direct, not e-mail) will offer opportunity for questions and answers.

Monthly Communication

- **On-site Visit Schedule.** Contractor Project Managers will be on site for monthly meetings at WASD offices. WASD may designate an office for this purpose.
- **Project Coordination Meeting.** This meeting will be held in person and conference with WASD staff in order to discuss the overall status of the project. The Contractor Project Managers will lead the meeting with participation from technical leads and Task Managers, as necessary.

1.8 Project Team Meetings

The Contractor shall conduct routine meetings with a clearly understood meeting agenda to aid in productivity. Early in the project, the Contractor's meeting philosophy will be communicated to each project participant.
For meetings conducted by the Contractor, a meeting agenda will be prepared and distributed to the WASD Internal Lead Project Manager no later than one day before the meeting. Within five days of these meetings, the Contractor shall publish meeting notes to document issues, decisions, actions, and action due dates that were established during the meeting.
The Contractor shall conduct or attend the following meetings to facilitate the ongoing coordination and understanding of project activities:

- Weekly client project update meetings
- Monthly Project Core Team status meetings
- Peer review meetings
- As-needed meetings

Table 2 documents the types of coordination meetings that the Contractor shall conduct and/or attend.

Table 2. Project Core Team Meetings

Meeting Type	Frequency	Contractor Participation	Purpose
Project update	Conducted weekly	Contractor Project Managers	Review intermediate tasks and weekly goals and challenges
Project status	Conducted monthly	Contractor Project Managers	Review overall project status
Peer review	Conducted as needed	Contractor Technical Staff—Coordination by Management Team	Review detailed deliverable or technical discussion

1.9 Risk Management Reporting, Planning, and Mitigation

The Contractor's risk management reporting process will include documenting, tracking, measuring, categorizing, and mitigating possible project risks. The Contractor shall define

specifics of project risk management in the Project Work Plan. This method will also be used for project problem resolution and escalation – tracking issues, both proactive and reactive.

Documenting. The process of reviewing, documenting, and reporting risks will be a part of the monthly project status meeting and is the responsibility of the entire Project Management Team, both the Contractor and WASD. At the meeting, each potential risk event will be identified, categorized, and ranked as defined by the Project Work Plan and mutually agreed upon by WASD and the Contractor.

Tracking. Specific project risks will be reported in a checklist analysis fashion with assumptions or related triggering events that may contribute to the risk event.

Measuring. Events that exceed a 60 percent probability (as jointly defined by the Contractor and WASD) will have a risk plan developed to assist with mitigating the event. This risk plan will outline alternatives and make recommendations for direct action in the case of the event. If a risk event is determined to have more than an 80 percent probability, this will be considered likely, and the risk plan will include or be amended to take initial action steps as defined in the risk plan.

Categorizing. Risk identification will include possible impact events to be considered, and will include at a minimum the cost, schedule, staffing, related policy and political ramifications, and performance issues. Risk conditions will include project management practice, data, and system integration—availability, process, and deployment.

Mitigating. The responsibility of monitoring and controlling risk will apply to the Contractor. Risks and possible negative impacts will be openly discussed in "what if" discussions that will occur regularly and be documented, regardless of how minor the concern.
Following the identification of a new potential risk event, the Contractor Lead Project Manager will further investigate and produce a risk report back to the WASD team. Potential risk events will be summarized in a risk matrix and reviewed each month by the entire project team.

Deliverables

- Conduct Executive Goals and Objectives Workshop (half-day session)
- Conduct weekly conference calls and monthly project management status meetings with WASD, reporting meeting minutes as defined in the Project Work Plan
- Start each meeting with an agenda in Microsoft Word or Adobe PDF format
- On-site project kickoff workshop meeting (one day)
- Draft and Final Project Work Plan, which will include the following:
  - Project Schedule with associated schedule of work tasks
  - Rationalized work sequencing with key critical milestones identified
  - Risk assessment reports in Microsoft Word or Adobe PDF format with Risk Plans (those events exceeding 60 percent probability of occurring) developed as needed
  - Comprehensive listing of outputs (deliverables) associated with each work task
  - Project Communication Plan with a resource plan
  - WASD resource and review schedule will be proposed to complement the Project Schedule
  - Detailed Project Schedule using Microsoft Project

- Project development and deployment strategy
- Monthly progress reports, schedule updates, and meeting minutes in Microsoft Word or Adobe PDF format
- Provide weekly project meeting minutes in Microsoft Word or Adobe PDF format
- Provide access to Project Website
- The Contractor shall also provide dual project management to avail themselves for maximum appropriate on-site presence and define on-site schedule for each in the Project Work Plan

WASD Responsibilities

- Provide a WASD point of contact for project management (Internal Lead Project Manager)
- Review Project Work Plan components, draft reports, and meeting minutes, providing feedback
- Attend conference calls and meetings
- Host workshops and team meetings
- Host the Contractor Project Manager (provide a workspace and access to general office peripherals and Internet capability)
- Schedule with staff and provide facilities for on-site project kickoff workshop
- Identify divisional/operational key contacts list
- Review and accept monthly project status reports
- Provide access to computer systems so that the Contractor can install (with assistance as needed) software and data
- Accommodate on-site work location, parking, and appropriate security access to the Contractor's Project Managers

Additional Assumptions and Understandings

- It is expected that WASD and the Contractor shall work together to identify the appropriate number and participation meetings/interview needed to accommodate Project Work Plan development.

Task 2. Business Analysis Review and Validation

Purpose

The purpose of Task 2 is to take the Practice and Metrics Benchmark information captured in Task 4 (Benchmark Assessment) and apply the information as a feeder to the 'as-is' and 'to-be' modeling activities of Task 9 (Datastream 7i Product Configuration and Testing).

Task 4 will have identified a set of benchmarks viewing Practices (work) and Processes (how work is completed) against industry *"best practice"* metrics. The benchmarks identified in Task 4 will serve as a baseline for identifying where WASD is performing against the industry and provide a point of reference for WASD and the Contractor in identifying areas of potential change.

Task 2 will have defined a broad set of business practice improvement strategies that WASD Track Teams determine to be appropriate for implementation. In this Task, the Contractor shall facilitate teams of WASD staff to create *"as-is"* and *"to-be"* business processes in accordance with the recommendations from Task 4. These process improvements will relate to the EAMS implementation and will include aspects of inventory, purchasing, and work management functions.

The Contractor understands that WASD has done a significant amount of "as-is" and "to-be" modeling as well as Key Performance Indicators (KPI), inbox, and EAMS report format development. The Contractor and WASD will collaboratively validate these previously defined *"to-be"* processes in order to determine their validity with the benchmark data defined in Task 4. It is the aim of the Contractor to work with WASD Design Teams in a fashion intended to create consensus within the various WASD Sections toward using consistent work practices. The Contractor shall complete a set of recommendations for WASD to optimize Core and Support business processes as supported by the EAMS.

Method and Approach

Design Teams will review current "as-is" business processes and the "to-be" processes that have been previously developed by WASD. The Contractor and WASD Design Teams will compare the previous work by WASD to the benchmark data developed in Task 4 and in areas where *"change"* is needed, develop new *"to-be"* processes based on the findings from the benchmark assessment work conducted in Task 4.

Assessment Task Descriptions

The following subtasks will be conducted subsequent to the work defined in Task 4 and the establishment of a project Vision by the "Core" and "Business Services" Design Teams. The following Sub-tasks have been subdivided into "A" and "B" with "A" reflective of the "Core" Track Teams 1 and 3 and "B" reflective of the "Business Services" Track Teams 2 and 4.

2.1.A Mobilize Core Design Teams

The Contractor shall meet with WASD "Core" Track Teams members to select the Design Teams. The Contractor and the Core Design Team will review previous work that WASD has accomplished relative to redesigned business processes, KPI development, and EAMS Analysis Report. This work will be compared and contrasted to the results from the previous assessment Task (Task 4). Contractor shall facilitate a series of work sessions with the Design Teams for the following purposes:

- Review of the Benchmark Assessments
- Review previous business processes/KPI design work already accomplished
- Learn the modeling process to be used in subsequent Sub-tasks
- Become acquainted with the resource loading tool to be used in a subsequent Sub-task

- Understand the concept of a high-level value chain business model and how it will be used

Following these Design Team work sessions each Team will develop a high-level business model of their respective segment of WASD in order to define workflows for modeling.

2.1.B Mobilize the Business Services Design Teams

The Contractor, separate of the "Core" Design Teams, will establish a single Design Team for the *"Business Services"* Tracks of 2 and 4. For Task 2, the Business Services Design Team will consist of the same participants of the Benchmark *"Business Services"* Tracks Teams from Task 4.
The "Business Services" Design Team will review the previous work that WASD has accomplished relative to redesigned business processes, KPI development, and EAMS report design. This work will be compared and contrasted to the results from the previous assessment Task (Task 4). The Contractor shall facilitate a series of work sessions with the Design Team for following purposes:

- Review of the Benchmark Assessments
- Review previous business process/KPI design work developed by WASD
- Review the Supply Channel connections between the WASD Value Stream and the various services under review by the Business Services Design Team
- Review of the Vision and Strategic plans of the Executive Management of WASD

An output of Task 2 will be the development of a functional map of services provided by *"Business Services."* Following these Design Team work sessions, each Team will develop a high-level business model of their respective segment of WASD in order to define workflows for modeling.

2.2.A Resource Loading Analysis for "Core"

Contractor shall conduct this step separately with each of the Design Teams. Contractor shall work with the Design Teams using an automated resource loading process. Using this tool, the Teams and Contractor shall compare the data generated with the estimated time requirements of redesigned work practices in Sub-task 2.4 to determine efficiency gains.
Using the value chain business model from Sub-task 2.1 and resource loading as guides, Contractor shall facilitate the Teams identification of high-level workflows reflecting the significant work of the Department. This significant work will conceptually represent approximately 80% of the work completed by the affected Department's staff on a regular basis. It is anticipated that a total of approximately **50** workflows will be identified for the various Design Team's areas.

2.2.B Resource Loading Analysis for "Business Services"

Due to the approach that will be used for the "Business Services" tracks, the Contractor shall not conduct a Resource Loading Analysis for the "Business Services." Identification of resource requirements and changes associated with resource allocations will be developed as part of Sub-task 2.4.B.

2.3.A Introduction of Trial Balloons for "Core"

The Contractor shall conduct this step separately with each "Core" Design Team. The Contractor shall present "trial balloon" alternative process models of the high-level work processes defined in Task 4 to each Design Team. The Contractor shall include examples of how work can be executed through the use of concepts and Benchmarks defined in Task 4 and through best EAMS technology practices. Contractor shall lead the Teams through a discussion of the trial balloons so that they may form their own improved business practices and goals. Through this discussion, "Quick Wins" will be identified. Quick Wins refer to changes that can be accomplished almost immediately, with little or no cost, and without the introduction of technology.

2.3.B Introduction of Benchmark "Business Services"

The Contractor shall use the Benchmark information developed in Task 4 to develop a hypothesis related to each business service Division or Section. Each hypothesis will be used to determine potential engagement points that a Division or Section may have with the EAMS. The Contractor shall use each hypothesis as a guide to determine process derived changes, technology related changes, or both.
For process related changes, the Contractor shall work with the WASD Design Team to map the existing "as-is" process and the "to-be" process change which will result in the "Quick Wins" for the *"Business Services"* support roles. For those hypothesis statements that will benefit from leveraging the EAMS technology, those business functions will be mapped out as part of the work performed in Sub-task 2.4.

2.4 Design Future Practices/Processes

The Contractor shall conduct this Sub-task separately with both the separate "Core" Design Teams and the "Business Services" Design Team. With each WASD Design Team, the Contractor shall compare the Resource Loading Analysis output and trial balloon models developed in subtasks 2.2 and 2.3 to identify the organizational, resource, technology, training, practice, and equipment-related obstacles to achieving the previously defined goals. Using the concepts of best business practices, assist the Design Teams to design new practices with the obstacles removed (the "to-be" models). The Contractor shall document the "as-is" and "to-be" models using tools that WASD can access and revise in the future. The Contractor shall review and verify the KPIs developed in Sub-task 2.3 A and B, and the previous work done by WASD. If the Contractor identifies discrepancies between the "as-is" and "to-be" models with work performed by WASD prior to this engagement, the previous work will be modified accordingly.

2.5 Determine Success Measures

The Contractor shall facilitate meetings with the Design Teams to develop action plans required to accomplish the business functions depicted in the "to-be" models. The action plans will focus on performance measurements, KPIs, and inboxes, as well as specific tactics to be employed in a pilot program, if appropriate. To as large an extent as possible, the Contractor shall base these measurements on criteria that can be measured prior to implementation of the EAMS, so that improvements can be quantified. As appropriate, the Contractor shall determine the current "cost" of business and estimate savings or performance improvements. The Contractor shall conduct this work so as to establish the baseline conditions in order to determine the level of improvement versus investment during the implementation period.

2.6 Identify Organizational Changes and Training Requirements

Contractor shall define new roles and skills required by the redesigned processes, as well as any new organizational structures needed to support the work processes.
The work in Sub-task 2.4 may have defined new job responsibilities. The Contractor shall work with WASD to determine if there is a need to develop revised job descriptions. If revised job descriptions are needed, the Contractor shall provide guidance, but the changes will be the responsibility of WASD.
The Contractor shall identify any formal training and certification programs that may be required in order to support the Organizational changes, as well as EAMS training. Such a program would involve:

- On-the-job training
- Classroom training
- E-learning
- Proficiency demonstrations
- Certification procedures

These programs should be run by WASD personnel, schools in the local area, or a combination of both. Actual revisions to job descriptions and the development of a training program are not included in this scope, but the need for such will be identified during the implementation of these tasks. Should the need occur, the Contractor shall provide an action plan for addressing these needs.

2.7 Revise Plans and Finalize Goals

The Contractor shall facilitate the Design Teams as they finalize action plans to accomplish the work practices and business functions depicted in the to-be models. If a pilot project is deemed appropriate for a certain task or a certain geographic area, the Contractor shall prepare a plan to implement its deployment. The Contractor shall define how these pilot projects should be deployed, how results should be measured, and how design flaws should be corrected. The Contractor shall include final to-be process designs, recommendations for implementation of the EAMS in conjunction with revised work plans, training requirements, and a finalized list of KPIs, inboxes, and reports. A handoff to the EAMS implementation team will occur to incorporate this information in the Datastream system. Included in this Task is preparation of a deployment strategy document, to be completed by Contractor, and reviewed with the WASD Project Core Team. This document will specifically define the deployment methods to be used for business process, as well as for EAMS deployment across the WASD organization.

Deliverables

An Implementation Analysis Report will be prepared by the Contractor, submitted for comments, and revised as necessary. The report will include the following, at a minimum:

- Updated, revised, and new "As-Is" and "To-Be" processes for the (up to) **50** high-level workflows
- Resource loading analysis output showing resource utilization required to meet the key, high-level workflows
- Recommended training and organizational impacts
- Finalized KPIs, in-boxes, and EAMS report designs

- Recommended EAMS implementation and deployment procedures as they relate to new practices and technology implementation

WASD Responsibilities

WASD will be responsible for continuing to ensure that the Design Team members are available as needed. WASD is also responsible for providing completed business process designs as well as KPIs, in-boxes, and EAMS report designs

Additional Assumptions and Understandings

- The Contractor shall consolidate, or add to, the WASD EAMS Project – Business Processes Mapped, as referenced in Appendix D – Business Processes Mapped, with no more than **50** workflows anticipated.
- Actual revisions to job descriptions and the development of a training program are not included in this scope but the need for such may be identified during these tasks
- The Implementation Analysis Report will direct the functional requirements and configuration of Datastream in Task 9 (Datastream 7i Product Configuration and Testing).

Task 3. Inventory Management Evaluation and Implementation

Purpose
To evaluate whether to implement inventory management using the PeopleSoft or the Datastream 7i product and implement the inventory management functions into the system selected by WASD.

Methods and Approach
Procurement activities must create an efficient balance between an enterprise's strategic sourcing and purchasing control functions and its day-to-day work operations. The Contractor shall work with WASD to assess and validate inventory management processes in an effort to determine optimum utilization of systems and enabling technology to establish and sustain balance between procurement activities and work operations.
The Contractor's approach to developing an effective inventory management solution is described by the following:

3.1 Assessment of Financial Management Systems

The Contractor shall assess the financial management system/solution environment based on the following criteria:

- How are parts and materials purchased?
- What are WASD's policies and standards for procurement?
- What are WASD's vision and direction for strategic sourcing?
- How are parts and materials costs captured, valued, and allocated to the organizations that use them?

3.2 Assessment of Material Management Systems

The Contractor shall assess the materials management process and practices based on the following criteria:

- What is the role(s) (current and envisioned) of the Stores/Procurement Section? What do they do today? What is done well? What needs to be improved? Where are the opportunities for employment of advanced technology to improve operations? What do they need to do in the future?
- Across the enterprise, what are the inventory management processes and practices that are used today? How effective are they? Where are the areas for improvement? How can advanced technology be employed to improve operations?
- How many storerooms are employed? How are they managed? What are their processes and practices? How effective are they?

3.3 Assessment of Storeroom Work Practices

The Contractor shall assess the work and asset management processes (in place and envisioned) in the storerooms:

- What are the work and maintenance processes and practices that are related to parts and materials usage? How effective are they?

- What are the "triggers" for inventory acquisition and replenishment? How tightly coupled are planned work requirements and parts and materials usage? Is work planning used to determine parts and materials inventory levels?
- How accurate are inventory levels relative to anticipated work requirements?
- Are parts and materials costs effectively allocated to work requirements?

3.4 Assessment of Technical Environment

The Contractor shall assess the technical environment (existing and envisioned) based on the following:

- What is the server platform and telecommunications infrastructure in place and/or envisioned for the Datastream 7i system?
- How will the PeopleSoft and Datastream systems be linked?

3.5 Summarization of Findings

The Contractor shall conduct a "fit-gap" analysis based on findings. The objective of this activity is to contrast WASD present, as well as envisioned, processes, practices, and technical platforms to the Contractor's empirical, best-practice solution model to determine the "gap." The Contractor shall analyze the "gaps" and, considering the best practices solution model and WASD's work environment(s), determine how to best accommodate them. The result will be a best practices solution model for WASD's inventory management activities.

The Contractor's recommended solution will focus particular attention on the "most appropriate" role of the Datastream 7i system and the PeopleSoft applications (general ledger, inventory, and procurement) to support the best practices solution model. The Contractor shall submit a draft findings and recommendations report to WASD for review. The Contractor shall conduct a review workshop with WASD staff to incorporate agreed-upon revisions in the final recommendations report.

Deliverables

- Documentation of assessment(s)
- Recommended option for implementing inventory management
- Design recommendations for inventory management in recommended system, including bar-coding solution

WASD Responsibilities

- Provide a WASD subject matter expert for materials management issues and questions
- Provide a WASD subject matter expert for PeopleSoft issues and questions
- Schedule appropriate staff and facilities for on-site meetings to conduct required assessment
- Identify Divisional/operational contacts list
- Review and accept or reject the recommended inventory management solution

Additional Assumptions and Understandings

- The implementation of inventory management within (Datastream and PeopleSoft) will occur in Task 9 (Datastream 7i Product Configuration and Testing).

Task 4. Benchmark Assessment

Purpose

The concept of improving WASD business Services and determining how to leverage technology to support the improved Services, is the goal of the activities conducted in Task 2 (Business Analysis Review and Validation), Task 4 (Benchmark Assessment) and Task 5 (Standards and Naming Conventions Definition). From a chronological perspective the activities start with Task 4, where the Contractor shall assess current WASD business Services against "industry best practices." The outcome of this Task will feed the "as-is" and "to-be" modeling efforts described in Task 2, as well as the standards, naming conventions, and work-order life cycle modeling conducted in Task 5. The activities in these three tasks are highly interrelated and culminate with EAMS configuration specifications.

In Task 4, the maintenance-related performance of the various Divisions and Sections of WASD will be assessed against best industry business practices. An important consequence of conducting the assessments is to transfer knowledge of best practices from the Contractor to representatives of the WASD staff. The techniques used in the assessment work described in this Task will create a consensus as to what WASD should look to accomplish through the EAMS implementation.

This Task will consist of two benchmarking activities; The "Core" Business Divisions and Sections of WASD will be benchmarked using *practice benchmarking techniques;* The "business" Services Divisions and Sections of WASD will be benchmarked using a *metric benchmarking technique.*

The techniques to be used, which are further described in this section, will compare the ways in which work is currently conducted within WASD. These methods will provide an efficient and effective process to determine what elements of WASD business processes may be candidates for improvement and how the EAMS could be leveraged to support such improvements. The Contractor and WASD will reach agreement on specific practice (work) and functional business Services that are candidates for business process improvement. In Task 2, the Contractor and WASD Track Team Representatives will incorporate concepts that have been discovered in this Task to create improved "to-be" work processes.

In addition to transferring knowledge regarding best business practices to WASD representatives, this assessment procedure will transfer knowledge from the various WASD Track Teams to the Contractor with respect to how current business practices are performed, the opportunities for improvement, and level of organizational resistance towards the EAMS. The activities performed in this Task will drive the efforts in Task 2 where selected business processes will be documented through "as-is" and "to-be" modeling.

Note that practice benchmarking work conducted in this Task is likely to suggest that WASD could benefit from broad redesign of organizational roles and responsibilities as well as changes to the way day-to-day maintenance activities are managed and carried out. While reengineering of business processes not specifically tied to use of the EAMS may be of benefit to WASD, reengineering of EAMS related activities is not within the current scope of this project.

Method and Approach

This Task will be conducted using two different methods. One method is specific to WASD's "core" functions and the other to its "business services" functions. (Note that core and business services have been previously defined). The core services assessment methodology will be based on several research programs conducted by EMA on behalf of industry associations such as AWWA, WEF, NACWA, AMSA, and others. Through these research projects, and several hundred benchmarking assessments for individual utilities, a facilitated self-assessment technique based on practice benchmarks has been developed and will be utilized by the Contractor. For the Core Services, a facilitated self-assessment procedure is used to guide teams of WASD staff to determine how the organization is positioned with respect to best practice criteria and what that rating means to the EAMS implementation requirements.

The "Business" Service Divisions and Sections of WASD will be assessed through a series of interviews designed to identify the business functions performed. The Contractor shall capture the processes used to perform work. Specific focus will be placed in identifying processes where the EAMS could add value to, or gain value from the work performed within the *"business services."*

The Contractor shall use the information to apply a *"metrics"* based methodology of assessing the Services which will aid in determining how to position the EAMS so that maximum value can be achieved.

The Contractor shall conduct four roughly parallel assessments. Each Assessment Track combines WASD organizational Divisions and Sections that conduct similar types of work and, consequently, have similar sets of requirements with regard to the EAMS. Each Division or Section within each Track will be assessed using similar criteria. Note that "EAMS requirements" is meant to imply both, functional requirements, and organizational work practice changes needed to capture the full benefit of the EAMS. The Contractor shall facilitate Assessment Tracks made up of these Sections.

Table 2. Assessment Tracks

Track Number	Division	Section	Assessment Method
1	Wastewater	Collection	Core
	Water	Distribution	
	Engineering and Planning	New Business	
2	Admin	Call Center	Business Services
	Finance	Customer Services	
	Water	Meters	
3	Admin	General Maintenance	Core
	Wastewater	Plants	
	Wastewater	Pump Stations	
	Water	Plants	
4	Admin	Procurement	Business Services

Core Business Services Performance Strategies

As previously described, the assessment framework for the core services is based on best industry practices. These practices are defined by the seven core business service performance strategies as described below. The Contractor shall facilitate the WASD Track teams in assessing how the current organization's practices compare to these "best practice strategies":

Operational Strategies

Total Productive Operations (TPO). Total Productive Operations is the elimination of the distinction between and among various jobs and tasks. Everyone is on the same team, working towards common goals.

Program-Driven Maintenance (PDM). PDM maximizes productivity and can significantly reduce the cost or increase the effectiveness of maintenance. It involves planning and performing maintenance and rehabilitation in advance of equipment and/or infrastructure failure.

Staff for the Base. This strategy focuses on staffing for the "base" workload and importing resources for peak, or emergency, conditions. This strategy optimizes utilization of labor, equipment, and materials.

Workforce Flexibility (WFF). The basic tenet of WFF is the cross-training and multi-skilling of staff. Often, the largest single factor in lost productivity is the time lost when employees are waiting for other employees with the right skills to perform associated tasks. WFF minimizes this waiting and increases the productivity of a worker's time on the job.

Enabling Strategies

Technology is Essential
The best utilities are leading-edge users of technology as a strategy to maximize productivity and minimize costs. They systematize information so people can share it and work together to re-engineer the way that tasks are performed. Work can be planned and scheduled more efficiently, staff skills and head counts can be determined based on work backlog and planned activities, procurement can be greatly enhanced, and inventories controlled better. This strategy is particularly important to WASD, since the objective of this assessment is to establish business practices suitable for the utility and then to determine how the EAMS should support them.

Organization as Strategy
Rapid, radical changes in large and small organizations are being accomplished through new approaches to organizing and utilizing human resources. The strategy focuses on removing organizational barriers and determining the changes needed to create a team-based, empowered organization. Also, an important organizational strategy is the degree to which WASD is planning for the inevitable loss of knowledge and leadership created by the aging workforce.

Assets as Investments
Effective asset management is a critical link in balancing service delivery and costs to achieve and sustain customer satisfaction. It is one of the most important, yet neglected practices associated with developing a competitive organization. Asset management is simply defined as the strategic use of resources to optimize the life cycle value of assets through cost-effective designs, smart investment and financing choices, best-in-class operations and maintenance, and business-based refurbishment or replacement decisions. The objective is to build a utility with a specific, sustainable level of service quality.

Results of the Core Business Assessment will not be recommendations for broad scoped organizational redesign or business process reengineering. Rather, they will be recommendations for "best applicable work practices" that can be implemented in conjunction with the EAMS so as to take as much advantage of the technology capabilities as possible within the constraints of the current organization.

Business Services Benchmark Assessment Approach

The Business Services Benchmark Assessment will consist of an aligning of the Value Stream and strategy of WASD with the Value Stream activities performed by the *"business services"* Divisions and Sections.

Executive Strategy and Vision
The initial stages of the *"business services"* benchmark assessment will consist of reviewing the current Executive Strategy and Vision that is defined for the WASD and reviewed in Sub-task

1.3 (Executive Goals and Objectives Workshop). The purpose of this step is to refine a basis or foundation for determining how the organization, the work performed by the non-core Divisions and Sections, and the Services are aligned to the Executive Administration's Strategy and Vision.

Identify the Service Channels

The *"business services"* assessment must take into consideration that the community of Divisions and Sections contained within this group provide a diverse set of services. Each *"business services"* Division or Section has an inherent means of providing their Services through an equally diverse set of delivery channels.

The objective of this step will be to identify the service channels used by WASD and to determine the connection points between various channels and the overall *"Value Stream"* of WASD. It is anticipated that in some cases, the *"business services"* Assessment community will connect to the *"Value Stream"* of WASD through Primary Assets directly embedded within the value stream, versus assets that are classified as secondary support assets (i.e., operational, sustainment or quality of life). For this reason, part of the Service Channel identification will be to identify each *"business services"* Division and Section as an Asset Owner, Asset Maker, or Asset Service Provider.

Identify the Service Channel Strategy and Vision

In order to determine the alignment of the Service Channel to the overall *"Value Stream"* of WASD, the Contractor shall document the alignment of the strategy and vision of each Division and Section to determine continuity between the Executive Strategy and Vision and those of the Division and Section. The focus here will be to identify induced operational constraints that may reduce the overall effectiveness and efficiency of the organization.

The Contractor shall identify which Channels and inherent Services provide value within the value stream of the organization, but there is no single solution for all Divisions and Sections.

Identify the Value

During this stage of the Benchmark Assessment, the Service Channels will be aligned to a value position. In other words, determine how the organization creates value for WASD. Assuming that all Divisions and Sections create value, it will be important to identify those Assets within each Division or Section that are needed to create value (tangible or non-tangible).

Capture the Processes

At this stage of the Assessment, the Contractor shall focus on capturing the methods used by each Service channel to perform its tasks. The objective of this step will be to identify dependences between Services and the technology used to create value and to identify Services that could benefit from the EAMS technology. Data dependency and usage would also be collected to determine what non-tangible value is derived from data that is collected and disseminated across the enterprise.

Define the Constraints

One of the objectives of the Benchmark assessment will be to identify constraints that are embedded within the Service Channels and Service Channel to *"Value Stream."* In this step, the Assessment will focus on the characteristics of the constraints (i.e., how they are formed, whether the constraints are steady-state or dynamic, and what triggers the constraints).

Assessment Task Descriptions

4.1 Select Services Assessment Track Teams

The Contractor shall meet with WASD EAMS Project Management to select two Assessment Track Teams. Team members should come from a cross section of the organizations shown in the table above. They should be open minded, critical thinkers, and familiar with how work is conducted in their areas. Approximately eight to twelve staff members will be chosen for the "Core" track team. For the "Business Services" tracks, one representative from each Division and Section knowledgeable in the Work Processes will be required. Utilization of the track team members will be considered as full time assignments for the duration of the task.
Note that the work described below is for a "facilitated assessment." The WASD Assessment Track Teams will learn best practice concepts, conduct interviews with WASD staff, assemble data, and through a facilitated process with the Contractor, define the best applicable business practices for their organizational sections.

4.2 Collective Assessment Teams Meeting

The Contractor shall conduct a workshop with the Core Services Assessment Track Teams and a separate workshop with the Business Services Assessment Track Team. The purpose of the workshops will be to present the approach that will be used by each track team, review the roles and responsibilities of each Track Team, and introduce the concept of the assessment tool previously described. The Contractor shall present a "state of the industry" overview and facilitate a discussion with the participants regarding their expectations for the project.

4.3 Assemble Desk Audit Information

At least two weeks prior to the meeting described in Sub-task 4.2 above, WASD will provide to the Contractor the following information regarding each Division and Section operations:

- Organization chart showing structure and composition of each Division and Section by location or function
- Personnel schedules and geographical deployment
- Detailed expense budget for current year and actual amounts spent for immediate past year
- Data for labor within the overall budgets, including overtime, by facility or organizational unit
- Average fully burdened employee salary rates including all benefits
- Allocation/expenditure for materials and supplies by facility or organizational unit
- Allocation/expenditure for contract services by facility or organizational unit
- Most recent capital improvement budget and plan
- If available, documents including Strategic Business Plan, Operations Plan, recent Annual Reports, and Strategic Information System Plan
- Map showing service area and locations from which resources are dispatched
- List of rolling stock, equipment by type, size, or crew assignment
- Maps showing location of sewer and potable water, treatment plants, pumping facilities, storage, regulation, and metering stations

- Schematic drawings or other descriptions of treatment facilities
- An accounting of any regulatory compliance problems over the last 12 months and measures taken to mitigate the problems
- Summary of Consent Decrees that may be in place
- Solids handling programs descriptions
- Maintenance backlog analysis and prioritization planning procedures by facility/organizational unit
- Predictive maintenance program description
- Materials and supplies inventory turnover rate and inventory dollar value
- Brief description and overview drawing of computer systems including:
  - Office automation, financial, project management, and human resource systems
  - Local and wide area network
  - Geographical Information System
  - Record Documents Storage and Retrieval
- Five year employee turnover records

Additional information will be requested once a better understanding of WASD's business services is achieved.

4.4 Assessment Team Training

The Contractor shall conduct this Sub-task, as well as all those remaining in this task, through individual workshops with each of the two Core Business and Business Services Assessment Teams.

Present Competitiveness Strategies
The Contractor shall conduct a half-day workshop for Executive management and union-labor entities to explain competitive strategies and how they can be applied, as well as the techniques used in this assessment.
For the Core Business Assessment Teams, the Contractor shall conduct a half-day workshop where the O&M competitive strategies (noted above) will be presented and explained as to how they can be applied, and the techniques to be used in this assessment.
For the Business Services Tracks, the Contractor shall conduct a half-day workshop centered on the alignment of the Strategy, Value Stream, Assets, Services (Demands) and Resources. Specific focus will be placed on the alignment of the Delivery Channels and associated services, how value is created, the processes used to create value, and constraints that exist within the Delivery Channels.

Desk Audit Information Review
In a continuation of the Competitive Strategies workshop described above, the Contractor shall conduct a half-day workshop to review the information request list for the desk audit with the Assessment Team, discuss why the Assessment Team needs each document, and how they will use it in the desk audit. It is anticipated that the Assessment Team members will have assisted in compiling the information. The Desk Audit Information review will be split along Core and Business Services lines to review the documentation as it relates to the specific focus of each Team.

Interview Process
In a subsequent workshop the Contractor shall discuss the interview process with the Assessment Teams. The Contractor shall use the WASD organization chart to make suggestions regarding which individuals the Assessment Team should interview and the reasons why they are good candidates. For the 'Core' Business teams, the process will start at the foreman/crew chief level. For the Business Services Assessment Team, the starting point may be a department lead or functional manager within a Division or Section. It is assumed that anyone interviewed can describe the activities one level below his/her own. Interview employees at every other level (skip levels based on this assumption). Discuss the reason for limiting the number of interviews (there is no value added by interviewing a lot of individuals who perform the same job function). Review standard interview questions and discuss what information the Assessment Team is trying to obtain and how to approach the questions. WASD Assessment Team members should not interview employees in their direct chain of command.

Conduct Brief Training on How to Conduct Interviews
For the 'Core' Business Assessment Teams members, the Contractor shall conduct a workshop to teach proper interview techniques. For example, do not challenge answers provided by employees. Ask open-ended questions. Assure confidentiality. Stress that this is not a test; there are no wrong answers. Discuss how the questions are structured to solicit responses specific to the seven core strategies. The Assessment Team will be coached on how to avoid making this a highly structured process.
The Contractor shall facilitate all interviews conducted as part of the Assessments. The WASD level of involvement will be limited to the representatives participating in the interviews with the Contractor, as well as the interviewees.

Compilation
The Contractor shall conduct multiple workshops with the Assessment Teams to discuss how the teams will combine the results of the desk audit and the interviews and how to apply the various assessment criteria.

4.5 Compute Assessment Results—Identify Savings Opportunities

After the interviews are completed, the Contractor shall meet with the Assessment Teams to examine interview results and performance figures. Through a facilitated process, the Assessment Team and Contractor staff will develop opportunities to increase efficiency or improve effectiveness. The Contractor shall help the Assessment Teams apply the seven O&M strategies previously described through a series of workshops defined below:

Calculate gap
With the interview and desk audit information, the Contractor shall facilitate the Assessment Teams in calculation of the performance gap by applying best business practice standards and general knowledge of the industry to the best industry strategies. The gap is defined as the difference between current controllable costs and the costs that a world-class utility would experience. Requirements for the EAMS will be defined and benefits to the organization will be documented. Note: this is not intended to be an exercise in determining how to cut costs. Rather, by quantitatively and qualitatively evaluating the gap, the Assessment Teams will begin to see where existing practices can be streamlined and how the EAMS can be used to improve the performance of their sections. As previously mentioned, the findings of this Task will drive the modeling work conducted in Task 2 (Business Analysis Review and Validation).

Create Performance Metrics
The Contractor shall use existing WASD performance metrics, measures defined as appropriate by QualServe and the AWWA/WEF Benchmarking Clearinghouse, and the Contractor's own

experience to suggest performance metrics for each 'Core' and Business Services Divisions and Sections to consider. These will be reviewed with the Assessment Teams and incorporated into the Presentation of Results. The Contractor shall work with the Assessment Teams to determine a general format for performance measurement; i.e., the QualServe method, Balanced Scorecard, or others. For each metric, the Contractor, in association with the Assessment Teams, will identify the data needed and the source of that data.

4.6 Presentation and Consolidation of Results

Through a series of workshops, the Contractor shall assist the Assessment Teams to consolidate findings from the work conducted to this point and to prepare and present the results of the assessments to the Project Core Team and other WASD management, as appropriate. The final presentation of results will include the following:

- Documentation of how each Section compares with best industry performance standards
- A set of recommended business process improvements that should be considered during the EAMS implementation and a budgetary ROI for the recommendations
- Overview of the functional needs of the EAMS to support the business requirements of the Sections
- Preliminary indications of roadblocks to the EAMS or business process improvement constraints
- Documentation of both practice and metric performance benchmarks

Following the presentation of the Team's findings and recommendations for their particular areas of emphasis, the Contractor shall consolidate the outcomes into a single document showing the following:

- Methods used to compare the current situation to best industry practices
- Comparison of current practices, best practices, and recommendations for "realistic, achievable or appropriate" practices for WASD
- Specifics of the "gap" and a quantification of the improvement potential for moving from the current situation to practices and procedures the teams feel appropriate for WASD to implement
- Recommended Key Performance Indicators (KPIs)
- Specific functional requirements as they relate to the EAMS implementation

Deliverables

- The final deliverable will be a series of presentations by the Assessment Teams to WASD management as defined in Sub-task 4.6 (Presenting and Consolidation of Results)

WASD Responsibilities

- WASD will be responsible for assembling the Assessment Track Teams defined in this Task and ensuring that team members are available to participate

- WASD will be required to gather the desk audit information and make it available to the Contractor at least 10 working days before the first assessment team training (Sub-task 4.4) begins
- WASD will provide reasonable facility space and office supplies needed to complete Task 4 at no cost to the Contractor
- All Required Consents needed to gain access to information and data, facilities, and technology

Additional Assumptions and Understandings

- Executive Sponsorship and commitment will be communicated to all Divisions and Sections in order to facilitate an environment of open dialog and a desire to improve organizational efficiency and effectiveness
- Assessment workshops will be conducted during WASD normal business hours
- WASD will provide facility space and access to Divisions and Sections at a time mutually agreed by WASD and Contractor

Task 5. Standards and Naming Conventions Definition

Purpose

The current best practice in asset numbering is to have the master asset application (typically the asset register or EAMS) automatically generate unique unintelligent asset numbers. Each additional application requiring asset records generates its own asset numbers that are cross-referenced in the master asset application. In order to facilitate managing maintenance resources and to support asset management concepts, searchable language-based modifiers need to be included in the asset ID. However, if the modifiers are done improperly, or without strict rules, they can become virtually useless. The approach defined in this Task will create the rules for implementing an asset identification system designed to meet WASD's business needs, as well as methods to capture important asset data that may be missing from current systems.

This Task will also establish a common work order life cycle management process for the entire Department (WASD). This process will leverage the work done in Task 2 (Business Analysis Review and Validation) and Task 4 (Benchmark Assessment) and establish an important element of the framework for the Datastream implementation.

Method and Approach

The Contractor shall facilitate development of standards, naming conventions, and related tasks while working with a Design Team established for this purpose. In order to increase the number of staff involved in this project, the Contractor recommends appointing individuals who were not part of the four Operational Track Teams or Design Teams used in Task 2 and in Task 4.

5.1 Selection of Naming Conventions and Standards Design Team

The Contractor shall meet with WASD management to select the Standards Design Team, which will consist of six to ten WASD maintenance management staff and at least one representative from the Stores and Procurement Section. As previously stated, the team members should have a thorough understanding of how maintenance is currently accomplished. They should be open to new ideas and should ideally be well regarded by their peers and subordinates. The Contractor shall present the overall objectives for the EAMS project and the results from Task 2 and Task 4, thereby educating the team about work conducted up to this point. The Contractor shall present concepts for asset identifiers and descriptions and explain why they are important. The Contractor shall present a standard work order life cycle as shown in Figure 2 below.

5.2 Development of Work Order Life Cycle Standards

The Contractor shall conduct a series of workshops with the Standards Design Team covering the work order life cycle management process reflected in Figure 2. The Contractor shall document each of the thirteen processes shown in the figure. Each process will detail a specific step in the maintenance work order process. In the final deliverable, the Contractor shall document screen configurations needed to meet the business requirements identified during the workshops described below.

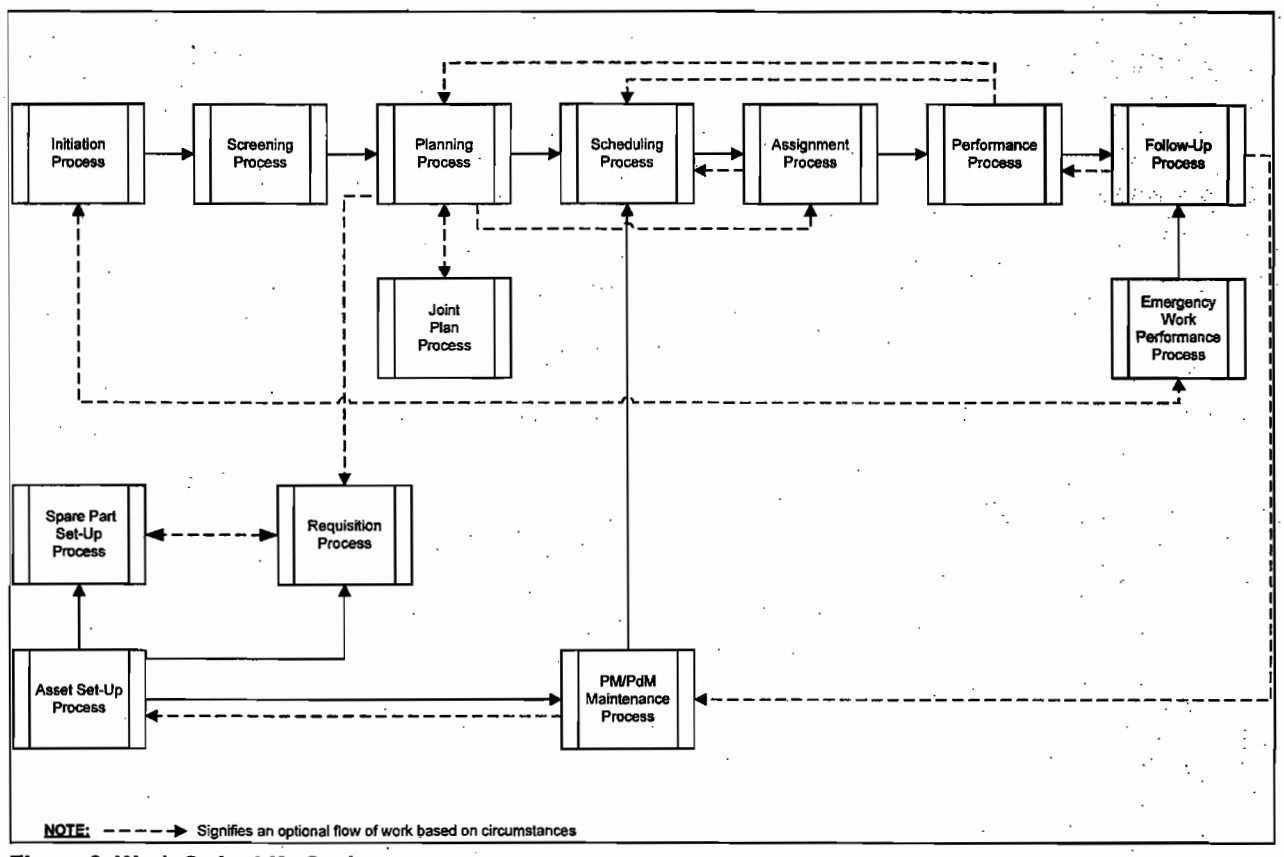

Figure 2. Work Order Life Cycle

The flow diagram above depicts the thirteen processes. The following is a brief description of each process:

1. **Initiation Process.** Used when an employee notices or is notified of a problem or work that is needed. Helps to ensure that requests for work are recorded.
2. **Screening Process.** Used to ensure that Work Requests are reviewed to determine legitimacy of the work requested and completeness of the information provided.
3. **Planning Process.** Used for Work Orders requiring formal planning. Increases maintenance efficiencies by having the skills coordinated and the materials available before the assignment of work.
4. **Joint Planning Process.** Used for Work Orders requiring the assistance of other resources to plan the work.
5. **Scheduling Process.** Used to ensure availability of personnel and parts before Work Orders are scheduled.
6. **Assignment Process.** Used to select work from the schedule for assignment and to verify that needed resources are available.
7. **Performance Process.** Used after a Work Order has been assigned in order to ensure that the work is performed in a consistent manner and that necessary work steps are executed.
8. **Follow-up Process.** Used after the tasks on a Work Order have been completed; helps to ensure that an analysis of the problem or the Preventive Maintenance (PM) or Predictive Maintenance (PdM) job plan is conducted, if necessary, and that needed corrective action is taken.

9. **PM/PdM Maintenance Process.** Used when a new PM or PdM job plan is needed, or when changes are needed to an existing one; helps to ensure that the proper type and amount of preventive maintenance is defined and implemented for an asset, based on its characteristics and priority.
10. **Emergency Work Performance Process.** Used when an emergency is identified; helps to ensure that individuals who need to be involved are notified and that expedient corrective action is taken.
11. **Asset Setup Process.** Used for setting up new or existing assets in Datastream.
12. **Spare Parts Setup Process.** Used when new parts (items not already set-up in inventory) are identified and need to be set-up for use by maintenance.
13. **Requisition Process.** Documents the steps to be followed when parts need to be purchased for a job; helps to ensure that order requests are processed in a timely manner and following established guidelines.

The outcome of this Task will be a Utilities Manual of Practice. The Contractor shall work with the Standards Design Team to develop the Manual of Practice which will contain the maintenance process overview and process flow charts for each element in the work order life cycle and will document the basic process flows and incorporate WASD's business practices with Datastream's functions.

5.3 Establishment of Objectives and Rules for Naming Conventions

Based on the best practice business requirements established in previous tasks and the work order life cycle standards defined in Sub-task 5.2, the Contractor shall assist the Standards Design Team with the establishment of the enterprise data needs required to manage the maintenance organizations. This work will focus on functional data/information needs such as information search requirements and review of performance measures and KPIs defined in previous tasks during development of these requirements. The objective will be to define these needs from a functional basis such that they will drive the asset classification and attribute rules to be defined in the Sub-tasks that follow. For example, a functional need may be identified as the requirement to search by items such as maintenance backlog categories, problem codes, asset classifications, or emergency work performed. Asset classifications and attributes (known as Positions, Systems, and Locations) will be mechanisms to search and manage the business of asset maintenance activities.

5.4 Establishment of Asset Classifications

The Contractor shall work with the Standards Design Team to establish a set of asset classifications. For example, to include equipment types such as pump, manhole, valve, or line segment. These asset classifications will be published in the Manual of Practice described in Sub-task 5.2.

5.5 Defining of Asset Class Attributes

The Contractor shall work with the Standards Design Team to establish attributes (generally referred to as maintenance significant items, or MSIs) associated with each asset class. For example, "pump" may be an asset class. Attributes associated with assets in that class might be descriptors for the "purpose" followed by the "size" and then the "manufacturer."
The Contractor shall work with the Standards Design Team to establish methods to capture "missing" attribute data. For example, if attribute data is missing for an asset that is included in a work order, then the system should automatically generate a form, along with the work order document, displaying the asset's attributes (MSIs) and values, and alerting the mechanic to

capture missing information while working the job. The class attributes and data retrieval recommendations will be published in the Manual of Practice described in Sub-task 5.2.

5.6 Creation of Unique Failure Codes by Asset Classifications

The Contractor shall work with the Standards Design Team to create unique failure codes for each asset classification. For example, the team might create codes for "problem/activity," for "cause," and for "remedy." The failure codes will be published in the Manual of Practice described in Sub-task 5.2.

5.7 Defining of Linked Document Rules

The Contractor shall work with the Standards Design Team to establish recommendations about linked documents. For example, each asset class may have linked Standard Operating Procedures and individual assets may have linked operating and maintenance procedures. The linked document rules will be published in the Manual of Practice described in Sub-task 5.2.

Deliverables

- Manual of Practice

WASD Responsibilities

- Provide time for the Standards Design Team members to participate in the workshops described above to accommodate the project schedule in a timely fashion

Additional Assumptions and Understandings

- None

Task 6. Optimal Technical Architecture Review and Assessment

Purpose
To confirm the server and network technical architecture for the production Datastream 7i and supporting systems and prepare a recommendation for EAMS implementation.

Method and Approach
The Contractor shall conduct an assessment of WASD's technical infrastructure and IT operating processes, practices, and procedures for continued sustainability. This assessment will confirm the optimal server and network architecture and configuration to support the proposed Datastream 7i system implementation. The assessment will consider the following:

- WASD's current high-speed, scalable wide area network (WAN) to 11 different geographic locations
- WASD's 24/7 operations and the use of mobile devices for field personnel
- WASD's plan for EAMS to reside in a central location within the Enterprise Technology Services Department (ETSD)

6.1 IT Strategic Direction Review and Standards

Following the Project Core Team kickoff workshop, WASD's IT staff will present to the Contractor those IT strategic directions that affect EAMS development.
Where appropriate, the Contractor shall then work with WASD IT staff to develop or refine standards for various digital products being used and integrated in the EAMS. These standards may include:

- **Metadata Standards**
  Metadata standards are standards for information describing spatial data. They will focus on the metadata requirements for sharing data within Miami-Dade County or outside of WASD. Options for disseminating metadata information (i.e., via the Oracle Enterprise Metadata Manager, as well as other intranet metadata repository management) may also be explored, at WASD's discretion.
- **Enterprise Data Warehouse Standards**
  Standards for the development and operation of an enterprise data repository for WASD with recommendations for the advancement to a data warehouse for statistical archive storage, analysis, and operation. Commercially available data warehouse tools will be evaluated for WASD consideration.
- **Solutions Development Standards**
  These are standards to support internal and contracted application development for a web-based solution, as well as integration toolsets. Standards will also be presented for WASD IT operational procedures to support the development of custom application, documentation, and on-line user help tools.
- **Supporting Enterprise Data View Standards**
  A review of WASD's standards for maintaining a centralized customer address master file, with recommendations for continued maintenance and periodic reconciliation to other organizationally known address data repositories. Standard views to the address master file and other commonly used data combinations will be devised and Extensible Markup Language (XML) validation services recommended. Procedures will be recommended to WASD for the expansion of new standard operational views to commonly used data elements. The Contractor shall also review service bus architecture

as an alternative to support systems integration for the EAMS and WASD IT development standard.

- **Data Integration and Naming Convention Standards**
  The integration of diverse data sets will require naming conventions for common linking data attributes. This is commonly done with alias referencing. Standards in naming conventions for data integration will be proposed to assist in organizing the enterprise data repository as well as naming conventions used in the configuration of the solutions themselves. Many software solutions to be integrated allow end-user configuration and definition of "user-defined fields"; when operating software across divisional boundaries, it is best to keep these user-defined fields within the parameters of some operational naming convention for easy recognition and potential operational delineation.
- **Operational Standards to Support Core Products Integration**
  As enterprise integration occurs with the identified core products, there will be requirements for continued integration. These standards of operation will be detailed. This is critical for continued operational integration between products. As software vendor product development occurs and new software versions are applied into a proposed test-configuration environment, these standards can be assured without interruption to service.
- **Other Best Practice Recommendations**
  Other best practices to support continued sustainable enterprise integration will be brought forth.

6.2 Hardware Requirements Specifications

Conduct hardware/software review meeting. The Contractor shall meet with WASD and WASD IT staff to review the proposed hardware/software specifications and the proposed server hosting environment.

Develop hardware and associated software specifications. Based on the review meeting, the Contractor shall develop hardware/software specifications for the computing systems (development and production) required by WASD to host and operate the EAMS with the following considerations:

- Browser requirements
- Workstation hardware and software requirements
- Mobile computing requirements
- Backup and recovery recommendations
- Server hardware configuration, capacity, and scalability
- Application deployment (timing and organizational considerations)
- Operating environments
- Database instances
- E-mail system enhancements
- Network infrastructure upgrades
- Database backup and fail over
- EAMS archiving strategy

- Wireless/mobile infrastructure
- EAMS security plan
- Operating performance criteria
- Performance monitoring requirements

Following discussions with WASD staff, the Contractor shall document recommendations as a portion of the initial Project Work Plan.

Deliverables

- Documentation of recommended technical architecture and recommended changes to the existing infrastructure
- Standards and best practices recommendations

WASD Responsibilities

- Provide a WASD subject matter expert for current IT infrastructure assessment
- Provide a WASD subject matter expert for definition of future IT infrastructure directions, plans, and strategies
- Review, comment, and provide acceptance of standards and best practices
- Schedule appropriate staff and facilities for on-site meetings to conduct required assessment
- Review and accept the recommended solution

Additional Assumptions and Understandings

- None

Task 7. Mobile Computing Requirements Definition and Specifications

Purpose
Develop mobile computing requirements and specifications to support WASD operational use of mobile solution for field data collection as part of the EAMS implementation.

Method and Approach
The Contractor shall address WASD's requirements and specifications document for mobile computing—hardware, software, data, and external components needed for WASD's mobile computing infrastructure, including a final mobile systems configuration.
In addition, before a final field platform is selected, the Contractor shall field test the candidate platforms in designated WASD service areas The Contractor shall summarize the findings from these reviews and will include them in the final Mobile Computing Requirements and Specifications Document to assist WASD in solution-architecture procurement.

7.1 Mobile Requirements Specifications

Datastream operations accommodate either a disconnected operation or resident solution accessed through a persistent wireless connection provided by Miami-Dade County or an alternate service provider. The Contractor shall work with WASD to review existing Infor solution and other mobile development alternatives and determine their applicability, define mobile architecture requirements, and develop deployment strategies to support mobile operations.

7.1 Field-Based Hardware Review

As part of the Mobile Computing Requirements and Specifications Document, the Contractor shall assist the Project Core Team in reviewing available devices in an effort to define the pros and cons of each. Examples of criteria to be reviewed for each device include, but are not limited to the following:

- Size and weight
- Screen size
- Ruggedness
- Effect of sunlight an display
- Battery life
- Built-in GPS receiver
- Cost
- Wireless communication capability

To review these devices, the Contractor shall work with the Project Core Team to compile a usability matrix consisting of critical criteria for the mobile computing platform. In addition, the Contractor shall help to procure demonstration devices to test field usability. The usability matrix will cover the device itself and its field usability, based on criteria set in the initial requirements gathering meeting. Using the matrix as a guide, the Contractor shall collaborate with WASD to eliminate potential problematic mobile computing platforms before field testing.
The Contractor, in conjunction with the Project Core Team, will take the remaining mobile device candidates into the field and perform a set of field-focused usability tests to determine the best platforms for WASD field personnel. To test field devices that may utilize a wireless connection to the WASD environment, the Contractor shall configure the mobile devices to access data in either the WASD staging environment or on another remote server. Results of

these usability tests will be combined with the earlier usability results and will be documented in the Mobile Computing Requirements and Specifications Document.
When field testing is complete, the Contractor shall recommend up to three options that support the needs of WASD field-based users. If there appears to be requirements for multiple field-based solutions, the Contractor will, as agreed to by WASD, document the business purposes supporting the use of each platform and will incorporate this documentation in the Mobile Computing Requirements and Specification Document.

7.2 Data Transfer

After selecting the appropriate hardware platform, the next item to consider is the type of data transfer technology available for field use. The Contractor shall investigate the various means of transferring data to and from the field-based users' preferred hardware platform. Furthermore, the Contractor shall use these findings in conjunction with available field-based user workflows to determine a solution that is both field-based in nature and fully supportive of the required workflows. The following is an example of the data transfer technologies to be reviewed by the Contractor:

- **Cellular-based Broadband.** The team will investigate the various data communication offerings from local cellular carriers and determine which, if any, are feasible for the data communication needs of WASD.
- **Wireless WAN/LAN.** If a metro-area wireless network or a series of regionalized hot-spots exist in the WASD service area, the Contractor shall determine whether they can be used as a part of the mobile computing infrastructure.
- **Batch Update.** If there is no wireless solution or if a wireless solution is not deemed appropriate for data transfer, the Contractor shall define other solutions for data transfer, such as end-of-the-day batch updates in the office.

Within the context of this review, the Contractor shall evaluate the possibility of sending and receiving email in the field. This capability depends on the availability of an always-on or periodically connected wireless solution.
Once applicable field-based data transfer technologies have been tested for performance and usability, the Contractor shall compile the results into the Mobile Computing Requirements and Specifications Document. In addition, the team will recommend an appropriate solution for the field users and will document workflow changes which may be necessary to perform the data transfer operations.

7.3 GIS, Images, and Drawings in the Field

The Contractor, taking into consideration the available hardware and data transfer strategies, will determine the appropriate mechanism for viewing GIS, image, and other drawing information in the field.

Deliverables

- Meeting minutes from the two-day mobile computing requirements and workflow meeting
- Completed usability matrix for each mobile platform
- Test results from field-based workflow tests
- Draft and Final Mobile Computing Requirements and Specification Document

WASD Responsibilities

- Attend a two-day meeting to review the requirements and workflow of the mobile users
- Assist in the creation of a mobile solutions usability matrix
- Assist in selecting mobile hardware platforms
- Make available at least two mobile users for field testing and verification
- Review the Mobile Computing Requirements and Specifications Document in draft and final formats

Additional Assumptions and Understandings

- The service estimates in this Scope of Services assume that mobile solutions will be deployed for the following functional areas: work management, inspections, inventory management, and GIS.
- The recommended solution will not include modification of source code or development of custom code.
- This Task will solely address the design of a mobile solution.

Task 8. Data Assessment and Conversion

Purpose
Assess existing systems and databases supporting maintenance-related activities within WASD to determine applicability to incorporate data into EAMS, the quality of the data in the systems, if data cleanup is required, and if archival of the data is recommended for historical purposes. Where appropriate, automated tools and/or procedures will be developed to aid in data cleanup, conversion, and importation to the Datastream database.

Method and Approach
The Contractor shall review the legacy work management systems listed in Appendix C - List of Applications, and working with the Project Core Team will determine the need to transfer data from each of the specified systems into the EAMS and to make recommendations on which solutions can be retired as a result of the EAMS.

8.1 Data Assessment

The Contractor shall assess the data in each of the legacy work management systems. For each system, the Contractor shall make a recommendation on whether the legacy system data needs to be transferred into the EAMS. If legacy system data is not viable for conversion into the EAMS, the Conversion and Migration Plan will identify that data source for archival storage. If the data is to be imported into the EAMS, the Contractor shall obtain copies of databases. The databases and dump files will be reviewed to determine what, if any, data cleanup is required by WASD and shared with the Contractor in a defined format. Contractor software developers will write the appropriate scripts to assist in data cleanup where automated processes can be applied.

8.2 Data Mapping to Datastream 7i

For each legacy system whose data will be transferred to the EAMS, the Contractor shall develop a data mapping matrix outlining the location of the data within the legacy system and the fields in which it will be mapped in the EAMS. These data mapping matrices will match legacy fields to EAMS fields and specify necessary data conversion processes such as data type changes or field updates, before the transfer into Datastream. The data mapping matrix will be reviewed with the Technical Design Team and adjustments will be made before development of a formal Conversion and Migration Plan. Once complete, the data map will be used as a guide to perform the actual loading of data into the EAMS.

8.3 Documentation for Data Conversion Strategy

Once the legacy datasets have been determined and data mapping matrices developed for each legacy system, the Contractor shall create a formal Conversion and Migration Plan. The Conversion and Migration Plan will consist of a detailed set of steps to be followed throughout the conversion process as well as rules that govern the inputs or outputs of the individual steps. Before final conversion, and in conjunction with the following task, the Contractor shall use the Conversion and Migration Plan to perform a pilot conversion to verify the methodology. Once the pilot conversion has been completed, the Contractor shall review the results with the Technical Design Team, adjust the Conversion and Migration Plan as necessary, and issue the final Conversion and Migration Plan document.

8.4 Data Conversion Scripts and Programs

As prioritized by the Project Core Team, the Contractor's application developers will develop the conversion and migration tools to the specifications determined in previous Data Assessment task where automated conversion is recommended. The Contractor shall develop the tools using SQL or industry standard assemblies for Microsoft .NET and provide to WASD for use with future data migration.
Following completion of tool development, the Contractor shall test the tools by performing the migration of a sample set of data from each legacy system. The Contractor shall conduct conversion and migration using a combination of the developed tools and standard SQL functionality. The Contractor shall document the results of the migration test and present them to the Technical Design Team in a one-day data conversion review meeting. Bugs or deficiencies identified in the tools during the pilot conversion will be fixed and retested by the Contractor before final production conversion.
Upon completion, the Contractor shall deliver to WASD the completed migration and conversion tools with installation instructions and source code generated for the tools development.

8.5 Final Data Conversion

Following acceptance of the pilot data conversion, the Contractor shall run the developed migration process against WASD legacy databases, as outlined in the Conversion and Migration Plan, to migrate selected historical records to the Datastream 7i environment. Records that cannot be loaded using the automated conversion approach will be turned over to the Project Core Team for resolution by WASD.

Deliverables

- Legacy system data assessment report
- Draft and final data mapping matrices for legacy systems data being imported into the EAMS
- Draft and final Conversion and Migration Plan for performing legacy systems data import
- Data conversion scripts for scrubbing data before import into the EAMS
- Source code for data scrubbing scripts or programs
- Data converted into pilot and production environments

WASD Responsibilities

- Make appropriate staff available for review of legacy systems data
- Assist in determining legacy system data to import into the EAMS
- Review the draft and final data mapping matrices for legacy systems being imported
- Review the draft and final Conversion and Migration Plan documents
- Make staff available for conversion into test and production environments
- Where needed, supply legacy system data in a predefined format and structure as defined by the Contractor

Additional Assumptions and Understandings

- WASD personnel will be responsible for consolidating data from disparate systems into a set of templates, which will be provided to the Contractor.
- Data mapping and conversion development tasks will take place in the offices of the Contractor.
- WASD will provide source data in an agreed-upon format as well as a configured, empty production schema for each trial run and the production run of the data conversion.
- Cost estimates for this step are based on four total iterations of the conversion run. Three will be evaluation conversions and the last will be a production run.
- It is anticipated that data will need to be refreshed from legacy systems to the Datastream production environment following the iterative deployment plan.
- The Contractor shall provide **276** man-hours of program-script development in support of data migration and data loading. Each data conversion program-script development which will be accompanied by a Software Requirements Specification (SRS) will have effort estimated before development.
- Data to be converted will include asset data from four existing systems and some PM schedules only. No historical data will be converted.

Task 9. Datastream 7i Product Configuration and Testing

Purpose
The purpose of this Task is to provide the technical assistance to configure and test the Datastream 7i modules, reflected in Figure 3.

Asset Management	Work Management	Project Management	Inspections Management	Materials Management
Purchasing Management	Reports	Analytics	Fleet	Mobile
Workflow				
Datastream 7i Extended				
Datastream 7i GIS Integration				
Databridge				

Figure 3. Datastream 7i Modules and Enabling Components

Method and Approach
The Contractor shall take the following approach to Datastream 7i configuration, with testing comprising three functional phases:

1. Datastream Design Phase
2. Datastream Configure Phase
3. Datastream Testing and Deployment Phase

9.1 Datastream Design Phase

During the Datastream Design Phase, the Contractor shall configure Datastream 7i to support the EAMS implementation procedures resulting from Task 2 (Business Analysis Review and Validation).
The Datastream Design Phase consists of the following primary tasks conducted by the Contractor:

- **Develop Business Scenarios and Scripts.** The purpose of this activity is to document detailed process scenarios and business transaction scripts. These scenarios and scripts transform the business processes into a more intuitive format and become the basis for further analysis, design, and testing.
- **Determine Datastream 7i Detail Fit and Gap.** The purpose of this activity is to perform a detailed Fit/Gap Analysis against Datastream 7i functionality. This activity consists of the following Sub-tasks:
  - **Identify/document functional gaps.** This includes gaps in data resulting from Task 8 (Data Assessment and Conversion) and functional configuration gaps when applying the results of Tasks 2 (Business Analysis Review and Validation).
  - **Prepare/Prioritize Development Requirements.** The purpose of this activity is to prioritize the requirements for development activity that may be required. This includes accommodation of interface and data conversion requirements.
  - **Define Global Settings and Organizational Hierarchy.** The purpose of this activity is to determine and document Datastream 7i configuration settings. In conjunction

with Task 5 (Standards and Naming Conventions,) the Contractor shall assess and document organizational structure to determine and document standards and rules of customization, if any. This activity includes the following Sub-tasks:

- Define and document Datastream 7i initial configuration settings
- Assess and document organization structure
- Define and document standards and rules for customization
- Review data migration specifications and data availability. Determine resulting Datastream 7i operational gaps
- Review resulting implementation procedures from Task 2 and their configuration specifications within Datastream 7i

The principal deliverables of the Datastream Design Phase will be the following:

- The EAMS design document reflecting the "what and how" for the Datastream 7i core application
- The EAMS technical specifications, including interface specifications, database specifications, and data migration specifications.

Upon completion of the Datastream Design Phase, the Contractor shall have completed the functional and technical design of the new EAMS. Additionally, the Contractor shall have designed the solution data model, interface requirements, and data conversion requirements. The Contractor shall then be ready to configure and test the new design with Datastream 7i.

9.1.1 Datastream Functional Requirements Gathering

The Contractor shall document the functions and capabilities necessary for the successful implementation of the Datastream deployment. As appropriate, the Contractor shall conduct meetings with members of WASD staff to clarify the content/functions of work processes and/or legacy in-house applications. This inventory of current functionality will then be compared to the functionality present in the Datastream application and used as a basis for functional deployment.

9.1.2 Reporting Output

The Contractor shall document existing reporting output requirements prioritized by WASD. Legacy in-house reporting output will be used as a guide for the requirements gathering. The Contractor shall also identify "gaps" that may exist between WASD's in-house operational reporting output and the Datastream application.
The Contractor shall classify each identified reporting output as "ad hoc" or "operational."

Ad hoc reporting output requirements will be gathered but not implemented as a part of the initial implementation of the Datastream application.

9.1.3 Storeroom Management Strategy

To support the recommendations for inventory management defined in Task 3 (Inventory Management Evaluation and Implementation,) the Contractor shall document the functions and capabilities that must be present for the implementation of a centralized and standardized parts/supplies inventory management strategy within the Datastream product suite. This strategy will include application functionality and database considerations that must be present in the Storeroom application. Once completed, the Contractor shall conduct a design meeting

with WASD to review the desired inventory functions and capabilities and prepare an implementation approach.

9.1.4 Datastream Functional Requirements Document

The Contractor shall consolidate the functional requirements, inventory management strategy, and reporting, and map output requirements into a Datastream Functional Requirements Document. This document will provide a functional roadmap for the configuration of the Datastream EAMS application. It will identify "gaps" that may exist between WASD's in-house applications and the Datastream application. In addition to identifying the "gaps", the Contractor shall identify if and when these functional requirements will be part of the application. For those "gaps" that are clearly customizations specific to WASD, the Contractor shall prepare a cost/schedule estimate for each and submit it to the Project Core Team.

9.1.5 ArcGIS Infrastructure Geodatabase Review

The Contractor shall document modifications to WASD's current ArcGIS infrastructure geodatabase models that will be necessary to support the use of the Datastream application. These modifications will be presented to WASD. WASD will then incorporate them into the change control process that was developed for the WASD infrastructure production geodatabase models.

9.1.6 Datastream Configuration Guide

The Contractor shall use the Datastream Functional Requirements Document and supporting work processes to develop a Datastream Configuration Guide. This guide will include the following:

- User Administration: defining system users, user groups, security permissions, etc.
- Employee Information: defining employee hierarchies, rates, payroll information, etc.
- Service Requests: defining problem types and categories, customer account and citizen information, standard FAQs, etc.
- Work Orders: defining work order templates, accessing/modifying labor material and equipment information on work order, grouping/summarizing work orders, etc.
- Materials and Equipment: defining materials and equipment hierarchies, etc.
- Inventory: defining parts, supplies, equipment locations, quantities, etc., to support recommendations defined in Task 3 (Inventory Management Evaluation and Implementation)
- Custom Fields and Codes: defining custom codes, custom field templates, etc.

9.1.7 Test and Acceptance Plan

The Contractor shall develop a Test and Acceptance Plan that will be used for acceptance of the Datastream application and integrations during the Site Acceptance Test as a part of the Sub-task 9.2 Configuration Phase. The Test and Acceptance Plan will describe data input to be passed to the products and integrations, test procedures to be followed and the output or results that should be received if the products and integrations are functioning properly. The test plan will be based on approved configuration and requirements documents.

9.2 Datastream Configuration Phase

During the Datastream Configuration Phase, the Contractor shall develop and integrate the final Datastream 7i configuration, as specified in the Datastream Design Phase. Training materials and documentation will also be created by the Contractor during this Phase for use in training and testing sessions.
The tasks outlined below will support the implementation of the Datastream application in a development environment provided by WASD.

The Datastream Configuration Phase consists of the following activities and deliverables by the Contractor:

9.2.1 Final Configuration and Test Scenarios

The purpose of this activity is to configure the global settings and business organization structure inherent in the Datastream 7i application. This activity consists of the following:

- Prepare initial system configuration
- Configure Datastream 7i organizational hierarchy
- Configure critical business processes confirmed or modified during the Fit/Gap Analysis
- Confirm business processes, as performed in the Datastream 7i system and develop scripts to test those business processes
- Document prototype configuration, which describes the menu path and table entries required in order to configure the Datastream 7i modules
- Test the prototype based on business scenarios and scripts
- Conduct demonstration with cross-functional team to validate that the prototype meets business process specifications

9.2.2 Security Profiles

The purpose of this activity is to determine the configuration of Datastream 7i application level security required to optimize user access to the system. This activity consists of the following:

- Develop security profiles
- Prepare security profile documentation
- Train selected team members on Datastream 7i security
- Generate the security access profiles
- Create user IDs
- Test the security profiles
- Implement security profiles
- Review roles
- Align Datastream 7i features to roles
- Group roles into profiles
- Assign profiles to jobs
- Configure security profiles

9.2.3 Test Plan Development

The purpose of this activity is to develop the system test plan, the integration test plan, and the user acceptance test plan. This Sub-task will depend on testing efforts accomplished as part of Task 8 (Data Assessment and Conversion) and Task 10 (Integration Design and Development).

Upon completion of the Datastream Configuration Phase, the Contractor shall have configured the Datastream 7i system to accommodate the EAMS design and confirmed the configuration. Additionally, the Contractor shall have confirmed the data load processes and procedures and developed and documented detailed test plans.

9.2.4 Software Installation

The Contractor shall provide on-site technical resources to install the Datastream application in the EAMS development environment. Upon completion, Infor will provide written confirmation that the Datastream applications were successfully installed. In addition, the Contractor shall document the steps necessary to perform the base load of the applications and provide it to the Project Core Team for review.

9.2.5 Datastream Configuration

The Contractor shall use the Datastream Configuration Guide developed in the Datastream Design Phase to configure the Datastream application. This configuration will also include the implementation of operational reports. The Contractor shall document potential configuration changes uncovered during the application configuration and provide it to the Project Core Team for review.

9.2.6 Site Acceptance Test

The Contractor shall use the Test and Acceptance Plan to conduct a Datastream Site Acceptance Test. This test will demonstrate to the Technical Design Team that the Datastream Configuration Guide and Datastream Functional Requirements Document were implemented correctly and that the Datastream application is functioning properly in the EAMS development environment. Upon completion, the Contractor shall provide written confirmation that the Site Acceptance Test was successful.

9.3 Datastream Testing and Deployment Phase

During the Datastream Testing and Deployment Phase, the Contractor will:

- Conduct and confirm system tests so the solution accommodates the requirements as a system.
- Conduct and confirm integration tests so the solution accommodates the requirements as a system integrated with defined external entities.
- Conduct and confirm user acceptance tests so the integration solution meets the user requirements, as specified in the Design Phase.

The Datastream Testing and Deployment Phase consists of the following activities and deliverables by the Contractor:

9.3.1 Integration and Data Conversion Tests

The purpose of this activity is to execute integration tests defined in Task 10 (Integration Design and Development) and the data migration-conversion efforts defined in Task 8 (Data Assessment and Conversion). This activity consists of the following:

- Prepare the integration test environment
- Conduct integration testing to check whether the system functions according to the specifications in the appropriate test plan and supporting documents
- Document test results

9.3.2 User Acceptance Test

The purpose of this activity is to execute the user acceptance test plan. This activity will involve sessions conducted in a conference room setting, with users from WASD's Divisions. The Contractor shall assist WASD with the following:

- Conduct user acceptance testing
- Document test results
- Refine final configuration

9.3.4 End-User Training Materials

The purpose of this activity is to update, as necessary, end-user training and support materials to support Task 12 (Training).

9.3.5 Deployment

The purpose of this activity is to refine deployment strategies defined in the Project Work Plan, define critical success factors for the individual deployment events, and to put a plan in place to support the organizational transition. This activity consists of the following:

- Refine and document the deployment strategy
- Define and document the Datastream 7i support strategy after the operational cut-over

Upon completion of the Datastream Testing and Deployment Phase, the Contractor shall have tested the Datastream 7i system to accommodate the EAMS design and user requirements. Additionally, the Contractor shall have updated the training materials, as required, and readied the system for deployment.

9.3.6 Disaster Recovery (DR) Documentation and Test

The Contractor shall develop a DR Toolkit for the EAMS test environment. The Contractor shall provide on-site technical support during the EAMS DR Test. Upon completion, The Contractor shall update the DR Toolkit to reflect inconsistencies discovered during DR Test.

Deliverables

- Documentation of configuration design
- Documentation of configuration for standard operating procedures
- Datastream 7i product installation and configuration

- Fully configured and tested Datastream 7i product for WASD

WASD Responsibilities

- Attend the Fit/Gap Analysis session where the project members will test/simulate/analyze system capabilities and handling of future processes
- Assist with consolidation of issues and opportunities identified during workshops
- Participate in a work session to choose the appropriate technique for loading data into the configured Datastream 7i
- Review and validate the design and configuration documents
- Assist with the development of system and integration test scenarios for use in validating future system and interfaces
- Define individual users who will be authorized to utilize the system
- Identify user groups to which individual users will be assigned
- Determine and document user authorization(s)
- Assist with the development of a testing strategy document identifying:
    - Objectives for the testing process
    - Preparation procedures required for the test environment, staffing for performing the tests, and schedules and procedures for performing the tests
    - Sequence of tests which the end users will conduct to verify and accept the system (the user acceptance test plan typically includes test scenarios and acceptance criteria)
    - Prepare the test environments
    - Conduct testing to ensure the expected results are validated
    - Conduct user acceptance sessions (this will involve departmental users processing business scenarios and scripts utilizing the test system)

Additional Assumptions and Understandings

- The Contractor shall provide **224** man-hours of report development in support of Datastream configuration as defined in the Implementation Analysis Report defined in Task 2 (Business Analysis Review and Validation). Each report development will be accompanied by a Software Requirements Specification (SRS) which will have effort estimated before development.
- Contractor shall configure Datastream to support the top 50 workflows defined in Task 4 as prioritized by WASD.

Task 10. Integration Design and Development

Purpose
To define a strategy to integrate Datastream with the following systems:

- Answer Center supported by Motorola CSR
- PeopleSoft Enterprise Resource Planning (ERP)
- PeopleSoft Customer Information System
- Inventory barcoding system currently supported by Wireless Data Systems, Inc.
- Geographic Information System (GIS) currently supported by ESRI, Inc.
- SCADA and historical SCADA information supported by Bristol Badcock SCADA Systems
- Personnel data stored on Miami-Dade County's mainframe
- EJ Ward Fuel Delivery System
- Predictive maintenance systems, including ENTEK/IRD's Odyssey vibration analysis software, Informetrics thermographic software, Aualog 80, Permalog, and Radcom Sound

Method and Approach
The Contractor shall document a common integration approach to be followed during the individual integration tasks. This approach will set in place the methodology that will govern each integration effort.

10.1 Integration Workshop

To begin each systems integration project, the Contractor shall conduct an integration workshop. The length of each workshop will vary depending on the complexity of the integration project. Some workshops may be as short as two hours, while others may take a full day or more. The goals of the integration workshops are twofold:

1. The Contractor shall interview members of WASD staff who are key to each specific system integration to determine that system's points of integration. Together, the system's points of integration will combine and become the integration application for the specific system in question.

2. The Contractor shall review each point of integration, collecting their individual requirements with the goal of answering the following questions:

    - Exactly, what information is required from each system?
    - What are the data types involved from one system to the other? For example, date, date and time, number stored as string, number stored as integer?
    - How often should data updates occur from one system to the other—real time, daily, weekly, on a pay-period basis?
    - Does each point of integration need to update on an identically scheduled basis? If not, what schedule for each data set?

- What reports will be run from each system? What other data needs to be included in the integration to support these reports?

10.2 Integration Software Requirements Specification (SRS)

Following each workshop, the Contractor shall produce a draft integration strategy and requirements document specific to that workshop. The draft integration strategy and requirements document will outline the recommended integration approach based on the information gathered during the integration workshop in the form of a Software Requirements Specification (SRS). The SRS will identify the following items:

- Functional integration specifications
- Ownership requirements
- Maintenance requirements
- Business rules
- Data flow diagrams
- Use cases for each point of integration
- Other technical design documents, as required, such as database schemas, object models, and class diagrams

Upon completion of the draft strategy and integration requirements document, the Contractor shall submit the documents to the Project Core Team for review and comments. The Contractor shall then review comments from the Project Core Team and make necessary modifications to the integration strategy and requirements document. After completing modifications, a final Integration Strategy and Requirements Document will be delivered to the Project Core Team for approval.

10.3 Integration Development and Testing

After approval of the final integration strategy and requirements document, the Contractor shall begin integration interface development. During development, the Contractor may ask for specific data from the Project Core Team in order to mimic a production environment. Integration will consider the best integration support method, first considering Databridge (service bus), followed by point-to-point service integration methods, and finally, database-to-database integration triggers/methods. When integration interface development is nearly done, the Contractor shall create a formal integration test plan that will be used to test the individual points of integration for each integration interface. Upon completion of the interface development phase, the Contractor shall follow the integration test plan and will test each point of integration of each integration interface up to three times in the staging environment. Only when each point of integration of the interface passes the testing phase, will the integration interface be delivered to WASD.
After completion of testing in the staging environment, the Project Core Team will then have two (2) weeks to verify completeness of the installation and configuration tasks and report issues to the Contractor. Reported issues will be discussed with the Project Core Team and necessary adjustments to the integration interface will be made before deployment into the production environment. Finally, after points of integration have been thoroughly tested, the integration interface will be deployed into the WASD production environment.

10.4 Integration Administrator's Guide

During the deployment of the integration interface into the staging environment, the Contractor shall produce a Draft Administrator's Guide that will be delivered to WASD for review and comments. Comments and new information gathered during deployment will be addressed, the draft guide will be amended, and a final Administrator's Guide will be produced. The final Administrator's Guide will be delivered to WASD shortly after completion of deployment into the production environment. At this point, the integration interface development project will be complete.

Upon completion of the deployment phase of each integration interface, the Contractor shall deliver the source code for the interface to the Project Core Team for maintenance and archival storage.

Deliverables

- Draft and final common integration approach document
- Meeting minutes from each systems integration workshop
- Draft and final integration strategy and requirements document for each system
- Integration applications for coded integrations
- Configured Databridge enabled integrations
- Draft and final Administrator's Guide for each integration interface

WASD Responsibilities

- Review the draft and final common integration approach documents
- Make appropriate staff available for each systems integration workshop
- Review the draft and final integration strategy and requirements document for each system
- Verify and accept the integration interfaces within two weeks of final testing
- Review the draft and final Administrator's Guide for each integration interface

Additional Assumptions and Understandings

- GIS integration will be to ESRI Geodatabase architecture supported by ArcSDE.
- There will be no integration back to SCADA to support operational controls.
- Without definition of the integration services or specific points of integration required for each solution, the Contractor shall provide **2,100** man-hours of technical program-script development. Each SRS supporting integration will have effort estimated before approval and development.
- Integration requiring integration-product vendor involvement or development will have firm-fixed pricing proposed and will have that amount divided by Contractor's Software Development hourly rate (at the price indicated in Appendix B - Price Schedule) to reduce overall not-to-exceed man-hours.

- Integration with PeopleSoft Financials in support of the inventory management evaluation and recommendations resulting from Task 3 (Inventory Management Evaluation and Implementation) will be performed in this task.
- Integration strategy to support inventory and PeopleSoft ERP will be coordinated with ETSD, the ERP Program Office, as well as with WASD EAMS and ERP staff.

Task 11. Web Services Design and Development

Purpose
To develop Web services or solutions to address product gaps and support a WASD data-sharing capacity and to enhance operational use of Datastream and/or general field operations.

Method and Approach
The Contractor recommends and supports developing and integrating the components of the EAMS around Web services and will do so when available. Web services are a way to build independent, yet integrated distributed systems. The Contractor perceives this Task to include any additional Web service and/or web application development necessary to deploy EAMS.
The Contractor shall develop Extensible Markup Language (XML)-based services in order to facilitate data sharing between autonomous solutions or operations; these will be written to accommodate data retrieval (get) functions and data input (put) functions. However, some solutions will not accommodate an XML Web services based data service. In these cases, the Contractor shall look to database "triggers" or independent processes (programs) in order to establish operational interconnectivity and appropriate business rules.

11.1 Web Services Development

The Contractor recommends object development supported by Microsoft .NET v2.0. This best technology practice is recommended because it supports Web services and XML serialization for improved performance, accommodates advancements for mobile solutions development, and enhances performance overall.
Where solutions are required, the Contractor shall support portal technologies by developing portlet required to be JSR168 compliant. In conjunction with Web services constructs, data services and solutions integration will be secured using Miami-Dade County's identity control software.

11.2 Web Application or Service Development

The Contractor shall use the following six-step approach to application development projects:

1. Needs Assessment Interviews
2. Needs Prioritization and SRS
3. Web Services Design
4. Application Building
5. Testing
6. Documentation, Installation, and Training

Each step is described below:

11.2.1 Needs Assessment Interviews

The Contractor shall work with WASD staff to define application or service need through a formal "gap" analysis and where identified in process review, where Web-solutions might enhance Datastream engagement or department engagement of EAMS. Work involves identifying WASD goals, workflow, and practical constraints.

The interview process will be designed to elicit three basic types of requirements:

- **Business Requirements.** The Contractor shall learn and document how WASD conducts its pertinent daily business, including the rules and procedures behind the work performed.
- **User Requirements.** The Contractor shall gather information on the types of tasks that will be performed with the software.
- **Functional Requirements**

Outcome of Step 1

From the EAMS interview processes, the Contractor shall provide a set of recommendations for service and solution development to the Project Core Team. Each development will be presented with an abstract and an estimated man-hour effort to develop. The Project Core Team will then prioritize these needs.

11.2.2 Needs Prioritization and SRS

The Contractor shall develop a formal SRS for each of the Project Core Team's approved developments. The Contractor shall work with WASD to produce a list of prioritized functions that will be included in the application. The Contractor and WASD have a responsibility to balance the desired project Scope of Services against the constraints of schedule, budgets, quality goals, and staffing. To manage these constraints, WASD will be expected to provide input about these needs. The goal of the list is for the application to provide the greatest benefit to users. Additionally, this prioritized list will focus the Contractor's development efforts on providing the functions that WASD deems essential.

Needs will be prioritized through a simple, three-tiered approach:

- **High.** A function that is prioritized as "high" is mission-critical. This function is necessary to the organization as a whole, or it is a core requirement that supplies a significant value to the organization.
- **Medium.** A function that is prioritized as "medium" is a supportive function. It is not necessary to the software application, but it would enhance the overall application for a significant number of users or would provide some time or effort savings.
- **Low.** A function that is prioritized as "low" is one that may enhance the product but is not necessary for business requirements, or, it can be a requirement that would benefit just a few users.

This list of prioritized needs will be used to identify the required software functions, which will be documented in the SRS. As changes are requested and mutually agreed upon, this document will be modified and redistributed among the project personnel.
At the end of this step, the Contractor shall use the SRS to build a schedule with milestones for tracking development progress during the remaining steps and will provide WASD the opportunity to review and comment on the schedule.

Outcome of Step 2

Step 2 will result in a deliverable document, the SRS. This document will be the baseline for development, and will be agreed upon and signed by interested members of the project team—staff members from WASD and the Contractor.

11.2.3 Web Services Design

The Web services design step will include a three-step process:

1. **Conceptual database-integration design.** The Contractor shall develop a plan for organizing the data. The Contractor shall work with WASD to understand and document its external data and determine how to incorporate it into the database application(s).
2. **Physical database-integration design.** The Contractor shall build virtual database table structures and data relationships. The data will be organized or stored in the planned structure from the conceptual design. Additionally, the planned structure will be refined and tested.
3. **Functional-integration design.** The Contractor shall define functional integration to include listening operations so the following can occur: availability and transaction processing, data retrieval and data replication processing, and redundancy and other error-checking processing.

As part of this effort, the Contractor shall produce an entity-relationship or other type of data model diagram as requested by WASD. These diagrams will show, in layman's terms, how the data is structured and how the relationships are defined and interact with existing data architectures.

Outcome of Step 3

A conceptual database design and an entity-relationship diagram will be developed and delivered to WASD. This document will become part of the SRS.

11.2.4 Application Building

The Contractor shall develop software applications using a variety of tools. During the application-building process, the Contractor shall communicate regularly with WASD in order to monitor project status. Agreed-upon changes will be documented in the SRS and redistributed to the Project Core Team.
During this application building step, the Contractor shall manage internal progress reports and the SRS to ensure the following:

- Design goals are met
- Problems are addressed
- Active communication takes place between Contractor developers and designers and between Contractor and WASD

Outcome of Step 4

Step 4 will have no tangible deliverables. However, WASD will receive ongoing communication about progress and issues that arise.

11.2.5 Testing

The Contractor shall develop a test plan that encompasses the various types of testing, such as unit tests, usability tests, and alpha or beta release tests. Much of this testing will be done behind the scenes, typically before WASD becomes directly involved with the new application.

The Contractor shall conduct a usability test in order to accomplish the following:

- Verify assumptions made in the design
- Evaluate the functional success of the application or service
- Evaluate overall consistency and ease of use or interaction

Appropriate types of software testing will be performed internally and by WASD, including the following:

- **Alpha testing.** An alpha test will be performed by the Contractor. It will test to eliminate functional bugs and to test the assumptions made during the planning steps. The Contractor shall also verify that the user interface works as it was intended.
- **Beta testing.** Beta tests will be performed on-site at WASD, with WASD staff reviewing the application to determine the appropriateness of the user interface and to ensure that it works well in the typical computing environment.

When the beta test is released to WASD, the Contractor shall provide WASD with a contact name for bug reports, comments, or problems. These reports will be logged and prioritized for Contractor development staff to resolve. WASD will have an agreed upon timeframe for testing and providing Contractor with problem reports. While WASD is testing the application, application development at the Contractor shall stop. After the testing is completed, the Contractor shall resume development of the application to resolve reported problems.

Outcome of Step 5

The Contractor shall deliver a beta test to WASD. As an option, the Contractor can either install the application on WASD's server and PCs or provide an installation CD with instructions for installing the application. The Contractor shall allow an agreed-upon timeframe for WASD to perform internal testing and will designate a recipient at Contractor for problem reports.

11.2.6 Documentation, Installation, and Training

During this step, the Contractor shall provide several types of documentation, including the following:

- Online help systems and other online documentation
- Paper-based documentation
- Administrative manuals
- User guides
- Quick-reference guides
- Tutorials

Outcome of Step 6

The Contractor shall install the final version of the application or service on the WASD servers.

Deliverables

- Administrator's Guide supporting the definition and operational explanation of services or applications
- Web services or application design and SRS

WASD Responsibilities

- Review and comment on the draft and final SRS
- Provide the Contractor with requested datasets
- Assist with software deployment into the development, quality assurance, and production environments
- Test integration deployments in development and quality assurance environments and provide feedback to Contractor
- Following identification of product gaps, Web services will be prioritized by WASD.

Additional Assumptions and Understandings

- Without definition of the services, solutions, or "gap" solutions required, the Contractor shall provide **970** man-hours of technical development, administration, documentation, and training. Each development approved by the Project Core Team will have effort estimated before SRS development.
- The Contractor shall review Datastream's new Call Center module as an alternative to support the Communications Center. This module will be evaluated against the needs of the EAMS, supported by an SRS for integration-deployment within this Task.

Task 12. Training

Purpose
To train the users of the EAMS system in order to ensure that WASD staff have an understanding for initial use and continued training to sustain operations.

Method and Approach
The Contractor's approach to Datastream 7i end-user training is to align the right training intervention with the requirements of each end user and the role they must fulfill. The Contractor shall collaborate with process owners, subject matter experts, and other key stakeholders to map business processes and specific job roles to the curriculum, courses, and topics to be delivered in the Training Plan. The Contractor shall also assess the characteristics of each user's job tasks Characteristics including criticality (level of importance a task plays in the business), frequency (how often a task is repeated) and complexity (how difficult a task is) are defined and aligned with the level of expertise required in each job role.

12.1 e-Training Development

The Contractor shall develop train-the-trainer seated training, training materials, and will assist WASD in creating the first e-learning module. The Contractor shall also recommend additional learning modules that are tailored to specific individual roles and responsibilities.

The Contractor shall develop the first module with WASD trainers based on simulation recordings captured from the WASD EAMS solution. These simulations will be based on recordings (screen capture, keyboard, and mouse clicks) captured while performing functions within the EAMS environment. The Contractor shall utilize the IBM Simulation Pro® tool (or equivalent approved by WASD) to perform the capture and recordings. Contractor shall provide all required IBM Simulation Pro® tool (or equivalent approved by WASD) software licenses to WASD as part of this Contract.

Module 1 Base EAMS User e-Learning Modules 1 consisting of basic EAMS overview, Navigation, and e-Learning module 1A, which is designed to show employees how to create and submit work requests.

The Contractor shall make the training e-Learning module available for users having a need and will work with WASD to define access privileges derived from assigned roles and responsibilities.

12.2 Core Team Training

Datastream 7i Core Team training will be provided using a combination of e-Learning tools and hands-on Datastream solution interaction and will provide the WASD core team with sufficient knowledge to begin the process of designing and configuring the Datastream 7i applications.

The Core Team training will include the following on-site, instructor-led training to be held at WASD training facilities:

- Datastream 7i Immersion Training
- Datastream 7i System Administration Training
- Datastream 7i Report Training

12.3 Training Plan

The Contractor shall document a Training Plan that includes a role-based approach to educating future users of the Datastream applications. It will include appropriate pre-requisites for each role that will use the applications, and classroom and alternative training tools that can be used throughout deployment. A result will be a curriculum based on defined user groupings made up of e-Learning sessions and formal training courses.

12.4 End User Training

The Contractor shall work closely with WASD in support of initial deployment training using e-Learning modules and the train-the-trainer approach. The Contractor shall provide on-site training session for up to **16** WASD staff members in a classroom environment. Training will be conducted using WASD's data and specific configuration of software. Training will focus on the fundamentals of working with Datastream, including the creation of service requests to respond to citizen issues. Objectives of training will be to provide the user an overall knowledge of Datastream functions by applying them throughout the training seminar, using WASD utility data.

The Contractor shall provide **580** man-hours of training support with WASD trainers to train end-users in the Datastream product just before solution deployment. Training may be performed on-site or off-site, as best supports the training need. The training provided will be consistent with the Training Plan developed and approved in 12.3 Training Requirements.

When necessary, the Contractor shall provide up to **320** man-hours to customize the training materials and services that reflect the solutions guides.

12.4.1 Mobile End User Training

This group encompasses the operational field crew users and operational supervisors using the EAMS toolset. It is anticipated that there may be as many as 16 key staff that will require this specialized training. These key users will support the train-the-trainer approach and also serve a support staff in the field. The Contractor recommends that mobile solutions training be accommodated in a customized approach that is focused on the daily uses of the solutions by mobile technicians.

Training Materials Development
The Contractor shall work with WASD to identify and refine Datastream training materials to support initial deployment and daily use by this operational group. The Contractor shall draft a "cheat sheet" to reflect deployed WASD datasets. This will then be reviewed and approved by WASD before scheduling training. Reporting functionality and use will be included.

Operational User Training
The Contractor shall conduct half-day operational mobile solutions training on-site. Two sessions are expected and may be scheduled non-concurrently.

12.4.2 Specialized – Technical User Training

WASD may require specialized technical training in Datastream modules such as Analytics or Databridge, custom training such as using Cognos custom report writer or FlexSQL, or other technical-group or one-on-one training. These training needs will be identified in the Training Plan and will be accommodated as a part of this task.

Deliverables

- Training Plan and strategies
- e-Learning Module content prepared in IBM Simulation Pro® (or equivalent approved by WASD) consisting of approximately 10 simulations
- Train-the-Trainer training and customized documentation for simulation software and Datastream
- Training for technical staff and power users
- IBM Simulation Pro® software licenses (or equivalent approved by WASD).

WASD Responsibilities

- Select and designate up to three individuals to attend the train-the-trainer class
- Provide classroom space of suitable conditions and environment conducive to learning
- Print copies of the training materials and distribute the training materials to WASD employees
- Provide access to the EAMS to facilitate training during the train-the-trainer class
- Schedule training and WASD training facilities
- Attendance for training

Additional Assumptions and Understandings

- The Student(s) attending the train-the-trainer class must have previous training work experience or be comfortable performing the role of an Instructor
- Training e-Learning Module will be stored on a network server provided by WASD. Access rights to the modules will be defined by WASD IT security on a per User basis
- The train-the-trainer class will be held in WASD facilities
- E-Learning module will be provided in MacroMedia Flash format
- Required Consent needed to facilitate training and access to the various systems will be provided by WASD
- Training will be conducted during WASD normal business hours, between 8:00AM and 5:00PM, Monday through Friday

Task 13. Support Plan Development

Purpose
Develop a Sustainable Support Plan to accommodate the EAMS to include the review of resources availability, roles assigned, and practices to management systems and user problem reporting.

Method and Approach
The Contractor shall provide support planning, an operational handbook for users and administrators, and organizational staffing recommendations to support a sustainable EAMS deployment.

13.1 Sustainable Support Plan

The Contractor shall provide a Sustainable Support Plan for integration and continued operation of the EAMS.

13.2 Operational Handbook

The Contractor shall develop an Operational Handbook to help users and administrators with operational aspects of the EAMS.

13.3 Organizational Staffing

The Contractor shall present alternatives in organizational structure, roles, and number of full-time equivalent employees (FTEs) needed to sustain operations. Alternatives will be presented and will take into consideration the change management and risk management experiences of the EAMS development-deployment.

Deliverables

- Operational Handbook draft and final

WASD Responsibilities

- Operational Handbook review and comment
- Coordinate staffing responsibilities and job description requirements with labor relations administration

Additional Assumptions and Understandings

- None

Task 14. System Startup and Post-Implementation Assistance

Purpose
To assist in the system startup and provide ongoing support/assistance immediately following deployment of the EAMS.

Method and Approach
The Contractor shall document testing and deployment procedures around a "Go Live" strategy that will take into consideration operational schedule and workload, and an IT process that accommodates recovery processes to prevent negative impact to daily operations upon deployment.

14.1 System(s) Startup

The Contractor shall remotely replicate a development architecture in order to assist in custom solution development efforts. WASD will develop a testing system architecture, independent of the production architectures, to provide quality control for deliverables.

14.1.1 Implementation Preparation

Quality Assurance System Installation
The Contractor shall install the fully configured Datastream system in a quality assurance environment.

Quality Assurance Installation Test
During the development of the SRS for each system and application, the Contractor shall develop test procedures or a test plan for the respective system or application. The test plan will document the tests that the system or application must pass in order to move to the next phase of testing (development, quality assurance). This information will include:

- The objective of each test
- Expected results of each test to comply with specifications in the SRS
- Traceability matrix to reference tests to associated requirements in the SRS
- Record of test results with witness initials and date performed
- Pass or fail evaluation with comments

Quality Assurance Portal Integration
The Contractor shall implement the data and system integration efforts documented in detail earlier in this document and will install them in the quality assurance environment.

Quality Assurance Environment Setup and Configuration
The Contractor shall work with WASD staff to ensure that a quality assurance environment has been established that meets the specific testing and operational needs of WASD users.

14.1.2 Implementation

User Acceptance Test
The Contractor shall work with WASD staff early in this project to define the format and content of user acceptance and integration tests. A full set of test scripts will be designed and developed to test each operational element of the EAMS.

User acceptance and integration testing will be conducted before deployment of the EAMS in the production environment. The test plan will include procedures to be followed if and when elements of the delivered system fail these tests.

Stress Test

The Contractor shall coordinate with WASD staff to design and implement a production-based stress test to assure system and network performance under normal operating conditions.

Disaster Recovery Test

The Contractor shall provide on-site assistance to WASD during disaster recovery testing. Integration experts will be available to help troubleshoot issues during this testing initiative. Further details of disaster recovery efforts are discussed in the "Go Live Events" section below.

Special Deployment Testing

As defined in the Deployment Plan, additional testing may be required. For example, tests may be performed to assure financial transactional processing and mobile data deployment.

Go Live Events

A Go Live event is the term used to refer to the deployment of software components or changes affecting operation's use of EAMS software or supporting data sources. They will occur following WASD acceptance testing, training, and development of special disaster recovery kit needs and testing.

The Contractor shall consider each Go Live event independently, and will define special considerations. Written deployment plans for each Go Live event will be developed by the Contractor and agreed upon by WASD and other affected operations groups within Miami-Dade County. Each Go Live event will be defined, documenting the implications of the event on operations, database, and system architecture. This document will also outline production performance and acceptance processes, as well as backup and recovery requirements. For each Go Live event, a production acceptance testing time frame will be determined.

The Project Core Team will schedule Go Live events, taking into consideration appropriate operational and technical implications. The transfer of operational data sources into the production data repository supporting team will have automated processes and tools developed and tested before each Go Live event. These tools will be used just before each Go Live event. Each data source will be evaluated during the development process with data archival and data transfer of active, scheduled, and historic records defined.

If a recovery or "pull-out" from a Go Live event is necessary, operational data already transferred to the EAMS will be procedurally transferred to the legacy operation. For each Go Live event, the Contractor shall have recovery procedures to return to the operational solution and condition that existed prior to the Go Live event.

When a Go Live event occurs, the Contractor shall be on site with technical resources to monitor and ensure that production deployment goes smoothly. Backups of databases that may be affected will be archived before Go Live events and will be readily available for restore.

Following each Go Live event, WASD will work with the Contractor to ensure that the event is operational and meets acceptance testing used in quality assurance processes. Feedback processes will be enacted and monitored during the initial production time frame. Following initial production time frames, critical-use feedback will be adjusted within the solution (following established testing/quality assurance processes,) and then bug reporting and enhancement versioning will occur.

14.2 Post-Production Support

User Support

The Contractor shall support WASD as the Department continues to implement the EAMS for a maximum of **240** man-hours of ongoing post-production support over an initial 30-day period followed by an additional **240** man-hours of extended support over six months past Go Live events.

Deliverables

- "Go Live" plan, procedures, and orchestration
- Post-implementation support for 6 months

WASD Responsibilities

- Participation in "Go Live" events

Additional Assumptions and Understandings

- The Contractor shall be invited to participate in ETSD technology strategy meetings as directed by WASD.

Task 15. Change Management

Purpose
To assist WASD in implementing an effective change management strategy for preparing, managing, and sustaining the EAMS.

Method and Approach
Working with WASD, the Contractor, including the Contractor's Lead Project Manager as well as the Contractor Project Manager, will identify and create an internal Change Design Team of five individuals representing WASD's Divisions of Water, Wastewater, Plant Maintenance, Administration, and Finance. The Contractor and the internal Change Design Team will work together to facilitate and sustain a culture of change in support of the EAMS project.
The internal Change Design Team's role will be one of listening for feedback from employees, sharing this feedback with the Contractor, working with the Contractor to develop and implement a Change Management Plan and, within this plan, a Communications Plan for Change Management.
Conscientious and respectful of WASD staff's limited time availability, the Contractor shall take the lead in the strategic and tactical implementation of Task 15. Additionally, the Contractor's Project Manager will serve as a trainer, coach, listener, and liaison, conducting "walkabout tours" of WASD's five divisions cited above, with the objectives of seamless EAMS awareness, education, implementation, and sustainability.
Ultimately, through a collaborative process further described below, the Contractor and the Change Design Team will address the following:

- Organizational Culture—the Human Side of Change
- Project Scope of Services Changes
- Product Changes/Upgrades
- Communications Planning
- Actively Managing Resistance to Change
- Strategy for Different Levels of Staff
- Assessing Effectiveness of Change Management Activities
- Controlling Risk Change Management Issues
- Readiness Assessment and Resource Dependencies

15.1 Change Design Team

The Contractor shall facilitate creating a formal, internal Change Design Team drawn from the five Divisions and diverse management levels. This team will be a WASD inner-working team that focuses on developing executive leadership and grassroots support as well as helps to assess the organization's overall understanding of the EAMS and staff members' appreciation for the technology and capacity for change.

The Contractor shall establish a process of selection whereby the Change Design Team's goals, roles, and functions will be publicized internally. WASD staff will be encouraged to apply to participate. The Contractor, working with the internal Project Core Team, will review the candidates in order to make a selection.

The Contractor shall conduct an initial meeting with the resulting internal Change Design Team to help members become familiar with the EAMS project and their role as part of the Change

Design Team. Later in the course of the project, the Change Design Team will meet for two more half-day sessions to develop the Change Management Plan.

15.2 Change Management Plan

The Contractor shall work with the Change Design Team to develop and implement a Change Management Plan which will include the following:

1. **Overall plan/design**
2. **Implementation/action steps**
3. **Management/sustainability strategies**
4. **Measurement methods**

The Change Management Plan created by the Contractor and the WASD internal Change Design Team will be a living, evolving document during the initial phases of the EAMS implementation project. Thus, the Change Management Plan cannot be fully defined in this Scope of Services.
Built into this plan will be best-practice change management strategies, including the following:

- **Listen and Measure.** The Contractor Project Manager and Change Design Team members will listen for employee perceptions and feedback through various methods and measure engagement in the EAMS.
- **Iterative Approach.** The Contractor and the Change Design Team will identify sections within WASD as most likely to first adopt the EAMS. These sections will be the first to be trained and transitioned to the EAMS, enabling the quick successes necessary to propel the entire organization forward in adopting the EAMS.
- **Reward-Consequence System.** The Contractor and the Change Design Team will identify appropriate rewards in order to promote EAMS usage as well as consequences for resistance to usage (i.e., reward early adopters). This strategy will require political and executive-level support for successful implementation.
- **Communicate and Educate.** Educational tools and, where appropriate, internal public relations activities, will be developed and implemented by the Contractor and the Change Design Team. Working together, they will develop a Communications Plan for Change Management and implement the recommendations in this plan. By communicating clearly, consistently, and frequently, WASD's employees will have a heightened understanding of the necessary transition to the EAMS and their role in its success.

Mindful of internal staff's limited time availability, the Contractor shall prepare a draft plan and share it with team members in advance. Ultimately, the plan will be developed collaboratively, with the goal of fostering internal ownership and pride in the EAMS.

15.3 Communications Plan for Change Management

The Contractor shall work with the Change Design Team to develop and implement a Communications Plan for Change Management. The results of research that occur during communications planning may yield valuable information that may feed directly into the overall Change Management Plan. It is expected that the Communication Plan for Change Management will build on the Project Communication Plan as defined in Sub-task 1.2.2. (Project Communication)

The Communications Plan for Change Management will include the following:

Research
Research will help to define the desired objectives/outcomes, best strategies/tactics for implementation, key stakeholders, key messages, program identity, and benchmarks for evaluation.
The Contractor's accredited public relations practitioner and researcher will conduct and/or participate in the following:

- **Organizational review meeting.** A half-day meeting on-site with WASD management (during Executive Goals and Objectives Workshop, if requested) to learn about WASD as an organization, lessons learned from past implementations, what management wants EAMS to achieve, who are potential internal champions of EAMS, who/what WASD Divisions would be candidates for creating quick successes.
- **Additional meeting.** A half-day meeting on-site with WASD's Public Relations Director and Human Resources Director, as well as the Contractor's Project Manager in order to gain additional feedback about employee perceptions and communications channels; to learn how internal resources and collaboration may best be utilized/realized.
- **Survey.** In order to determine a cross-section of employee perceptions – how they feel about new technologies and the EAMS implementation in particular
- **Communications audit**. Review of existing WASD internal employee communications (messaging and existing communications channels) with goal of utilizing existing communications channels

Plan
The plan is the roadmap for communicating the EAMS transition. The Contractor's public relations practitioner/researcher will develop a draft Communications Plan for Change Management based on the above-conducted research and results. The Contractor and its practitioner/researcher will work with the internal Change Design Team to develop and finalize the plan. Thus, creating a plan that is designed to meet the specific needs of WASD and help to ensure ownership in the plan. The plan will include the following:

- Situation analysis/results of research
- Stakeholders identified by research in logical groupings
- Best spokespersons/champions/channels of communication
- Key messages
- Overarching goal
- Measurable objectives
- Strategies
- Tactics
- Timeline
- Roles/responsibilities

Implement
The implementation phase is actual execution of strategies and tactics outlined in the plan upon client approval to proceed. Please note that research will determine best strategies/tactics. The following are some strategies and tactics that may be implemented:

- Identify/use an overall spokesperson to communicate major milestones, issues
- Identify/use internal champions to build awareness/educate throughout WASD
- Distribute key messages to management, spokesperson, champions so all are "on same page" with messaging
- Develop simple, consistent, overall identity for the EAMS project
- Develop communications/education materials for employees utilizing various communications channels (i.e., employee newsletter, Intranet/website, training DVD)
- Hold kickoff workshop for employees
- Create an on-line FAQ help desk
- Identify an "ombudsman" who can help employees through specific issues they may have with EAMS
- Have a few fun "challenges" with rewards among Divisions

Evaluate
The Contractor and its practitioner/researcher will evaluate the results at key milestones during implementation based on the objectives and measures set forth. Adjustments will be made to the Communications Plan for Change Management, as needed, to correct the course of the efforts and improve results.

15.4 Dealing with Internal Culture, Politics, and Resistance

Proactive communication and mutual understanding of the EAMS project's goals, objectives, and implications will be paramount to creating success. The process begun in developing a thorough Scope of Services and the related tasks and plans associated with this document, agreed to by the Contractor and WASD will help in creating a smooth EAMS implementation.

The Contractor, working with the internal Project Core Team and the Change Design Team, will identify cultural issues, political "hot button" issues, and resistance areas during the documented risk management process. The Contractor's Project Manager, during "walkabouts" throughout WASD's five Divisions and in the field, will be an independent source to help identify resistance to change. The Change Design Team, as well, will serve as an internal source for identifying resistance and opportunities for effective change. The strategies described in the Communication Plan for Change Management above will also be used to deal with internal politics and manage resistance to change.

Deliverables

- Draft and Final Change Management Plan
- Draft and Final Communications Plan for Change Management

WASD Responsibilities

- Staff availability for meetings listed above
- Schedule with staff and provide facilities for on-site meetings
- Provide WASD employees the opportunity to serve on the Change Design Team
- Provide Divisional/Operational contacts list, organizational flow chart, and samples of past internal employee communications materials
- Review and comment on monthly project status reports

Additional Assumptions and Understandings

- The Contractor shall provide **691** man-hours of development and administration. This will include workshops and "awareness programs" developed to support change management initiatives. Each initiative approved by the Project Core Team will have effort estimated.

Task 16. Upgrade to New Releases

Purpose
During the development of the EAMS Project, plan for and evaluate customized and off-the-shelf software upgrades to newer software releases.

Method and Approach
WASD's Datastream software will not be upgraded to newer versions or releases throughout the development and deployment of the EAMS Implementation project.

Following successful "Go Live" into production, the Contractor shall review EAMS software product advancement for components for which a newer software release exists. Corresponding software upgrades will be prioritized based on their benefits and risk associated with their deployment. Points of integration will be reassessed and necessary adjustments will be identified and prioritized. Items on this prioritized list will be processed one at a time, using established "Go Live" testing and deployment procedures, processed through the test systems, and brought into production.

If WASD determines that an upgrade is not required or has undesired implications, the Contractor shall document integration processes and procedure changes and recommend a scheduled upgrade deployment.

After the upgrade list is processed, upgrade processing will be accommodated by WASD.

Deliverables

- Risk assessment for each component upgrade
- Test plan for configuration changes based on established "Go Live" procedures from Task 14 (System Startup and Post-Implementation Assistance).

WASD Responsibilities

- Prioritization of component upgrades available

Additional Assumptions and Understandings

- It is anticipated that only one Datastream software version upgrade will occur through the duration of this Scope of Services
- WASD and ETSD will accommodate a 90-day "Go Live" testing period for any software solution impacting the EAMS before initiating a production deployment of any new software upgrade or software release

Task 17. Asset Management Program Development

Purpose
WASD's EAMS implementation project, as defined, is centered on maintenance management activities. This is where much of WASD's labor and operating costs are incurred and where the most urgent need for improved processes and technology exist. However, in Task 4 (Benchmark Assessment,) the Contractor shall have evaluated WASD's asset management practices against best industry practices. WASD will use this task to structure the framework of an asset management program for its use.
For purposes of clarity, the difference between asset management and maintenance management is defined as follows:

- **Asset management.** Deals with sustainable, competitive, long-term delivery of infrastructure-focused services. It accomplishes this by optimizing aspects of the asset lifecycle from the identification of service needs through decommissioning of assets at the end of their economic life. In advanced asset management, it is even possible that service needs are satisfied through non-asset solutions such as demand management, public education, consolidation of existing facilities, or other techniques.
- **Maintenance management.** Deals primarily with the efficient and effective maintenance of existing assets to optimize and extend their useful service life. Maintenance management typically includes the division/sharing of work between operations, maintenance, and external service providers, flexibility and training of O&M staff, work order processes, planning and scheduling, and emergency response, among others.

The "gray" areas between asset management and maintenance management are generally related to higher-level maintenance management activities such as the development and optimization of preventive maintenance programs and the determination of maintenance versus rehabilitation or replacement decisions. The line between asset and maintenance management may vary between organization and asset type and value.

The core EAMS project focuses primarily on the steps "Operate, Maintain, and Monitor" through "Decommission." This task recommends that a program be developed that puts in place processes and technology to address the entire asset life cycle. This Task establishes an asset management program framework and addresses the planning and management needs of WASD's most critical assets. From that framework, a complete program can be implemented over time, as need, and organizational capabilities allow. Implementation of the complete program is not included in this Scope of Services.

Approach
The Contractor shall conduct this work in a series of workshops in collaboration with a team from WASD. This will be a Design Team composed of senior maintenance managers and engineering staff. Much of the work this team will be asked to help conduct will be of a strategic or conceptual nature. Consequently, the team members will need to understand the "big picture" issues facing WASD. They will need to be knowledgeable with regard to technical considerations, as well as financial and political issues that might constrain options and recommendations for the asset management program. In the task descriptions that follow, this team will be referred to as the "Asset Management Design Team."

17.1 Program Overview, Asset Hierarchy and Asset Data

The Contractor shall present asset management concepts, best practices, and the results of Task 4 (Benchmark Assessment) to the Asset Management Design Team. The Contractor shall discuss the approach for this task and a set of goals for this element of the work. Much of the work associated with establishing asset hierarchies and data needs/collection processes will

have been accomplished in Task 5 (Standards and Naming Conventions Definition). The Asset Management Design Team will review the work product from that task for applicability to the asset management program goals. An example of the analysis that the team will do is to determine if the hierarchy and data structures to be implemented allow for the following functions:

- Condition Analysis
- Failure Analysis
- Work History
- Cost Analysis
- Demand Management Analysis
- Asset Rationalization Analysis

17.2 Service Level Definition

The Contractor, in collaboration with the Asset Management Design Team, will develop a method to consider and determine the required service level for a particular piece of equipment or system. The objective is to build a framework for an asset management program that can start now and mature in the coming years.

Service level is a vital issue when evaluating the maintenance tactics applied to an asset. The Contractor shall work with the Asset Management Design Team to design this process in order to ensure that it will be usable as the asset management program expands. The Contractor shall work with the Asset Management Design Team to use the process to determine the service levels for at least twelve major pieces of equipment and subsystems. Service levels will need to be well defined based on measurable performance targets affecting the customer (whether internal or external).

17.3 Criticality Rating

The Contractor shall facilitate the Asset Management Design Team in the development of a methodology to determine the asset or subsystem criticality that can be used now and in the future. The methodology will be used to determine a criticality factor for at least twelve major pieces of equipment or subsystems identified in Sub-task 17.2. It is anticipated that there will be at least one critical asset from each of the categories listed in Sub-task 5.4.

17.4 Condition Assessment

The Contractor shall work with the Asset Management Design Team to create a set of condition standards that can be used across asset types. Different asset types have different industry-recognized rating standards. The Contractor shall review these standards with the Asset Management Design Team and adopt them where applicable. In order for a standard classification system to be implemented across asset classes, a method to normalize individual asset condition ratings will need to be developed. The Contractor shall work with the Asset Management Design Team to develop standard rating methods for the following assets:

- Sewer Collection Piping Assets
- Water Distribution Linear Assets
- Plant Assets
- Facility Assets

Once these standards are in place, WASD personnel will apply the rating codes to the critical assets defined in Sub-task 17.3.

17.5 Planned Maintenance

Based on the findings from the previous two Sub-tasks, the Contractor shall develop planned and/or preventive maintenance programs for the identified critical assets, with current WASD Project Managers as a starting point. The Contractor shall introduce the concept of Reliability Centered Maintenance. The Contractor shall help the Asset Management Design Team to determine if those concepts are applicable to the assets identified. The Contractor shall document the adopted maintenance practices incorporated in the EAMS implementation. The Contractor shall introduce the concept of work order prioritization. The Contractor shall develop a matrix of equipment criticality versus work order prioritization and include it with the Manual of Practice as a part of Task 5 (Standards and Naming Conventions Definition) and used for the Datastream configuration functional requirements.

17.6 Capital Improvements

The objective of this Sub-task is to establish a business-case-driven methodology for the analysis of capital needs. Often, capital requirements are defined by growth or regulatory requirements or by less-than-sound economic analysis. Some utilities do not forecast capital needs based on condition assessments or other sound engineering evaluation. Similarly, experience has shown that capital programs are often not focused on extending the life of assets. Rather, they are focused on replacement or new construction. The Contractor shall work with the Asset Management Design Team to review the current capital prioritization methods and recommend revisions as may be necessary.

17.7 Funding Strategy

In Task 4 (Benchmark Assessment,) an overview of the funding strategy methodology will have been accomplished. In this task, the Contractor shall recommend the framework for tracking funding needs based on condition assessments, historical maintenance costs, other information regarding useful asset life, and anticipated repair or replacement costs. This method will predict annual budgetary capital and operating costs in a scenario-based method. Various constraints may be considered, with the result being different capital and operating costs requirements given different scenarios. The Contractor shall present this model and define the technology to support it to the Asset Management Design Team for review and feedback. The Contractor shall work with the Asset Management Design Team to recommend adoption of funding strategy development techniques to WASD.

Deliverables

- Asset Management Program Framework and Proof of Concept Report that will include the following:
    - Definition of asset hierarchy and data requirements that (or if) different than those defined in Task 5
    - Methodology of determining the service level requirements for a particular asset or sub-system and examples of how the process is applied using at least 12 critical assets
    - Methodology for determining criticality ratings for a particular asset or sub-system and examples of how the process is applied using at least 12 critical assets

- Methodology for assessing the condition of particular asset or sub-system and examples of how the process is applied using at least 12 critical assets
- Planned maintenance practices for the critical assets defined above
- A business-case-driven method for establishing capital requirements
- Method and technology for predicting future funding requirements based on various constraints

WASD Responsibilities

- Provide a time for the Asset Management Design Team members to participate in the multiple workshops and meetings described above in compliance with the schedule requirements.
- Conduct the work necessary to determine the asset conditions in accordance with Sub-task 17.4.

Additional Assumptions and Understandings

- The Project Work Plan will include the scheduling of Asset Management Program Development to assure adequate historical performance and cost information.

CONTRACT NO. RFP511

ENTERPRISE ASSET MANAGEMENT SYSTEM (EAMS) IMPLEMENTATION SERVICES

APPENDIX B

PRICE SCHEDULE

Contract No. RFP511 Appendix B – Price Schedule

Project Task	Task Fee	Hourly Dependency (if applicable)
1. Project planning and management	$ 1,216,731.00	Note 1
2. Business analysis review and validation	$ 355,968.00	Note 1
3. Inventory management evaluation and implementation	$ 69,652.00	Note 1
4. Benchmark assessment	$ 242,505.00	Note 1
5. Standards and naming conventions definition	$ 297,998.00	Note 1
6. Optimum technical architecture review and assessment	$ 74,282.00	Note 1
7. Mobile computing requirements definition and specification	$ 75,614.00	Note 1
8. Data assessment and conversion	$ 186,738.00	Includes 276 hours of Application Development
9. Datastream 7i product configuration and testing	$ 1,811,763.00	Includes 224 hours of Report Development
10. Integration design and development	$ 1,036,537.00	Includes 2,100 hours of Application Development
11. Web services/application design and development	$ 196,835.00	Includes 970 hours of Task Development
12. Training	$ 428,866.00	Includes 580 hours of On-site Training Includes 320 hours of Custom Training Materials
13. Support plan development	$ 88,055.00	Note 1
14. System startup and post-implementation assistance	$ 148,361.00	Includes 240 hours of Post-Production Support and 240 hours of Extended Support
15. Change management	$ 137,335.00	Includes 691 hours of Task Development
16. Upgrade to new releases	$ 132,760.00	Note 1
Subtotal	$ **6,500,000.00**	Note 1
Contingency Allocation	$ 357,727.00	
Total Contract Amount	**$ 6,857,727.00**	

Note 1: Not to exceed Price. Price is independent of hours required by Contractor to complete Tasks.

Optional Services

Description	Price
Task 17. Asset Hierarchy and Condition Review	$ 333,000.00 (Note 1)
Project Manager/Director	$ 276.00 per hour
Sr. EAMS Consultant	$ 343.00 per hour
EAMS Consultant	$ 265.00 per hour
Systems Designer	$ 208.00 per hour
Programmer/Database Analyst	$ 175.00 per hour
Technical Writer	$ 116.00 per hour
Custom Training Development and Customization	$ 250.00 per hour
Software Development	$ 210.00 per hour
Custom On-site Training (16 attendee limit)	$ 2,500.00 per day (8 hours)

Note 1: Not to exceed Price. Price is independent of hours required by Contractor to complete Task.

CONTRACT NO. RFP511

ENTERPRISE ASSET MANAGEMENT SYSTEM (EAMS) IMPLEMENTATION SERVICES

APPENDIX C

LIST OF APPLICATIONS

The following table lists the systems and/or applications that have been identified as potentially needing to be migrated to EAMS.

Division/Section	Current Application	Current Platform
Pump Station	WOTS – Work Order Tracking System. Tracks work orders performed, personnel time, and vehicle usage.	Access
	WMS – Work Management System. Tracks structural, mechanical, and electrical inventory for pump stations.	Oracle
	ETMS - Elapsed Time Management System. Stores pump operating hours and related data for pump stations. Allows for the analysis of compliance with EPA standards and the generation of reports to the Department of Environmental Resource Management (DERM).	Oracle
Plant Maintenance (inventory of systems may not be complete)	Cassworks – Allows for planning, scheduling, and tracking primarily preventive maintenance work orders performed on plant assets.	Oracle
Water Distribution (inventory of systems may not be complete)	DWRS - Distribution Work Record System. Tracks field work performed by Water Distribution Division	Oracle
	Sod Restoration	Access
	Complaints	Access
	Service Renewals	Access
	Inventory	Access
	Job Order	Access
	Work Tickets	Access
	Canal Crossings	Access
	Barricades	Access
	Landfill Tickets	Access
	Safety Shoes	Access
	In-house Paving	Access
	Valves Database	Access
	WPDS – Paving	Oracle
Sewer Collection (inventory of systems may not be complete)	Daily time record	Access
	Sewer Repairs	Access
	Unscheduled maintenance / Work Tickets	Access
	Valves	Access
	Air Release Valves	Access

	Force Mains	Access
	Paving	Access
	Smoke Test	Access
	TV Inspections	Access
	Inventory for tools	Access
	Manhole Inspections	Access
	Lateral Inspections	Access
	High risk manholes	Access
	Basin inventory	Access
	Personnel	Access
Communication Center	CCS - Communications Center System. Tracks trouble calls received by the Communications Center	Oracle
General Maintenance (inventory of systems may not be complete)	VEMS - Vehicle Equipment Management System. Tracks vehicle and equipment inventory, as well as, related preventive maintenance and repair work orders performed	Oracle
Meter Section (inventory of systems may not be complete)	MSDL - Meter Shop Daily Log. Tracks maintenance work performed by Meter shop	Oracle
Stores/Procurement	Barcoding. Tracks physical parts inventory for multiple store rooms within the department	SQL Server

CONTRACT NO. RFP511

ENTERPRISE ASSET MANAGEMENT SYSTEM (EAMS) IMPLEMENTATION SERVICES

APPENDIX D

BUSINESS PROCESSES MAPPED

WASD EAMS Project – Business Processes Mapped

Division/Section	Business Process
Communications Center	1. Premise based service request (As-is) 2. Premise based service request (To-be) 3. Construction Complaint (As-is) 4. Construction complaint (To-be) 5. SCADA (As-is) 6. SCADA (To-be) 7. Contingency Plan (As-is) 8. Contingency Plan (To-be)
General Maintenance	1. Fuel Delivery/Extraction (As-is) 2. Fuel Delivery/Extraction (To-be) 3. Installation/Excavation (As-is) 4. Installation/Excavation (To-be) 5. Cleaning – Tanks, Pipes, and Flumes (As-is) 6. Cleaning – Tanks, Pipes, and Flumes (To-be) 7. Outsourcing (As-is) 8. Outsourcing (To-be) 9. Corrective Maintenance (As-is) 10. Corrective Maintenance (To-be) 11. Preventive Maintenance (As-is) 12. Preventive Maintenance (To-be) 13. Reactive Maintenance (As-is) 14. Reactive Maintenance (To-be) 15. Proactive Maintenance (As-is) 16. Proactive Maintenance (To-be) 17. Body Shop Maintenance (As-is) 18. Body Shop Maintenance (To-be) 19. Garage - Corrective Maintenance (As-is) 20. Garage - Corrective Maintenance (To-be) 21. Garage - Preventive Maintenance (As-is) 22. Garage - Preventive Maintenance (To-be) 23. Loaner Pool Vehicle Operations (As-is) 24. Loaner Pool Vehicle Operations (To-be) 25. Tank Upgrade (As-is) 26. Tank Upgrade (To-be) 27. Corrective Maintenance – Hazardous Waste (As-is) 28. Corrective Maintenance – Hazardous Waste(To-be) 29. Inspection – Hazardous Waste (As-is) 30. Inspection – Hazardous Waste (To-be)
Meter Section	1. Water Meter -Corrective Maintenance: Premise Based (As-is) 2. Water Meter -Corrective Maintenance: Premise Based (To-be) 3. Water Meter - Preventive Maintenance: Premise Based (As-is) 4. Water Meter - Preventive Maintenance: Premise

Division/Section	Business Process
	Based (To-be) 5. Water Meter - Preventive Maintenance: Non-premise Based (As-is) 6. Water Meter - Preventive Maintenance: Non-premise Based (To-be) 7. Water Meter - Corrective Maintenance: Repair Shop (As-is) 8. Water Meter - Corrective Maintenance: Repair Shop (To-be) 9. Water Meter - Contract Work (As-is) 10. Water Meter - Contract Work (To-be) 11. Sewer Meter - Corrective Maintenance: Field/Shop (As-is) 12. Sewer Meter - Corrective Maintenance: Field/Shop (To-be) 13. Sewer Meter - Preventive Maintenance: Field Work (As-is) 14. Sewer Meter - Preventive Maintenance: Field Work (To-be) 15. Sewer Meter - Meter Reading (As-is) 16. Sewer Meter - Meter Reading (To-be) 17. Sewer Meter - Contract Work (As-is) 18. Sewer Meter - Contract Work (To-be)
Plants	1. Hialeah/Preston - Service Request/Corrective Maintenance (As-is) 2. Hialeah/Preston - Preventive Maintenance (As-is) 3. Hialeah/Preston - Contract Services (As-is) 4. Alex Orr - Service Request/Corrective Maintenance (As-is) 5. Alex Orr - Preventive Maintenance (As-is) 6. Alex Orr - Contract Services (As-is) 7. Blackpoint - Service Request/Corrective Maintenance (As-is) 8. Blackpoint - Preventive Maintenance (As-is) 9. Blackpoint - Contract Services (As-is) 10. Virginia Key - Service Request/Corrective Maintenance (As-is) 11. Virginia Key - Preventive Maintenance (As-is) 12. Virginia Key - Contract Services (As-is) 13. Interama - Service Request/Corrective Maintenance (As-is) 14. Interama - Preventive Maintenance (As-is) 15. Interama - Contract Services (As-is) 16. Plant-wide To-be - Service Request/Corrective Maintenance 17. Plant-wide To-be - Preventive Maintenance 18. Plant-wide To-be - Contract Services

Division/Section	Business Process
	19. Plant-wide To-be - Projects
Pump Station	1. Corrective/Emergency Maintenance (As-is) 2. Corrective/Emergency Maintenance (To-be) 3. Preventive Maintenance (As-is) 4. Preventive Maintenance (To-be) 5. Work Outsourcing (As-is) 6. Work Outsourcing (To-be)
Sewer Collection	1. Corrective Maintenance: Unscheduled (As-is) 2. Corrective Maintenance: Unscheduled (To-be) 3. Corrective Maintenance: Planned (As-is) 4. Corrective Maintenance: Planned (To-be) 5. Contract Work: Maintenance and Repair (As-is) 6. Contract Work: Maintenance and Repair (To-be) 7. I/E/I CCTV and Basin Inspection (As-is) 8. I/E/I CCTV and Basin Inspection (To-be) 9. I/E/I Smoke Test Inspection (As-is) 10. I/E/I Smoke Test Inspection (To-be) 11. Contract Work: Inspection (As-is) 12. Contract Work: Inspection (To-be)
Water Distribution	1. Construction Related Complaint (As-is) 2. Construction Related Complaint (To-be) 3. Inspection Request (As-is) 4. Inspection Request (To-be) 5. Permanent Paving (As-is) 6. Permanent Paving (To-be) 7. Canal Crossing (As-is) 8. Canal Crossing (To-be) 9. Corrective Maintenance (O&M) (As-is) 10. Corrective Maintenance (O&M) (To-be) 11. Corrective Maintenance (Prepaid Job Order) (As-is) 12. Corrective Maintenance (Prepaid Job Order) (To-be) 13. Corrective Maintenance (Emergency Job Order) (As-is) 14. Corrective Maintenance (Emergency Job Order) (To-be) 15. New Service Installation (As-is) 16. New Service Installation (To-be) 17. Service Renewal (As-is) 18. Service Renewal (To-be) 19. Low Pressure Program (As-is) 20. Low Pressure Program (To-be) 21. Questionnaire (As-is) 22. Questionnaire (To-be) 23. Job Orders (JO) (As-is) 24. Job Orders (JO) (To-be) 25. Reconnect – Joint Professional Agreement (JPA)

Division/Section	Business Process
	(As-is) 26. Reconnect – Joint Professional Agreement (JPA) (To-be) 27. Utility Location (As-is) 28. Utility Location (To-be) 29. Location/GIS Survey (As-is) 30. Location/GIS Survey (To-be) 31. Equipment Repair & Fabrication (As-is) 32. Equipment Repair & Fabrication (To-be) 33. Installation and Replacement (ESR) (As-is) 34. Installation and Replacement (ESR) (To-be) 35. Pipe Bursting – ER (As-is) 36. Pipe Bursting – ER (To-be) 37. Pressure Testing & Chlorination (As-is) 38. Pressure Testing & Chlorination (To-be) 39. Fire Hydrant Repair/Replacement (As-is) 40. Fire Hydrant Repair/Replacement (To-be) 41. Valve Exercise Program (As-is) 42. Valve Exercise Program (To-be) 43. Valve Repair/Replacement (As-is) 44. Valve Repair/Replacement (To-be) 45. Flushing (As-is) 46. Flushing (To-be) 47. Leak Detection (As-is) 48. Leak Detection (To-be)
Inventory Management	1. Stock Receipts (As-is) 2. Stock Receipts (To-be) 3. Non-stock Receipts (As-is) 4. Non-stock Receipts (To-be) 5. Service Receipts Without Property (As-is) 6. Service Receipts Without Property (To-be) 7. Receipts-GSA Supplies (As-is) 8. Receipts-GSA Supplies (To-be) 9. Fixed Asset Purchase Receipts (As-is) 10. Fixed Asset Purchase Receipts (To-be) 11. Return to Vendor (As-is) 12. Return to Vendor (To-be) 13. Stock Issues (As-is) 14. Stock Issues (To-be) 15. Stock Returns (As-is) 16. Stock Returns (To-be) 17. Non-stock Returns to Stores (As-is) 18. Non-stock Returns to Stores (To-be) 19. Partial Cycle Count (As-is) 20. Partial Cycle Count (To-be) 21. Storewide Physical Inventory (As-is) 22. Storewide Physical Inventory (To-be)

Division/Section	Business Process
	23. Meter and Tail Piece Sales (As-is) 24. Meter and Tail Piece Sales (To-be) 25. Obsolete Inventory (As-is) 26. Obsolete Inventory (To-be) 27. Scrapping Process (As-is) 28. Scrapping Process (To-be) 29. Add New Stock Item (As-is) 30. Add New Stock Item (To-be) 31. Store-to-Store Transfer (As-is) 32. Store-to-Store Transfer (To-be) 33. Inventory Adjustment (As-is) 34. Inventory Adjustment (To-be) 35. Automatic Reordering (As-is) 36. Automatic Reordering (To-be) 37. Manual Stock Reordering (As-is) 38. Manual Stock Reordering (To-be)

CONTRACT NO. RFP511

ENTERPRISE ASSET MANAGEMENT SYSTEM (EAMS) IMPLEMENTATION SERVICES

APPENDIX E

FINAL SYSTEM ACCEPTANCE

Final System Acceptance

Final System Acceptance of the deliverables identified in Appendix A – Scope of Services is divided into three categories:

- Reports
- Services
- Solutions

Each category has a different set of acceptance test criteria and acceptance period. As part of the Project Work Plan, each deliverable's scheduled delivery and acceptance period will be identified as described below.

Reports

Reports constitute any deliverable that is an original document provided by the Contractor to the County. For example, work breakdown structure, project management status reports, System Requirements Specifications, and workflow process recommendations.

Acceptance Period

Following delivery of a draft report, County will provide comments to the Contractor within ten (10) working days. The Contractor shall then make the necessary report revisions within five (5) days and resubmit a draft report. For each resubmitted draft report, County will provide comments to the Contractor within three working days. The report will be considered accepted when County does not provide any further comments.

Services

Services constitute any deliverable which, by its nature, is considered to be complete upon delivery. For example, training, project meetings and presentations, and post-production support.

Acceptance Period

By nature, there is no a formal acceptance period for service deliverables.

Solutions

Solutions constitute software deliverables. These include, packaged software configuration, standard and customized reports software capabilities, interfaces, integration scripting, custom-programmed Solutions, etc.

The Contractor shall work with the Project Core Team early in the project to refine the format and content of acceptance and integration tests for Solutions. Each iterative deliverable, deployment, or event shall follow a "Go Live" process.

Acceptance and integration tests shall be conducted within a County-supported test architecture before deployment of the EAMS to the production environment. If testing fails, the vendor and County staff will agree on the best approach to support the business process, fix the software, and retest. The test plan shall include back-up and recovery procedures.

"Go Live"

A Go Live event is the term used to refer to the deployment of software components or changes affecting operation's use of EAMS software or supporting data sources.

The following practices shall be followed in conjunction with each Go Live event:

The Contractor shall develop and draft deployment plan documents for each Go Live event. The Contractor shall consider each Go Live event independently and shall identify and define any applicable special considerations for each one. Deployment plan documents will be considered final once reviewed and approved by the County, per the terms above under "Reports."

Each Go Live event will be clearly defined, documenting the implications of the event on operations, database, and system architecture. Deployment plan documents shall also outline production performance and acceptance processes, as well as back-up and recovery process requirements. An acceptance test timeframe will be determined for each Go Live event.

The Project Core Team will schedule each Go Live event, taking into consideration appropriate operational and technical requirements and implications. All automated processes and tools required for the successful transfer of operational data sources into the production data repository shall be tested before Go Live events. These tools shall be available and used in preparation for each Go Live event. Each data source will be evaluated during the development process with data archival and data transfer of active, scheduled, and historical records defined.

Acceptance Period
Following each Go Live event, the County will work with the Contractor to determine if the event was successful and meets acceptance test criteria agreed upon and used during initial testing environment.

Following each Go Live event, there will be an initial production timeframe. These timeframes will have two phases:

i) An initial production phase, which in most cases is the initial few hours of a production Go Live event, whereby the County Project Manager determines if production use is acceptable or system and data recovery is necessary.

ii) A continued production phase whereby system feedback processes will be enacted and monitored for a period of 10 working days.

Following initial production timeframes, critical-use feedback will be used to make necessary adjustments to the Solution (following established testing/quality assurance processes)

The County will determine whether system and data recovery is necessary at any point during the initial production timeframes.

The Contractor shall make any necessary "bug fixes" to custom software and integration Solutions through versioning and continued Go Live events.

A Go Live event shall be considered accepted no earlier than 30 days after the Go Live date and only upon application and successful completion of all required "bug fixes," as mutually agreed by County and Contractor.

Acceptance of the Go Live event defines the beginning of Post Production Support activities for that event.

Final System Acceptance

Final System Acceptance shall occur only after all deliverables have met their respective acceptance periods as described above, including the completion of all Go Live events, and no earlier than 30 days after full production.

Final System Acceptance shall be deemed successfully completed upon mutual agreement by County and Contractor.

Memorandum

MIAMI-DADE COUNTY

Date: June 22, 2006

To: Miriam Singer, Director
Department of Procurement Management

From: Dag J. Abreu, Chairperson
Evaluation/Selection Committee D.A.

Subject: Report of Evaluation/Selection Committee for RFP 511; EAMS Implementation Services for Miami-Dade Water & Sewer Department

---

The Evaluation/Selection Committee has completed the task of evaluating proposals submitted in response to the above referenced Request for Proposals ("RFP") following the guidelines published in the RFP solicitation as summarized below.

Committee meeting dates:

March 28, 2006	Kick-off Meeting
April 19, 2006	Meeting to rank proposals (Pre-Oral Presentations)
May 18, 2006	Vendor Oral Presentations
May 18, 2006	Meeting to discuss Oral Presentations
June 5, 2006	Meeting to rank proposals (Post-Oral Presentations)

Verification of compliance with contract measures:
The Review Committee meeting of August 10, 2005 recommended a Small Business Enterprise (SBE) selection factor for this solicitation. The Department of Business Development (see attached memo) has determined that none of the proposing firms qualify for the selection factor.

Verification of compliance with minimum qualification requirements:
RFP 511 had minimum qualification requirements which were reviewed by the Chairperson of this Committee and Loira Urena of the client department, Miami-Dade Water & Sewer Department. All of the proposers met the minimum requirements of this solicitation.

Summary of Committee scores:

Technical Scores Prior to Oral Presentations (max. 500 points):

Proposer	***Total Score. Technical & Price***
1. Woolpert, Inc.	417
2. BearingPoint, Inc.	338

The Selection Committee decided to hold oral presentations with both vendors to review their proposals. All submitted proposals were evaluated by the selection committee and scored on technical and price criteria as noted in Section 4.0 of the RFP solicitation.

The final scores for the submitted proposals are as follows:

Proposer		***Total Score. Technical & Price***	***Price/Cost Submitted***
1.	Woolpert, Inc.	408	$5,906,949.00
2.	BearingPoint, Inc.	293	$7,909,833.00

Local Preference:
Local Preference was considered in accordance with applicable ordinances, but did not affect the outcome of this solicitation.

Negotiations:
The Selection Committee recommends that the County enter into negotiations with the highest ranked, responsive firm, Woolpert, Inc. The following individuals are recommended to participate in the negotiations:

Dag J. Abreu, Negotiation Chair, DPM
Diane Camacho, Assistant Director - Finance, Miami-Dade Water & Sewer Department
Peter Velar, Budget and Financial Advisor to Director, Miami-Dade Water & Sewer Department

Copies of the score sheets are attached for each Evaluation/Selection Committee Member, as well as a composite score sheet for your review.

Reviewed:

Director

6/30/06
Date

RFP 511
EAMS Implementation Services
INITIAL EVALUATION OF PROPOSALS

COMPOSITE

SELECTION CRITERIA / PROPOSERS	BearingPoint	Woolpert
Project management approach to meet scope of services *[Max. Points: 100 (20 points per 5 members)]*	73	86
Technical approach to meet scope of services. *[Max. Points: 100 (20 points per 5 members)]*	66	92
Proposer's EAMS water/wastewater utility experience, qualifications, capabilities, and past performance in providing the type of services described in this scope of services. *[Max. Points: 150 (30 points per 5 members)]*	89	107
EAMS water/wastewater utility experience and qualifications of individuals, including subcontractors, that will be assigned to this project. *. [Max. Points: 100 (20 points per 5 members)]*	80	86
Pricing *[Max. Points: 50 (10 points per 5 members)]*	30	46
TOTAL POINTS *(500)*	**338**	**417**
Local Preference* *(Highest ranked proposer's total points - 5% = Local Preference range)*		

Signature: _____ 4/20/06
Chairperson

_____ 4/20/06
Reviewed By

6/19/2006

FP 511
EAMS Implementation Services

Sharon Mitchell

SELECTION CRITERIA / PROPOSERS	BearingPoint	Woolpert				
Project management approach to meet scope of services *(Max. Points: 20 points)*	10	15				
Technical approach to meet scope of services. [Max. Points: 20]	10	15				
Proposer's EAMS water/wastewater utility experience, qualifications, capabilities, and past performance in providing the type of services described in this scope of services. *[Mex. Points: 30]*	15	18				
EAMS water/wastewater utility experience and qualifications of individuals, including subcontractors, that will be assigned to this project. *[Max. Points: 20]*	15	20				
Pricing *[Max. Points: 10]*	5	10				
Total Points *(100*)*	55	78				

*Additional points may be added to qualifying Proposers based on the Selection Factor applied by the County's SBE program. (See Section 1.7 for details)

Sharon Mitchell
SIGNATURE

4/19/06
DATE

191

RFP 511
EAMS Implementation Services

Jenny Deblois

SELECTION CRITERIA / PROPOSERS	BearingPoint	Woolpert				
Project management approach to meet scope of services *[Max. Points: 20 points]*	12	17				
Technical approach to meet scope of services. [Max. Points: 20]	8	18				
Proposer's EAMS water/wastewater utility experience, qualifications, capabilities, and past performance in providing the type of services described in this scope of services. *[Max. Points: 30]*	12	14				
EAMS water/wastewater utility experience and qualifications of individuals, including subcontractors, that will be assigned to this project. *[Max. Points: 20]*	8	11				
Pricing *[Max. Points: 10]*	5	8				
Total Points *(100*)*	45	68				

*Additional points may be added to qualifying Proposers based on the Selection Factor applied by the County's SBE program. (See Section 1.7 for details)

Jenny Deblois
SIGNATURE

4/19/06
DATE

861

55 78 (23)
45 68 (23)
97 100
74 83

RFP 611
EAMS Implementation Services

Ivette Barbeito-Locay

SELECTION CRITERIA / PROPOSERS	BearingPoint	Woolpert				
Project management approach to meet scope of services *[Max. Points: 20 points]*	16	16				
Technical approach to meet scope of services. [Max. Points: 20]	13	19				
Proposer's EAMS water/wastewater utility experience, qualifications, capabilities, and past performance in providing the type of services described in this scope of services. *[Max. Points: 30]*	22	25				
EAMS water/wastewater utility experience and qualifications of individuals, including subcontractors, that will be assigned to this project. *[Max. Points: 20]*	17	15				
Pricing *[Max. Points: 10]*	6	8				
Total Points *(100*)*	74	83				

*Additional points may be added to qualifying Proposers based on the Selection Factor applied by the County's SBE program. (See Section 1.7 for details)

Ivette N. Barbeito-Locay
SIGNATURE

4/17/06
DATE

6h1

RFP 511
EAMS Implementation Services

Lillie Estrada

SELECTION CRITERIA / PROPOSERS	BearingPoint	Woolpert				
Project management approach to meet scope of services *[Max. Points: 20 points]*	15	18				
Technical approach to meet scope of services. [Max. Points: 20]	15	20				
Proposer's EAMS water/wastewater utility experience, qualifications, capabilities, and past performance in providing the type of services described in this scope of services. *[Max. Points: 30]*	10	20				
EAMS water/wastewater utility experience and qualifications of individuals, including subcontractors, that will be assigned to this project. *[Max. Points: 20]*	20	20				
Pricing *[Max. Points: 10]*	7	10				
Total Points *(100*)*	67					

*Additional points may be added to qualifying Proposers based on the Selection Factor applied by the County's SBE program. (See Section 1.7 for details)

SIGNATURE

4-13-06
DATE

(20)

55 78 (23)
45 68 (23)
97* 100
74 83

...FP 811
EAMS Implementation Services

Joseph A. Mazzarese

SELECTION CRITERIA / PROPOSERS	BearingPoint	Woolpert				
Project management approach to meet scope of services *[Max. Points: 20 points]*	20	20				
Technical approach to meet scope of services. [Max. Points: 20]	20	20				
Proposer's EAMS water/wastewater utility experience, qualifications, capabilities, and past performance in providing the type of services described in this scope of services. *[Max. Points: 30]*	30	30				
EAMS water/wastewater utility experience and qualifications of individuals, including subcontractors, that will be assigned to this project. *[Max. Points: 20]*	20	20				
Pricing *[Max. Points: 10]*	7	10				
Total Points *(100*)*	97	100				

*Additional points may be added to qualifying Proposers based on the Selection Factor applied by the County's SBE program. (See Section 1.7 for details)

SIGNATURE

J.A. MAZZARESE

4/17/06
DATE

15)

RFP NO. 511
EAMS Implementation Services
FINAL EVALUATION OF PROPOSALS

COMPOSITE

SELECTION CRITERIA / PROPOSERS	BearingPoint	Woolpert
Project management approach to meet scope of services *[Max. Points: 100 (20 points per 5 members)]*	70	81
Technical approach to meet scope of services. *[Max. Points: 100 (20 points per 5 members)]*	64	83
Proposer's EAMS water/wastewater utility experience, qualifications, capabilities, and past performance in providing the type of services described in this scope of services. *[Max. Points: 150 (30 points per 5 members)]*	81	117
EAMS water/wastewater utility experience and qualifications of individuals, including subcontractors, that will be assigned to this project. *. [Max. Points: 100 (20 points per 5 members)]*	47	81
Pricing *[Max. Points: 50 (10 points per 5 members)]*	31	46
TOTAL POINTS *(500)*	**293**	**408**
Local Preference* *(Highest ranked proposer's total points - 5% = Local Preference range)*		

Signature:

Chairperson 6/6/06

6/16/06

Reviewed By

Ranking	**2**	**1**
Local Preference Is highest ranked local? Y / N	**Y**	**Y**
Is firm within 5% local? Y / N	**N**	**N**
Is any firm within 5% of the highest ranked? Y / N	**N**	**N**

6/6/2006

111

EAMS Implementation Services

Joseph A. Mazzarese

AFTER PRESENTATION & REFERENCES

SELECTION CRITERIA / PROPOSERS	BearingPoint	Woolpert				
Project management approach to meet scope of services *[Max. Points: 20 points]*	18	19				
Technical approach to meet scope of services. [Max. Points: 20]	18	19				
Proposer's EAMS water/wastewater utility experience, qualifications, capabilities, and past performance in providing the type of services described in this scope of services. *[Max. Points: 30]*	25	28				
EAMS water/wastewater utility experience and qualifications of individuals, including subcontractors, that will be assigned to this project. *[Max. Points: 20]*	18	19				
Pricing *[Max. Points: 10]*	7	10				
Total Points *(100*)*	86	95				

*Additional points may be added to qualifying Proposers based on the Selection Factor applied by the County's SBE program. (See Section 1.7 for details)

SIGNATURE

6/5/06
DATE

153

RFP 511
EAMS Implementation Services

Lillie Estrada

SELECTION CRITERIA / PROPOSERS	BearingPoint	Woolpert				
Project management approach to meet scope of services *[Max. Points: 20 points]*	15	18				
Technical approach to meet scope of services. [Max. Points: 20]	10	15				
Proposer's EAMS water/wastewater utility experience, qualifications, capabilities, and past performance in providing the type of services described in this scope of services. *[Max. Points: 30]*	5	20				
EAMS water/wastewater utility experience and qualifications of individuals, including subcontractors, that will be assigned to this project. *[Max. Points: 20]*	0	15				
Pricing *[Max. Points: 10]*	7	10				
Total Points *(100*)*	37	78				

*Additional points may be added to qualifying Proposers based on the Selection Factor applied by the County's SBE program. (See Section 1.7 for details)

Lillie Estrada
SIGNATURE

06-05-06
DATE

251

511
EAMS Imple...ntation Services

Ivette Barbeito-Locay

SELECTION CRITERIA / PROPOSERS	BearingPoint	Woolpert				
Project management approach to meet scope of services [Max. Points: 20 points]	13	15				
Technical approach to meet scope of services. [Max. Points: 20]	15	20				
Proposer's EAMS water/wastewater utility experience, qualifications, capabilities, and past performance in providing the type of services described in this scope of services. [Max. Points: 30]	15	25				
EAMS water/wastewater utility experience and qualifications of individuals, including subcontractors, that will be assigned to this project. [Max. Points: 20]	11	16				
Pricing [Max. Points: 10]	7	8				
Total Points (100*)	61 ~~62~~	84				

*Additional points may be added to qualifying Proposers based on the Selection Factor applied by the County's SBE program. (See Section 1.7 for details)

SIGNATURE

6/05/06
DATE

551

RFP 511
EAMS Implementation Services

Jenny Deblois

SELECTION CRITERIA / PROPOSERS	BearingPoint	Woolpert				
Project management approach to meet scope of services *[Max. Points: 20 points]*	14	12				
Technical approach to meet scope of services. [Max. Points: 20]	11	14				
Proposer's EAMS water/wastewater utility experience, qualifications, capabilities, and past performance in providing the type of services described in this scope of services. *[Max. Points: 30]*	21	24				
EAMS water/wastewater utility experience and qualifications of individuals, including subcontractors, that will be assigned to this project. *[Max. Points: 20]*	8	11				
Pricing *[Max. Points: 10]*	5	8				
Total Points *(100*)*	59	69				

*Additional points may be added to qualifying Proposers based on the Selection Factor applied by the County's SBE program. (See Section 1.7 for details)

951

M. Jenny Deblois
SIGNATURE

6/5/06
DATE

511

EAMS Implementation Services

Sharon Mitchell

SELECTION CRITERIA / PROPOSERS	BearingPoint	Woolpert				
Project management approach to meet scope of services *[Max. Points: 20 points]*	10	19 (Su)				
Technical approach to meet scope of services. [Max. Points: 20]	10	15				
Proposer's EAMS water/wastewater utility experience, qualifications, capabilities, and past performance in providing the type of services described in this scope of services. *[Max. Points: 30]*	15	20				
EAMS water/wastewater utility experience and qualifications of individuals, including subcontractors, that will be assigned to this project. *[Max. Points: 20]*	10	20				
Pricing *[Max. Points: 10]*	5	10				
Total Points *(100*)*	50	84				

*Additional points may be added to qualifying Proposers based on the Selection Factor applied by the County's SBE program. (See Section 1.7 for details)

Sharon Mitchell
SIGNATURE

June 5, 2006
DATE

451