REVISED 03-01-2024 TO ADD ITEM 7.a.

City Council Regular Meeting Agenda
March 5, 2024 at 6:30 PM
City Hall Council Chambers - 210 W 6th Ave and Virtual

Meetings are broadcast live at https://www.go2kennewick.com/CouncilMeetingBroadcasts.
Public comment registration and instructions are available at https://www.go2kennewick.com/PublicComments.

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1. CALL TO ORDER

Roll Call/Pledge of Allegiance/Welcome/Invocation

HONORS & RECOGNITIONS

- Employee Achievement Recognition: Brandi Ralston, Public Records Officer/Deputy City Clerk

2. VISITORS

This is an opportunity for visitors to share their perspective about any item on the agenda. Comments may not exceed three minutes.

3. APPROVAL OF AGENDA

4. CONSENT AGENDA

All matters listed within the Consent Agenda have been distributed to each member of the Kennewick City Council for reading and study, are considered to be routine, and will be enacted by one motion of the Council with no separate discussion.

a. Meeting Minutes: February 20, 2024, Regular Meeting
Motion to approve the February 20, 2024, City Council regular meeting minutes as presented.

b. Meeting Minutes: February 27, 2024, Workshop Meeting
Motion to approve the February 20, 2024, City Council regular meeting minutes as presented.

c. Claims Roster: Columbia Park Golf Course Account
Motion to approve the Claims Roster for the Columbia Park Golf Course Account for January 2024 in the amount of $24,500.04, comprised of check numbers 2797-2801 in the amount of $7,237.74 and electronic transfers in the amount of $17,262.30.

d. Contract: Northwest High Intensity Drug Trafficking Area (HIDTA) 2024 Service Agreement with Ian McKenzie, Operations Manager
Motion to authorize the interim City Manager to sign a 2024 HIDTA service contract with Ian McKenzie, Operations Manager.

e. Contract: Consulting Services to Complete City-Wide Pavement Condition Assessment
Motion to authorize the interim City Manager to execute an agreement to complete Pavement Condition Assessment with IMS Infrastructure Management Services for a not to exceed price of $113,865.00, plus a 10% contingency amount of $11,386.50, for a total amount of $125,251.50.

5. ORDINANCES/RESOLUTIONS

a. Ordinance: Sitting/Lying on a Public Sidewalk/Right-of-Way Amending KMC 10.08.140(4)(c)

6. PUBLIC HEARINGS/MEETINGS

7. NEW BUSINESS

a. Contract: Toyota Center HVAC Replacement Project - 2024-291

8. UNFINISHED BUSINESS

9. VISITORS

This is an opportunity for visitors to share their perspective regarding a general topic. Comments may not exceed three minutes.

10. COUNCIL COMMENTS/DISCUSSION

11. ADJOURNMENT

To assure disabled persons the opportunity to participate in or benefit from City services, please provide twenty-four (24) hour advance notice for additional arrangements to reasonably accommodate special needs.
Please be advised that all Kennewick City Council Meetings are Audio and Video Taped

Council Agenda Coversheet	Agenda Item Number: 4.a.	Council Date: 3/5/2024	Category: Consent Agenda
	Agenda Item Type: General Business Item		
	Subject: Meeting Minutes: February 20, 2024, Regular Meeting		
	Department: Management Services		
	Ord/Reso #	Contract #	
	Project #	Permit #	

Recommendation

Staff recommends approving the minutes as presented.

Motion for Consideration

Motion to approve the February 20, 2024, City Council regular meeting minutes as presented.

Summary

Alternatives

Council may correct errors and approve the minutes as amended.

Fiscal Impact

Attachments:

1. Minutes - Draft

CITY OF KENNEWICK
CITY COUNCIL REGULAR MEETING
February 20, 2024

1. CALL TO ORDER

Mayor Crawford called the meeting to order at 6:30 p.m.

City Council and Staff Present:

Loren Anderson	Lisa Beaton	Nick Farline
Brad Beauchamp	Anthony Muai	Beth Goldberg
Gretl Crawford	Christina Palmer	Evelyn Lusignan
Jason McShane	Laurencio Sanguino	Krystal Townsend
Jim Millbauer	Cary Roe	
John Trumbo	Chris Guerrero	
Chuck Torelli	Chad Michael	

Chief Guerrero led the Pledge of Allegiance.

No one was present to provide an invocation.

2. VISITORS: None

3. APPROVAL OF AGENDA

MOTION: Mayor Pro Tem Torelli moved, seconded by Councilmember Millbauer to approve the agenda.

DISCUSSION: None.

VOTE: The motion passed unanimously (7-0).

4. CONSENT AGENDA

a. Meeting Minutes – February 6, 2024, City Council Regular Meeting
Motion to approve the February 6, 2024, City Council regular meeting minutes as presented.

b. Meeting Minutes – February 13, 2024, City Council Workshop
Motion to approve the February 13, 2024, City Council workshop meeting minutes as presented.

c. Claim Roster: January 2024
Motion to approve the Claims Roster for January 2024 in the amount of $7,369,150.93, comprised of electronic payments and check numbers 312958-313464.

d. Contract Approval: Pathway and Trails Master Plan Agreement
Motion to authorize the City Manager to execute the Pathway and Trails Master Plan contract with Kittelson & Associates in the amount of $159,584.00.

e. Easement: Gas Pipeline at 4800 South Olympia Street
Motion to authorize the Mayor to sign the deed for a gas pipeline easement to Cascade Natural Gas at 4800 South Olympia Street.

f. Contract Award: 2024 Bituminous Surface Treatment (BST) Seal Coat Project
Motion to award Contract P2402-24 2024 Bituminous Surface Treatment Seal Coat to Tommer Construction Co. in the amount of $512,512.51 plus a 10% contingency amount of $51,251.25, for a total amount of $563,763.76 and authorize the City Manager to execute the contract.

g. Interagency Letter Urging State-Level Action to Address the Fentanyl Crisis
Motion to authorize the Mayor to sign the letter to legislators.

MOTION: Councilmember Anderson moved, seconded by Councilmember Trumbo to approve the consent agenda as presented.

VOTE: The motion passed unanimously (7-0).

5. ORDINANCES/RESOLUTIONS

a. Ordinance 24-6050: Change of Zone COZ-2023-0009 at 10601 Ridgeline Drive from Business Park (BP) to Commercial, Community (CC)

Anthony Muai, Community Planning Director, provided a staff report and answered City Council's questions.

City Clerk Krystal Townsend read the ordinance title into the record:

AN ORDINANCE AMENDING THE ZONING CLASSIFICATION OF CERTAIN REAL PROPERTY WITHIN THE CITY OF KENNEWICK LOCATED AT 10601 and 10657 RIDGELINE DRIVE FROM BUSINESS PARK (BP) TO COMMERCIAL, COMMUNITY (CC) (COZ 2023-0009, Knutzen Engineering, c/o Paul Knutzen).

MOTION: Councilmember Anderson moved, seconded by Councilmember Millbauer, to adopt the ordinance as presented.

DISCUSSION: None.

VOTE: The motion passed unanimously (7-0).

6. PUBLIC HEARINGS/MEETINGS: None

7. NEW BUSINESS: None

8. UNFINISHED BUSINESS: None

9. VISITORS:

Shelley Goodnight, Kennewick, regarding safety concerns and requests for improvement to lighting and traffic control in her neighborhood (comments read by Ms. Townsend).

10. COUNCIL COMMENTS/DISCUSSION

Councilmembers reported on their respective activities.
Interim City Manager Lisa Beaton provided updates in response to Council questions.

12. ADJOURNMENT

Mayor Crawford concluded the meeting at 7:14 p.m.

DRAFT
Krystal Townsend, CMC, CPRO
City Clerk

Council Agenda Coversheet	Agenda Item Number: 4.b.	Council Date: 3/5/2024	Category: Consent Agenda
	Agenda Item Type: General Business Item		
	Subject: Meeting Minutes: February 27, 2024, Workshop Meeting		
	Department: Management Services		

Recommendation

Staff recommends approving the minutes as presented.

Motion for Consideration

Motion to approve the February 20, 2024, City Council regular meeting minutes as presented.

Summary

Alternatives

Council may correct errors and approve the minutes as amended.

Fiscal Impact

Attachments:

1. Minutes - Draft

CITY OF KENNEWICK
CITY COUNCIL
Workshop
February 27, 2024

1. **CALL TO ORDER.** Mayor Pro Tem Torelli called the meeting to order at 6:30 p.m.

   City Council and Staff Present:

Loren Anderson	Lisa Beaton	Chris Guerrero
Brad Beauchamp	Anthony Muai	Chad Michael
Jason McShane	Laurencio Sanguino	Evelyn Lusignan
Jim Millbauer	Cary Roe	Rohana Carmichael
Chuck Torelli	Christina Palmer	Chad Crouch
John Trumbo	Krystal Townsend	Kylie Peel
	Nick Farline	

   Mayor Crawford provided advance notice that she would not attend the workshop.

2. **HISTORIC DOWNTOWN PARTNERSHIP UPDATE.** Ms. Lusignan introduced Rohana Carmichael and guest panelist Stephanie Button, Director of the Historic Downtown Kennewick Partnership. Ms. Button and Ms. Carmichael presented an update and answered Council questions. **No action taken.**

3. **BENTON COUNTY DEPARTMENT OF HUMAN SERVICES – HOUSING AND HOMELESSNESS UPDATE.** Ms. Beaton introduced guest panelists Kyle Sullivan, Gloria Caldwell, and Niria Lucatero from Benton County. The guest panelists presented an update and answered Council questions, including responses from John Penny, a coalition partner. CDBG Coordinator Kylie Peel spoke to the City's housing projects funded through the Benton County 2060 funds. Ms. Peel replied to Council's questions. **No action taken.**

4. **ADJOURNMENT.** Mayor Pro Tem Torelli concluded the meeting at 8:18 p.m.

DRAFT
Krystal Townsend, CMC, CPRO
City Clerk

Council Agenda Coversheet	Agenda Item Number: 4.c.	Council Date: 3/5/2024	Category: Consent Agenda
	Agenda Item Type:	General Business Item	
	Subject:	Claims Roster: Columbia Park Golf Course Account	
	Department:	Finance	
	Ord/Reso #	Contract #	
	Project #	Permit #	

Recommendation

Staff recommends Council approve the Claims Roster for the Columbia Park Golf Course Account for January 2024.

Motion for Consideration

Motion to approve the Claims Roster for the Columbia Park Golf Course Account for January 2024 in the amount of $24,500.04, comprised of check numbers 2797-2801 in the amount of $7,237.74 and electronic transfers in the amount of $17,262.30.

Summary

Alternatives

Fiscal Impact

$24,500.04.

Attachments:

1. Roster

COLUMBIA PARK GOLF COURSE FUND
CHECK REGISTER
JANUARY 2024

Check Number	Vendor Check Name	Check Date	Amount	Type
NATIONWIDE 364179395	NATIONWIDE	1/12/2024	$515.16	EFT
ADPBEN 3161208	ADP TOTAL SOURCE (AUTOPAY)	1/10/2024	$4,133.47	EFT
WA DOR 0037649215	WASHINGTON STATE DEPARTMENT OF REVENUE	1/25/2024	$1,383.03	EFT
2797	COLUMBIA POINT GOLF COURSE	1/29/2024	$384.60	Check
2798	COURSECO, INC	1/29/2024	$1,115.54	Check
2799	KENNEWICK GOLF CORPORATION	1/29/2024	$5,259.60	Check
2800	TOTAL E INTEGRATED INC.	1/29/2024	$438.00	Check
2801	YELP	1/29/2024	$40.00	Check
487520	CITY OF KENNEWICK ELECTRICAL	1/10/2024	$102.42	EFT
487577	FOREUP GOLF SOFTWARE BILLING	1/10/2024	$447.00	EFT
487591	WAMBEKE WINDOW WASHING	1/29/2024	$25.00	EFT
Paid by ACH	CINTAS CORPORATION #608	1/11/2024	$107.02	EFT
Paid by ACH	CINTAS CORPORATION #608	1/25/2024	$107.02	EFT
Paid by ACH	CINTAS CORPORATION #608	1/25/2024	$107.02	EFT
Paid by ACH	PEPSI COLA BOTTLING CO. OF PASCO	1/25/2024	$40.25	EFT
Paid by ACH	ADP TOTAL SOURCE (AUTOPAY)	1/12/2024	$3,155.06	EFT
Paid by ACH	ADP TOTAL SOURCE (AUTOPAY)	1/26/2024	$4,215.11	EFT
Paid by ACH	ELAN (MONTHLY CREDIT CARD CHGS)	1/31/2024	$2,342.07	EFT
Bank Deduction	MERCHANT SERVICES	1/2/2024	$536.61	EFT
Bank Deduction	US Bank	1/16/2024	$46.06	EFT
			$24,500.04	

I, Michele Hamada, Accounting Manager, do hereby certify that the merchandise or services hereinbefore specified have been received, that any advance payment is due and payable pursuant to a contract or is available as an option for full or partial fulfillment of a contractual obligation and that the vouchers listed above are approved for payment this day.

Michele Hamada

Michele Hamada, Accounting Manager

The payments on this claims roster are comprised of the following:

Check numbers 2797-2801	$	7,237.74
Electronic transfers		17,262.30
Total	$	24,500.04

Exceptions:

Check	Vendor	Date	Amount		Debit	Credit
NATIONWIDE 364179395	NATIONWIDE	1/12/2024		$515.16		
	PAY	20005-000-244-00	ACCOUNTS PAYABLE - GP			$515.16
	PURCH	18400-000-244-00	PREPAID GEN LIAB INS		$515.16	
ADPBEN 3161208	ADP TOTAL SOURCE (AUTOPAY)	1/10/2024		$4,133.47		
	PAY	20005-000-244-00	ACCOUNTS PAYABLE - GP			$4,133.47
	PURCH	50800-050-244-00	HEALTH BENEFITS		$2,069.97	
	PURCH	50800-060-244-00	HEALTH BENEFITS		$2,063.50	
WA DOR 0037649215	WASHINGTON STATE DEPARTMENT OF REVENUE	1/25/2024		$1,383.03		
	PAY	20005-000-244-00	ACCOUNTS PAYABLE - GP			$1,383.03
	PURCH	20300-000-244-00	SALES TAX PAYABLE		$779.99	
	PURCH	91101-000-244-00	OTHER STATE TAX		$603.04	
2797	COLUMBIA POINT GOLF COURSE	1/29/2024		$384.60		
	PAY	20005-000-244-00	ACCOUNTS PAYABLE - GP			$384.60
	PURCH	50100-060-244-00	SALARIES		$192.30	
	PURCH	50100-080-244-00	SALARIES		$192.30	
2798	COURSECO, INC	1/29/2024		$1,115.54		
	PAY	20005-000-244-00	ACCOUNTS PAYABLE - GP			$1,115.54
	PURCH	18400-000-244-00	PREPAID GENERAL LIABILITY INS		$1,115.54	
2799	KENNWICK GOLF CORPORATION	1/29/2024		$5,259.60		
	PAY	20005-000-244-00	ACCOUNTS PAYABLE - GP			$5,259.60
	PURCH	59600-080-244-00	ACCOUNTING FEES		$1,315.52	
	PURCH	59610-080-244-00	MANAGEMENT FEE		$3,944.08	
2800	TOTAL E INTEGRATED INC.	1/29/2024		$438.00		
	PAY	20005-000-244-00	ACCOUNTS PAYABLE - GP			$438.00
	PURCH	51900-050-244-00	CONTRACT SERVICES		$438.00	
2801	YELP	1/29/2024		$40.00		
	PAY	20005-000-244-00	ACCOUNTS PAYABLE - GP			$40.00
	PURCH	53100-080-244-00	ADVERTISING & MARKETING		$40.00	
487520	CITY OF KENNEWICK ELECTRICAL	1/10/2024		$102.42		
	PAY	20006-000-244-00	ACCOUNTS PAYABLE - GP			$102.42
	PURCH	52200-060-244-00	UTILITIES - GAS & ELECTRIC		$74.98	
	PURCH	52210-060-244-00	IRRIGATION ELECTRICITY		$27.44	
487577	FOREUP GOLF SOFTWARE BILLING	1/10/2024		$447.00		
	PAY	20006-000-244-00	ACCOUNTS PAYABLE - GP			$447.00
	PURCH	51900-050-244-00	CONTRACT SERVICES		$447.00	
487591	WAMBEKE WINDOW WASHING	1/29/2024		$25.00		
	PAY	20006-000-244-00	ACCOUNTS PAYABLE - GP			$25.00
	PURCH	51900-080-244-00	CONTRACT SERVICES		$25.00	
Paid by ACH	CINTAS CORPORATION #085	1/11/2024		$107.02		
	PAY	20006-000-244-00	ACCOUNTS PAYABLE - GP			$107.02
	PURCH	51900-060-244-00	CONTRACT SERVICES		$40.24	
	PURCH	51900-080-244-00	CONTRACT SERVICES		$66.78	
Paid by ACH	CINTAS CORPORATION #085	1/25/2024		$107.02		
	PAY	20006-000-244-00	ACCOUNTS PAYABLE - GP			$107.02
	PURCH	51900-060-244-00	CONTRACT SERVICES		$40.24	
	PURCH	51900-080-244-00	CONTRACT SERVICES		$66.78	
Paid by ACH	CINTAS CORPORATION #085	1/25/2024		$107.02		
	PAY	20006-000-244-00	ACCOUNTS PAYABLE - GP			$107.02
	PURCH	51900-060-244-00	CONTRACT SERVICES		$40.24	
	PURCH	51900-080-244-00	CONTRACT SERVICES		$66.78	
Paid by ACH	PEPSI COLA BOTTLING CO. OF PASCO	1/25/2024		$40.25		
	PAY	20006-000-244-00	ACCOUNTS PAYABLE - GP			$40.25
	PURCH	49150-070-244-00	COGS - PACKAGED FOOD		$40.25	
Paid by ACH	ADP TOTAL SOURCE (AUTOPAY)	1/12/224		$3,155.06		
	PAY	50000-000-244-00	TEMPORARY ACCT			$3,155.06
	PURCH	50200-050-244-00	HOURLY WAGES		$2,112.67	
	PURCH	50200-060-244-00	HOURLY WAGES		$1,207.78	
	PURCH	50800-050-244-00	HEALTH BENEFITS			$406.21
	PURCH	50800-060-244-00	HEALTH BENEFITS			$403.22
	PURCH	50950-050-244-00	COMBINED ADMIN, TAXES, W/C		$374.53	
	PURCH	50950-060-244-00	COMBINED ADMIN, TAXES, W/C		$221.06	
	PURCH	50950-080-244-00	COMBINED ADMIN, TAXES, W/C		$20.75	
	PURCH	52100-050-244-00	CELL PHONE		$27.70	
Paid by ACH	ADP TOTAL SOURCE (AUTOPAY)	1/26/2024		$4,215.11		
	PAY	50000-000-244-00	TEMPORARY ACCT			$4,215.11
	PURCH	50200-050-244-00	HOURLY WAGES		$1,572.04	
	PURCH	50200-060-244-00	HOURLY WAGES		$948.73	
	PURCH	50300-050-244-00	BONUSES		$1,250.00	
	PURCH	50300-060-244-00	BONUSES		$500.00	
	PURCH	50800-050-244-00	HEALTH BENEFITS			$406.21
	PURCH	50800-060-244-00	HEALTH BENEFITS			$403.22
	PURCH	50950-050-244-00	COMBINED ADMIN, TAXES, W/C		$451.26	
	PURCH	50950-060-244-00	COMBINED ADMIN, TAXES, W/C		$255.42	
	PURCH	50950-080-244-00	COMBINED ADMIN, TAXES, W/C		$19.39	
	PURCH	52100-050-244-00	CELL PHONE		$27.70	

Check	Vendor	Date	Amount	Debit	Credit
Paid by ACH	ELAN (MONTHLY CREDIT CARD CHGS)	1/31/2024		$2,342.07	
	PURCH	50000-000-244-00	TEMPORARY ACCT		$2,342.07
	PURCH	51500-060-244-00	TRAVEL LODGING & ENT	$38.71	
	PURCH	51500-060-244-00	TRAVEL LODGING & ENT	$619.32	
	PURCH	51500-080-244-00	TRAVEL LODGING & ENT	$38.71	
	PURCH	51500-080-244-00	TRAVEL LODGING & ENT	$619.32	
	PURCH	51900-050-244-00	CONTRACT SERVICES	$49.00	
	PURCH	52100-060-244-00	TELECOMMUNICATIONS	$106.01	
	PURCH	52300-060-244-00	GARBAGE & DEBRIS REMOVAL	$126.50	
	PURCH	52500-080-244-00	OFFICE SUPPLIES	$72.14	
	PURCH	52800-080-244-00	SUBSCRIPTIONS & PUBLICATIONS	$9.26	
	PURCH	52900-080-244-00	PRINTING	$278.03	
	PURCH	53100-080-244-00	ADVERTISING & MARKETING	$105.11	
	PURCH	58500-060-244-00	EQUIPMENT SHOP SUPPLIES	$279.96	
Bank Deduction	MERCHANT SERVICES	1/2/2024		$536.61	
	PAY	10420-000-244-00	OPERATING CHECKING ACCT - US Bank		$536.61
	PURCH	54000-080-244-00	BANK CHARGES	$536.61	
Bank Deduction	US Bank	1/16/2024		$46.06	
	PAY	10420-000-244-00	OPERATING CHECKING ACCT - US Bank		$46.06
	PURCH	54000-080-244-00	BANK CHARGES	$46.06	

Council Agenda Coversheet	Agenda Item Number: 4.d.	Council Date: 3/5/2024	Category: Consent Agenda
	Agenda Item Type:	Contract/Agreement/Lease	
	Subject:	Contract: Northwest High Intensity Drug Trafficking Area (HIDTA) 2024 Service Agreement with Ian McKenzie, Operations Manager	
	Department:	Finance	
	Ord/Reso #	Contract #	
	Project #	Permit #	

Recommendation

Staff recommends City Council authorize the interim City Manager to sign a 2024 HIDTA service agreement with Ian McKenzie, Operations Manager.

Motion for Consideration

Motion to authorize the interim City Manager to sign a 2024 HIDTA service contract with Ian McKenzie, Operations Manager.

Summary

As a Fiduciary for the Northwest HIDTA program, the City's responsibilities primarily consist of administrative duties, including required reporting to the federal government and acting as a pass-through for federal funds to the program's contracted staff. As a part of its administrative duties, the City is required to enter into separate agreements with the program's contractors. This contract is for the Operations Manager, which was vacated by the previous contractor effective February 16, 2024.

Alternatives

None recommended.

Fiscal Impact

The proposed contractor agreement does not have a fiscal impact on the City of Kennewick. All compensation and reimbursements authorized under the agreement will be reimbursed to the City through the federal HIDTA grant.

Attachments:

1. Agreement

CONTRACTOR:	Ian McKenzie
AGENCY:	City of Kennewick
PROJECT:	Northwest HIDTA Operations Manager
AMOUNT:	$101,379.31
FUND SOURCE:	High Intensity Drug Trafficking Area Grant
DURATION:	February 26, 2024, through December 31, 2024

AGREEMENT FOR NORTHWEST HIDTA OPERATIONS MANAGER SERVICES

THIS Agreement for Northwest HIDTA ("HIDTA") operations manager services ("Agreement") is made by and between the CITY OF KENNEWICK, a municipal corporation of the State of Washington, as a fiscal fiduciary for HIDTA (the "City"), and IAN MCKENZIE, an individual (the "Contractor"), hereinafter referred to collectively as the "Parties."

In consideration of the mutual benefits and covenants contained herein, the Parties agree as follows:

1. SCOPE OF SERVICES TO BE PROVIDED BY CONTRACTOR.

Contractor agrees to perform operations manager services for HIDTA. Operations manager services include, but are not limited to:

1.1 Serving as the primary point of contact and administrator of the Performance Management Process (PMP) database;

1.2 Ensuring the reliability and accuracy of data and information entered into the PMP database;

1.3 Ensuring participant/initiative/agency compliance with the performance reporting provisions detailed in HIDTA's Program Policy and Budget Guidance as well as the PMP user guide, keeping HIDTA's executive director ("executive director"), or designee, updated as required;

1.4 Maintaining their PMP certification;

1.5 Ensuring appropriate personnel are trained annually on the PMP database and are apprised of any changes in procedures or definitions;

1.6 Assisting HIDTA, the Office of National Drug Control Policy ("ONDCP"), and independent auditors during performance audits and program reviews;

1.7 Where applicable, implementing audit recommendations, addressing findings, and drafting and implementing a corrective action plan (CAP), if necessary;

1.8 Creating, implementing, and tracking annual training plans to include expected outputs and preparing and submitting associated budgets;

1.9 Identifying, recommending, and carrying out relevant training for HIDTA and its initiatives;

1.10 Routinely communicating with others similarly situated throughout the HIDTA community, and elsewhere, to identify and implement best practices;

1.11 Being responsible for administrative matters associated with HIDTA sponsored training, to include: physical and virtual classroom set-up, facility considerations, student manuals/training material, training aids, other necessary equipment, and instructor/student coordination;

1.12 Conducting after-action interviews and assessments;

1.13 Communicating training matters to HIDTA employees and contractors, stakeholders, and other law enforcement and public health agencies/entities operating in Washington State;

1.14 Supervising the information technology unit; and

1.15 Performing other duties as directed by competent authority.

2. TIME OF PERFORMANCE.

This Agreement shall govern services rendered beginning February 26, 2024, and ending December 31, 2024, unless this Agreement is terminated earlier as provided in Section 11.

3. INDEPENDENT CONTRACTOR.

Contractor is and shall at all times be an independent contractor and is not to be considered an agent, employee, or servant of the City. The parties agree that the Contractor is not entitled to any benefits or rights enjoyed by employees of the City. The Contractor specifically has the right to direct and control Contractor's own activities in providing the agreed services in accordance with the specifications set out in this Agreement. The City's only responsibility under this Agreement is to administer the Grant Agreement between ONDCP and the City ("Grant/Award") by supplying ONDCP the proper documentation regarding any payments due to the Contractor, and disbursing such funds to the Contractor. Nothing in this Agreement shall be construed to render the Parties partners or joint venturers.

The Contractor will report to the executive director, or designee, and will serve at the will of HIDTA. The Contractor will be required to comply with all requirements for

employment established by HIDTA. This Agreement is subject to the review and approval of the executive director.

4. CONDITIONS OF EMPLOYMENT.

Employment is contingent on the qualification for and maintenance of a National Security Clearance at the appropriate level, with the minimum level required being secret.

5. COMPENSATION.

This Agreement, particularly the payment by the City to the Contractor of a salary and travel reimbursement, is contingent on funding by a Grant/Award and made available through ONDCP. Provided sufficient funding is available, the City will pay the Contractor a total salary of $101,379.31 for the services provided under this Agreement. One (1) payment of $1,379.31 will be issued approximately February 23, 2024, to compensate the Contractor for four (4) days worked in February 2024. The remaining payments will be made semi-monthly and will consist of twenty (20) substantially equal installments. In addition to this salary, and provided sufficient funding is available, the City will reimburse the Contractor for necessary travel expenses incurred during the performance of this Agreement.

6. OWNERSHIP.

All reports, plans, specifications, all forms of electronic media, and data and documents produced in the performance of this work shall remain the property of HIDTA. The City reserves the right to access any records pertaining to the City of Kennewick.

7. CHANGES.

No changes or additions shall be made in this Agreement except as agreed to by all parties and reduced to writing and executed with the same formalities as are required for the execution of this Agreement.

8. REVIEW AND APPROVAL.

Upon submittal of any report or other information required by the scope of services to be performed, the executive director, or designee, upon review may accept such work or reject it, or request such modification or additions as it deems appropriate.

9. HOLD HARMLESS AND INDEMNIFICATION.

The Contractor shall defend, indemnify, and hold the City, its officers, officials, employees, and volunteers harmless from any and all claims, injuries, damages, losses, or suits, including attorney fees, arising out of or in connection with the performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

It is further specifically and expressly understood that the indemnification provided herein constitutes the Contractor's waiver of immunity under Industrial Insurance, Title 51 Revised Code of Washington (RCW), solely for the purposes of this indemnification. This waiver has been mutually negotiated by the Parties. The provisions of this section shall survive the expiration or termination of this Agreement.

The Contractor's obligation shall inc1ude, but not be limited to, investigating, adjusting, and defending all claims alleging loss from action, error, or omission or breach of any common law, statutory, or other delegated duty by the Contractor, Contractor's employees, agents, or subcontractors.

10. COMPLIANCE WITH LAWS.

The Contractor shall comply with all applicable federal, state, and local laws in performing this Agreement, inc1uding laws governing discrimination.

11. TERMINATION.

11.1 Each Party understands that funding is currently available to support this Agreement through December 31, 2024, but that funding is contingent upon legislative appropriation. Should loss of funding occur during the period covered by this Agreement, the City or HIDTA may terminate this Agreement with thirty (30) days' advance notice. In that instance, the City will pay the Contractor for services performed up to and including one-half (l/2) of the month in which the termination is effective, assuming funding is available.

11.2 HIDTA may terminate this Agreement upon thirty (30) days' written notice to the Contractor for any other reason or no reason. In that event, the City shall pay the Contractor only for services provided. A final, pro-rata payment shall be made in accordance with Section 5 of this Agreement.

11.3 Termination shall not affect the rights of HIDTA, the City, or the Contractor under any other paragraph herein.

12. NON-ASSIGNMENT.

The Contractor shall not sublet or assign any of the rights, duties, or obligations covered by this Agreement without the prior express written consent of the City.

13. CONFLICTS BETWEEN ATTACHMENTS AND TEXT.

Should any conflicts exist between any attached exhibit or schedule and the text of this Agreement, the text shall prevail.

14. GOVERNING LAW AND STIPULATION OF VENUE.

The laws of the state of Washington shall govern this Agreement and any lawsuit regarding this Agreement must be brought in Benton County, Washington.

15. SEVERABILITY.

Should any clause, phrase, sentence, or paragraph of this Agreement be declared invalid or void, the remaining provisions of this Agreement shall remain in full force and effect.

16. INTEGRATION.

This Agreement is intended to replace all previous Agreements between the Parties with respect to the terms of this Agreement. This Agreement constitutes the entire Agreement between the Parties with respect to work to be performed by the Contractor for the City, and there are no representations, warranties, or commitments, except as set forth in this Agreement.

17. NON-DISCRIMINATION.

The Contractor shall not discriminate against any person or persons because of race, religion, color, sex, national origin, or any other protected class status in the conduct of its operation hereunder and shall comply with all federal and state laws relating to discrimination.

Conversely, HIDTA shall not discriminate against the Contractor because of race, color, sex, national origin, or any other protected class status, and shall comply with all federal and state laws relating to discrimination.

18. ENTIRE AGREEMENT.

This Agreement constitutes the entire Agreement between the Parties with respect to work to be performed by the Contractor for the City, and there are no representations, warranties, or commitments, except as set forth in this Agreement.

19. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY.

If federal funds are the basis for this Agreement, the Contractor certifies that neither the Contractor nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in this Agreement by any federal department or agency. If requested by the City, the Contractor shall complete and sign a Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion form. Any such form completed by the Contractor for this Agreement shall be incorporated into this Agreement by reference.

IN WITNESS WHEREOF, the Parties hereto execute this written Agreement on the latest day and year subscribed below:

CONTRACTOR

_____ _____

IAN MCKENZIE Date

CITY OF KENNEWICK

_____ _____

LISA BEATON, Interim City Manager Date

Approved as to form:

_____ _____

LAURENCIO SANGUINO, Interim City Attorney Date

EXECUTION APPROVED BY NORTHWEST HIDTA EXECUTIVE BOARD

_____ _____

RAFAEL PADILLA, Executive Board Chair Date

Council Agenda Coversheet	Agenda Item Number: 4.e.	Council Date: 3/5/2024	Category: Consent Agenda
	Agenda Item Type:	Contract/Agreement/Lease	
	Subject:	Contract: Consulting Services to Complete City-Wide Pavement Condition Assessment	
	Department:	Public Works	
	Ord/Reso #	Contract #	
	Project #	P2404 Permit #	

Recommendation

Staff recommends City Council authorize the interim City Manager to execute an agreement to complete Pavement Condition Assessment with IMS Infrastructure Management Services for a not to exceed price of $113,865.00, plus a 10% contingency amount of $11,386.50, for a total amount of $125,251.50.

Motion for Consideration

Motion to authorize the interim City Manager to execute an agreement to complete Pavement Condition Assessment with IMS Infrastructure Management Services for a not to exceed price of $113,865.00, plus a 10% contingency amount of $11,386.50, for a total amount of $125,251.50.

Summary

This project is for performing a Pavement Condition assessment on all roads within the City and urban growth boundaries, utilizing automated or semi-automated mechanical pavement survey equipment. Based on the data collected through the survey, video imaging, and visual inspection, each roadway segment shall be assessed for pavement distress, including the type (ex. alligator cracking, raveling, etc.) and severity, to develop a pavement condition index (PCI) indicator for each roadway segment. The PCI indicators shall be assigned to each roadway segment in a manner that allows for integration with the City's existing GIS and work order tracking systems. The vendor will prepare a pavement management summary capable of modeling the condition and performance of the City's roads recommending various available maintenance, rehabilitation, and reconstruction strategies and projecting the funding levels to support these activities.

Alternatives

Staff has not identified an alternative.

Fiscal Impact

Pavement Preservation Fund $125,251

Attachments:

1. Agreement

AGREEMENT BETWEEN CITY AND CONSULTANT

THIS AGREEMENT, is made between the City of Kennewick, PO Box 6108, 210 W. 6th Ave., Kennewick, Washington, (hereinafter referred to as the "City"), and IMS Infrastructure Management Services, 10630 75th Street North, Largo, Florida 33777 (hereinafter referred to as the "Consultant").

WITNESSETH:

1) SCOPE OF WORK AND AGREEMENT CONTENTS

a) The Consultant shall furnish all services, labor and related equipment necessary to conduct and complete the work as designated in this Agreement. The Consultant shall provide assessment services for the Pavement Condition Assessment project.

b) This Agreement consists of this Agreement, and other documents listed below issued prior to the execution of this agreement and all modifications and change orders issued subsequent thereto. These form the entire agreement and all are as fully a part of the Agreement as if attached to this Agreement or repeated herein. In the event of a conflict between documents the order of precedence will be the order listed below. An enumeration of the Agreement documents is set forth below:

(i) This Agreement No. P2404 between the City and Consultant.
(ii) Exhibit A: Scope of Work (incl. Revised Scope & Fee Sch. Dated 2/15/24)

2) GENERAL REQUIREMENTS

a) The Consultant shall attend status, progress, and coordination meetings with the designated City of Kennewick representatives, or such federal, community, state, city or county officials, groups or individuals as may be requested by the City. If additional meetings are requested, the City will provide the Consultant sufficient notice prior to those meetings requiring Consultant participation.

b) The Consultant shall prepare a monthly progress report if requested, in a form approved by the City, that will outline in written and/or graphical form the various phases and the order of performance of the work in sufficient details so that the progress of the work can easily be evaluated.

3) TIME FOR BEGINNING AND COMPLETION

The Consultant shall not begin any work under the terms of this Agreement until authorized in writing by the City. Consultant agrees to use best efforts to complete all work described under this Agreement by November 30, 2024.

4) PAYMENT

a) The City shall pay the Consultant an amount not to exceed **One hundred thirteen thousand, eight hundred sixtyfive and 00/100 ($ 113,865.00)** to complete the services rendered under this Agreement. Payment shall be made on a per unit basis as outlined in the Scope and Fee Schedule. Payment as identified in this section shall be full compensation for all work performed or services rendered, and for all labor, materials, supplies, equipment, and incidentals necessary to complete the work specified in the Scope of Work (Exhibit A).

b) Invoices not in dispute by the City will be paid within thirty (30) days and shall reference the contract number and/or purchase order applicable to the work. The invoice shall provide sufficient detail on the work being billed and include detailed receipts for any invoices

c) Partial payments to cover the percentage of work completed may be requested by the Consultant. These payments shall not be more than one (1) per month.

d) Pre-approved travel, meals and lodging will be reimbursed at cost and only when consultant travels at least 150 miles per one way trip. Reimbursable expenses are limited to the following: coach airfare, ground transportation (taxi, shuttle, car rental), hotel accommodations at the government rate, personal or company vehicle use at the then-current federal mileage rate, and meals at the current federal per-diem meal allowance.

e) Reimbursement for extra services/reimbursable expenses are not authorized under this Agreement unless detailed in the Scope of Work or agreed upon in writing as a modification to this Agreement.

f) The Consultant will allow access to the City, the State of Washington, the Federal Grantor Agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts, and transcriptions. Unless otherwise provided, said records must be retained for three years from the date of receipt of final payment. If any litigation, claim, or audit arising out of, in connection with, or relating to this contract is initiated before the expiration of the three-year period, the records shall be retained until such litigation, claim, or audit involving the records is completed.

5) INDEPENDENT CONTRACTOR

a) The Consultant, and any and all employees of the Consultant or other persons engaged in the performance of any work or services required of the Consultant under this Agreement, are independent contractors and shall not be considered employees of the City. Any and

all claims that arise at any time under any Workers' Compensation Act on behalf of said employees or other persons while so engaged, and any and all claims made by a third party as a consequence of any negligent act or omission on the part of the Consultant's employees or other persons engaged in any of the work or services required to be provided herein, shall be the sole obligation and responsibility of the Consultant.

6) OWNERSHIP OF DOCUMENTS

a) All designs, drawings, specifications, documents, reports and other work products prepared pursuant to this Agreement, shall become the property of the City upon payment to the Consultant of the fees set forth in this Agreement. The City acknowledges the Consultant's plans and specifications, including all documents on electronic media, as instruments of professional services. The plans and specifications prepared under this Agreement shall become the property of the City upon completion of the services and payment in full of all payment due to the Consultant. The City may make or permit to be made any modifications to the plans and specifications without the prior written authorization of the Consultant. The City agrees to waive any claim against the Consultant arising from any unauthorized reuse of the plans and specifications, and to indemnify and hold the Consultant harmless from any claim, liability or cost arising or allegedly arising out of any reuse of the plans and specifications by the City or its agent not authorized by the Consultant.

7) TERMINATION

a) This Agreement may be terminated by either party upon thirty (30) days' written notice. In the event this contract is terminated by the Consultant, the City shall be entitled to reimbursement of costs occasioned by such termination by the Consultant. In the event the City terminates this Agreement, the City shall pay the Consultant for the work performed, which shall be an amount equal to the percentage of completion of the work as mutually agreed between the City and the Consultant.

b) If any work covered by this Agreement shall be suspended or abandoned by the City before the Consultant has completed the assigned work, the Consultant shall be paid an amount equal to the costs incurred up to the date of termination or suspension as mutually agreed upon between the City and the Consultant.

8) DISPUTE RESOLUTION

a) The City and the Consultant agree to negotiate in good faith for a period of thirty (30) days from the date of notice of all disputes between them prior to exercising their rights under this Agreement, or under law.

b) All disputes between the City and the Consultant not resolved by negotiation between the parties may be arbitrated only by mutual agreement of the City and the Consultant. If not mutually agreed to resolve the claim by arbitration, the claim will be resolved by legal action.

9) DEBARMENT CERTIFICATION

a) The Consultant certifies that neither the Consultant nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in this contract by any federal or state department or agency. Further, the Consultant agrees not to enter into any arrangements or contracts related to completion of the work contemplated under this Agreement with any party that is on the "General Service Administration List of Parties Excluded from Federal Procurement or Non-procurement Programs" which can be found at:
www.sam.gov and
http://www.lni.wa.gov/TradesLicensing/PrevWage/AwardingAgencies/default.asp

10) VENUE, APPLICABLE LAW AND PERSONAL JURISDICTION

a) In the event that either party deems it necessary to initiate a legal action to enforce any right or obligation under this Agreement, the parties agree that any such action shall be initiated in the Superior Court of the State of Washington situated in Benton County. The parties agree that all questions shall be resolved by application of Washington law, and that the parties to such action shall have the right of appeal from such decision of the Superior Court in accordance with the laws of the State of Washington. The Consultant hereby consents to the personal jurisdiction of the Superior Court of the State of Washington situated in Benton County.

11) ATTORNEY'S FEES

a) The parties agree that should legal action be necessary to enforce any of the provisions of this Agreement, that the prevailing party will be awarded its reasonable attorney's fees and costs in action, including costs and attorney's fees on appeal if appeal is taken.

12) INSURANCE

a) Insurance Term

The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees.

b) No Limitation

The Consultant's maintenance of insurance as required by the Agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance, or otherwise limit the Owner's recourse to any remedy available at law or in equity.

c) Minimum Scope of Insurance

The Consultant shall obtain insurance of the types and coverage described below:

1. Automobile Liability insurance covering all owned, non-owned, hired and leased vehicles. Coverage shall be as least as broad as Insurance Services Office (ISO) form CA 00 01.

2. Commercial General Liability insurance shall be at least as broad as ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, stop-gap independent contractors and personal injury and advertising injury. The Owner shall be named as an additional insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the Owner using an additional insured endorsement at least as broad as ISO CG 20 26.
3. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.
4. Professional Liability insurance appropriate to the Consultant's profession.

d) Minimum Amounts of Insurance

The Consultant shall maintain the following insurance limits:

1. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of $1,000,000 per accident.
2. Commercial General Liability insurance shall be written with limits no less than $1,000,000 each occurrence, $2,000,000 general aggregate.
3. Professional Liability insurance shall be written with limits no less than $1,000,000 per claim and $1,000,000 policy aggregate limit.

e) Other Insurance Provision

The Consultant's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain that they shall be primary insurance as respect the Owner. Any insurance, self-insurance, or self-insured pool coverage maintained by the Owner shall be excess of the Consultant's insurance and shall not contribute with it.

f) Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

g) Verification of Coverage

The Consultant shall furnish the Owner with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before the Owner shall issue a Notice to Proceed.

h) Notice of Cancellation

The Consultant shall provide the Owner with written notice of any policy cancellation within two business days of their receipt of such notice.

i) Failure to Maintain Insurance

Failure on the part of the Consultant to maintain the insurance as required shall constitute a material breach of contract, upon which the Owner may, after giving five business days' notice to the Consultant to correct the breach, immediately terminate the contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Owner on demand, or at the sole discretion of the Owner, offset against funds due the Consultant from the Owner.

j) Owner Full Availability of Consultant Limits

If the Consultant maintains higher insurance limits than the minimums shown above, the Owner shall be insured for the full available limits of Commercial General and Excess or Umbrella liability maintained by the Consultant, irrespective of whether such limits maintained by the Consultant are greater than those required by this contract or whether any certificate of insurance furnished to the Owner evidences limits of liability lower than those maintained by the Consultant.

13) INDEMNIFICATION / HOLD HARMLESS

a) Consultant shall defend, indemnify, and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the negligent or wrongful acts, errors or omissions of the Consultant or the Consultant's employees or agents in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

b) Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability, including the duty and cost to defend, shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

14) STANDARD OF CARE

a) The professional services will be furnished in accordance with the care and skill ordinarily used by members of the same profession practicing under similar conditions at the same time and in the same locality.

15) SUCCESSORS OR ASSIGNS

a) All of the terms, conditions and provisions hereof shall inure to the benefit of and be binding upon the parties hereto, and their respective successors and assigns; provided,

however, that no assignment of the Agreement shall be made without written consent of the parties to the Agreement.

16) EQUAL OPPORTUNITY AGREEMENT

a) The Consultant agrees that s/he will not discriminate against any employee or job applicants for work under this Agreement for reasons of race, sex, nationality, religious creed, sexual orientation, or any other protected class status.

17) PARTIAL INVALIDITY

a) Any provision of this Agreement which is found to be invalid or unenforceable shall be ineffective to the extent of such invalidity or unenforceability, and the invalidity or unenforceability of such provision shall not affect the validity or enforceability of the remaining provisions hereof.

18) AMENDMENTS

a) All amendments must be in writing and be approved and signed by both parties.

19) CHANGE IN LAW

a) The parties hereto agree that in the event legislation is enacted or regulations are promulgated, or a decision of court is rendered, or any interpretive policy or opinion of any governmental agency charged with the enforcement of any such law or regulation is published that affects or may affect the legality of this Agreement or any part thereof or that materially and adversely affects the ability of either party to perform its obligations or receive the benefits intended hereunder ("Adverse Change in Law"), then within fourteen (14) days following written notice by either party to the other party of such adverse change in law, the parties shall meet to negotiate in good faith an amendment which will carry out the original intention of the parties to the extent possible. If, despite good faith attempts, the parties cannot reach agreement upon an amendment within sixty (60) days after commencing negotiation, then this Agreement may be terminated by either party as of the earlier of: (i) the effective date of the adverse change in law, or (ii) the expiration of a period of sixty (60) days following written notice of termination provided by one party to the other.

20) CONFIDENTIALITY

a) In the course of performing under this Agreement, Consultant, including its employees, agents or representatives, may receive, be exposed to, or acquire confidential information. Confidential information may include, but is not limited to, patient information, contract terms, sensitive employee information, or proprietary data in any form, whether written, oral, or contained in any computer database or computer readable form. Consultant shall: i) not disclose confidential information except as permitted by this Agreement; (ii) only permit use of such confidential information by employees, agents and representatives having a need to know in connection with performance under this Agreement; and (iii) advise each of its employees, agents, and representatives of their obligations to keep such information confidential.

21) CHANGES OF WORK

a) When required to do so, and without any additional compensation, the Consultant shall make such changes and revisions in the completed work of this Agreement as necessary to correct or revise any negligent errors, omissions, or other deficiencies in the design, drawings, specifications, reports, and other similar documents which the Consultant is responsible for preparing or furnishing under this Agreement.

b) Should the City find it desirable for its own purposes to have previously satisfactorily completed work or parts thereof changed or revised, the Consultant shall make such revisions as directed by the City. This work shall be considered as Extra Work and will be paid for as herein provided under Section 22, Extra Work.

22) EXTRA WORK

a) The City may desire to have the Consultant perform work or render additional services within the general scope of this Agreement. Such work shall be considered as extra work and will be specified in a written supplement to this Agreement which will set forth the nature of the scope, schedule for additional work, additional fees and the method of payment. Work under a supplemental Agreement shall not proceed until authorized in writing by the City.

23) PUBLIC DISCLOSURE

a) The parties to this Agreement understand and acknowledge that the City is subject to the Public Records Act, RCW 42.56 et seq. If the City receives a public records request for this agreement and/or for documents and/or materials provided to the City under this agreement, generally such information will be a public record and must be disclosed to the public records requester. However, the City agrees to notify the Consultant if it receives such a public records request and the date the City plans to release the records. If the Consultant fails to obtain a protective order from the applicable court prior to the time the City releases the records to the public records requester, the Consultant shall be deemed to have given the City full authority to release the records on the date specified, and the Consultant understands it has thereby given up all rights to challenge the disclosure in any forum.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may be delivered by facsimile or other electronic means and those signatures shall be treated as original signatures for all applicable purposes. The person signing this Agreement for Consultant represents that he or she has full and proper authority to do so and to bind the party which they are representing. This Agreement will become binding on the date of last execution hereon.

CITY OF KENNEWICK, WASHINGTON

Lisa Beaton
Interim City Manager

IMS Infrastructure Management Services

Kurt Keifer, PhD, PE
Dir. of Client Solutions & Principal Engineer

10630 75th Street North
Largo, Floridan 33777

Phone: (727) 547-0696

APPROVED AS TO FORM:

Laurencio Sanguino
Interim City Attorney

EXHIBIT A
Detailed Scope of Work

Exhibit 'A'

January 31, 2024

Request for Proposal (RFP) for

Pavement Conditions Assessment

Contract No. P2404

City of Kennewick
1010 E Chemical Drive
PO Box 6108
Kennewick, Washington 99336

IMS
POWERED BY ICC

01/31/2024

IMS Infrastructure Management Services
10630 75th Street North
Largo, Florida 33777
(727) 547-0696
www.icc-ims.com

City of Kennewick
Heath Mellotte, PE
Design Services Manager
1010 E Chemical Drive, PO Box 6108
Kennewick, Washington 99336

Dear Selection Committee,

IMS Infrastructure Management Services is pleased to submit our proposal in response to the City of Kennewick's solicitation. IMS is an industry leader with 49 years of pavement and asset management experience. Since our founding, we have provided services like those requested by the City to more than 1,000 municipalities across the United States and 36 in the State of Washington since 2010.

While there are several qualified firms that can survey this project, IMS offers the City something more:

- **High-quality support focused on accurate data and informed decisions.** We believe in the power of precise data. Our analyses are rooted in accuracy, ensuring that you have the information needed to make the best decisions for your community.
- **Think outside the box to maximize your return on investment.** We have encountered many issues that similarly sized agencies face and understand the importance of high-quality pavement condition data to plan for and justify necessary funding. When you choose IMS, you gain a dedicated partner. Our support backed by decades of proven experience results in better outcomes and often translates into direct program cost-savings.
- **As an added value, we are pleased to offer the City complimentary access to our pavement and asset data visualization software Inform™.** Inform is a convenient, web-based tool that simplifies visualization of data and associated imagery, and allows clients to customize search parameters based on the agency's GIS. Inform is fast, intuitive, and offers the simplest way to make valuable photologs available agency-wide with no license restrictions on number of users.

We are confident that IMS will be an excellent partner for the City and are committed to achieving the project goals. Thank you again for the opportunity to submit our proposal. **IMS agrees to all terms in the RFP and I confirm that I am authorized to commit IMS to a binding agreement.** I can be reached at (737) 900-6676 or by email at kkeifer@imsanalysis.com should you have any questions regarding our proposal.

Best regards,
IMS Infrastructure Management Services

Kurt Keifer, PhD, PE, Director of Client Solutions & Principal Engineer
kkeifer@imsanalysis.com | (737) 900-6676

ADDENDUM NO.1
TO THE
REQUEST FOR PROPOSAL
Pavement Condition Assessment
CONTRACT P2404

TO BE SIGNED AND SUBMITTED WITH THE PROPOSAL

PROPOSALS TO BE RECEIVED BY JANUARY 31, 2024 AT 2:00 PM

This Addendum No. 1 shall be signed by the bidder, attached to the proposal and shall be considered as much a part thereof as if it had been written into the body of the request for proposal.

1. **Reference Request for Proposal, Page 4 of 5:**

   Modify the first bullet with the following:

   - Perform a Pavement Condition assessment on all roads within the City and urban growth boundaries, utilizing automated ~~or semi-automated mechanical~~ pavement survey equipment. This equipment must be capable of conducting the assessment at greater than 15MPH (for roadways) to minimize the impedance of normal traffic.

2. **Reference Request for Proposal, Page 4 of 5:**

   Modify the third bullet with the following:

   - Based on the data collected through the survey, video imaging, ~~deflection testing,~~ and visual inspection; each roadway segment shall be assessed for pavement distress, including the type (ex. alligator cracking, raveling, etc.) and severity, to develop a pavement condition index (PCI) indicator for each roadway segment. The PCI indicators need to be assigned to each roadway segment in a manner that allows for integration with the City's existing GIS and work order tracking systems.

3. **Reference Request for Proposal, Page 5 of 5:**

   Modify the third bullet with the following:

   - This project requires a survey of 100% of sample units (100% of images collected per ASTM D6433-11). **This will apply to the outside lanes only, and will require two (2) passes for each roadway centerline, with the second pass performed in the opposing lane of the first pass.**

4. **Reference Request for Proposal, Page 5 of 5:**

   Modify the fourth bullet with the following:

   Pavement Condition Index should be calculated per ASTM D6433-11. ~~as described in the Northwest Pavement Management Association's Pavement Surface Condition Field Rating Manual for Asphalt Pavements~~

Heath Mellotte, P.E.
Design Services Manager

Bidder's Signature

Appv'd By

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References

City of SeaTac, Washington - 2024, 2020, 2019, 2017, 2015, 2013, 2011

IMS performed several cycles of the city's pavement condition survey of 111 miles, linking condition data to the city's GIS and uploading to StreetSaver. In addition, IMS performed ROW asset collection, which included utility poles along the entire roadway network and streetlights along a shorter section. The city adopted the use of IMS' ESA spreadsheet as an enhancement to StreetSaver, which provided quick access to survey results and preliminary analysis. IMS worked with the city to prepare an M&R report with new budget scenarios, unit rates, and suggested M&R priorities.

Reference Contact: Florendo Cabudol, PE, City Engineer | **Phone:** (206) 973-4742
Email: fabudol@seatacwa.gov

Team Members Involved: Kurt Keifer, PhD, PE, Principal Engineer; Geoff Dew, GIS & Data Processing Manager; Megan Foshee, EIT, Project Engineer

City of Bellingham, Washington - 2022, 2016, 2013

IMS performed an automated pavement condition assessment using the IrisPRO Pave data collection vehicle on 390 test miles of City of Bellingham roadways in 2013. The data collected was originally loaded into IMS' ESA spreadsheet. All data was linked to the city's GIS and delivered as a geodatabase. IMS conducted a comprehensive roadway network analysis and developed a final report to aid the city in near-term and future M&R decision-making. In 2017, IMS collected ROW asset information for the city that included ADA ramps, sidewalks, curb and gutter, pavement marking and striping, as well as traffic signs. IMS updated the multi-year M&R report with new budget scenarios, unit rates, and suggested plans. The final output of IMS' most recent update (2022) included a unique synchronization of the ESA spreadsheet with the city's Cityworks enterprise software solution.

Reference Contact: Jess Herring, Streets Division Supervisor
Phone: (360) 778-7700 | **Email:** jherring@cob.org

Team Members Involved: Kurt Keifer, PhD, PE, Principal Engineer; Sadaf Khosravifar, PhD, PE, Project Manager; Geoff Dew, GIS & Data Processing Manager; Megan Ratliff, EIT, Project Engineer

City of Seattle DOT, Washington - 2022

IMS conducted a pavement condition survey of the arterial street system for the City of Seattle as a major subcontractor to Quality Engineering Solutions, Inc. (QES). The Seattle Department of Transportation's arterial pavement network has a total area of approximately 1,547 12-foot lane-miles across 3,132 management sections. IMS performed pavement data collection using IrisPRO Pave data collection vehicles equipped with LCMS-2 technology and analyzed the data as a major subcontractor to a larger team. PCI ratings were completed in StreetSaver, and survey data was uploaded into the Seattle Department of Transportation's MTC StreetSaver online database. Approximately one third of the pavements throughout the city were concrete surfacing and the remainder were asphalt concrete or composite roadways.

Reference Contact: Benjamin Hansen, PE, Seattle DOT Maintenance and Operations
Phone: (206) 684-5304 | **Email:** benjamin.hansen@seattle.gov

Team Members Involved: Kurt Keifer, PhD, PE, Principal Engineer; Sadaf Khosravifar, PhD, PE, Project Manager; Geoff Dew, GIS & Data Processing Manager

Medford, Oregon - 2024, 2022, 2020, 2018, 2016, 2014, 2012, 2010

In 2010, and every two years thereafter, IMS collected pavement condition and ROW asset data for 378 lane miles of roadway using the IrisPRO Pave data collection vehicle equipped with second generation Laser Crack Measurement System (LCMS-2) 3D pavement imaging technology. The pavement condition data and sign inventory were imported into the appropriate Cartegraph modules. The last four of seven cycles IMS completed for the city included Cartegraph OMS import. In addition, IMS analyzed the pavement condition data and ran several budget scenarios to develop potential pavement management solutions for the city.

Reference Contact: Mike Mordi, PE | **Phone:** (970) 870-5337 | **Email:** mmordi@co.routt.co.us

Team Members Involved: Kurt Keifer, PhD, PE, Principal Engineer; Sadaf Khosravifar, PhD, PE, Project Manager; Geoff Dew, GIS & Data Processing Manager

Schedule

This schedule is based on an estimated NTP by early-March 2024. A final schedule will be provided upon the completion of scope negotiations. The schedule for data collection is variable and dependent upon the receipt of NTP. Assumes NTP is issued and preliminary work commences on March 1, 2024.

Proposed Schedule: Kennewick, Washington			
Assumes NTP is issued March 1, 2024			
Task	**Description**	**Duration**	**Est. Milestone**
1	Executed Agreement/NTP	N/A	March 1, 2024
2	Kickoff Meeting	1 day	March 2024
3	GIS Acquisition and Validation	2 weeks	March 2024
4	LCMS-2 IrisPRO Pave Pavement Field Data Collection	2-3 weeks	See revised Scope and Fee Schedule (2/15/2024)
5	QC/QA Program, Data and Image Processing	1 month	June 2024
6	Client Review Spreadsheet and Image Deliverables	2-3 weeks	July 2024
7	Pavement Analysis, Budget Scenarios, and Project Planning	2-3 weeks	July - August 2024
8	Final Deliverables	1 week	August 2024

Costs

Task	Activity	Qty	Units	Unit Rate	Total
Project Initiation					
1	Project Initiation & Kickoff	1	LS	$2,500.00	$2,500.00
2	Network Referencing & GIS Linkage	700	T-Mi	$5.00	$3,500.00
3	Network Inventory Checks & Survey Map Development	700	T-Mi	$10.00	$7,000.00
Field Surveys					
4	IrisPRO Pave - LCMS Mobilization/Calibration	1	LS	$4,875.00	$4,875.00
5	IrisPRO Pave Field Pavement Data Collection	700	T-Mi	$75.00	$52,500.00
Data Management					
6	Collection of Digital Images @ 20' Intervals	Included in Base Charges			
7	Data QC/QA, Processing, & Formatting	700	T-Mi	$20.00	$14,000.00
8	Easy Street Analysis of Pavement and Budget Development	1	LS	$7,500.00	$7,500.00
8a	"ESA - Easy Street Analysis" Pavement Management Spreadsheet Software	Included in Base Activities			
8b	Project Development to Enable Project-Level Analysis	Included in Base Activities			
8c	Customizable Prioritization & Cost-Benefit Analysis	Included in Base Activities			
8d	Unlimited Access - Training Library	Included in Base Activities			
8e	Online ESA Spreadsheet Training via Teams	Included in Base Activities			
9	Format Condition Data for Cartegraph and Assist with Load	8	HR	$175.00	$1,400.00
10	Inform Web Based Viewer for Images in Inform Continuous Intervals	Included in Base Charges for Year 1			
11	Administration and Project Management				.00
				Project Total:	5.00

See revised Scope and Fee Schedule (2/15/2024)

Year 2 Inform Data Hosting Services

Task	Activity	Qty	Units	Unit Rate	Total
12	Inform Web Based Data Viewer Annual Data Fee for Hosting ***Starting in Year 2***	1	LS	$4,840.00	$4,840.00

Assumptions

1. Test miles are calculated based on the number of centerline miles and whether they require one- or two-pass collection. City centerline of approximately 350 miles was obtained from previous discussion with the City.
    a. Prior to the kickoff meeting, the City will provide IMS with a) primary POC, secondary POC and other stakeholder contact information; and b) preliminary centerline GIS (i.e., geodatabase).
2. Data collection relies heavily on up to date and topologically sound GIS centerline information.
3. Pavement data collection is dependent on the City's approval of the GIS maps representing the street inventory to be surveyed.
4. Pavement data collection is weather dependent and assumes one mobilization to the area. Data cannot be collected if the pavement is wet or if the temperatures are below 32° or above 95° F.
5. The City will actively participate in submission review and provide comments within the period of time agreed to during kickoff. Our proposed schedule assumes a two-week review period for draft deliverables.

Proposal

Firm Overview

IMS Infrastructure Management Services, now powered by International Cybernetics Company (ICC), has revolutionized roadway infrastructure management since 1975. With the 2022 merger of IMS and ICC, the IMS team of infrastructure consultants is now backed by ICC's industry leading data acquisition technologies. We take pride in having one of the industry's largest fleets of advanced pavement, sidewalk, and right of way (ROW) asset data collection systems.

Over the past five years, we have made a $5 million investment in enhancing our Unify™ software suite, solidifying our position as an industry leader in providing fully integrated, end-to-end data collection, processing, and visualization tools. Our advanced systems—combined with our rigorous approach to quality control (QC)—empower us to generate unparalleled data quality while setting the industry benchmark for the fastest turnaround time. The actions that we have taken over the past five years illustrate our continued commitment to improving data quality while simultaneously reducing data collection costs for our clients.

We offer the following pavement management services:

- Automated and semi-automated pavement condition assessments.
- Non-destructive pavement testing and analysis.
- Pavement management system implementation and training.
- Pavement management plan development.

In addition to pavement management services, IMS offers complementary services such as:

- ROW asset inventory development using 360° imagery and mobile lidar.
- Sidewalk and Americans with Disabilities (ADA) compliance surveys.
- Data visualization services using dashboards, StoryMaps, and web applications built on GIS.

Welcome to the new era of infrastructure management, where consulting services are powered by advanced technologies. Together, IMS powered by ICC are paving the way forward!

FIRM QUALIFICATIONS

- **49 years of experience** helping cities and counties assess, analyze, and manage pavements and ROW assets, **with successful project delivery for more than 1,000 municipalities** in that time
- **87 employees** across the United States and Canada, **including 10 engineers (six possessing PhDs)**
- Extensive experience with more than **15 pavement and asset management systems**, including, AgileAssets, Cartegraph OMS, Cityworks, Lucity, PAVER, StreetLogix, StreetSaver, VUEWorks, and others
- Project teams led by Professional Pavement/Infrastructure Engineers
- Largest fleet of second generation laser crack measurement system (LCMS-2) equipped IrisPRO Pave data collection vehicles dedicated to municipal pavement management in the United States
- QC/QA technicians independently certified through the rigorous Orange County Transportation Authority (OCTA) for ASTM D6433 condition rating

Firm Qualifications and Experience

Our technical team completes more than 100 pavement and asset management projects annually and stands second to none in our ability to establish cost effective maintenance management programs for large and small agencies alike. We have earned a reputation for excellence over the course of thousands of projects for municipal clients across the United States performed over almost five decades.

State of Washington Experience

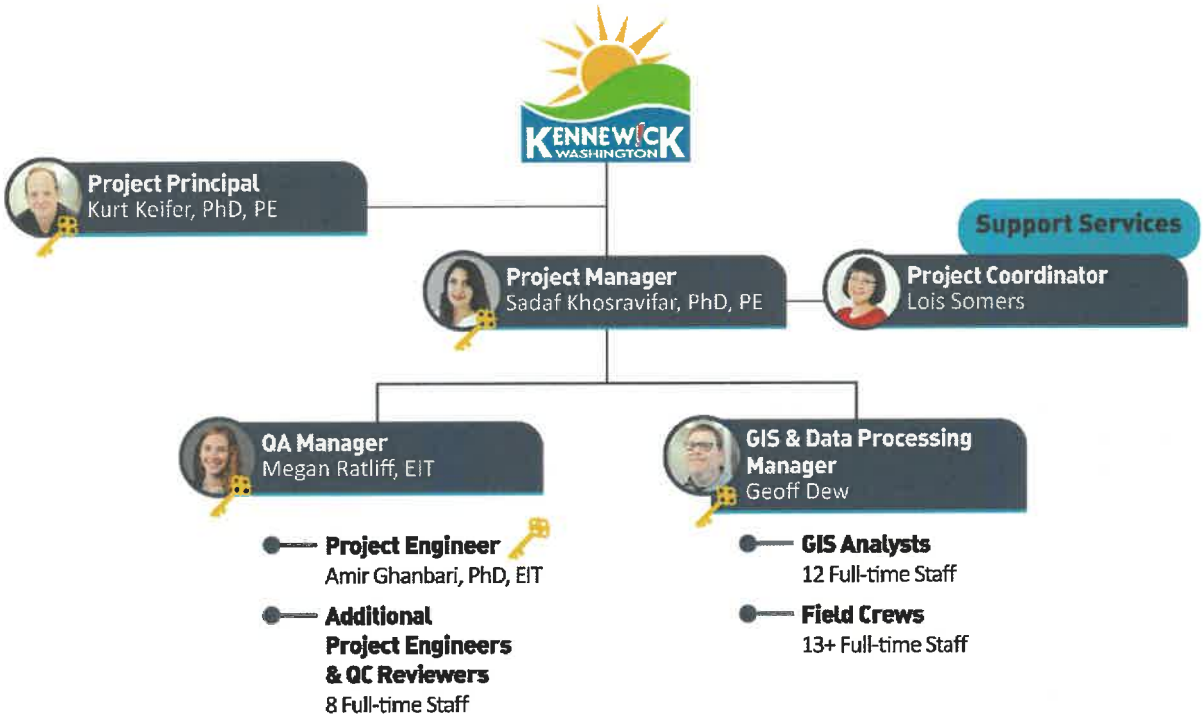
IMS brings significant regional experience to meet the City's pavement management needs as shown in the table below. We have completed more than 36 projects in the State of Washington since 2010. Many of our clients hire us for repeat work and rely on IMS to help maintain their pavement and asset management programs.

Agency	Miles	Software	Year(s)
Auburn	306	Cartegraph	2012, 2017, 2019, 2021
Bainbridge Island	140	ESA	2014, 2018, 2023
Bellevue	555	StreetSaver	2011, 2015, 2019, 2022
Bellingham	390	ESA	2013, 2016, 2022
Bonney Lake	78	Paver	2022
Bremerton	190	ESA	2018
Des Moines	104	ESA	2016
Edmonds	185	ESA	2017, 2022
Federal Way	285	ESA	2011, 2013, 2015, 2017, 2019, 2021
Fife	74	ESA	2020
Issaquah	154	ESA	2019
Kalispel Tribe of Indians	42	ESA	2014
Kitsap County	309	Cartegraph	2010, 2012, 2014, 2022
Longview	158	Cartegraph	2011
Lynwood	150	ESA	2016
Marysville	269	ESA	2020
Mason County	605	Mobility	2020
Mercer Island	109	ESA	2013, 2016, 2019, 2022

Agency	Miles	Software	Year(s)
Mill Creek	58	ESA	2020
Monroe	56	Lucity	2015
Pacific	78	ESA	2015
Pasco	502	StreetLogix	2021
Port Orchard	87	ESA	2016
SeaTac	112	ESA	2011, 2013, 2015, 2017, 2020
Seattle	982	StreetSaver	2022
Spokane Valley	230	Cartegraph	2010, 2013, 2015, 2017
Tacoma	1025	StreetSaver	2015
Tukwila	180	ESA	2020
University Place	104	ESA	2022
Yakima	475	ESA	2022
Yakima County	737	Mobility	2019
Mill Creek	58	ESA	2020
Monroe	56	Lucity	2015
Pacific	78	ESA	2015
Pasco	502	StreetLogix	2021
Port Orchard	87	ESA	2016

Key Personnel

The IMS team, comprised of 87 employees, includes 10 engineers (six possessing PhDs), eight independently certified pavement raters, and 18 data and GIS technicians focused exclusively on pavement and ROW asset management. In addition, 13 of our engineers and technicians are independently certified Pavement Condition Index (PCI) raters through the Orange County Transportation Authority's (OCTA) rigorous annual certification program.



Our proposed team is supported by additional resources that, if needed, can provide extra capacity or specialized expertise for the project. We are accustomed to mobilizing additional personnel and fleet equipment as required to meet the schedule.

Qualifications

Those summarized below will be assigned to the City for the duration of the project. They have been selected for their State of Washington experience as well as their current availability/workloads.

Project Principal | Kurt Keifer, PhD, PE (AZ, TX, GA, IL, ND, SD, KS, MD, FL, OH)
26 Years' Experience, 4 with IMS

Kurt is the President of IMS and has spent his entire career implementing pavement management systems for municipal agencies across the world. A major focus of his work has been developing and integrating automated pavement imaging and road surface profiling hardware and software technologies. Kurt worked with the US Army Corps of Engineers for more than a decade developing PAVER. ***PhD, MS, and BS in Civil and Environmental Engineering, University of Illinois at Urbana-Champaign***

Project Manager | Sadaf Khosravifar, PhD, PE (MD, TX, VA)
14 Years' Experience, 2 with IMS

Sadaf is a professional engineer and researcher with 14 years of pavement engineering and evaluation, performance, design, pavement and asset management, and GIS experience. She is fluent in several nondestructive pavement evaluation technologies including automated pavement condition surveys using 3D LCMS-2, falling/heavy/lightweight deflectometer and Dynaflect, traffic speed deflectometer (iPAVE and RAPTOR), GPR, and friction test devices, as well as specialized experience using pavement/asset management software including Cartegraph and many others. ***PhD and MS in Geotechnical and Pavement Engineering, University of Maryland; BS in Civil and Environmental Engineering, Sharif University of Technology***

GIS & Data Processing Manager | Geoff Dew | 18 Years' Experience, 4 with IMS

Geoff leads IMS' service operations and is an accomplished data analysis manager. His experience includes 500,000 miles of data processing for 12 DOTs, including delivering more than 3.5 million unique assets across 70 different asset types. ***Business Administration, Human Resources Management Diploma, Durham College***

QA Manager | Megan Ratliff, EIT | 4 Years' Experience, 2 with IMS

Megan is a recent graduate of Auburn University where her research at the National Center for Asphalt Technology focused on the structural analysis of several asphalt pavement test sections at the world-renowned Test Track. ***MS in Civil and Environmental Engineering, BCE in Civil Engineering, Auburn University***

Project Engineer | Amir Ghanbari, PhD, EIT | 10 Years' Experience, 2 with IMS

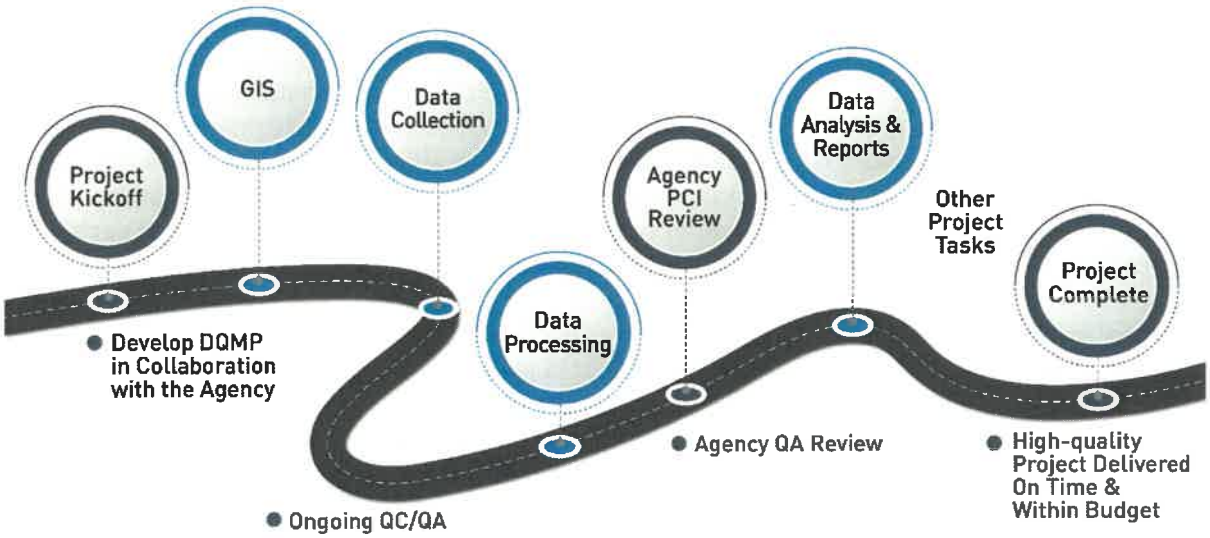
Amir is a pavement engineer and data scientist fluent in pavement condition index analysis, pavement life cycle cost analysis, and preservation techniques. He has contributed to several FHWA reports and 20 published articles. ***PhD in Pavement Engineering, North Carolina State University; MS in Transportation Material, Sharif University of Technology; BS in Civil Engineering, Sharif University of Technology***

Workload & Availability

As a signature project for both the City and IMS, we will ensure our key personnel's workload is balanced so that they can maintain daily contact with the City and travel to the project site as needed. Our key personnel typically average 80 to 90% billable hours each week. While they are accustomed to providing high quality service to multiple concurrent projects, we load balance project phases so that no team member's assigned projects are in the same critical startup, data collection, or closeout phases at the same time.

Project Approach

IMS has standardized a project approach based upon our 49 years of pavement management experience and subsequent lessons learned. We will use our automated ASTM D6433 PCI survey approach for this project, which provides comprehensive and objective data collected in the safety of a vehicle traveling at posted speeds. The IMS project approach for pavement condition and asset inventory projects typically follows the eight steps shown in the figure below.



Project Kickoff and Status Meetings

Successful projects begin with a kickoff meeting with City staff and the IMS team. This early communication is essential to aligning fully with the City's overall vision for the project and your specific data needs. We use the information shared during kickoff to prepare a project management plan, detailed GIS setup instructions, and a City-approved milestone schedule before any data collection begins. At a minimum, we schedule bi-monthly routine check-in meetings to communicate the current project schedule, upcoming tasks, challenges, and mitigation strategies. IMS develops the meeting agenda and prepares succinct meeting minutes that record the items discussed, decisions made, and action items with a list of who will be responsible for completing each activity.

GIS Survey Mapping & Network Referencing

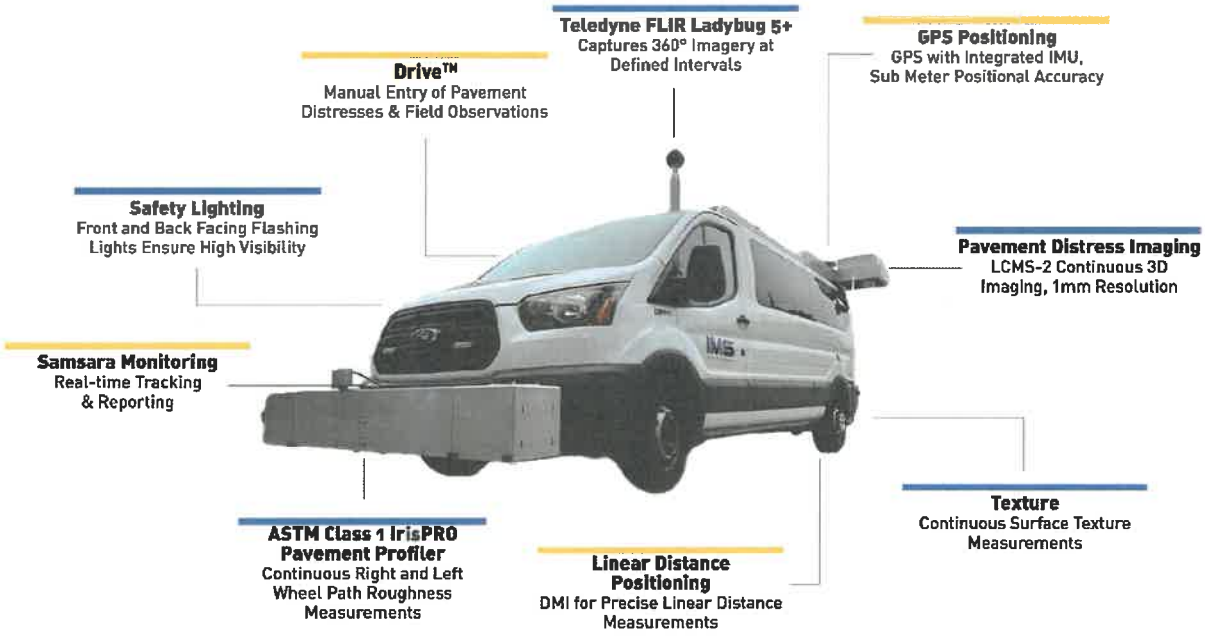
Data collection is unique in every jurisdiction. To facilitate a standard approach that yields deliverables tailored to our clients' needs, **we developed our Unify™ Software Suite that includes Drive™ for data collection, Connect™ for data processing, and Inform™ for online visualization.** Our comprehensive software suite relies on street centerline GIS data provided by the City to build all successive processes, which include calibration, collection, processing, analysis, and reporting. We will review the City's road network GIS files that define the extents of the survey and compare them against existing pavement database street segments. If discrepancies exist, they will be noted and reviewed with the City before data collection begins. We will load the finalized road network into Drive™, which defines the pavement network segmentation and attribution to be collected, minimizing routing problems and location errors. The GIS files will include attributes such

as road section ID, street name, street type, beginning and ending descriptions, and start and end references for each segment. Data collection will then take place using one of our IrisPRO Pave data collection vehicles. Upon completion of data collection, Connect™ is used to automatically extract data from the sensors on the IrisPRO Pave and combine it with location information and imagery. The output from Connect™ may be uploaded to Inform™ for visualization.

Pavement Condition Survey

Our two-person field crews will collect both outward facing and downward facing pavement imagery using an IrisPRO Pave data collection vehicle equipped with second generation Laser Crack Measurement System (LCMS-2) 3D pavement imaging technology. The LCMS-2 system is the highest resolution 3D pavement scanning technology available. The 3D cameras can detect one-millimeter-wide cracks and full-lane-width rutting, as required by ASTM D6433, on the pavement surface at speeds up to 65 mph. **Pavement surface distresses including alligator cracking, block cracking, rutting, raveling, reflective cracking, loss of section, bleeding, edge distress, and patched areas as well as ROW imagery will be collected on a segment-by-segment basis, with each distress being captured by type, extent, and severity as outlined in ASTM D6433.**

The data and imagery collected is linked to the City's existing GIS data. Pavement data collection and imagery surveys are expected to progress at a rate of between 30 and 50 miles per day. IMS processes the collected data using Connect™, a combination of advanced analytical tools, and QC/QA checks to determine accurate and repeatable PCI values for each roadway segment. Furthermore, we deliver our PCI ratings and supporting data (inventory, distress, rutting, and roughness information) in both spreadsheet and GIS formats for easy review. The data may be used immediately for decision making or before it is imported into Cartegraph for additional analysis and reporting.

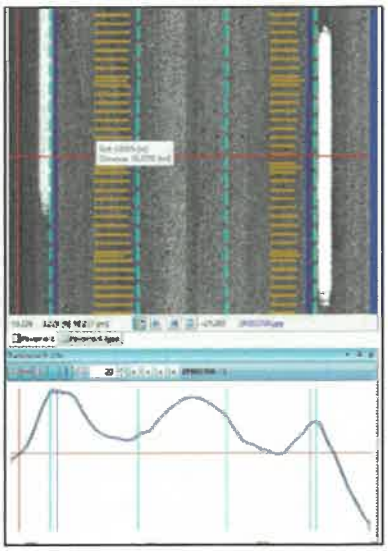


We perform the following activities daily during data collection to ensure data consistency:

- Equipment is calibrated and daily reports completed
- All sensors are continually monitored to ensure they are receiving data within specification
- The LCMS-2-equipped IrisPRO Pave crew chief and operator manually monitor the HD digital images, GPS, distress recorder, roughness measurements, and rutting data
- Each street is noted within the inventory and on the map as well as through GPS and assignment by van number
- Production is tracked and records of coverage are documented
- If necessary, a corrective action plan is developed and followed
- All data is backed up and sent to the IMS primary office for processing

Rutting and Roughness

IMS' LCMS-2 systems detect rutting on asphalt roadways using laser measurements of transverse profiles that are collected continuously as the IrisPRO Pave drives at normal traffic speed. With more than 4,000 measurement points collected per transverse profile and sub-millimeter vertical accuracy, the LCMS-2 can define transverse profiles with a high level of precision, accuracy, and repeatability. Once all the transverse profiles are collected for a roadway, IMS determines the rut area and the deepest (or maximum) rut depth for each segment.



Rutting areas and severity levels

These values, as well as width of rut and color coding, can be seen in the LCMS-2 laser images created. Orange represents high severity rutting, while yellow represents moderate severity rutting. The severities are determined based on maximum rut depth thresholds that are specified in ASTM D6433.

Pavement roughness is evaluated by measuring the accumulated difference in the vertical displacement of a road surface, independent of chassis response, over a prescribed road length (longitudinal profile). **Roughness is typically reported following the International Roughness Index (IRI) index, which is calculated in real time from continuous longitudinal profile data collected by the ASTM Class 1 IrisPRO™ pavement profiler.** To determine the longitudinal profile, data is simultaneously obtained in compliance with ASTM E950 from three devices: a pulse transducer-based distance-measuring instrument (DMI), high-speed RoLine™ lasers, and an accelerometer.

Inform Pavement Data Visualization and Analysis Software

IMS offers a convenient, web-based tool for reviewing pavement condition data and associated imagery. Our cloud-hosted visualization and analysis software Inform™ enables agencies to review all collected pavement data, including cracking, rutting, and roughness together, in a geocentric environment. The software is fast, intuitive, and the simplest way to make valuable photolog images available to every user, saving field visits and time.

Inform™ powerful, enterprise-grade pavement condition data visualization and analysis software

"... ADOT had specific requirements [that needed] to be met for our viewer. Inform met and Inform has not only met but also surpassed our expectations. It is quick, exceptionally responsive, requires no IT involvement, and is incredibly user-friendly for individuals of all levels."

—Robert Bush, Program Manager, Arizona DOT

Right-of-Way (ROW) Assets (Optional)

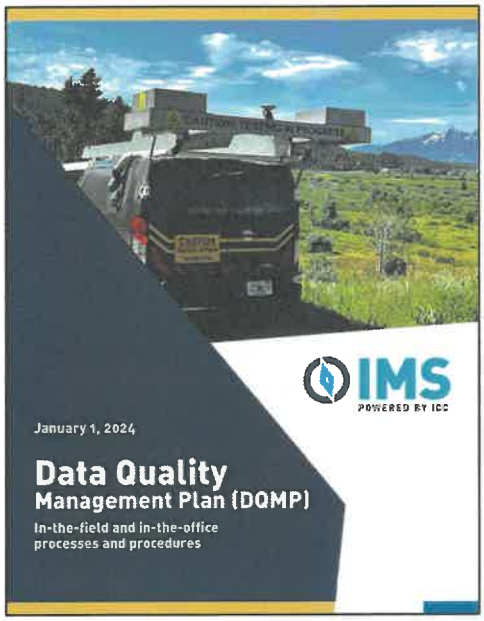
ROW asset data collection is a primary component of nearly half of IMS' projects. We have experience collecting data for and managing ROW asset inventories and condition assessments on signs, sign supports, curb and gutter, sidewalks and multi-use trails, ADA ramps, pavement markings and striping, traffic signals, and many others.

Quality Control and Quality Assurance Procedures

Based on discussions with the City during the project initiation and kickoff meetings, we will develop a project-specific version of our standard data quality management plan (DQMP) for this project. The DQMP will be formalized with the City's approval prior to data collection.

At a minimum, the plan will address the following:

- How the data collection equipment will be calibrated and certified
- What data quality control (QC) measures will be conducted before data collection begins and periodically during data collection
- How data will be sampled, reviewed, and checked for quality
- What error resolution procedures will be followed
- How data will be accepted



IMS' standard DQMP is customized for each client's project

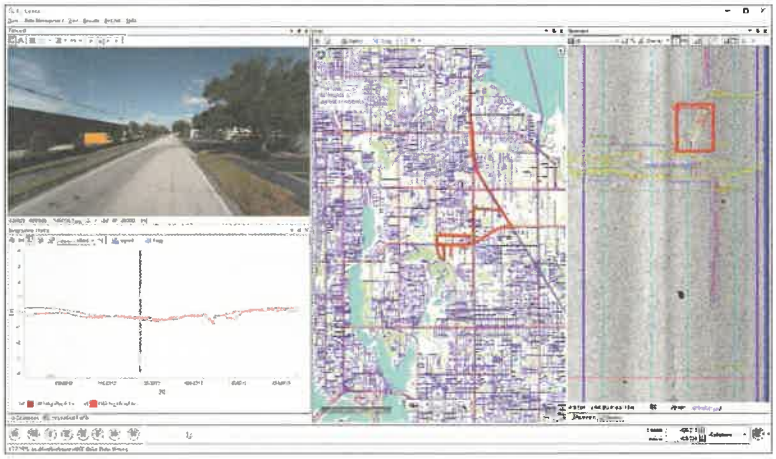
Data Quality Monitoring

During the collection and processing workflow, data discrepancies are detected in the following three ways. These processes are run on 100% of the collected and processed data. Any road sections with data discrepancies arising from sensors, systems, or processing that exceed the defined thresholds will be recollected and/or reprocessed, as necessary.

- **During data collection** through real-time health monitoring systems onboard the IrisPRO Pave data collection vehicle
- **During data processing** in Connect™'s data import module using data quality checks that include data completeness and data synchronization validation
- **During data reporting** in Connect™'s report generation module through sensibility and range checks

Image Sample Checking and Distance/Location Verification

IMS will review a random sample of pavement images to confirm the accuracy of reported distress data using our Connect™ software. The detailed distress data for each image, including cracking and the classified and rated distresses, are superimposed over the image as well as displayed in a table. This allows QC reviewers to efficiently review and confirm that the condition of the road has been surveyed accurately.



Connect™ with distress data review

Connect™ also shows the vehicle GPS traces (collection polylines) overlaid on a street view map or an aerial image. They are shown together with the City-provided GIS shapefile polylines to provide quick and easy verification that the correct sections were driven, that section limits were correctly identified, and that the vehicle GPS is accurate. This all-in-one processing software makes location errors and misplaced sections things of the past, and the transparency improves client confidence in the delivered data.

Connect™ with shapefile and GPS trace

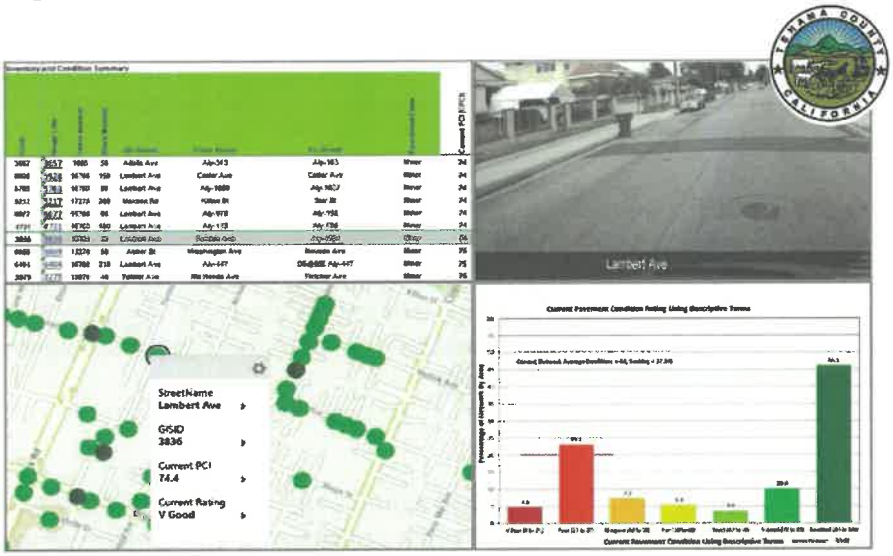
Data Load

Easy Street Analysis by IMS

As a convenient enhancement tool for Cartegraph's analysis capabilities, we recommend using IMS' Easy Street Analysis (ESA). ESA integrates the core analysis capabilities of some of the most powerful pavement management systems within a familiar Microsoft® Excel environment. It is a pavement management tool designed to provide our clients with easy access to the pavement condition data and analysis results almost immediately, enhancing the use of traditional licensed-based software such as Cartegraph.

ESA was engineered as a simple solution that eliminates the need for users to become pavement management software experts before they can leverage their survey results. Our interactive ESA spreadsheet is fully customizable to the needs of our clients and programmed to develop multi-year

M&R plans built around practical prioritization techniques and financial optimization, typically as cost of deferral analyses. Results can be visualized using both Esri GIS software and the new Excel-based mapping tools as an added benefit.



Tehama County, California ESA data analysis

Upon completion of the pavement condition survey, condition data will be loaded into ESA. We will validate that the data was uploaded properly, and configure the operating parameters to reflect local conditions. This may include repair methods, rehabilitation alternatives, local unit costs, critical PCI thresholds, and others—all configured to produce reliable analysis routines and reports.

Cartegraph

The City's updated PCI data will be loaded to the City's Cartegraph database in collaboration with Cartegraph, and the Cartegraph data will be linked to the City's GIS system. The IMS team will develop a series of reports to identify and support jurisdictional-specific repair programs that include timing and cost.

Note: IMS has encountered issues with Cartegraph OMS loads in the past when the jurisdiction did not maintain parity between its GIS centerline database and Cartegraph OMS. Whether that was intentional or accidental, the data load will not be successful without 1:1 alignment between the two systems. IMS has been recommending to clients that they ensure their GIS and Cartegraph datasets are in sync prior to data collection.

If additional edits need to be made to the GIS after this and prior to data loading, it is critical that the City have record level metadata to track changes made to the data to facilitate the data load. If that proves difficult, the City can also opt to freeze editing of the centerline until the data load is complete. During this step of the project, IMS will engage Cartegraph to upload the data to the City's pavement database and to validate that the data has been loaded properly.

Budget Analysis and Reports

Our multi-year pavement M&R programs are built around practical prioritization techniques and financial optimization, typically in the form of cost of deferral. IMS incorporates pavement management principles that assist agencies in producing cost effective maintenance programs. Localized construction costs, customized deterioration models that reflect local pavement performance, and other environmental and local construction practices are considered in developing our M&R analyses and recommendations.

Our approach to establishing overall prioritization of M&R recommendations is flexible and can account for non-engineering factors. Our engineering team has recent experience using ESA as an enhancement to Cartegraph to develop equitable M&R plans that consider funding distribution based on technical and non-technical considerations that impact local communities. We look forward to collaborating with the City to ensure that the pavement management program addresses the needs and priorities of the stakeholders involved.

Final Reports

IMS will prepare all project documentation, including a draft and final summary report of the findings and conclusions as specified by the City. Project Coordinator Lois Somers will oversee document control, which will include major and minor version numbers assigned in the file name and rigorous QC/QA. After the City's review, we will make all necessary changes and prepare copies of the final report. In addition, we will provide project documentation in native, electronic formats to the City as requested.

Revised Scope and Fee Schedule (2/15/2024)

for Pavement Conditions Assessment

Project P2404

February 15, 2024

City of Kennewick
1010 E. Chemical Drive
PO Box 6108
Kennewick, Washington 99336

Scope and Fee Schedule

Kennewick, Washington 2024 IMS Base Scope of Services

Task	Activity	Qty	Units	Unit Rate	Total
Project Initiation					
1	Project Initiation & Kickoff	1	LS	$2,500.00	$2,500.00
2	Network Referencing & GIS Linkage	800	T-Mi	$5.00	$4,000.00
3	Network Inventory Checks & Survey Map Development	800	T-Mi	$10.00	$8,000.00
Field Surveys					
4	IrisPRO Pave - LCMS Mobilization/Calibration	1	LS	$4,875.00	$4,875.00
5	IrisPRO Pave Field Pavement Data Collection	800	T-Mi	$75.00	$60,000.00
Data Management					
6	Collection of Digital Images @ 20' Intervals	Included in Base Charges			
7	Data QC/QA, Processing, & Formatting	800	T-Mi	$20.00	$16,000.00
8	Easy Street Analysis of Pavement and Budget Development	1	LS	$7,500.00	$7,500.00
8a	"ESA - Easy Street Analysis" Pavement Management Spreadsheet Software	Included in Base Activities			
8b	Project Development to Enable Project-Level Analysis	Included in Base Activities			
8c	Customizable Prioritization & Cost-Benefit Analysis	Included in Base Activities			
8d	Unlimited Access - Training Library	Included in Base Activities			
8e	Online ESA Spreadsheet Training via Teams	Included in Base Activities			
9	Format Condition Data for Cartegraph and Assist with Load	8	HR	$175.00	$1,400.00
10	Inform Web Based Viewer for Images in Inform Continuous Intervals	Included in Base Charges for Year 1			
11	Administration and Project Management	1	LS	$4,750.00	$4,750.00
Project Total					**$109,025.00**

Proposed Schedule: Kennewick, WA			
Assumes a NTP is issued March 19, 2024			
Task	Description	Duration	Est. Milestone
1	Executed Agreement/NTP	N/A	March 19, 2024
2	Kick-off Meeting	1 day	March 2024
3	GIS Acquisition and Validation	2 weeks	April 2024
4	LCMS-2 RST Pavement Field Data Collection	2-3 weeks	April-June 2024
5	QC/QA Program, Data & Image Processing	1 month	July 2024
6	Client Review Spreadsheet & Image Deliverables	2-4 weeks	August 2024
7	Pavement Analysis, Budget Scenarios, and Project Planning	2-4 weeks	September 2024
8	Final Deliverables	2 weeks	October 2024

Council Agenda Coversheet	Agenda Item Number: 5.a.	Council Date: 3/5/2024	Category: Ordinance/Reso
	Agenda Item Type: Ordinance		
	Subject: Ordinance: Sitting/Lying on a Public Sidewalk/Right-of-Way Amending KMC 10.08.140(4)(c)		
	Department: City Attorney		
	Ord/Reso #	Contract #	
	Project #	Permit #	

Recommendation

The City Attorney's Office recommends that City Council pass the ordinance as presented.

Motion for Consideration

Motion to adopt the ordinance as presented.

Summary

This ordinance amends Kennewick Municipal Code (KMC) 10.08.140(4)(c) by replacing Canal Drive, between Young Street and Kellogg Street with Clearwater Avenue, between Arthur Street and Morain Street.

Alternatives

Staff has not identified alternatives.

Fiscal Impact

Not applicable.

Attachments:

1. Ordinance
2. Ordinance - REDLINE
3. Presentation

CITY OF KENNEWICK
ORDINANCE NO. 24-_____

AN ORDINANCE RELATING TO OFFENSES AGAINST PUBLIC ORDER AND AMENDING SECTION 10.08.140 OF THE KENNEWICK MUNICIPAL CODE

THE CITY COUNCIL OF THE CITY OF KENNEWICK, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. Section 10.08.140 of the Kennewick Municipal Code, be, and the same hereby is, amended to read as follows:

10.08.140: Sitting, Lying on Sidewalk in Designated Zone.

(1) Prohibition.

(a) No person may sit or lie down upon a public sidewalk or right of way, or upon a blanket, chair, stool, or any other object placed upon a public sidewalk or right of way, during the hours between six a.m. and midnight in the zones designated in this section.

(b) At all times it is unlawful to sit or lie on any drinking fountain, trash container, planter, bicycle rack, or any other sidewalk fixture not designed primarily for the purpose of sitting.

(c) At all times, it is unlawful to sit or lie in any entrance to or exit from any building or parking lot, or on any loading dock.

(2) Exceptions. The prohibition in subsection (1) of this section does not apply to any person:

(a) Sitting or lying down due to a medical emergency or due to a sensory, mental, or physical disability;

(b) Who, as the result of a sensory, mental, or physical disability, utilizes a wheelchair, walker, or similar device to move about a public sidewalk;

(c) Operating or patronizing a business with permission to occupy the sidewalk;

(d) Participating in or attending a parade, festival, performance, rally, demonstration, meeting, or similar event conducted on the public sidewalk pursuant to a special event or other applicable permit;

(e) Sitting on a chair or bench supplied by a public agency or by the abutting private property owner pursuant to the appropriate permit or license;

(f) Sitting within a bus stop zone while waiting for public or private transportation; or

(g) Sitting on privately-owned sidewalk fixture with the permission of the owner.

(3) No person shall be subject to enforcement under this section unless the person engages in conduct prohibited by this section within the entirety of the zone designated in this section after having been notified by a law enforcement officer that the conduct violates this section and has been given a reasonable amount of time to comply or has refused to comply. If the individual fails to comply in a reasonable time or engages in prohibited conduct in another location within the designated zone, a law enforcement officer may then enforce this section.

(4) The zones where the conduct described in section (1) is prohibited are as follows:

(a) From Clearwater Avenue to Kennewick Avenue, between Yelm Street and Huntington Street;

(b) From 24th to 28th , between Tweedt Street and Olson Street;

(c) Clearwater Avenue, between Arthur Street and Morain Street; and

(d) Portions of the Kennewick Central Business District to include the following streets and public rights of way, from 1st Avenue to Canal Drive, between Dayton Street and Washington Street, including W. Kennewick Avenue between Dayton Street and Washington Street, including N. Cascade Street, N. Benton Street and N. Auburn Street between 1st Avenue and Canal Drive.

(5) This section does not permit any conduct which is prohibited by KMC 10.08.020 regarding interference with pedestrian or vehicular traffic.

(6) A violation of KMC 10.08.140 is a misdemeanor.

(7) The provisions of this section are declared separate and severable. The invalidity of any clause, sentence, paragraph, section, or portion of this section, or the invalidity of the application thereof to any person or circumstance does not affect the validity of the remainder of this section, or the validity of its application to other persons or circumstances.

(Ord. 24-_____ Sec. 1, 2024; Ord. 6024 Sec. 1, 2023; Ord. 5760 Sec. 1, 2018)

Section 2. This ordinance shall be in full force and effect five days from and after its passage, approval and publication as required by law.

PASSED BY THE CITY COUNCIL OF THE CITY OF KENNEWICK, WASHINGTON, this 5th day of March, 2024, and signed in authentication of its passage this 5th day of March, 2024.

Attest:

KRYSTAL TOWNSEND,
City Clerk

GRETL J. CRAWFORD, Mayor

ORDINANCE NO. 24-_____ filed and recorded in the office of the City Clerk of the City of Kennewick Washington, this 6th day of March, 2024

Approved as to Form:

LAURENCIO SANGUINO,
Interim City Attorney

KRYSTAL TOWNSEND,
City Clerk

DATE OF PUBLICATION: _____

ORDINANCE EFFECTIVE DATE: _____

CITY OF KENNEWICK
ORDINANCE NO. 24-_____

AN ORDINANCE RELATING TO OFFENSES AGAINST PUBLIC ORDER AND AMENDING SECTION 10.08.140 OF THE KENNEWICK MUNICIPAL CODE

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(b) At all times it is unlawful to sit or lie on any drinking fountain, trash container, planter, bicycle rack, or any other sidewalk fixture not designed primarily for the purpose of sitting.

(c) At all times, it is unlawful to sit or lie in any entrance to or exit from any building or parking lot, or on any loading dock.

(2) Exceptions. The prohibition in subsection (1) of this section does not apply to any person:

(a) Sitting or lying down due to a medical emergency or due to a sensory, mental, or physical disability;

(b) Who, as the result of a sensory, mental, or physical disability, utilizes a wheelchair, walker, or similar device to move about a public sidewalk;

(c) Operating or patronizing a business with permission to occupy the sidewalk;

(d) Participating in or attending a parade, festival, performance, rally, demonstration, meeting, or similar event conducted on the public sidewalk pursuant to a special event or other applicable permit;

(e) Sitting on a chair or bench supplied by a public agency or by the abutting private property owner pursuant to the appropriate permit or license;

(f) Sitting within a bus stop zone while waiting for public or private transportation; or

(g) Sitting on privately-owned sidewalk fixture with the permission of the owner.

(3) No person shall be subject to enforcement under this section unless the person engages in conduct prohibited by this section within the entirety of the zone designated in this section after having been notified by a law enforcement officer that the conduct violates this section and has been given a reasonable amount of time to comply or has refused to comply. If the individual fails to comply in a reasonable time or engages in prohibited conduct in another location within the designated zone, a law enforcement officer may then enforce this section.

(4) The zones where the conduct described in section (1) is prohibited are as follows:

(a) From Clearwater Avenue to Kennewick Avenue, between Yelm Street and Huntington Street;

(b) From 24th to 28th , between Tweedt Street and Olson Street;

(c) ~~Canal Drive, between Young Street and Kellogg Street;~~Clearwater Avenue, between Arthur Street and Morain Street; and

(d) Portions of the Kennewick Central Business District to include the following streets and public rights of way, from 1st Avenue to Canal Drive, between Dayton Street and Washington Street, including W. Kennewick Avenue between Dayton Street and Washington Street, including N. Cascade Street, N. Benton Street and N. Auburn Street between 1st Avenue and Canal Drive.

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Attest:

GRETL J. CRAWFORD, Mayor

KRYSTAL TOWNSEND,
City Clerk

ORDINANCE NO. 24-_____ filed and recorded in the office of the City Clerk of the City of Kennewick Washington, this 6th day of March, 2024

Approved as to Form:

LAURENCIO SANGUINO,
Interim City Attorney

KRYSTAL TOWNSEND,
City Clerk

DATE OF PUBLICATION:

ORDINANCE EFFECTIVE DATE:

Sitting/Lying on a Public Sidewalk/Right-of-Way

March 5, 2024

Laurencio Sanguino
Kennewick City Attorney's Office

KMC 10.08.140

(1) Prohibitions.

(a) No person may sit or lie on a public sidewalk; right-of-way; or blanket, chair, stool, or object placed upon a public sidewalk or right-of-way from 6:00 a.m. to midnight in the designated zones.

(b) No person may sit or lie on a drinking fountain, trash container, planter, bicycle rack, or sidewalk fixture that is not primarily designed for sitting at any time.

(c) No person may sit or lie in a building or parking lot entrance or exit or loading dock at any time.

KMC 10.08.140

(2) Exceptions. Prohibitions do not apply to a person:

(a) Sitting or lying down due to a medical emergency or mental, physical, or sensory disability;

(b) Who uses a wheelchair, walker, or device on a public sidewalk or right-of-way due to said disability;

(c) Patronizing a business;

(d) Participating in a special event on a public sidewalk or right-of-way;

(e) Sitting on a chair or bench provided by a public agency or abutting private property;

(f) Sitting at a bus stop while waiting for public or private transportation; or

(g) Sitting on a private sidewalk fixture with an owner's permission.

(3) A person is not subject to enforcement unless he or she engages in prohibited conduct within a designated zone after an officer notifies him or her that the conduct violates KMC 10.08.140 and provides him or her with a reasonable amount of time to comply.

KMC 10.08.140

(4) Zones (amended May 16, 2023). Prohibitions apply:

(a) From Clearwater Avenue to Kennewick Avenue, between Yelm Street and Huntington Street;

(b) From 24th Street to 28th Street, between Tweedt Street and Olson Street;

(c) Canal Drive, between Young Street and Kellogg Street; and

(d) From 1st Avenue to Canal Drive, between Dayton Street and Washington Street.

KMC 10.08.140

(4) Zones (amended May 16, 2023). Prohibitions apply:

(a) From Clearwater Avenue to Kennewick Avenue, between Yelm Street and Huntington Street;

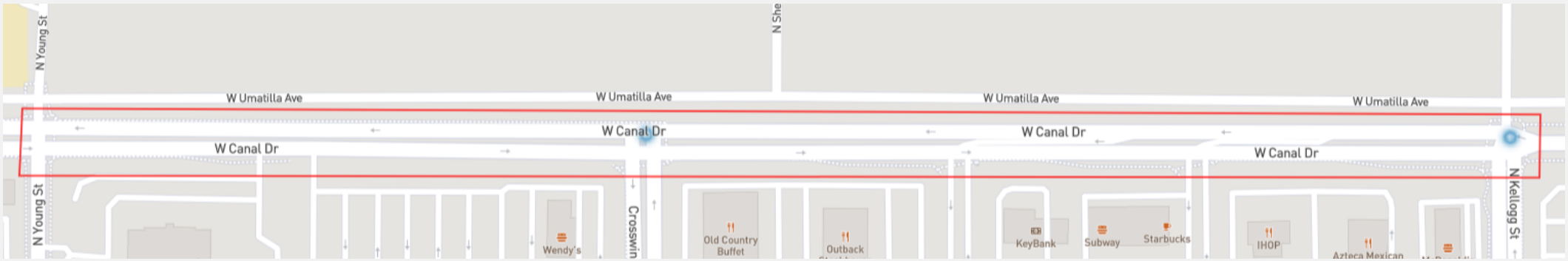
(b) From 24th Street to 28th Street, between Tweedt Street and Olson Street;

(c) ~~Canal Drive, between Young Street and Kellogg Street~~ Clearwater Avenue, between Arthur Street and Morain Street; and

(d) From 1st Avenue to Canal Drive, between Dayton Street and Washington Street.

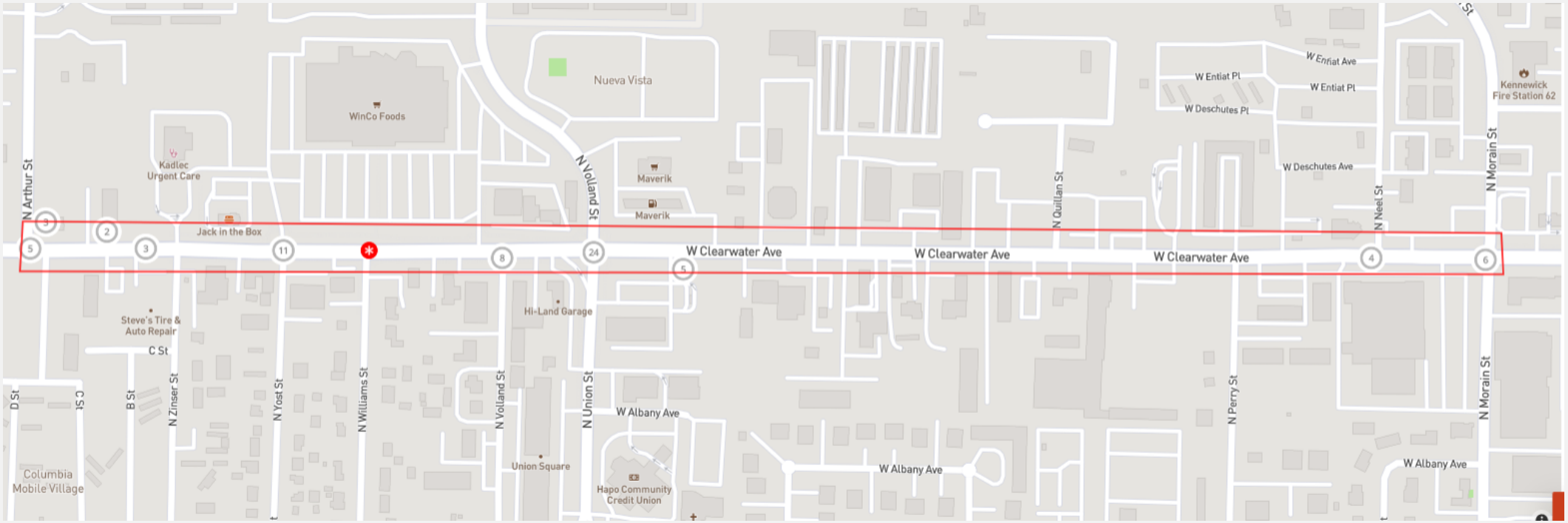
KMC 10.08.140

In 2023, KPD responded to 3 calls for service on Canal Drive, between Young Street and Kellogg Street.



KMC 10.08.140

In 2023, KPD responded to 284 calls for service on Clearwater Avenue, between Arthur Street and Morain Street.



KMC 10.08.140

In 2023, KPD responded to 284 calls for service on Clearwater Avenue, between Arthur Street and Morain Street, including:
2 assault,
2 destruction of property,
3 disturbance,
14 drug,
1 graffiti,
11 loitering,
3 overdose,
20 suspicious activity/person/vehicle,
131 theft,
47 trespass,
1 vehicle prowl,
7 warrant,
6 weapon, and
36 welfare calls.

Clearwater Avenue is the most important patrol area and Winco is the most frequent caller.

Council Agenda Coversheet	Agenda Item Number: 7.a.	Council Date: 3/5/2024	Category: Other
	Agenda Item Type:	Contract/Agreement/Lease	
	Subject:	Contract: Toyota Center HVAC Replacement Project - 2024-291	
	Department:	City Manager	
	Ord/Reso #	Contract # 2024-291	
	Project #	Permit #	

Recommendation

The staff recommends granting authorization to the City Manager to execute the agreement for the Toyota Center HVAC replacement project with Apollo Mechanical Contractors.

Motion for Consideration

Motion to authorize the City Manager to execute an agreement with Apollo Mechanical Contractors for an amount not to exceed $1,346,700 for the Toyota Center HVAC system replacement project.

Summary

In October 2023, the City authorized Apollo Solutions Group, in collaboration with the Department of Enterprise Services (DES), to conduct an Investment Grade Audit (IGA). The objective of this audit was to assess the cost and feasibility of replacing three HVAC units at the Toyota Center through the DES Energy Savings Performance Contract (ESPC) program. Among the four main HVAC units at the Toyota Center, one unit was previously replaced in 2016, while two of the remaining units are currently functioning at a minimal capacity.

Given that major events are scheduled at the Toyota Center later this year, the need for HVAC system replacement demands immediate action.

The Energy Services Proposal (ESP) is the outcome of the IGA study, presenting a guaranteed not-to-exceed cost for the project. The procurement process, facilitated through the Washington State Department of Enterprise Services (DES), has endorsed Apollo Mechanical Contractors as a pre-approved contractor. This ESP will be incorporated into a contract authorizing Apollo Solutions Group to carry out the project under the supervision of Toyota Center personnel.

With Council approval, the City will engage in a contract with Apollo using the DES standardized contract. Subsequently, upon its preparation, the City Manager will execute the contract without necessitating further review by the Council.

The project is funded with ARPA proceeds.

Alternatives

No alternatives are recommended.

Fiscal Impact

This purchase is fully funded with ARPA funds.

Attachments:

1. Proposal
2. Report

ENERGY SERVICES PROPOSAL

Energy Services Authorization
No: 2024-291 A (1)

City of Kennewick
Toyota Center ESPC Project PH-II
VenuWorks of Kennewick, WA

Apollo

— MECHANICAL CONTRACTORS —
Solutions Group

February 17, 2024

Table of Contents

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SECTION 6: FIM SUMMARY 19
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PROJECT CONTACTS

Table 1: Client Contact Information

Name	Title	Email	Phone
Rob Gireke	Director of Operations	rgierke@3riverscampus.com	(509) 737-3734

Table 2: Apollo Solutions Group Contact Information

Name	Title	Email	Phone
Mike Fuentes	Division Manager	mfuentes@apollosolutionsgroup.com	(509) 413-6227
Scott Lewis	Account Manager	scott.lewis@apollosolutionsgroup.com	(509) 821-0379
Mike Sill	Engineering Manager	Mike.sill@apollosolutionsgroup.com	(509) 821-0757
Gage Lane	Program Manager	gage.lane@apollosolutiongroup.com	(509) 405-0712
Galen Ribelia	Energy Engineer	galen.ribelia@apollosolutiongroup.com	(509) 405-5860
Michael Paul	Construction Manager	michael.paul@apollosolutionsgroup.com	(509) 405-4679
James Penman	Labor Superintendent	James.penman@apollosolutionsgroup.com	(509) 851-7022

Table 3: Department of Enterprise Services Contact Information

Name	Title	Email	Phone
Alysa Wiyrick	Energy Engineer	alysa.wiyrick@des.wa.gov	509-279-5024

SECTION 1: EXECUTIVE SUMMARY

This Energy Services Proposal (ESP) documents the findings and proposed improvements identified through an Investment Grade Audit (IGA) performed by Apollo Solutions Group (ASG) as part of the Energy Savings Performance Contract (ESPC) process for the Toyota Center in Kennewick, Washington. The outcome of the Energy Services Proposal will be to implement the proposed Facility Improvement Measures (FIMs) which include:

- Total project cost of $1,346,700.
- Total guaranteed construction and ESCO fee cost of $1,194,785.
- Total non-guaranteed costs including WA state sales tax, DES project management fee, and miscellaneous fees of $151,915.
- Utilization of VenuWorks of Kennewick LLC. capital reserves to fund the amount above.
- The list of FIMs include:
    - Installation of (3) new ground mounted Trane packaged RTUs with DX cooling and natural gas heating sections to replace the (3) 1988 McQuay (Snyder General) H&V DX units.
    - Extension of the existing natural gas piping system within the building to the installation locations of the new RTUs.
- Benefits of the above FIMs include:
    - Demand control ventilation for the arena space.
    - Standardization and improved reliability of heating & cooling system.
    - Improved efficiency from the new equipment.
- Annual energy cost savings of $9,467 after baseline corrections.
- 4.7% reduction in annual utility usage after baseline corrections.
- Annual guaranteed electrical savings of 186,362kWh per year after baseline corrections.
- The energy savings presented are based upon a modified baseline to account for bringing the ventilation systems up to code. The new baseline will be greater than what the Toyota Center is currently consuming now by our projections, Apollo is being conservative in our energy guarantee.

Table 1-1: Future Utility Expenditures

Facility	Existing Electrical Usage (kWh)	Existing Natural Gas Usage (Therm)	Existing Costs ($)	Modified Electrical Usage (kWh)	Modified Natural Gas Usage (Therm)	Post-Project Electrical Usage (kWh)	Post-Project Natural Gas Usage (Therm)	Post-Project Costs ($)
Toyota Center	2,126,400	42,690	$207,621.14	2,696,209	42,690	2,509,847	42,690	$235,934.13

ASG has worked with Three Rivers Campus staff and administration with the review and approval from the State of Washington's Department of Enterprise Services (DES) ESPC Program to develop this proposal for implementing the project described above.

The implementation phase of this project will begin in the summer of 2024 and conclude no later than the end of 2024. ASG proposes to guarantee energy savings for the minimum term per the measurement and verification (M&V) guidelines of the DES Main Energy Services Agreement (MESA). Per MESA standards, the cost of M&V for the first year is included in the price of the project. M&V services can be contractually renewed after the first year at the request of the client to extend the guarantee term, however, the performance guarantee is only valid when services are

provided by ASG via a qualified M&V contract. The scope and annual cost of M&V services is presented in Section 5 of this proposal.

ACKNOWLEDGEMENTS

ASG would like to thank Three Rivers Campus and the Toyota Center for their cooperation in providing data, access, and assistance in the development of this ESP. ASG would like to thank the following individuals: Executive Director for the Toyota Center Corey Pearson, Director of Operations for the Toyota Center Rob Gierke, and DES Energy Engineer Alysa Wiyrick.

PROJECT FINANCES AND GUARANTEE

The total cost to implement the FIMs is a guaranteed maximum construction cost itemized in detail in Table 1-2. This price includes all design, permits, fees, construction, and construction management costs as well as the DES project management fee, and state sales tax for projects included in this report only. The proposed improvements will be funded by VenuWorks of Kennewick LLC. capital reserves. Financial details are provided in Section 4 of this document.

Table 1-2: Open Book Project Cost Summary Table

OPEN BOOK PROJECT COST SUMMARY Toyota Center Air Handling Unit Retrofits		TOTAL
CONSTRUCTION COSTS		
Direct Subcontracted Costs		$786,280
ASG On-Site Services (Supervision, etc.)		$48,560
Misc. Direct Costs		$0
SUB-TOTAL CONSTRUCTION COSTS		$834,840
Performance Bond	1.50%	$12,522
TOTAL DIRECT CONSTRUCTION COSTS		$847,362
ESCO FEES		
Audit Fee		$24,933
Design Engineering	10.0%	$78,628
Construction & Project Administration	6.0%	$50,090
Overhead	10.0%	$83,484
Profit	8.0%	$66,787
TOTAL ESCO FEES		$303,922
OTHER COSTS		
Project Contingency	5.0%	$41,742
Construction Interest		$0
ASG Year 1 M&V		$1,759
ASG Year 2 M&V		$0
ASG Year 3 M&V		$0
TOTAL OTHER COSTS		$43,501
TOTAL GUARANTEED CONSTRUCTION & ESCO COSTS		**$1,194,785**
NON-GUARANTEED COSTS		
Misc. Costs:		$0
Tax - Construction and Professional Svcs	8.7%	$100,315
Washington DES Project Mgmt Fee		$51,600
TOTAL NON-GUARANTEED COSTS		$151,915
TOTAL MAXIMUM PROJECT COST		**$1,346,700**

The Total Guaranteed Construction & ESCO Costs are guaranteed to VenuWorks of Kennewick. Any cost overruns beyond this price will be borne by ASG. Barring unforeseen changes in conditions or owner-requested changes from Toyota Center to the scope, there will be no changes in price (change orders). Construction costs will be documented throughout the project in a transparent, open book pricing methodology.

SECTION 2: PROJECT SCOPE OF WORK

VenuWorks of Kennewick selected for development in this Investment Grade Audit, a number of Facility Improvement Measures (FIMs) that were presented by ASG as a result of a Preliminary Energy Assessment. These FIMs generate energy savings and improve the operation of the facility. This section of the Energy Services Proposal describes each FIM, and the scope of work that ASG will implement during construction to achieve savings.

The scopes of work for each FIM were developed after an audit of the facility. While every effort has been made to identify failed equipment and problematic building operation during the site survey, there may be additional work identified during design and construction that is not included in the scope of work for each FIM as defined in this section of the proposal. Some of this work could include, but is not limited to, repairing or replacing equipment that is found to be malfunctioning or failing. Repairing or replacing equipment that may have been damaged after the site survey occurred, correcting problematic building or system operation, etc. ASG may work with the owner to correct such deficiencies, however, any work that is not included in the scope of work for each FIM would be considered an unforeseen condition and can get added to the project through an owner directed change order.

FIM-1: Air Handling Unit Retrofits

Existing Conditions:

The Toyota Center's stadium seating area is provided ventilation and air conditioning by four (4) air handling units located at each of the 4 corners of the building. Three (3) of the air handlers are original to the 1988 construction of the building, these are McQuay (Snyder General) units with DX cooling and hydronic heating sections. The McQuay units are in varying states of operability with two (2) units not able to provide ventilation air at full capacity. Repairs to these systems have become cost prohibitive. The fourth unit is a Trane package RTU with DX cooling and natural gas heating sections installed in 2016.

The McQuay units utilize zone thermostats and onboard controls to meet heating and cooling demands. Ventilation air is manually adjusted daily based on facility usage and event type. Ventilation air remains relatively constant throughout the year, outside air dampers are not adjusted regularly.

The existing Trane unit operates using a zone thermostat and onboard controls with demand-based ventilation capabilities. Ventilation air is controlled using CO2 sensor readings taken in the return air plenum, outside air dampers are automatically adjusted to meet the fresh air requirements. The existing Trane unit also utilizes 100% outside air economizing when outside air temperatures allow.

The facility does not currently have a BAS controlling any of the mechanical equipment.

Proposed Modifications:

The intent of this FIM is to replace the existing three (3) 1988 McQuay Snyder-General H&V units with three (3) all new Trane ground mounted RTUs. The new RTUs will be installed outside the building where they can be accessed for maintenance. The new equipment will also be installed with an all-new digital controls system that will provide the ability to trend data and the ability to schedule equipment. The fourth (existing) Trane RTU will be picked up by this control system as well, giving the Toyota Center total control over the ventilation air entering the stadium seating area.

Benefits and Results:

- Significantly improved indoor air quality by bringing in the code required amount of outdoor air as described in ASHRAE 62.1, improved filtration, and improved circulation.
- New equipment will provide improved reliability and controllability through the new digital controls system.
- New controls system will allow for energy savings controls methods to be put in place to reduce energy usage when the stadium is unoccupied.
- Greatly improved access to mechanical equipment for maintenance and repairs.

Scope of Work:

The scope will include the following work:

- Demolition and removal of three (3) McQuay Snyder-General H&V units within the mechanical mezzanines. Exposed hydronic and condenser water piping will be capped and re-routed such that the loops are preserved.
- Pour new concrete equipment pads on three corners of the building for the new RTUs to sit upon.
- Relocate one (1) outdoor unit for a walk-in cooler including all electrical and refrigerant connections.
- Furnish and install three (3) new Trane RTUs with DX cooling and natural gas heating sections.
- Mechanically connect all new equipment. This includes all ductwork connecting the RTUs to their respective supply / return air plenums and natural gas piping.
- Electrically connect all new equipment. This includes providing new power wiring, conduit, and disconnects where required and making all necessary terminations for a complete installation.
- Providing all of the wiring, mapping, programming, graphics, and other devices for the new digital controls system.
- Tab and Commissioning of the new equipment, including verifying the new demand-controll ventilation systems are working as intended.
- 1-year warranty

The scope of work for this FIM excludes:

- Extended warranty past year 1, aside from any manufacturer warranties on installed equipment which are independent from the warranty offered by Apollo.
- Building code upgrades not necessary to complete this scope of work.
- Asbestos abatement is excluded in our GMAX Fee, as the good faith survey revealed that there wasn't any hazardous material in the systems that Apollo would be working on.

Services provided by ESCO:

- Construction management
- Site Supervision
- Design Management, Oversight, and Review
- Commissioning
- M&V as indicated in the FIM-specific M&V plan

Extent of subcontracting:

- Engineering design
- Retrofit Installation
- Concrete Contractor (Hendon Construction)
- Mechanical Contractor (Apollo Mechanical)
- Electrical Contractor (Brashear Electric)
- Controls Contractor (Apollo Mechanical)

- Commissioning (KJH Engineering)
- Test, Adjust, and Balance (Air Commander)

Approved equipment:

- Trane RTUs
- Belimo Valves/Actuators
- Allerton Controls
- Or approved equal

Applicable Building Codes:

- Washington State Energy Code, Section C403
- Washington State Mechanical Code, Section 403

End of Project Scope of Work Section

SECTION 3: CONSTRUCTION PROCESS

Apollo Solutions Group is able to guarantee the cost of this ESPC project by acting as the general contractor to manage the installation and implementation of the FIMs. The project management approach is site-specific for the Toyota Center and is described in this section of the Energy Services Proposal.

WORKING CONDITIONS AND SITE LOGISTICS

Daily Work Schedules:

ASG plans for all work to be completed during normal business hours, Monday through Friday 7am to 5pm.

Site Logistics:

Due to the nature of the facility's use, building, and working environment, some assumptions have been made regarding the construction logistics. These assumptions have been made through discussions with the staff as part of the development of this Energy Services Proposal:

- A parking area for ASG and subcontractors will be dedicated.
- A staging area will be provided to ASG to provide for storage of materials and equipment on the Three Rivers Campus. The site will need to be a fenced area where several connex boxes could be stored during the project if needed.
- A three week look ahead schedule will be used to coordinate any required shutdowns required to be in place before construction begins.

Statutory Apprenticeship Requirements:

Each of the subcontractors working on the project has confirmed that they participate in an apprenticeship program that meets the requirements of the State Prevailing Wage Act per RCW 39.12.021. Workers registered with the WSATC are entitled to the prevailing wage rates for an apprentice of that trade. If the worker is not registered, they will be paid the full journey-level wage rate. Additionally, each subcontractor will comply with the requirements of RCW 39.04.320.

CONSTRUCTION SEQUENCING

Based upon the estimated timeline for approvals, VenuWorks of Kennewick administration shall convene to approve the project in late winter 2024. DES will then process Design and Construction Contracts with the bond and insurance requirements that Apollo will need to obtain. Once these contract requirements are in place, a Notice to Proceed from DES should occur in the winter or spring of 2024. At this time submittals, final design review and the construction schedule will be reviewed and approved by the Toyota Center. Every effort will be made to expedite this process so the equipment would arrive in the summer of 2024, with the biggest hurdle being the long-lead Package RTUs. It is anticipated that the work would take place from July to September time frame.

- FIM-1: Air Handling Unit Retrofits

Other Services from Apollo Solutions Group:

ASG will provide engineering design review, construction management, on-site superintendent, permitting, commissioning, and training of facility personnel on new equipment.

WARRANTY

Work performed as part of this Energy Services Proposal will be provided with a one-year parts and labor warranty starting on the date of substantial completion of the entire ESPC project. Close-out items will be submitted and approved prior to the commencement of warranty.

DIVERSE BUSINESS INCLUSION GOALS

ASG has established the following diverse business participation goals for this project in the table below. Apollo Solutions Group is considered to be a minority owned business so we will be able to reach the goals in this category. During the project, we will have one concrete subcontractor, one electrical subcontractor, one mechanical subcontractor, and one controls subcontractor that has been initially selected to perform the work based upon their cost, availability and high quality of work. At this time none of these subcontractors fall under the State Certification Categories listed below.

Table 3-1

State Certification Categories	Percentages from the Amendment to MESA	Percentages for Construction	Percentages for Professional Services
Minority-owned business	12%	79.55%	50.84%
Women-owned business	8%	0%	0%
Veteran-owned business	5%	0%	0%
Small/mini/micro business	5%	0%	0%

APPRENTICESHIP PARTICIPATION

ASG will apply 15% apprenticeship participation to projects with total construction costs that exceed one million dollars. ASG will strive to exceed but will not be required to exceed this requirement. Prior to the submittal of the first construction invoice, an Apprentice Utilization Plan will be provided to the Department of Labor & Industries' (L&I) Prevailing Wage Intents and Affidavit (PWIA) system to demonstrate how and when ASG intends to utilize apprentices. ASG will provide an updated plan during construction when there are significant changes that may affect the ability to meet the requirement. A Good Faith Effort may be accepted to the PWIA system if ASG is not able to attain the minimum requirement despite a good faith effort. The Good Faith Effort will document the shortfall and reasons for not attaining the required apprentice labor hours.

End of Construction Process Section

SECTION 4: PROJECT FINANCIALS

Apollo Solutions Group has developed, by way of the IGA, the Guaranteed Maximum Construction Cost and Guaranteed Energy Cost Savings for implementing the FIMs described in this Energy Services Proposal. The project cost and project fulfillment of the cost effectiveness criteria is described in this section of the Energy Services Proposal.

PROJECT COST

As an ESPC project developed through the State of Washington Department of Enterprise (DES) Services process, the cost to the Toyota Center is presented as a Guaranteed Maximum Construction Cost and as a Total Project Cost. ASG has presented the breakdown of project costs in Table 4-1 according to the State of Washington DES's open book pricing format.

Guaranteed Maximum Construction Cost:

The Guaranteed Maximum Construction Cost (GMAX) includes the Investment Grade Audit Fee, professional design fees, construction management fees, contingency on the construction cost, and construction material and labor costs – including payment and performance bond.

Total Project Cost:

The Total Project Cost includes the sales tax on all components plus miscellaneous fees (EG: State of Washington Department of Enterprise Services project management fee), as applicable. These additional costs are not guaranteed by ASG but are included in the Total Project Cost to establish overall project cost effectiveness.

Table 4-1

OPEN BOOK PROJECT COST SUMMARY

Toyota Center Air Handling Unit Retrofits

		TOTAL
CONSTRUCTION COSTS		
Direct Subcontracted Costs		$786,280
ASG On-Site Services (Supervision, etc.)		$48,560
Misc. Direct Costs		$0
SUB-TOTAL CONSTRUCTION COSTS		$834,840
Performance Bond	1.50%	$12,522
TOTAL DIRECT CONSTRUCTION COSTS		$847,362
ESCO FEES		
Audit Fee		$24,933
Design Engineering	10.0%	$78,628
Construction & Project Administration	6.0%	$50,090
Overhead	10.0%	$83,484
Profit	8.0%	$66,787
TOTAL ESCO FEES		$303,922
OTHER COSTS		
Project Contingency	5.0%	$41,742
Construction Interest		$0
ASG Year 1 M&V		$1,759
ASG Year 2 M&V		$0
ASG Year 3 M&V		$0
TOTAL OTHER COSTS		$43,501
TOTAL GUARANTEED CONSTRUCTION & ESCO COSTS		**$1,194,785**
NON-GUARANTEED COSTS		
Misc. Costs:		$0
Tax - Construction and Professional Svcs	8.7%	$100,315
Washington DES Project Mgmt Fee		$51,600
TOTAL NON-GUARANTEED COSTS		$151,915
TOTAL MAXIMUM PROJECT COST		**$1,346,700**

FINANCIALS

Toyota Center Source of Funds

The proposed improvements will be funded from VenuWorks of Kennewick's capital reserves. ASG will receive the notice to proceed to design after VenuWorks of Kennewick administration has approved the project. Thereafter, construction will proceed and ASG will invoice the Toyota Center for its IGA costs. The anticipated project funding timeline is presented in Table 4-2.

Table 4-2: Project Timeline

Timeline	
Acceptance of Energy Services Proposal	2/2024
Notice to Proceed to Design-Build	3/2024
Design Commences	3/2024
Order Long Lead Equipment	3/2024
Construction Commences	7/2024
Substantial Completion of Construction	9/2024
Commencement of Energy Savings	9/2024

UTILITY REBATES & GRANT

ASG does not guarantee the value of any rebates or incentives nor does it guarantee there will be any available to the facility from Benton County PUD or Cascade Natural Gas Corporation.

Utility incentives would be secured through a process of analysis and verification performed by the utilities, Benton County PUD and Cascade Natural Gas Corporation. A preliminary estimate for incentives has not been provided. ASG does not guarantee the value of any rebate incentives or that they will be available to VenuWorks of Kennewick indefinitely.

ESCO COMPENSATION

ASG shall be compensated via monthly progress billings paid in accordance with the terms outlined in the State of Washington's Main Energy Services Agreement. The first payment shall include the cost of the ASG audit fee as outlined in the IGA agreement with DES. Payments will be released after any compliance issues have been resolved.

EQUIPMENT TITLE

After installation and payment, the VenuWorks of Kennewick will have ownership of all installed equipment.

SECTION 5: MEASUREMENT & VERIFICATION

FIM-SPECIFIC M&V PLANS

Overview

The measurement and verification (M&V) methodology for this project is based on the guidance of the International Performance Measurement and Verification Protocol (IPMVP) and Federal Energy Management Protocol - M&V Guidelines: Measurement and Verification for Federal Energy Projects (FEMP); current and previous versions. Any deviations from the defined options of these protocols are indicated where applicable.

As defined in the IPMVP, the savings analysis methodology for this project corresponds to the "normalized savings" method of calculating energy savings. The Baseline Energy Consumption was calculated using the utility data that was made available and adjusted to "normal" conditions as described in Section 4 of the Energy Services Proposal, (Utility Savings and Verification). During the Guarantee Term, actions will be taken to measure and verify Energy Consumption as described in the M&V plan for each FIM. Per the IPMVP Normalized Savings method, the Energy Consumption during the Billing Period will be normalized to the same conditions as the Baseline Energy Consumption.

For each FIM, the Energy Consumption Savings will be calculated as the difference between the normalized Baseline Energy Consumption and the normalized Energy Consumption actually incurred in the Billing Period. Savings calculations, energy models, assumptions, algorithms, etc. and the value of savings will not be modified after execution of the Construction Contract except to include any measurements made by ASG as described in the FIM-specific measurement and verification plans set forth in this Energy Services Proposal.

To comply with the Master Energy Services Agreement for State of Washington Facilities, the Energy Consumption Savings will be multiplied by the applicable utility rate to arrive at the Energy Cost Savings for the Billing Period. The applicable utility rate during each Billing Period will be the utility rates published in Section 4 of the Energy Services Proposal (Utility Savings and Verification).

In the event that the Energy Cost Savings during the Billing Period exceed the Guaranteed Energy Cost Savings for that Billing Period, the surplus savings will be given to the client. If the Guaranteed Energy Cost Savings still exceed the Totalized Energy Cost Savings, ASG will reimburse the customer for the difference.

ASG guarantees that the sum total, for all FIMs included in the project, of Totalized Energy Cost Savings realized during each year of the Guarantee Term will equal or exceed the projected Energy Cost Savings set forth in this Energy Services Proposal – this sum total is the Guaranteed Energy Cost Savings.

In the unlikely event that there is a shortfall in energy savings, ASG will negotiate the equivalent dollar value of the shortfall in equivalent value of services by ASG to correct the deficiencies at the site/FIM that ASG believes is leading to or may eliminate the shortfall. Negotiation between ASG and the client may result in a reimbursement (payment) of the value of energy shortfall calculated based on the M&V term period and the unit energy cost rate agreed upon in this proposal or a combination of the payment and services.

FIM-1: Air Handling Unit Retrofits

Overview Of M&V Plan:

The table 5-1 is used to show which protocol will be used for a specific FIM.

Table 5-1

M&V BASIS	DESCRIPTION
☐ IPMVP / OPTION A	RETROFIT ISOLATION: KEY PARAMETER MEASUREMENT
☑ IPMVP / OPTION B	RETROFIT ISOLATION: ALL PARAMETER MEASUREMENT
☐ IPMVP / OPTION C	WHOLE FACILITY (UTILITY BILL COMPARISON)
☐ IPMVP / OPTION D	CALIBRATED SIMULATION
☐ IPMVP / N/A	OPERATIONAL VERIFICATION
☐ N/A	STIPULATED SAVINGS

General Description Of M&V Process:

ASG will use the new DDC control system to trend the operation of the new scheduling parameters and the mixing dampers to verify the outdoor air economizer is operating as planned. Other non-measured variables used in the calculations will be fixed constants. This data will be used to calculate actual savings achieved from the installation. The savings results, based on measured data, will be the *Energy Consumption Savings*.

Baseline M&V Activities:

All baseline variables are per data obtained during the field survey and as provided by facility operations staff. The operational H&V unit runtime was logged using the start and stop of the supply fan motor to characterize the existing schedule.

Post-Installation M&V Activities:

ASG will verify new HVAC equipment efficiency rating from the manufacturer's data, verify DDC sequence of operation programmed for outdoor air economizer operation as planned, establish DDC system trending to show outdoor air temperature vs mixing damper position as a means to prove operation of outdoor air economizer, and calculate the verified savings as the difference between the baseline and post retrofit energy usage (these savings will be compared to the projected savings guaranteed and the results documented in a final report). ASG will perform an onsite walkthrough of the systems being installed towards the end of the M&V period to verify the operation of the

equipment and collect the trend data from the BAS as well as ensure energy saving control strategies are still in place.

Calculation Methodology:

ASG will use the measurements taken as part of the M&V activities to calculate the actual savings, using the same excel spreadsheet method used previously. The difference between the re-calculated baseline and re-calculated post-retrofit energy consumption, using measured data, will become the *energy consumption savings* for the FIM during the Guarantee Term. Variables in the savings calculations that are non-measured will be fixed constants throughout the Guarantee Term.

Performance Period M&V Report:

ASG will provide an M&V Report at the end of a one-year period. This report will detail the performance and operation of FIM-specific equipment at the facility. The findings of the M&V Report will be based on the methods outlined in the post-installation M&V activities section.

Deliverables:

ASG will provide M&V Reports over a one-year period at the facility to ensure the proper operation of the installed equipment.

GUARANTEED ENERGY COST SAVINGS

The Toyota Center utilities are expected to increase based on our conservative calculations. ASG's estimate of future utility expenditures compared to existing and modified utility consumption can be found in Table 5-3 below. ASG proposes to guarantee the energy cost savings resulting from implementation of the proposed FIMs in this project. The *Guaranteed Energy Cost Savings* have been discounted for M&V methodology effectiveness.

Table 5-3: Future Utility Expenditures

Facility	Existing Electrical Usage (kWh)	Existing Natural Gas Usage (Therm)	Existing Costs ($)	Modified Electrical Usage (kWh)	Modified Natural Gas Usage (Therm)	Post-Project Electrical Usage (kWh)	Post-Project Natural Gas Usage (Therm)	Post-Project Costs ($)
Toyota Center	2,126,400	42,690	$207,621.14	2,696,209	42,690	2,509,847	42,690	$235,934.13

ANNUAL M&V RENEWAL FEES

The cost of measurement and verification for the first year is included in the price of the project. The M&V services can be renewed after the end of year one at the request of the Client to extend the guarantee term. However, the performance guarantee is only valid when M&V services are provided by ASG.

Table 5-5: Annual M&V Renewal Fees

ANNUAL M&V RENEWAL FEES	
PROJECT YEAR	M&V RENEWAL FEE
0	$0
1	$0
2	$1,812
3	$1,866

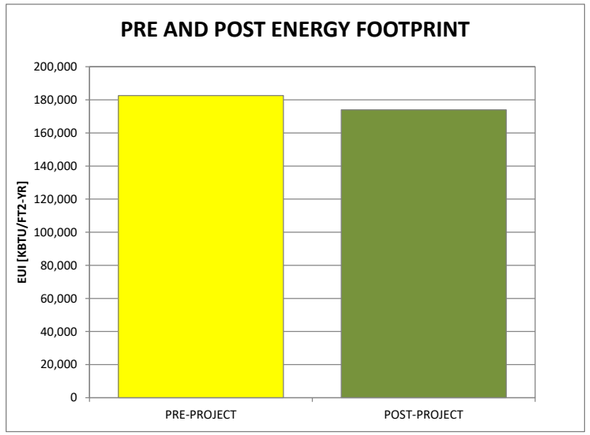
SECTION 6: FIM SUMMARY

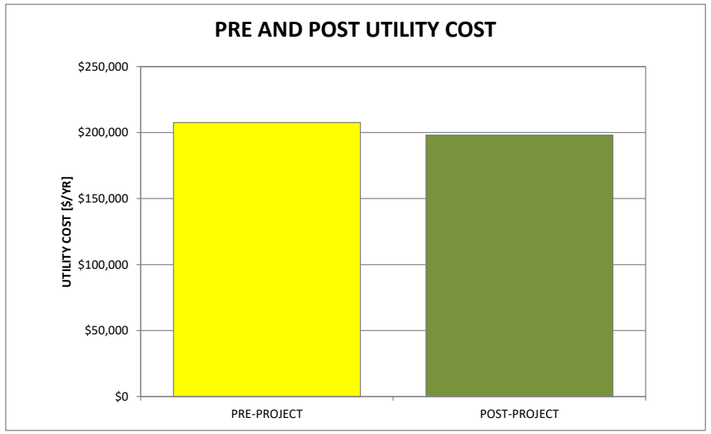
FACILITY IMPROVEMENT MEASURES SUMMARY

Toyota Center Air Handling Unit Retrofits

ROW	FIM ID	FIM DESCRIPTION	PROJECT PRICE	UTILITY INCENTIVES [$]	TOTAL ANNUAL COST SAVINGS	SIMPLE PAYBACK BEFORE INCENTIVES	MODIFIED PAYBACK AFTER INCENTIVES	ANNUAL ELECTRICITY SAVINGS [KWH/YR]	ANNUAL FUEL 1 SAVINGS	ANNUAL FUEL 2 SAVINGS	ANNUAL WATER SAVINGS [KGAL/YR]	GUARANTEED ANNUAL UTILITY COST SAVINGS [$/YR]	ANNUAL O&M SAVINGS [$/YR]	ELIMINATED C02 [TONS/YR]	ELIMINATED C02 [CARS/YR]
1	1	Air Handling Unit Retrofits (Toyota Center)	$1,346,701	$0	$9,467	142.2	142.2	186,362	0	0	0	$9,467	$0	129	25
			$1,346,701	**$0**	**$9,467**	**142.2**	**142.2**	**186,362**	**0**	**0**	**0**	**$9,467**	**$0**	**129**	**25**

UTILITY SAVINGS SUMMARY FOR ALL FACILITIES INCLUDED IN THE PROJECT							
	FLOOR AREA [FT2]	ELECTRICITY USAGE [kWh/yr]	FUEL 1 USAGE [Therm/yr]	FUEL 2 USAGE -	WATER USAGE [CCF/yr]	UTILITY COST [$/YR]	EUI [BTU/FT2-YR]
PRE-PROJECT	73,758	2,696,209	42,690	0	0	$207,619	182,640
POST-PROJECT	73,758	2,509,847	42,690	0	0	$198,152	174,016
PERCENT SAVINGS		6.9%	0.0%	#DIV/0!	#DIV/0!	4.6%	4.7%





APPENDIX A: IGA REPORT

The IGA report will be attached in digital format.

— MECHANICAL CONTRACTORS —
Solutions Group

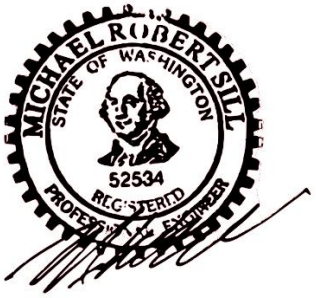
Investment Grade Audit Report

DES Project # 2024-291 A (1)

7000 W Grandridge Blvd,

Kennewick, WA 99336

Report Date: 2/17/2024



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PROJECT CONTACTS

Table 1: Client Contact Information

Name	Title	Email	Phone
Rob Gireke	Director of Operations	rgierke@3riverscampus.com	(509) 737-3734

Table 2: Apollo Solutions Group Contact Information

Name	Title	Email	Phone
Mike Fuentes	Division Manager	mfuentes@apollosolutionsgroup.com	(509) 413-6227
Scott Lewis	Account Manager	scott.lewis@apollosolutionsgroup.com	(509) 821-0379
Mike Sill	Engineering Manager	Mike.sill@apollosolutionsgroup.com	(509) 821-0757
Gage Lane	Program Manager	gage.lane@apollosolutiongroup.com	(509) 405-0712
Galen Ribelia	Energy Engineer	galen.ribelia@apollosolutiongroup.com	(509) 405-5860
Michael Paul	Construction Manager	michael.paul@apollosolutionsgroup.com	(509) 405-4679
James Penman	Labor Superintendent	James.penman@apollosolutionsgroup.com	(509) 851-7022

Table 3: Department of Enterprise Services Contact Information

Name	Title	Email	Phone
Alysa Wiyrick	Energy Engineer	Alysa.Wiyrick@des.wa.gov	(509) 279-5024

SECTION 1: EXECUTIVE SUMMARY

This Investment Grade Audit (IGA) Report documents the findings and proposed improvements identified through an Investment Grade Audit performed by Apollo Solutions Group (ASG) as part of the Energy Savings Performance Contract (ESPC) process for the Toyota Center in Kennewick, Washington. The outcome of the Energy Services Proposal will be to implement the proposed Facility Improvement Measures (FIMs) which include:

- The list of FIMs include:
  - Install (3) new ground mounted Trane package RTUs with DX cooling and Natural Gas heating sections to replace the (3) 1988 McQuay H&V DX units. This will also include extending natural gas piping to the installation locations of the RTUs.
- Benefits of the above FIMs include:
  - Demand based ventilation for the arena space.
  - Standardization and improved reliability of heating & cooling system.
  - Improved efficiency from new equipment.

ASG has worked with Three Rivers Campus staff and administration with the review and approval from the State of Washington's Department of Enterprise Services (DES) ESPC Program to develop this proposal for implementing the project described above.

ASG proposes to guarantee the energy savings for the minimum term per the measurement and verification (M&V) guidelines of the DES Main Energy Services Agreement (MESA). Per MESA standards, the cost of M&V for the first year is included in the price of the project. M&V services can be contractually renewed after the first year at the request of the client to extend the guarantee term, however, the performance guarantee is only valid when services are provided by ASG via a qualified M&V contract. The scope and annual cost of M&V services is presented in Section 4 of this proposal.

Because two of the H&V units are not operational, the facility will see an increased utility consumption once the replacement equipment is brought online. The tables below reflects what we anticipate the utility consumption to be once all units are brought online.

Facility	Pre-Project Electric Usage	Pre-Project Annual Costs	Post-Project Electric Usage	Post-Project Electric Costs
Toyota Center	2,126,400 kWh	$156,290.40	2,429,977 kWh	$178,603.28

ACKNOWLEDGEMENTS

ASG would like to thank the Toyota Center for their cooperation in providing data, access, and assistance in the development of this Energy Services Proposal. ASG would like to thank the following individuals: Corey Pearson, Executive Director for the Toyota Center, Rob Gierke, Director of Operations for the Toyota Center, and Alysa Wiyrick, DES Project Manager.

SECTION 2: FACILITY DESCRIPTION

FACILITY DATA SUMMARY

FACILITY:	Toyota Center
SQUARE FOOTAGE:	73,758 sq. ft.
APPROXIMATE AGE:	36 years old

FACILITY USAGE AND OCCUPANCY:

The Toyota Center, owned by the City of Kennewick, WA, is a 7,700 seat, indoor arena facility. It offers sporting events, such as hockey, as well as music concerts, etc. The arena opened in 1988 as the Tri-Cities Coliseum, and later named the Three Rivers Colosseum. Name rights currently belong to Toyota, dubbing the building the Toyota Center.

Currently, the facility hosts minor league hockey teams from the area. It is also used for concerts, banquets, ice shows, circuses, and trade shows. The capacity for hockey is about 6,000 attendees. For concerts and other events, the maximum capacity is 7,700 attendees.

BUILDING ENVELOPE:

The walls are comprised of a mix of concrete and CMU block construction with architectural facades and sections of storefront glass. Interior walls are primarily gypsum wall board over steel studs with sections of concrete and CMU block. The majority of the roof is standing seam metal with 6" VRP insulation, the area of the building with a flat roof utilizes single-ply TPO with 3" of rigid insulation over 1 ½" of base insulation on the vapor barrier. Windows are double glazed with aluminum frames. Doors are primarily hollow metal and glass construction with steel or aluminum frames.

Electrical & Lighting Systems:

Interior lighting indoors largely consists of T-8 fixtures that are recessed into a T-bar grid or surface mount fixtures. The facility currently does not use occupancy sensors to control lighting circuits. The arena bowl uses high bay lighting in addition to spot and event lighting. Exterior lighting is a mix of metal halide lamps.

The primary electrical connection for the building is a 408V/3ph service, Benton PUD meter #251667.

HVAC SYSTEMS & CONTROLS:

HVAC Overview:

The arena is served by three (3) McQuay (Snyder General), 50-ton, packaged HVAC units, with DX cooling and HW heating coils original to the building's construction and one (1) Trane, 50-ton, packaged RTU, with DX cooling and natural gas heating installed in 2016. The McQuay units are located up high in mechanical rooms, positioned on 3 corners of the arena. Because of the location of these rooms, above the seating area, it is difficult to get equipment in and out of them for maintenance and repairs. In addition, space inside the

mechanical rooms is very limited, which makes disassembly of equipment difficult. The Trane RTU is ground mounted outside the building and ducted to the supply and return plenums, this gives greatly improved access to the equipment for repairs and maintenance.

Primary cooling for the McQuay (Snyder General) units is provided by DX refrigeration systems, integral to each air handler. However, due to their age, and the location of the systems underneath the air handlers, replacement of failed components is cost prohibitive. These refrigeration systems utilize a central condenser water system piped to each unit, with a central cooling tower for heat dissipation. Primary heating for the McQuay units is provided by a central HW boiler, pumps and distribution piping to each unit. The heating coils are located in each unit, just upstream of the DX cooling coils.

Primary cooling for the Trane unit is provided by DX refrigeration systems integral to the RTU utilizing scroll compressors and air-cooled condenser coils for heat dissipation. Primary heating for the Trane unit is provided by a natural gas heating section with 10:1 turndown integral to the unit.
Ventilation is provided at each air handler through a mixing box section, with connecting return air ductwork and outdoor air intake louver.

Controls on each McQuay (Snyder General) air handler are currently manually operated, temperature set points and ventilation damper positions are adjusted by hand whenever needed. Facility operational staff currently make adjustments in each of the 3 mechanical rooms daily, as needed to serve each different event or function. The McQuay air handlers operate at constant volume, with a single thermostat to stage the DX cooling and HW heating coils as needed for temperature control.

The Trane unit utilizes demand-control ventilation and has more sophisticated controls for adjusting ventilation air automatically based on measured conditions. The Trane unit operates at a constant volume, adjusting ventilation, heating, and cooling staging to meet demand of the space using a single thermostat and return air sensors.

Ventilation rates remain generally constant most of the time with no automated system in place to setback based on occupancy. Condition of the McQuay (Snyder General) H&V units limits the ability of the facility to reach code required ventilation rates.

TOYOTA CENTER AIR HANDLER SCHEDULE								
Equipment Tag	**Location**	**MAKE**	**Model**	**Serial**	**MFG. DATE**	**Cooling**	**Heating OUTPUT**	**Heating INPUT**
HV-1	Section J Mechanical Room	Snyder General	VSC050B	5TG03508 01	1988	50 TONS DX COIL		
RTU-1	Section S (outside)	TRANE	YCH600B4HM1A3MC6A	C15A00242	2016	50 TONS DX COIL	648,000 BTUH	800,000 BTUH
HV-3	Section W Mechanical Room	Snyder General	VSC050B	5TG03505 01	1988	50 TONS DX COIL		
HV-4	Section E Mechanical Room	Snyder General	VSC050B	5TG03507 01	1988	50 TONS DX COIL		

UTILITIES:

The total electric use for the Toyota center in 2022 was 2,126,400 kWh at a total cost of $156,331.27. Electricity is purchased from Benton County PUD at an average rate of $0.0735 per kWh. The total natural gas usage for the Toyota Center in 2022 was 42,690 Therms at a total cost of $51,289.87. Natural gas is purchased from Cascade Natural Gas Corp. at an average rate of $1.2014 per Therm. These rates are of primary interest as the energy savings will be in this billable range.

Energy Cost Index: **$2.81** per Square Foot/Year
Consumption Index: **156,244** BTUs per Square Foot/Year

End of Facility Data Section

SECTION 3: UTILITY DATA & ENERGY ANALYSIS

The guaranteed savings from the proposed FIMs are arrived at through a three-step process. The first step in the process is the analysis of utility billing information which establishes the amount and cost of utilities that are provided to the site. The second step in the process is the analysis of equipment information that establishes where the utility usage is allocated within the facility. It is the changes to this equipment, and its operation, which generate the savings. The third step in the process is integrating the measurement and verification (M&V) plan for each FIM into the IGA. These M&V plans and associated measurements, services, and operations form the basis of validating that savings have been achieved. This section of the Energy Services Proposal describes these three steps and how they come together to form the project guarantee.

UTILITY BASELINES AND RATES

Electricity Baseline and Rates

Facilities included in the Energy Services Proposal are listed in Table 3-1. Electricity is provided to these facilities by the Benton County PUD under the Large General 23 & 24 schedule, shown in Table 3-2. The Toyota Center consumed 2,126,400 kWh at a cost of $156,331.27 over the calendar year, 2022. Electricity is purchased at an average rate of $0.0735/kWh and a marginal rate of $0.0508/kWh from Benton County PUD. These rates are of primary interest to us as the energy saved will be in this billable range.

Table 3-1

	Facility	Address	Rate Schedule	Square Footage
1	Toyota Center	7000 W Grandridge Blvd	Large General: 23	73,758

Table 3-2

	Tier	$/kWh
Rate 23	Per kWh	$0.0471
	Daily System Charge	$2.01/Day
	First 50 kW of Demand Per Billing Period	No billing demand charge
	Excess Above 50 kW Demand Per Billing Period	$8.15/kW billing demand

The marginal rate per kWh to be applied to the kWh savings was calculated based on the tiered kWh consumption rate and charges. These rates include the applicable taxes and fees and are shown in Table 3-2. This marginal rate is used in the savings calculations. The annual gross average electricity rate at each facility is listed in the Table 3-3 below. These rates include applicable sales taxes and fees.

Table 3-3

	Facility	Blended Rate
1	Toyota Center	$0.0735/kWh

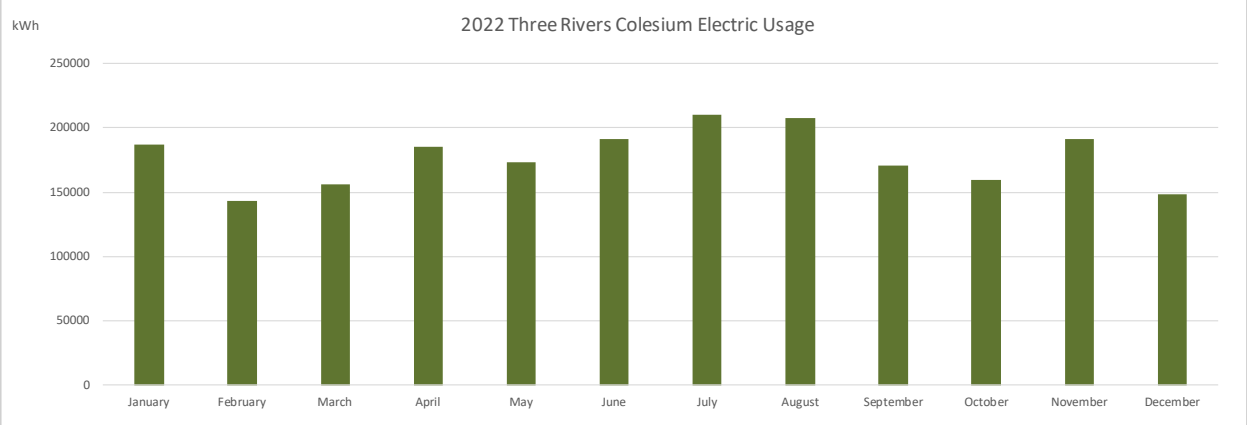
Table 3-4

Portfolio Manager Property ID	32883914
Property Name	Toyota Center
Portfolio Manager Parent Property ID	Not Applicable: Standalone Property
Parent Property Name	Not Applicable: Standalone Property
Year Ending	10/31/2023
City	Kennewick
State/Providence	Washington
Postal Code	99336
Property GFA - Calculated (Buildings)(ft^2)	73758
Site EUI (kBtu/ft^2)	136.3
Source EUI (kBtu/ft^2)	294.5
Weater Normalized Source EUI (kBtu/ft^2)	292.5
National Median Site EUI (kBtu/ft^2)	51.9
National Median Source EUI (kBtu/ft^2)	112.0
% Difference from National Median Source EUI	162.9
Energy Cost ($)	$ 193,772.48

Table 3-5

2022 Three Rivers Colesium Electric Usage					
Months	Beginning Read Day	Ending Read Day	# of Days in Billing Period	kWh	Total Cost
January	1/7/2022	2/8/2022	32	186800	$13,550.94
February	2/8/2022	3/8/2022	28	143200	$11,031.14
March	3/8/2022	4/8/2022	31	156400	$11,756.46
April	4/8/2022	5/8/2022	30	185600	$13,847.81
May	5/8/2022	6/7/2022	30	173600	$12,907.39
June	6/7/2022	7/8/2022	31	191200	$14,419.14
July	7/8/2022	8/8/2022	31	210400	$14,206.56
August	8/8/2022	9/8/2022	31	208000	$13,889.37
September	9/8/2022	10/8/2022	30	170800	$13,515.93
October	10/8/2022	11/8/2022	31	160000	$11,958.15
November	11/8/2022	12/8/2022	30	191600	$14,154.43
December	12/8/2022	1/8/2023	31	148800	$11,093.95
Total			**366**	**2,126,400**	**$156,331.27**

Table 3-6



The electrical usage pattern shown above is more complex than the gas profile shown below. There is an electrical peak shown during the heating season even with gas heating equipment serving the facility. This profile can be explained by the fact that electrical usage generated during events held in the facility are the greatest driver of consumption, rather than the weather alone. This is atypical of a weather driven usage pattern as is seen in most facilities.

Natural Gas Baseline and Rates

The Toyota Center consumed 42,690 therms of natural gas at a cost of $51,289.87 over the 2022 calendar year. Natural gas is purchased at an average rate of $1.2014 and a marginal rate of $1.1571 from Cascade Natural Gas Corporation under the scheduled rate 511 - Large Volume General Commercial Service. These rates are of primary interest to us as the energy saved will be in this billable range.

Table 3-7

	Facility	Blended Rate
1	Toyota Center	$1.2014/therm

Table 3-8

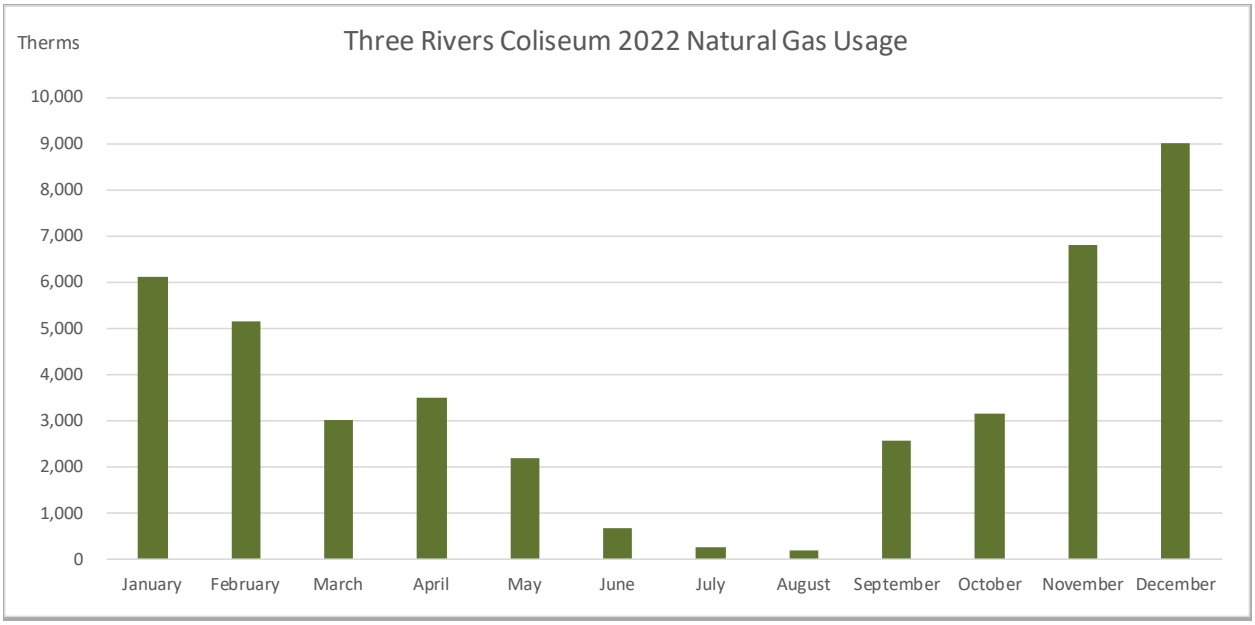
	Tier	$/therm
Rate 511	Basic Service Charge	$125.00/Month
	First 20,000 Therms	$1.06448
	Next 80,000 Therms	$1.02575
	Above 100,000 Therms	$0.92994

The marginal rate per therm to be applied to the therm savings was calculated based on the consumption rate and charges. These rates include the applicable taxes and fees and are shown in Table 3-8. This marginal rate is used in the savings calculations. The annual gross average natural gas usage rate at each facility is listed in the Table 3-9 below. These rates include applicable sales taxes and fees.

Table 3-9

2022 Three Rivers Colesium NG Usage					
Months	Beginning Read Day	Ending Read Day	# of Days in Billing Period	Therms	Total Cost
January	1/11/2022	2/8/2022	28	6,130	$6,880.90
February	2/8/2022	3/11/2022	31	5,158	$5,792.10
March	3/11/2022	4/11/2022	31	3,015	$3,322.32
April	4/11/2022	5/10/2022	29	3,505	$3,648.74
May	5/10/2022	6/10/2022	31	2,181	$2,275.81
June	6/10/2022	7/11/2022	31	689	$728.67
July	7/11/2022	8/11/2022	31	254	$277.62
August	8/11/2022	9/12/2022	32	182	$204.34
September	9/12/2022	10/11/2022	29	2,569	$2,742.83
October	10/11/2022	11/8/2022	28	3,162	$3,616.00
November	11/8/2022	12/9/2022	31	6,821	$9,386.73
December	12/9/2022	1/11/2023	33	9,024	$12,413.81
Total			**365**	**42,690**	**$51,289.87**

Table 3-10



The usage pattern shown above is as expected for this facility, with weather related usage estimated to be all that over the 20 Therm/day level. All usage below this minimum threshold is assumed to be related to cooking and domestic water heating.

SAVINGS ANALYSIS METHODOLOGY

The savings analysis methodology will be performed by various means. Depending on the scope of the work, some or all of the following methods will be used:

Commercial energy modeling software, such as TRACE 3D, eQuest, Carrier HAP

- Building heating and cooling load calculations
- Scheduling parameters
- Sequences of operations parameters
- Detailed mechanical equipment parameters
- Horsepower, static pressure, efficiencies, unloading curves, etc.
- Detailed modeling of ASHRAE occupancy and ventilation parameters, and space types (healthcare, office, etc.)

The advantage of commercial energy modeling software is the accuracy it allows and the many variables that can be input and modified, because of the hourly analysis capability.

Weather BIN analysis

- Used when full building scope is not required or only when modifying specific equipment, such as chillers and boilers or unitary equipment. Not used for complex systems.

- Quicker calculation of heating and cooling loads using ASHRAE database and allows quicker comparison of before and after cooling and heating energy usage
- Used for kitchen hood energy savings

The weather BIN analysis allows a quicker calculation of heating and cooling energy usage based on ASHRAE historical data. We use an in-house spreadsheet in conjunction with this analysis to calculate energy usage of a chiller and boiler, and any associated fans.

Where deficiencies are identified (either code or poor design), a baseline adjustment will be performed to correct the building energy usage so that it reflects code and/or proper design. The energy savings of any facility improvement measures performed will then be compared to that baseline building energy usage. Examples of this are healthcare facilities that don't currently meet ASHRAE Standard 170 requirements or underheated buildings that can't maintain typical temperature set points. If a correction is not performed, facility improvement measures can show an increase in building energy usage, which would be inaccurate.

When performing a full building energy simulation using commercial energy modeling software, simulated energy usage of the existing building is modeled to within five percent of actual historical utility bills.

Table 3-11

SAVINGS PARAMETERS			
FIM	**FIM DESCRIPTION**	**BASELINE PARAMETERS**	**SAVINGS PARAMETERS**
1	FIM-01: Air Handling Unit Retrofits	-Existing H&V units are out of commission and not operational	– Trend the run time of the outside air economizing systems – Trend the operating runtime of the new air handling units – Trend demand control ventilation

Because two of the H&V units are not operational, the facility will see an increased utility consumption once the replacement equipment is brought online. The tables below characterize the utilities corrected for the baseline modification, and the expected savings.

Table 3-12

BASELINE UTILITY CORRECTIONS				
FACILITY	**Consumption - Cost (kWh - $)**	**Consumption - Cost (Therms - $)**	**Baseline Corrected Consumption / Cost (kWh - $)**	**Baseline Corrected Consumption / Cost (Therms - $)**
Toyota Center	*2,126,400 kWh - $156,331.27*	*42,690 therms - $51,287.77*	*2,429,977 kWh – $178,603.28*	*42,690 therms – $51,287.77*

Table 3-13 below shows the savings that will be deducted from the baseline corrected consumption and cost shown in table 3-12.

Table 3-13

FIM	FIM DESCRIPTION	PERCENT GUARANTEE	ELECTRICITY SAVINGS (kWh/yr)	NATURAL GAS SAVINGS (THERMS/yr)	ENERGY COST SAVINGS
1	FIM-01: Air Handling Unit Retrofits	70%	186,362	0	$9,467.00

The energy savings are being guaranteed at 70% of the calculated savings because the scope of the IGA did not include full building energy modeling, rather a targeted energy model was created to analyze the specific equipment being replaced. The savings are not contingent on financing the project and this number is conservative.

1:

SECTION 4: FACILITY IMPROVEMENT MEASURES

The Toyota Center selected for development in this IGA, a number of FIMs that were presented by ASG as a result of a Preliminary Energy Assessment. These FIMs generate energy savings and improve the operation of the facility. This section of the Energy Services Proposal describes each FIM, and the scope of work that ASG will implement during construction to achieve the savings.

The scope of work for each FIM was developed after a site survey. While every effort has been made to identify failed equipment and problematic building operation during the site survey, there may be unforeseen conditions identified during design and construction that is not included in the scope of work for each FIM as defined in this section of the proposal. Some of this work could include, but is not limited to, repairing or replacing equipment peripheral to the project scope that is found to be malfunctioning or failing, repairing or replacing equipment that may have been damaged after the investment grade audit occurred, unforeseen conditions or system damage on un-inspectable items during the investment grade audit, etc. ASG may work with the owner to correct such deficiencies. However, any work that is not expressly stated in the scope of work for each FIM would need to be addressed with the customer contingency.

FIM-01: AIR HANDLING UNIT RETROFITS:

Existing Conditions:

The Toyota Center has three (3) McQuay heating and ventilation units that are original to the building's construction in 1988. These three McQuay heating and ventilation units have reached their useful service life and are becoming cost prohibitive to maintain. Two (2) of the air hadlers have mechaical failures preventing them from operating at full cooling capacity. The third unit is still operational, but does not run during hockey season because it disturbs ice conditions. The heating and ventilation units sit in individual mehcanical mezzanines above the stadium seating and access for maintenance and repairs is poor.

Proposed Modifications:

The three (3) McQuay heating and ventilation units are to be demolished, removed, and replaced with three (3) more efficient Trane package RTUs with DX cooling and natural gas heating sections. The cooling equipment being replaced has an EER of 8.0, the new equipment has an EER of 10.0. The RTUs are to be ground mounted outside the mezzanines and ducted their respective supply and return plenums to provide access for maintenance and repairs. This new equipment will be associated with a new building automation system front end accessible to the staff.

Benefits & Results:

- Visibility into the systems processes
- Energy savings from increase in efficiency
- Accessibility for maintenance and repairs
- Increased equipment reliability
- Improved occupant comfort

SECTION 5: MEASUREMENT & VERIFICATION

FIM-SPECIFIC M&V PLANS

Overview

The measurement and verification (M&V) methodology for this project is based on the guidance of the International Performance Measurement and Verification Protocol (IPMVP) and Federal Energy Management Protocol - M&V Guidelines: Measurement and Verification for Federal Energy Projects (FEMP); current and previous versions. Any deviations from the defined options of these protocols are indicated where applicable.

As defined in the IPMVP, the savings analysis methodology for this project corresponds to the "normalized savings" method of calculating energy savings. The Baseline Energy Consumption was calculated using the utility data that was made available and adjusted to "normal" conditions as described in Section 4 of the Energy Services Proposal, (Utility Savings and Verification). During the Guarantee Term, actions will be taken to measure and verify Energy Consumption as described in the M&V plan for each FIM. Per the IPMVP Normalized Savings method, the Energy Consumption during the Billing Period will be normalized to the same conditions as the Baseline Energy Consumption.

For each FIM, the Energy Consumption Savings will be calculated as the difference between the normalized Baseline Energy Consumption and the normalized Energy Consumption actually incurred in the Billing Period. Savings calculations, energy models, assumptions, algorithms, etc. and the value of savings will not be modified after execution of the Construction Contract except to include any measurements made by ASG as described in the FIM-specific measurement and verification plans set forth in this Energy Services Proposal.

To comply with the Master Energy Services Agreement for State of Washington Facilities, the Energy Consumption Savings will be multiplied by the applicable utility rate to arrive at the Energy Cost Savings for the Billing Period. The applicable utility rate during each Billing Period will be the utility rates published in Section 4 of the Energy Services Proposal (Utility Savings and Verification).
In the event that the Energy Cost Savings during the Billing Period exceed the Guaranteed Energy Cost Savings for that Billing Period, the surplus savings will be given to the client. If the Guaranteed Energy Cost Savings still exceed the Totalized Energy Cost Savings, ASG will reimburse the customer for the difference.

ASG guarantees that the sum total, for all FIMs included in the project, of Totalized Energy Cost Savings realized during each year of the Guarantee Term will equal or exceed the projected Energy Cost Savings set forth in this Energy Services Proposal – this sum total is the Guaranteed Energy Cost Savings.

In the unlikely event that there is a shortfall in energy savings, ASG will negotiate the equivalent dollar value of the shortfall in equivalent value of services by ASG to correct the deficiencies at the site/FIM that ASG believes is leading to or may eliminate the shortfall. Negotiation between ASG and the client may result in a reimbursement (payment) of the value of energy shortfall calculated based on the M&V term period and the unit energy cost rate agreed upon in this proposal or a combination of the payment and services.

FIM-01: AIR HANDLING UNIT RETROFITS

Overview Of M&V Plan:

The table 5-1 is used to show which protocol will be used for a specific FIM.

Table 5-1

M&V BASIS		DESCRIPTION
☐	IPMVP / OPTION A	RETROFIT ISOLATION: KEY PARAMETER MEASUREMENT
☑	IPMVP / OPTION B	RETROFIT ISOLATION: ALL PARAMETER MEASUREMENT
☐	IPMVP / OPTION C	WHOLE FACILITY (UTILITY BILL COMPARISON)
☐	IPMVP / OPTION D	CALIBRATED SIMULATION
☐	IPMVP / N/A	OPERATIONAL VERIFICATION
☐	N/A	STIPULATED SAVINGS

General Description Of M&V Process:

ASG will use the new DDC control system to trend the operation of the new scheduling parameters and the mixing dampers to verify the outdoor air economizer is operating as planned. Other non-measured variables used in the calculations will be fixed constants. This data will be used to calculate actual savings achieved from the installation. The savings results, based on measured data, will be the *Energy Consumption Savings*.

Baseline M&V Activities:

All baseline variables are per data obtained during the field survey and as provided by facility operations staff. The operational H&V unit runtime was logged using the start and stop of the supply fan motor to characterize the existing schedule.

Post-Installation M&V Activities:

ASG will verify new HVAC equipment efficiency rating from the manufacturer's data, verify DDC sequence of operation programmed for outdoor air economizer operation as planned, establish DDC system trending to show outdoor air temperature vs mixing damper position as a means to prove operation of outdoor air economizer, and calculate the verified savings as the difference between the baseline and post retrofit energy usage (these savings will be compared to the projected savings guaranteed and the results documented in a final report). ASG will perform an onsite walkthrough of the systems being installed towards the end of the M&V period to verify the operation of the equipment and collect the trend data from the BAS as well as ensure energy saving control strategies are still in place.

Calculation Methodology:

ASG will use the measurements taken as part of the M&V activities to calculate the actual savings, using the same excel spreadsheet method used previously. The difference between the re-calculated baseline and re-calculated post-retrofit energy consumption, using measured data, will become the *energy consumption savings* for the FIM during the Guarantee Term. Variables in the

savings calculations that are non-measured will be fixed constants throughout the Guarantee Term.

Performance Period M&V Report:

ASG will provide an M&V Report at the end of a one-year period. This report will detail the performance and operation of FIM-specific equipment at the facility. The findings of the M&V Report will be based on the methods outlined in the post-installation M&V activities section.

Deliverables:

ASG will provide M&V Reports over a one-year period at the facility to ensure the proper operation of the installed equipment.

ANNUAL M&V RENEWAL FEES:

ASG proposes to guarantee the energy cost savings resulting from this project for one year. The M&V services can be renewed after the end of year one at the request of the Client to extend the guarantee term. However, the performance guarantee is only valid when M&V services are provided by ASG. The annual cost of M&V services is presented in Table 5-3.

Table 5-2

ANNUAL M&V RENEWAL FEES	
PROJECT YEAR	**M&V RENEWAL FEE**
0	$0
1	$0
2	$1,812
3	$1,866

APPENDIX A: ENERGY CALCULATION OUTPUT