Agenda Summary Report (ASR)

Franklin County Board of Commissioners

DATE SUBMITTED: 6/9/2021	**PREPARED BY:** Keith Johnson
Meeting Date Requested: 6/15/2021	**PRESENTED BY:** Keith Johnson
ITEM: (Select One) **X☐** Consent Agenda	Brought Before the Board Time needed: 5 minutes
SUBJECT: Approval of HAPO Center Energy Audit agreement with the State Department of Enterprise Services	
FISCAL IMPACT: $85,197 (Will be paid from federal Recovery Act proceeds or contingency funds)	
BACKGROUND: The HAPO Center needs upgrades and replacement of a number of HVAC, energy and lighting systems in order to comply with Washington clean energy building standards and also to be able to attract the right kind of events at the facility. McKinstry is under contract with the State Department of Enterprise Services to conduct Investment Grade Audits (IGA) of these kind of systems. This agreement is between Franklin County and the Dept. of Enterprise Services to authorize moving forward with the IGA.	
RECOMMENDATION: **Approve Resolution and contract**	
COORDINATION: (All Supporting) Keith Johnson, Administrator Tom French, HAPO manager	
ATTACHMENTS: (Documents you are submitting to the Board) Resolution and contract	
HANDLING / ROUTING: (Once document is fully executed it will be imported into Document Manager. Please list name(s) of parties that will need a pdf) Administration Office, HAPO Center	

I certify the above information is accurate and complete.

_____ Keith Johnson, Administrator

FRANKLIN COUNTY RESOLUTION _____

BEFORE THE BOARD OF COUNTY COMMISSIONERS,
FRANKLIN COUNTY, WASHINGTON

Approval of Agreement with Washington Department of Enterprise Services to engage the services of McKinstry, Inc. to perform an Investment Grade Audit of energy, lighting and other environmental systems of the HAPO Center

WHEREAS, the HAPO Center is a significant economic engine for Franklin County and was built to host civic, social, recreational, business and other important events.

WHEREAS, since its construction, many of the systems in the HAPO Center have not been upgraded and are now in an "end of life" functional status and are in need of repair and replacement; and

WHEREAS, current systems do not adequately provide for the needs of the sponsors and promoters that would like to hold their events at the HAPO Center; and

WHEREAS, The Washington State Department of Enterprise Services is authorized by State Law to provide contracting services for Investment Grade energy audits of publicly owned buildings;

NOW THEREFORE BE IT RESOLVED that the Board of Commissioners hereby approves the Energy Services Authorization No. 2021-235 A (1) herein attached and authorizes the County Administrator to sign the Funding Agreement herein attached on behalf of Franklin County.

APPROVED this 15th day of June, 2021

BOARD OF COUNTY COMMISSIONERS
FRANKLIN COUNTY, WASHINGTON

_____
Chair

_____
Chair Pro Tem

_____
Member

Attest:

_____
Clerk to the Board

ENERGY SERVICES AUTHORIZATION NO. 2021-235 A (1)
Detailed Investment Grade Energy Audit & Energy Services Proposal Agreement
Franklin County
HAPO Center Renovations
May 27, 2021
MASTER ENERGY SERVICES AGREEMENT NO. 2019-179 H (8)

The Owner and the Energy Services Company (ESCO) named below do hereby enter into this Authorization under terms described in the following sections:

Authorization to Proceed
Compensation for Energy Services
Project Conditions

I. AUTHORIZATION TO PROCEED:

Energy Services Company:

McKinstry Essention, LLC
PO Box 24567
Seattle, WA 98124
Telephone No. (206) 762-3311
Fax No. (206) 658-1769
E-Mail wades@mckinstry.com

By _____
Name _____
Title _____
Date _____

Owner:

Franklin County
acting through the
Department of Enterprise Services
Energy Program
PO Box 41476
Olympia, WA 98504

By _____
Name Doug Kilpatrick, PE
Title Energy Program Manager
Date _____

State of Washington Contractor's License No. MCKINEL874CL
State of Washington Revenue Registration No. 603 259 907
MWBE Certification No. _____

II. COMPENSATION FOR ENERGY SERVICES:

Basic Services	**COMPENSATION**
Energy Audit and Energy Services Proposal	$ 85,197.00
Grand Total (plus WSST as applicable)	**$ 85,197.00**

III. PROJECT CONDITIONS:

The Project Conditions contained in the Master Energy Services Agreement will be used unless specifically changed herein. The cost effectiveness criteria for this project are per the McKinstry Essention, LLC proposal dated May 24, 2021.

IV. SCOPE OF WORK:

Per the ESCO proposal dated May 24, 2021 conduct a Detailed Investment Grade Energy Audit of Franklin County, HAPO Center, to identify cost effective energy conservation measures and present a written Energy Services Proposal, including all energy audit documentation. The ESCO shall prepare the final Energy Services Proposal, detailing the actual energy services and ESCO equipment to be provided, energy savings and cost guarantees, measurement and verification plans, and commissioning plans for the proposed measures. Measures will include items that save energy, water and other resources. The Cost Effectiveness Criteria for this project shall be as established in the Master Energy Services Agreement or as modified in Section III above.

V. SCHEDULE FOR COMPLETION

Final completion of the Energy Audit and Energy Services Proposal within 120 calendar days after Authorization to Proceed.

2021235Aagrko

STATE OF WASHINGTON
DEPARTMENT OF ENTERPRISE SERVICES
1500 Jefferson St. SE, Olympia, WA 98501
PO Box 41476, Olympia, WA 98504-1476

May 27, 2021

TO: Keith Johnson, Franklin County

FROM: Kim Obi, Contracts Specialist, (360) 407-8273

RE Agreement No. 2021-235 A (1)
Investment Grade Audit – HAPO Center Renovations

IAA No. K7034

McKinstry Essention, LLC

SUBJECT: Funding Approval

The Dept. of Enterprise Services (DES), Energy Program, requires funding approval for the above referenced contract documents. The amount required is as follows:

ESCO Audit	$ 85,197.00
Total Funding	**$ 85,197.00**

In accordance with the provisions of RCW 43.88, the signature affixed below certifies to the DES Energy Program that the above identified funds are appropriated, allotted or that funding will be obtained from other sources available to the using client/agency. The using/client agency bears the liability for any issues related to the funding for this project

By _____ _____
Name / Title **Date**

Please sign and return this form to E&AS. If you have any questions, please call me.

2021235Aagrfundingko

McKinstry
For The Life Of Your Building
850 E Spokane Falls Blvd #100 • SPOKANE, WA 99202 • 509.747.3389 • mckinstry.com

May 24th, 2021

Tom French
General Manager
Franklin County HAPO Center
6600 Burden Blvd.
Pasco, WA 99301

Alysa Wiyrick
Project Manager
Department of Enterprise Services (DES)
P.O. Box 41476
Olympia, WA 98504-1476

Subject: Investment Grade Audit (IGA) Proposal | Franklin County HAPO Center Renovations

Dear Tom French;

McKinstry Essention, LLC (McKinstry) is pleased to propose an energy conservation project for Franklin County in response to the recent discussions between McKinstry and the Department of Enterprise Services (DES)/Franklin County. Based on those discussions, we understand Franklin County is interested in improving the energy efficiency of HAPO Center through the Energy Savings Performance-based Contracting (ESPC) Method.

PROJECT DESCRIPTION

This proposal will provide the guidelines for which McKinstry will provide the following tasks:

1. Complete an Investment Grade Audit (IGA) study analysis associated with the following building:
    a. HAPO Center (FCH) – 660 Burden Blvd. Pasco, WA 99301
2. Develop a comprehensive Energy Services Proposal (ESP) for the identified systems and issues below. Initial scoping concepts below will be vetted during the Investment Grade Audit (IGA):
    a. HAPO Center HAPO Center :
        i. **Arena:**
            1. **HVAC Upgrades:** Develop an HVAC solution and options for a like-for-like upgrade, Natural Gas and Dx Cooling Upgrade, and an all-electric system upgrade. Include a new controls system for this space, to be integrated into the rest of the facility.
            2. **Envelope Upgrades:** Develop a solution to bring the Arena envelope up to current energy code standards as well as optimizing the space for better utilization for both the occupants as well as overall energy usage.
        ii. **Atrium:**
            1. **HVAC Upgrades:** Develop an HVAC solution and options for a like-for-like upgrade, Natural Gas and Dx Cooling Upgrade, and an all-electric system upgrade. Include a new controls system for this space, to be integrated into the rest of the facility.
            2. **Envelope Upgrades:** Develop a solution to replace the exterior glass as needed, and to seal the space from unwanted outside air infiltration.

3. **Plumbing Upgrades:** Replace all plumbing fixtures/valves as needed to allow for more efficient operation of the facility. Install a new dividing wall and ADA water closet in both the Men's and Women's restrooms between the Atrium and Arena spaces to allow for better utilization of the space for both the occupants and overall energy usage.

iii. **EXPO Center:**

1. **HVAC Upgrades:** Develop an HVAC solution and options for a like-for-like upgrade, Natural Gas and Dx Cooling Upgrade, and an all-electric system upgrade. Include a new controls system for this space, to be integrated into the rest of the facility.

2. **Envelope Upgrades:** Develop a solution to replace the exterior overhead doors, and to seal the space from unwanted outside air infiltration. Insulation may be added if it is determined to be necessary to meet the current Commercial Clean Building Performance Standard Energy Usage Intensity (EUI) requirement.

iv. **HAPO Center – Facility Wide:**

1. **Envelope Upgrades:** Develop a solution to mitigate the snow and ice shed risk at the facility. Repair all damaged areas and install new snow breaks around equipment that can withstand the existing load shed.

2. **Lighting and Generation Upgrades:** Develop a solution to replace or retrofit existing lighting fixtures and controls within the facility to optimize aesthetics, controllability, reliability, and energy efficiency in the facility. Replace all exterior lighting fixtures including parking lot lighting, and the exterior lighting on the Ice Arena with new high efficiency fixtures with updated controls to optimize performance and energy savings. Develop a solution to offer either emergency or standby generation to the facility to keep critical operations on-line, as well as provide resiliency to the facility in the event of a natural disaster or emergency scenario.

3. **PV Solar Upgrade:** Develop a PV Solar solution to reduce the overall building consumption to ensure that the building will meet or exceed the Commercial Clean Building Performance Standard Energy Usage Intensity target (EUI).

v. **Utility Data Analysis (UDA)**: Collect and analyze historic utility data to determine how the overall operation of the facility is performing against Energy Star and ASHRAE 100-2018 benchmarks.

vi. Provide an **Energy Services Proposal (ESP)** that will include a **project schedule**, **scope** and **Guaranteed Maximum Pricing and Energy Savings (GMAX Pricing and Savings)** for implementation in 2022.

The investment grade effort is intended to lead to the implementation of energy improvement measures. The audit will provide all details necessary for implementation of viable initiatives including associated savings, costs, potential utility funding, and return on investment scenarios, as well as a construction schedule.

The Energy Services Proposal (ESP)/Investment Grade Audit (IGA) will be a product of the direction McKinstry receives and it is anticipated that the information contained in the Investment Grade Audit (IGA) and resulting Energy Services Proposal (ESP) will form the basis of a proposal and contracting documents. The specific deliverables associated with this professional services endeavor can be found in Attachment A.

MEASUREMENT AND VERIFCATION OF ENERGY SAVINGS AND PERFORMANCE

McKinstry will verify the guaranteed energy savings for this project using a mix of the Department of Energy defined Measurement and Verification (M&V) options:

Option A. **Retrofit Isolation with Key Parameter Measurement**

Option A is used when all savings for a measure can be verified by a single Key Point Indicator (KPI). The KPI should be measured prior to the retrofit and periodically throughout the performance period. Energy savings can be determined per Facility Improvement Measure (FIM).

Example I. A non-condensing boiler is replaced with a high efficiency boiler. A flue gas analysis can be performed on both the old and new boilers to verify improved efficiency and a reduction in natural gas. No other measurements need to be verified.

Option B. **Retrofit Isolation with All Parameter Measurement**

Option B requires periodic measurement of all Key Point Indicators (KPIs) effecting energy use of the system but is otherwise identical to Option A. All Key Point Indicators (KPIs) should be measured prior to the retrofit and periodically throughout the performance period. Energy savings can be determined per Facility Improvement Measures (FIMs).

Example II. A large lighting retrofit switching out T8 fluorescent lighting to LED fixtures with daylighting controls. In this FIM, several Key Point Indicators (KPIs) are measured: lighting runtime, fixture electric demand, and light level. Interactive effects with building HVAC can be calculated based on the measured Key Point Indicators (KPIs) and known existing HVAC equipment as it remains unchanged.

Option C. **Whole-Facility Measurement**

Option C is used when a retrofitted system cannot be isolated or when most of the buildings systems are updated. Combined savings for all Facility Improvement Measures (FIMs) are verified by recording building energy use at the building's utility meter. All building systems energy use is included in the measurement regardless of whether they were retrofitted or not. Energy savings can only be verified as a whole project rather than by Facility Improvement Measure (FIM).

Example III. A whole building renovation including HVAC equipment upgrades, lighting upgrades, envelope upgrades, and system controls upgrades. Rather than measuring dozens of Key Point Indicators (KPIs) as what would be required in Option B, Option C would allow for a single monthly trend of the utility meters serving the building. Post-retrofit energy use can then be compared to the previous year's bills.

Option D. **Calibrated Computer Simulation**

Option D is a time-intensive study of a building's energy use through a calibrated computer simulation. Computer simulations should only be used when multiple complex Facility Improvement Measures (FIMs) are implemented with several interacting effects and when savings is sufficient to justify the cost of the simulation. Savings is determined first by modeling the building prior to the retrofit using data collected in a whole building audit and calibrated to known energy use. The calibrated model can then be updated to post-retrofit conditions using inputs based on several measured and monitored Key Point Indicators (KPIs). The post-retrofit model is then compared to the pre-retrofit model.

Example IV. A new construction is using high efficiency equipment and controls rather than standard equipment. Since no baseline measurements can occur, a whole building energy model can be used to simulate the standard equipment scenario.

The Measurement and Verification (M&V) approach to verify a project's ability to perform can vary from project to project or even measure to measure. A Measurement and Verification (M&V) plan should scale to the value of the project. McKinstry utilizes the most accurate and cost-effective option for the installation. During the Investment Grade Audit (IGA) the method selected to ensure accurate verification of energy savings is subject to change as the scope of the project develops to a guaranteed level. McKinstry will ensure that the client and Department of Enterprise Services (DES) are made aware of the M&V processes that will be used for the Measurement and Verification (M&V) of the final project.

TIMELINE AND MILESTONES

McKinstry will initiate this scope of work upon receipt of written direction from Franklin County HAPO Center. Formal progress review meetings will be conducted regularly throughout the study phase. During these review meetings, McKinstry will recommend measures based on preliminary analysis. The goal of these review meetings is to focus engineering efforts, budgeting, and savings assessment on those measures that possess a high probability for implementation. During this time, McKinstry will provide a detailed Measurement and Verification (M&V) plan for the energy savings.

McKinstry will target completion of the Investment Grade Audit (IGA) within 120 days upon a signed contract from Department of Enterprise Services (DES)/Franklin County HAPO Center.

REQUESTED INFORMATION

For effective execution of this proposal we ask that Franklin County provide access to the following:

1. Historical utility bills for the last 24 to 36 months.
2. All mechanical, electrical, architectural, and structural drawings.
3. All operational and maintenance manuals, balancing records, & specifications.
4. Operational records related to the cost of maintaining specific equipment.
5. Information with regards to any on-going maintenance contracts.
6. Access to individuals that have relevant information pertaining to the day-to-day operation of energy using systems on site.
7. Prior energy studies for related systems, if applicable.
8. Any available hazardous material survey reports (i.e. Good Faith Survey).

COST EFFECTIVENESS CRITERIA

It is Franklin County HAPO Center's intent that McKinstry will implement all approved projects that meet the project cost effectiveness criteria:

- McKinstry will focus on an aggregate simple payback to be equal to or less than the useful life of the equipment, less any utility incentives. Savings will include any utility and may include hard-cost operational savings (no labor) pending Franklin County approval. While this is our focus, it is understood that Franklin County has directed McKinstry to investigate measures that may have a simple payback beyond the useful life of the equipment/systems.
- McKinstry will focus on items that will allow the HAPO Center to meet or exceed the Commercial Clean Building Performance Standard (WAC 194-50, formally HB-1257 or CETA) target Energy Usage Intensity (EUI). McKinstry will review the Facility Improvement Measures (FIMs) at a Rough order of Magnitude (ROM) level to determine what will be necessary to implement in order to meet or exceed the target Energy Usage Intensity (EUI), at which point the County and Department of Enterprise Services (DES) will determine which Facility Improvement Measures (FIMs) to move forward into GMAX. Any Facility Improvement Measures (FIMs) that do not move forward into GMAX will be added to the Facility Improvement Measures (FIMs) considered section of the Energy Services Proposal (ESP) for consideration at a later date.
- Franklin County may infuse capital either from planned capital project budgets, cash reserves, financing, grants, or other sources to assist with implementation of Facility Improvement Measures (FIMs).
- If the client decides to add scope based on the Rough Order of Magnitude (ROM) review, the Cost Effectiveness Criteria along with the GMAX portion of the Investment Grade Audit (IGA) will be amended to reflect the changes in scope.

HAPO Center Investment Grade Audit (IGA) Proposal

PROPOSED COSTS

All fees assessed in the Investment Grade Audit (IGA) proposal will be included in the final implementation costs. In the event McKinstry is unable to recommend projects that meet the criteria above, Franklin County HAPO Center has no financial obligation to McKinstry. However, if the recommendations meet or exceed the "Criteria" (List above), and Franklin County chooses not to enter into an agreement with McKinstry to implement the projects, Franklin County will Reimburse McKinstry for its time and expenses not to exceed the following:

SCOPE	DESCRIPTION	COST
Investment Grade Audit (IGA)	Identify Facility Improvement Measures (FIMs) that will allow the facility to meet or exceed the WAC 194-50 EUI Target and provide Rough Order of Magnitude (ROM) Pricing and Energy Savings.	$37,594
	Finalize GMAX design, pricing, and energy savings for Facility Improvement Measures (FIMs) selected at the Rough Order of Magnitude (ROM) review.[1]	$47,603[2]

TOTAL: $85,197

All associated information, including deliverables, will become the property of Franklin County HAPO Center upon final receipt of payment. We appreciate the opportunity to continue serving Franklin County HAPO Center as your energy partner. Please let us know if we can answer any questions or provide you with additional information.

Casey McGourin, PE
Sr. Program Manager
McKinstry

cc: Lance Funke – McKinstry; Scott McGann – McKinstry; Alysa Wiyrick – DES

[1] If the client decides to not move forward with FIMs that will meet the Cost Effectiveness Criteria (CEC), the CEC will be amended to reflect the project parameters set by the client at that time.
[2] This is not to exceed value based on the current identified scope of work. If the client decides to include additional scope or options after the ROM review, the not to exceed quote for GMAX design, cost and energy savings will be subject to change based on the potential added scope.

ATTACHMENT A: INVESTMENT GRADE AUDIT DELIVERABLES

The Investment Grade Audit for Franklin County HAPO Center will include the following elements:

1. A description of the systems which shall receive ESCO Equipment and ESCO Services;
2. The cost-effective Facility Improvement Measures (FIMs) to be installed or caused to be installed by the ESCO and a description of the FIMs analyzed but disqualified;
3. A description of the services that the ESCO will perform or cause to be performed on or in the infrastructure, including but not limited to engineering, construction management, the operations and maintenance procedures for use on ESCO Equipment, training for personnel, warranty service provided, and equipment maintenance provided;
4. The Maximum Allowable Project Cost, itemized in detail, which may be amended to represent actual costs;
5. Recommendations for replacement of existing equipment, along with recommendations for improvements to existing equipment and operating conditions;
6. The service standards appropriate for the infrastructure;
7. The baseline energy consumption, including the data, methodology and variables used to compute the baseline, and the baseline calendar period which shall not be less than twelve (12) months;
8. The estimated energy savings and energy cost savings that are expected to result from the installation of the ESCO Equipment and from the ESCO Service, and an explanation of the method used to make the estimate;
9. The method by which Energy Savings and Energy Cost Savings will be calculated during the term of the Energy Services Agreement;
10. A Description of how ESCO will finance its acquisition of ESCO Equipment and when title to ESCO Equipment will pass to the Owner;
11. A description of how project financing (if required) will be completed;
12. A description of how the Energy Savings will be guaranteed by the ESCO;
13. A description of how the ESCO proposes to be compensated;
14. The term of the Energy Services Authorization;
15. The Termination Value for each year during the term of the Energy Services Authorization;
16. The schedule for project completion;
17. The nature and extent of the work and equipment that the ESCO anticipates it will receive from other firms under subcontract;
18. Detailed Measurement and Verification (M&V) Plan;
19. A list of applicable building, mechanical, energy or other pertinent state and local codes that may impact the project costs.

Preliminary FIM List

Project:	Franklin County HAPO Center
Scenario:	Preliminary FIM List
Date:	6/20/2021

ided by Tom French: **Bold FIMs**

Energy code required FIMs if cooling is added to the arena:

FIM NAME	FACILITY	FIM Description	Usability Driven	Energy Driven	Operational Cost Driven	Needs Based Driven	Relative Cost	Relative Savings	Anticipated MSV Option *
FIM 03.01-ARN | HVAC Upgrades Option A: Like-for-Like	Arena (ARN)	Replace existing heating units with new high efficiency units. Automate exhaust fans and dampers for economizer cooling.		✓	✓	✓	$$$	$$	B
FIM 03.01-ARN | HVAC Upgrades Option B: NG Heat & DX Cooling AHU's		Install new AHU's connected to duct socks for heating and cooling. Install a new Energy Recovery Ventilator (ERV) for outside air. Install new dense curtain partitions in the arena to divide the space for events.	✓	✓	✓	✓	$$$$	$	B
FIM 03.01-ARN | HVAC Upgrades Option C: New VRF (Air-Cooled)		Install new AHU's with VRF Coils connected to duct sock for heating and cooling. Install a new ERV system for outside air. Install new dense curtain partitions in the arena to divide the space for events.	✓	✓	✓	✓	$$$$	$$	B
FIM 03.01-ARN | HVAC Upgrades Option D: New VRF (Water-Cooled)		Install new AHU's with VRF Coils connected to duct sock for heating and cooling. Install a new ERV system for outside air. Install a new NG boiler and cooling tower to heat and cool the condenser loop. Install new dense curtain partitions in the arena to divide the space for events.	✓	✓	✓	✓	$$$$	$$$	B
FIM 13.01-ARN | Overhead Door Upgrades		Replace main East overhead door and NW overhead door with new doors that meet current energy code. In-fill remaining doors to meet current energy code.		✓	✓		$	$	A
FIM 13.02-ARN | Envelope Sealing		In-fill existing exhaust fans and damper to meet current energy code standards.	✓	✓		✓	$	$$	A
FIM 13.03-ARN | Envelope Insulation Upgrade Option A: Interior		Fur out interior walls and ceiling to meet current energy code insulation requirements; remove and replace existing bleachers as necessary.	✓	✓	✓	✓	$$$$	$$$	A
FIM 13.03-ARN | Envelope Insulation Upgrade Option B: Exterior		Replace exterior metal with new insulated metal panels to meet current energy code requirements; remove and replace existing bleachers as necessary.	✓	✓		✓	$$$$	$$$	A

Preliminary FIM List

Project	Franklin County HAPO Center
Scenario	Preliminary FIM List
Date	5/20/2021

ided by Tom French: **Bold FIMs**

Energy code required FIMs if cooling is added to the arena:

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For The Life Of Your Building

FIM NAME	FACILITY	FIM Description	Usability Driven	Energy Driven	Operational Cost Driven	Needs Based Driven	Relative Cost	Relative Savings	Anticipated M&V Option *
FIM 03.01-ATR | HVAC Upgrades Option A: Like-for-Like	Atrium (ATR)	Replace existing all HVAC equipment with new, higher efficiency units.		✓	✓	✓	$$$	$$	B
FIM 03.01-ATR | HVAC Upgrades Option B: Variable Refrigeration Flow System		Replace existing HVAC equipment with a new VRF system and ERV units to ventilate the space.	✓		✓	✓	$$$$	$$	B
FIM 13.01-ATR | Envelope Upgrades		Replace existing single pane exterior doors and glass with new double pane insulated doors and glass to meet current energy code.		✓			$	$	B
FIM 18.01-ATR | Plumbing Upgrades		Replace all restroom plumbing fixture valves with new automatic, high efficiency valves. Install new ADA stall, divider wall and partitions to better utilize the restroom space.	✓	✓	✓	✓	$	$	A
FIM 03.01-EXP | HVAC Upgrades Option A: Like-for-Like	Expo (EXP)	Replace existing all HVAC equipment with new, higher efficiency units.		✓	✓	✓	$$$	$$	B
FIM 03.01-EXP | HVAC Upgrades Option B: Variable Refrigeration Flow System		Replace existing HVAC equipment with a new VRF system and ERV units to ventilate the space.	✓		✓	✓	$$$	$$	B
FIM 13.01-EXP | Envelope Upgrades		Replace existing overhead doors with new insulated overhead doors that meet current energy code standards. Install new insulation as needed to meet HB-1257 requirements.		✓			$	$	B
FIM 13.01-HPO | Roofing Repair	HAPO Center (HPO)	Replace and repair damaged roof and gutters. Re-seal all roof penetrations and install new, more robust systems for dealing with snow and ice shed.	✓		✓	✓	$$$	$	B
FIM 09.01-HPO | Interior Lighting Upgrades		Replace and retrofit all interior light fixtures with new LED fixtures. Install new lighting controls to allow for partial utilization of the EXPO and Arena facilities. Install new standby generation to support the HAPO Center in the event of an emergency outage situation where the facility can be used for emergency services.	✓	✓	✓	✓	$$	$$$	B
FIM 09.02-HPO | Exterior Lighting Upgrades		Replace and retrofit all exterior light fixtures with new LED fixtures. Install new lighting controls to optimize performance. Areas to include Arena, Expo, Atrium, Ice Arena, and all exterior parking.	✓	✓	✓	✓	$$	$$$	B
FIM 10.01-HPO | PV Solar Upgrade		Install a new pv solar array on each available meter to reduce the overall utility charge to the facilities. Implement a demand shedding scheme to minimize electrical demand charges.		✓			$$$	$$$$$	C

* Anticipated M&V Options are subject to chance based on IGA findings. McKinstry will provide a detailed M&V plan as a part of the Energy Services Proposal that details the means and methods by which we will verify energy savings and performance.

CBA Risk Assessment

Project	Franklin County HAPO Center
Scenario	Preliminary FIM List
Date	5/21/2021

Estimated SQFT:
133,756

Date	Base Penalty	Additive Penalty	Annual Penalty	Combined Penalty	Potential Incentive
June 1, 2021	$0	$0	$0	$0	$113,693
June 1, 2022	$0	$0	$0	$0	
June 1, 2023	$0	$0	$0	$0	
June 1, 2024	$0	$0	$0	$0	
June 1, 2025	$0	$0	$0	$0	
June 1, 2026	$0	$0	$0	$0	
June 1, 2027	$5,000	$0	$5,000	$5,000	$0
June 1, 2028	$5,000	$133,756	$138,756	$143,756	
June 1, 2029	$5,000	$133,756	$138,756	$282,512	
June 1, 2030	$5,000	$133,756	$138,756	$421,268	

IGA COST ESTIMATE - Attachment C

Job Name	Franklin County HAPO Center - ROM	Program Manager	Lance Funke
Location	Pasco, WA	Account Manager	Scott McGann
Job #	204288-001	Date	5/20/21

Line Item	ITEM	Development Manager	Program Manager	Energy Engineer	Lighting Engineer	Design Engineer	Design Manager	Proj Mgr/ Constr. Mgr	Account Executive	Estimator	Administrative Support	Commissioning Engineer	Architect	Structural Engineer	Electrical Engineer	Totals
1	Preliminary/ ROM Phase															
2	Facility Walkthrough															0
3	FIM Matrix Development/Scope Definition															0
4	Deploy Loggers															0
5	ROM Energy Savings (Based on Number of FIMs)															0
6	ROM Construction Cost Estimate															0
7	Client Meetings/Presentations (2) Kickoff/ROM Pres															0
8	Travel Time															0
9	Prefinal Phase															
10	PA Plan and client / state review										2					2
11	Site Surveying / data gathering (Pre-Retrofit Measurments)		8	8	16	8						8	4			44
12	Detailed Lighting Audit		4	2	14											20
13	Analyzing Audit Data	2	8	16	6	8							4			40
14	Guaranteed Energy and Operational Calculations		4	18	4											26
15	Design Engineering	2	2	2	20	24							4			50
16	Cost estimating		16		12	4		4	2				6			38
17	Additional Site Walkthrough															0
18	Utility rebate coordination			2					2							4
19	Packaging Scenarios/Deliverables		8	4		4			4							20
20	Pre-Final Risk Review															0
21	Final Risk Review															0
22																
23	DES Presentation															0
24	ESP Development															0
25	Final Scoping															0
																0
																0
																0
																0
																0
																0
	SUBTOTAL [HRs]	4	50	52	72	48	0	4	8	0	2	8	18		0	264
													All Outside Consultants	$ 600.00	$ 2,000.00	$2,600
															Total IGA Sell:	$37,594

IGA COST ESTIMATE - Attachment C

Job Name	Franklin County HAPO Center - GMAX	Program Manager	Lance Funke
Location	Pasco, WA	Account Manager	Scott McGann
Job #	204288-001	Date	5/20/21

Line Item	ITEM	Development Manager	Program Manager	Energy Engineer	Lighting Engineer	Design Engineer	Design Manager	Proj Mgr/ Constr. Mgr	Account Executive	Estimator	Administrative Support	Commissioning Engineer	Architect	Structural Engineer	Electrical Engineer	Totals
1	Preliminary ROM Phase															
2	Facility Walkthrough															0
3	FIM Matrix Development/Scope Definition															0
4	Deploy Loggers															0
5	ROM Energy Savings (Based on Number of FIMs)															0
6	ROM Construction Cost Estimate															0
7	Client Meetings/Presentations (2) Kickoff/ROM Pres															0
8	Travel Time															0
9	Prefinal Phase															
10	PA Plan and client / state review												4			0
11	Site Surveying / data gathering (Pre-Retrofit Measurments)															0
12	Detailed Lighting Audit	2											8			2
13	Analyzing Audit Data			14												14
14	Guaranteed Energy and Operational Calculations		2	2		16	4						12			24
15	Design Engineering		16			4		8	6				2			34
16	Cost estimating		24			8		8				8				48
17	Additional Site Walkthrough			2					2							4
18	Utility rebate coordination		12	16		12		8	4				8			52
19	Packaging Scenarios/Deliverables	2	4	4		4	1	4								19
20	Pre-Final Risk Review	2	4	4		4		4	2			2				22
21	Final Risk Review															
22																
23	DES Presentation		4						8							12
24	ESP Development		8	8					4							20
25	Final Scoping		8			4										12
																0
																0
																0
																0
																0
																0
																0
	SUBTOTAL (Hrs)	6	82	55	0	52	5	32	26	0	0	10	34		0	297
													All Outside Consultants	$ 600.00	$ 6,500.00	$7,100
															Total IGA Sell:	$47,603