COUNTY DEPARTMENT AGENDA REQUEST

Department:	Sheriff-Jail	Presenter(s):	Major Charles Cowart
Meeting Date:	Wednesday, April 4, 2012	Type of Request:	Old Business

Wording for the Agenda:

Discussion of information and detailed cost analyses for repair/modification work to bring the old Jail building back into operation.

Background/History/Details:

Due to recent/current inmate populations in the new (current) Jail facility, imminent repair work (mold eradication) to the new (current) Jail facility & the need to evacuate one or more cell blocks of the new (current) Jail facility in the event of an emergency, disaster, etc., the old Jail (building C) must receive repairs to bring it up into operations. The old Jail would be used to house maximum security inmates, when the design capacity of the current jail facility is surpassed (overcrowding), when certain cellblocks by classification exceed design capacity or when the need arises to close off a section(s) of the current jail.

A detailed professional analyses to repair the old Jail, under the project management of Mallett Consulting, Inc.(see attachments), was performed with costs for repairs ranging from $855,500.00 to $1,250,000.00.

Once in operation, additional costs involved would be ten (10) additional jail officers, five (5) of which would be supervisory positions, one (1) additional maintenance person, uniforms for staff, utilities, inmate supplies (bedding, linens, etc.), office equipment for the control tower (phone, computer, etc.) & normal maintenance/upkeep costs.

What action are you seeking from the Board of Commissioners?

The information is provided so that the Board of Commissioners can study it to determine whether or not to proceed with repairs to the old jail building. Other options would be to add additional units to the current (new) jail facility as needed and/or house inmates at other facilities at additional costs.

If this item requires funding, please describe:

$855,500.00 to $1,250,000.00 for repairs/modifications.

Has this issue come before the Commissioners in the past?	Yes	If so, when?	Thursday, December 9, 2010
Do you need audio-visual for the presentation?	No	Back-up Material Submitted?	Yes

STAFF USE ONLY

Approved by Finance	Yes	Reviewed by Legal	Yes
Approved by Purchasing	Not Applicable	Approved by County Clerk	Yes
Administrator's Approval	Yes		

Staff Notes:

FAYETTE COUNTY JAIL
STUDY FOR REFURBISHING OF OLD POD C

September 22, 2011

RECOMMENDATIONS

The Fayette County Jail built in 1985 had three sections designated Pods A, B, and C. Pods A and B were offices and jail support functions; Pod C was "inmate housing"

When the new jail was built in 2002, the new inmate housing was connected back to the old Pod C with an enclosed corridor. The plan was to include the Pod C housing in the overall operation of the new jail when inmate population requires. Pods A and B were renovated for Sheriff offices following occupancy of the new jail.

Inmate population has now grown to the point that the old Pod C beds are needed. Pod C building is now 25 years old and has been unused for nearly 10 years. The purpose of this paper is to evaluate and report on existing conditions of the building and its systems, then recommend and develop budgets for the work that is needed to bring the facility up to code and safe operational conditions.

Generally the exterior of the building is in good condition having had some upgrades with the renovation of Pods A and B. Minor work required on the exterior is mentioned in the individual work items. Also electronics and controls were extended to Pod C with the new jail construction.

A design team of architects and engineers who inspected the building in some detail in the last two months prepared the following listing of existing conditions and recommendations.

GENERAL CONSTRUCTION

1. Inmate Showers
   - A. Existing Conditions
     1. Due to age and deterioration of finishes, the showers are in poor condition and are in violation of Health Department Regulations. Steel structural columns and window frames are badly rusted and the finish on the concrete and the masonry are badly deteriorated. Mildew growth is rampant and cannot be controlled with present conditions.
   - B. Recommendations
     1. Remediation is necessary due to code issues.
     2. Install new concrete masonry back wall and 14 gauge steel exterior cover at window. Refinish walls and floors with Prime Coat.
     3. Fixtures as described in Plumbing Section below.

2. Glazing (Glass)
   - A. Existing Conditions
     1. Interior Lexan glazing is scratched and disfigured. Glazing at Control Tower is mismatched due to replacement lites due to previous breakage. Mirror film is extensively damaged. Glazing generally is very unsightly.
   - B. Recommendations
     1. As a minimum operational requirement, the mirror film must be replaced. This will return the facility to operational status, but the film will be subject to deterioration as happened with this current glazing plus the scratched and mismatched glazing remains.
     2. A more permanent fix will be to replace all glazing, including an integral (protected) mirror film.

3. Exercise Yard Overhead
   A. Existing Conditions
      1. The steel beams supporting the overhead security screen are badly rusted. The rusting must be controlled or continued rusting will ultimately lead to structural failure.
   B. Recommendations
      1. Remediation is necessary for responsible operation.
      2. Remove security screens, clean steel by sandblasting to sound steel and refinish with good quality paint system. Replace security screens.

4. Inmate Bunks
   A. Existing Conditions
      1. Bed pans of upper bunks in inmate cells have ventilation holes that are potential anchor places for hanging suicides.
   B. Recommendations
      1. For operation safety (and protection from law suits) the holes must be filled.
      2. Fill holes will filler plate, weld, and paint.

5. Towel / Clothes Hooks
   A. Existing Conditions
      1. Each inmate cell has three collapsible hooks and showers have one each. These hooks are corroded due to age and present an additional suicide hazard.
   B. Recommendations
      1. Replacement is required for operational safety.
      2. Replace hooks with new hardware.

6. Security Door Locks and Operators
   A. Existing Conditions
      1. There are 106 security doors in Pod C; 27 of these doors have reported problems with the door or hardware. While the doors and hardware are now over 25 years old and have been unused for several years, they are rugged and of good quality.
   B. Recommendations
      1. As key to security and operational control, all doors and hardware must be operational.
      2. Due to age, the doors and locks should be adjusted, repaired, lubricated, and returned to operating condition.

7. Control Room Desk
   A. Existing Conditions
      1. No counter or furniture is in place for control panels, monitors, and paperwork.
   B. Recommendations
      1. Due to the limited space available, we recommend custom building a desk or counter to fill this need.
      2. An alternate is use of a desk but cost will be similar and may compromise function.

8. Control Room Ceiling
   A. Existing Conditions
      1. Existing ceiling is damaged and in need of extensive repair or replacement
   B. Recommendations
      1. Install new acoustical tile ceiling.

9. Painting
   A. Existing Conditions
      1. After some 25 years of use and maintenance, often with non-professional labor, the interior of the cell block is in need of a complete paint job.
   B. Recommendations
      1. As a minimum, this project should include a budget item for painting and caulking material for a continuation of the past work with inmate labor.
      2. To bring this pod to finishes consistent with the remainder of the jail, a complete repainting of the interior is recommended.

10. Washer and Dryer

    A. Existing Conditions

        1. The new jail includes a laundry that was furnished with washers and dryers to serve the initial inmate population. The design includes space and utility connections for additional machines as the need arises.

    B. Recommendations

        1. With added inmate population for Pod C, laundry requirements can probably be met using existing machines and going to multiple shifts and long hours.
        2. In the long run it will probably be more economical to add one washer/extractor and one dryer and continue with normal work hours.

ELECTRICAL

1. Cell Light Fixture
   A. Existing Conditions
      1. The fixture body is in reasonable condition but the ballast, lens and the lamps are old and in need of replacement. The ACA code requires 20 foot-candle within the cell and in some cells this is not met due to the condition of the light fixture.
   B. Recommendations
      1. Option 1 is to have the ballast, lens and lamps replace and the lamps reinstalled.
      2. Option 2 is to install a new light fixture.

2. Dayroom Light Fixture
   A. Existing Conditions
      1. The fixtures are in very bad condition and do not provide adequate illumination in the dayroom.
   B. Recommendations
      1. Install new light fixture.

3. Control Room Lighting
   A. Existing Conditions
      1. The lights are old and no attempt should be made to fit them to a new ceiling.
   B. Recommendations
      1. Install new fixtures.

4. Exit Lights
   A. Existing Conditions
      1. The lights are old and obsolete.
   B. Recommendations
      1. Install new fixtures.

5. Replace Cell Night Light Pushbutton
   A. Existing Conditions
      1. The pushbuttons are old and are not vandal resistant. They are not appropriate for intended use.

B. Recommendations

1. Install new prison grade pushbuttons at each cell.

PLUMBING

1. Inmate Plumbing Fixtures
   A. Existing Conditions
      1. Inmate plumbing fixtures throughout the Pod do not meet the current code requirements for water efficiency. Valves and trim are obsolete and nearing their life expectancy. Some fixtures are vitreous china, which is not appropriate for intended cell use. Many of the fixtures are not functioning properly.
   B. Recommendations
      1. Replace all plumbing fixtures with stainless steel in cells and showers.

2. Replace Existing Boilers and Storage Tank
   A. Existing Conditions
      1. There are two non-functional boilers and a rusted storage tank both at least 25 years old with a maximum thermal efficiency of 80%.
   B. Recommendations
      1. Replace existing boilers with new boilers that meet or exceed the thermal efficiency and/or standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IESNA 90.1.3.

3. Replace Sprinkler heads
   A. Existing Conditions
      1. There are currently exposed pendant and sidewalk sprinkler heads subject to vandalism and offer a potential for suicide.
   B. Recommendations
      1. Replace existing sprinkler heads in cells with institutional, concealed type, fast response sprinkler heads.

MECHANICAL

1. Replace Four (4) Roof Top Units
   A. Existing Conditions
      1. The existing units are old (past their expected life span) and out of date, they do not meet the new code requirements for efficiency.
   B. Recommendations
      1. Replace all units to include curbs (curb transitions), ductwork transition, and accessories.
      2. Perform a Test and Balance to insure proper airflow and temperatures per design.

2. Replace Seven (7) Exhaust Fans
   A. Existing Conditions
      1. The existing units are old (past their expected life span).
   B. Recommendations
      1. Replace all units.

3. Replace Seventy-five (75) Supply and Exhaust Grilles
   A. Existing Conditions
      1. These units might be cleaned and repainted, but we are concerned they may not be the correct application to prevent suicides. They are the square open type with 0.5″ x 0.5″ square punched holes. A shoelace might be threaded through the square holes and allow an inmate to try suicide. New unit should be the type that is more suicide resistant.
   B. Recommendations
      1. Replace all units.

4. New DDC Controls (Building Automation System)
   C. Existing Conditions
      1. Existing HVAC systems are controlled with local thermostats.
   D. Recommendations
      1. To continue with local control is workable but not consistent with the new jail.
      2. We recommend providing a Building Automation System (DDC) to control the HVAC system and tie it into the existing DDC system that is already serving the other parts of the building. System shall be Siemens to match existing.

ELECTRONIC SECURITY

1. Existing Locking Controls
   - A. Existing Conditions
     1. There are four existing locking control panels that are approximately 6 years old. These panels have not been used daily and appear to be in average condition.
     2. Any electronics that sit unused for an extended length of time is subject to environmental wear and tear such as humidity, dust and corrosion.
   - B. Recommendations
     1. The following work is essential to assure operation of doors and controls:
        - a. Provide testing and check out for each door after the door and hardware has been serviced. Check to include: push button, LED, relay, fuses, terminations, power supplies, plc inputs and outputs.
        - b. Clean and test all components of the locking control panels such as push buttons, LED's terminations, relays, fuses, power supplies, etc.
        - c. This work is considered over and above the existing maintenance contract responsibilities.

2. Touch Screen Locking Panel
   - A. Existing Conditions
     1. There is no locking control panel located in the mid level control landing to effectively control the lower level sally port door inmate movement. This will consolidate controls that require considerate movement of officers on the upper level.
   - B. Recommendations
     1. This control panel is essential for safe movement into and within the pod, on a level comparable to the new jail.
     2. Provide a new touch screen locking control panel in the center of the control room. This touch screen panel will control all the sally port doors and cell doors.
     3. This new touch screen locking control panel shall have a graphics display and controls of every door within Housing Unit C.
     4. The existing central control room (in the new jail) shall have complete and duplicate control of this new panel.

3. Central Control Tie-in
   A. Existing Conditions
      1. The locking control system for the new jail has the reporting structure currently in place anticipating Pod C. The tie-in will need to be made involving some minimal new equipment.
   B. Recommendations
      1. Tie-in to central control is necessary for operation of Pod C as an integral part of the overall jail.
      2. This work should be done by South Western Communication (SWC), who currently provides maintenance service for the system; see comments under Special Recommendations below.

4. CCTV Coverage
   A. Existing Conditions
      1. There is no CCTV coverage in Pod C housing unit.
   B. Recommendations
      1. CCTV coverage is essential for safe operation.
      2. Add 23 CCTV cameras throughout for 100% coverage. This includes 2 per dayroom and 2 in the exercise yard.
      3. Add 7 CCTV cameras in the corridors and sally port for movement coverage.

5. Lighting Controls
   A. Existing Conditions
      1. The lighting controls are currently not on any of the locking control panels.
   B. Recommendations
      1. This upgrade is desirable for conveniences and match operation in new jail.
      2. Move the existing lighting controls on the new touch screen graphic panel.
      3. Provide additional control relays, conduit and wiring from the new touch screen head end to the existing lighting control panel.

SPECIAL RECOMMENDATIONS

1. The security systems have been and are currently under a maintenance contract for service with Southwestern Communications. This means that the existing locking controls, intercom, CCTV systems have been maintained since originally installed at the new jail. Therefore, our recommendation is to have SWC perform a routine service at the same time the additional work to refurbish is being done.
2. Secondly, it is our recommendation not to publically bid the Pod C locking control work, the new touch screen locking panel and tie-in to central control. We believe the County would benefit in having any new equipment installed by SWC. The new equipment would become part of the existing maintenance contract. If bid out, another contractor would have to separate controls from the housing unit back to central control and provide separate maintenance. This separate system will be substantially more costly to install and maintain.
3. The budget figures in this report are based on SWC doing this work.

BUDGET

The following budget figures include first, a suggested Minimum Upgrade Budget. This listing includes all work the design professionals determined to be required by code, safety or minimal operating standards.

The second listing of items is a listing of additional work that would be necessary to bring the facility to a level of finish that is close to that of the new jail. These budget figures include consideration of general contractor's mark-ups.

Minimum Upgrade Budget

General Construction

1.	Inmate Showers	$47,200
2.	Mirror Film at Control Room	$3,400
3.	Exercise Yard Steel Beams Finish	$4,100
4.	Cell Bunks	$1,500
5.	Clothes Hooks	$7,200
6.	Service Security Doors	$16,400
7.	Control Room Desk	$1,000
8.	Control Room Ceiling	$2,700
9.	Painting and Caulking Materials	$5,000

Electronic Security

1.	Locking Controls	$5,300
2.	Touch-Screen Locking Panel	$25,000
3.	Tie-in to Central Control	$5,000
4.	CCTV Coverage	$46,000
5.	Lighting Control	$3,000

Electrical

1.	Refurbish Cell Lights	$12,000
2.	Dayroom Light Fixtures	$26,900
3.	Control Room Lighting	$900
4.	Exit Lights	$1,800
5.	Cell Night Light Pushbutton	$33,800

Plumbing	
1. Inmate Plumbing Fixtures	$156,700
2. Boilers and Storage Tanks	$30,400
Fire Protection Sprinklers	
1. New Heads in Cells	$9,700
Mechanical	
1. Roof Top Units	$71,900
2. Exhaust Fans	$4,400
3. Cell Exhaust and Supply Grilles	$30,000
Sub-Total:	$551,300
Design Contingency	$150,000
General Contractor Management	$85,500
GC Insurance, OH and Profit	$68,700
Total:	$855,500

Recommended Additional Upgrades

Architectural	
1. New glazing at Control Room in lieu of new mirror film	add $54,800
2. New glazing in door vision panels	add $11,900
3. Complete repainting in lieu of material only	add $38,200
4. New washer/extractor and dryer	add $37,700
Electrical	
1. New light fixtures in cells in lieu of refurbishing	add $23,900

Recommended Overall Project Budget

Construction	
1. Minimum up-grades	$855,500
2. Recommended additional	$190,400
Sub-Total:	$1,045,900

Design and Engineering		
1. Project Management (1.5%)	$14,200	
2. Design (6%)	$56,800	
3. Inspections	$13,500	
4. Testing	$2,000	
	Sub-Total:	$86,500
Construction Contingency		$95,000
	TOTAL	$1,227,400
	(rounded)	**$1,250,000**

Average Daily Populations (Fiscal Year)
For the Fayette County Jail

	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015
July	254.87	273.23	278.48	301.45	274.18			
August	265.84	282.55	296.16	304.84	286.57			
September	253.50	309.77	298.90	321.07	280.00			
October	262.65	298.55	290.65	337.36	294.81			
November	249.73	273.03	267.60	324.00	276.77			
December	208.81	252.42	245.90	291.00	284.24			
January	225.74	277.06	244.19	302.29	277.56			
February	248.71	241.18	256.07	292.14	263.41			
March	259.13	218.23	270.74	306.94				
April	244.17	231.20	270.73	312.10				
May	256.33	241.23	266.61	312.58				
June	263.33	268.43	301.47	281.40				
Fiscal Year Average	249.41	259.77	273.99	307.26				

D. FURTHER CONSIDERATION OF STAFF'S REQUEST FROM THE SHERIFF'S DEPARTMENT FOR FUNDING FOR REPAIRS IN THE SHOWER AREAS OF INMATE CELL BLOCKS IN THE JAIL:

Major Charlie Cowart of the Sheriff's Department had further discussion with the Board about the need to address issues of mold in the shower areas of the County Jail. A copy of the request and backup, identified as "Attachment No. 28", follows these minutes and are made an official part hereof. He said Consulting Engineer David Jaeger of Mallett Consulting recommended overlaying the existing floor tile and wall surfaces with a special coating specifically designed for use in wet areas in lieu of removing and replacing the floor tile grout. He said this coating would be a durable mold resistant urethane or epoxy type coating. He noted that the tile and block walls would be stripped, cleaned and prepped for the new coating including killing all existing mold. He said the metal partitions would be removed during the floor and wall work and cleaned and reinstalled with some minor adjustments during the reinstallation of the metal partitions.

Commissioner Maxwell remarked that item D and item E were both related. He noted that until the old jail was renovated there was no where to move the displaced prisoners. He felt this allowed additional time to listen to Mr. Jaeger in order to get more information.

The Board suggested that Mr. Cowart gather more information about alternative methods for alleviating the problem, cost comparisons, the sequence of activities that would provide a remedy for the problem, and the time frame during which repairs would occur. The Board expressed support for resolving the issue but asked that more definitive information be provided before authorizing funds for the repairs.

E. FURTHER CONSIDERATION OF STAFF'S REQUEST FROM THE SHERIFF'S DEPARTMENT CONCERNING THE NEED AND COST FOR BRINGING THE FORMER JAIL FACILITY INTO TEMPORARY OPERATION:

See Item D above. A copy of the request and backup, identified as "Attachment No. 29", follow these minutes and are made an official part hereof.