

ENROLLED ORDINANCE 174-015

MODIFY CAPITAL PROJECT 201615 SECURITY SYSTEM RECORDING AND
DISPLAY EQUIPMENT REPLACEMENT TO ALLOCATE FUNDS FOR
SYSTEM DESIGN AND INTEGRATION WITH OTHER COMPONENTS
OF THE SECURITY ELECTRONICS SYSTEM

WHEREAS, the current security electronics system in the Waukesha County Jail is an analog system that is planned to be replaced with a digital system in the 2019 capital budget; and

WHEREAS, there was a study performed in 2016 to provide guidance regarding options for the replacement of the analog system and the Department used that guidance to develop a replacement strategy; and

WHEREAS, project management believes that obtaining additional consulting work for designing detailed system specifications would generate more accurate cost estimates and help promote a competitive purchasing process by allowing the county to bid out identical system solutions where price comparisons can be made; and

WHEREAS, staff anticipate that it will cost \$75,000 to hire a consultant to draft system specifications to allow for staff to bid out the security electronics system; and

WHEREAS, the scope of the security electronics system originally did not include the replacement of the technology utilized to control jail door operations; and

WHEREAS, the current security electronics vendor recommends that the system be included in the scope of the project due to the fact that the system is operating on a platform that will be de-supported at the end of 2019 and because the technology needs to be reprogrammed to operate on a digital system; and

WHEREAS, staff anticipate that it will cost approximately \$80,000 to upgrade the technology to operate the doors so it is on a supported platform and works with the digital system; and

WHEREAS, the capital project scope will need to be modified in order to carry out these tasks during 2019; and

WHEREAS, existing 2019 Capital Project appropriations will be used to fund these tasks, but it may be necessary to update the funding associated with Capital Project 201615 during the 2020-2024 capital planning process, once better cost estimates are known.

THE COUNTY BOARD OF SUPERVISORS OF THE COUNTY OF WAUKESHA ORDAINS that the scope of Capital Project 201615 be modified to allow for additional consultant work for system design and to upgrade technology used to operate jail doors.

FISCAL NOTE

MODIFY CAPITAL PROJECT 201615 SECURITY SYSTEM RECORDING
AND DISPLAY EQUIPMENT REPLACEMENT TO ALLOCATE FUNDS FOR
SYSTEM DESIGN AND INTEGRATION WITH OTHER COMPONENTS OF THE
SECURITY ELECTRONICS SYSTEM

This ordinance modifies the scope for capital project 201615 Security System Recording and Display Equipment Replacement to allow for two additional items: (1) Additional consulting services to develop detailed system specifications to allow for a competitive purchasing process, estimated to cost \$75,000, and (2) An upgrade of the security electronics system that is used to control jail doors, estimated to cost \$80,000.

These additional items will be funded within the existing project budget in 2019. There may be a request for additional funding in the 2020 budget, through the 2020-2024 capital planning process, after more accurate cost estimates from the detailed system specifications are available.



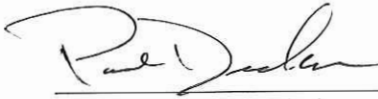
Linda Witkowski
Budget Manager
4/2/2019
BPD

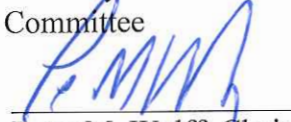
MODIFY CAPITAL PROJECT 201615 SECURITY SYSTEM RECORDING AND
 DISPLAY EQUIPMENT REPLACEMENT TO ALLOCATE FUNDS FOR
 SYSTEM DESIGN AND INTEGRATION WITH OTHER COMPONENTS
 OF THE SECURITY ELECTRONICS SYSTEM

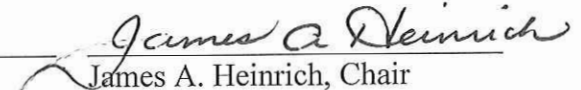
Presented by:
Executive Committee

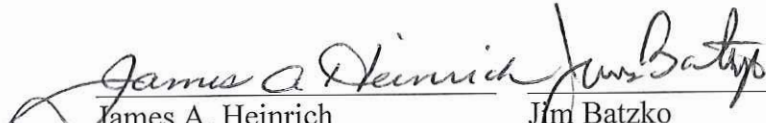
Approved by:
Judiciary and Law Enforcement
Committee


Approved by:
Finance Committee


Paul L. Decker, Chair

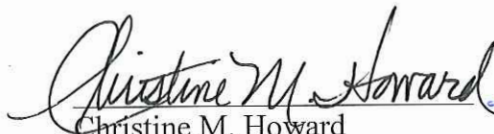

Peter M. Wolff, Chair

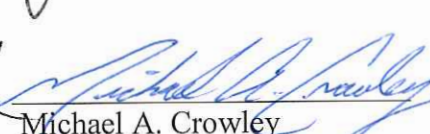

James A. Heinrich, Chair


James A. Heinrich


Jim Batzko


Timothy Dondlinger


Christine M. Howard

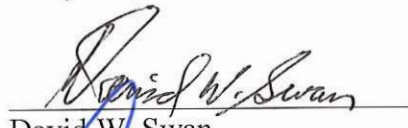

Michael A. Crowley


Tyler J. Foti

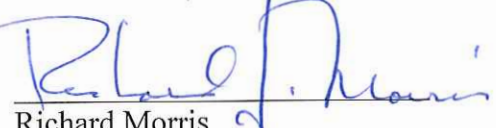

Larry Nelson

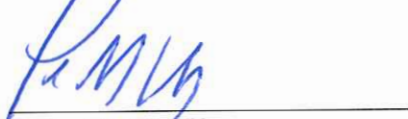

Timothy Dondlinger

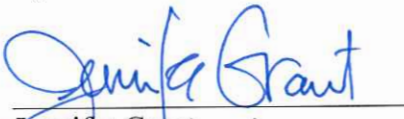

Thomas A. Michalski


David W. Swan

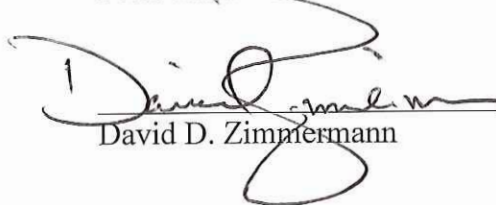

Tyler J. Foti

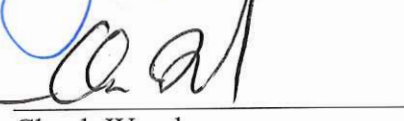

Richard Morris

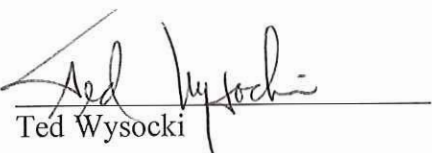

Peter M. Wolff


Jennifer Grant



Duane E. Paulson


David D. Zimmermann


Chuck Wood


Ted Wysocki

The foregoing legislation adopted by the County Board of Supervisors of Waukesha County, Wisconsin, was presented to the County Executive on:

Date: April 24 2019, 
Margaret Wartman, County Clerk

The foregoing legislation adopted by the County Board of Supervisors of Waukesha County, Wisconsin, is hereby:

Approved: X
Vetoed: _____

Date: 4/29/19, 
Paul Farrow, County Executive

Project Title:	Security System Recording & Display Equipment Replacement	Project #:	201615
Department:	Sheriff's Department	Project Type:	Equipment Replacement
Phase:	Design	Sponsor:	Sheriff's Department
Budget Action:	C - Scope	Manager:	Donn Hoffmann/John Gorski, IT
Date:	March 29, 2019		

CAPITAL BUDGET SUMMARY						
Year	2016	2017	2018	2019	2020	Total Project
Project Phase	Design/Analysis		Implementation			
Expenditure Budget	\$55,000	\$0	\$0	\$755,000	\$0	\$810,000
Revenue Budget	\$55,000	\$0	\$0	\$755,000	\$0	\$810,000
Net Cost After Revenues Applied	\$0	\$0	\$0	\$0	\$0	\$0
COST DOCUMENTATION		REVENUE				
Hardware*	\$272,000	Jail Assessment Fund Balance Reserves				\$810,000
Installation*	\$205,000					
Licenses	\$64,000					
Upgrade Jail Door Technology	\$80,000					
2019 Specifications Consultant	\$75,000					
2016 Consultant Study	\$39,000					
Contingency	\$75,000					
Total Project Cost	\$810,000	Total Revenue				\$810,000
EXPENDITURE BUDGET	\$810,000	REVENUE BUDGET				\$810,000
* Appropriation to be reviewed for 2020 Capital Project budget.						

Project Scope & Description

The Waukesha County Jail has a security electronics system that includes:

- Approximately 320 analog cameras which, send camera images through coaxial cable to master control and other staff monitoring stations.
- 20 DVRs (digital video recorders) that record and store camera images for approximately 30 days so that staff can access video following an event.
- 1 virtual matrix which connects all of these devices so that they can be utilized by staff to monitor the jail.

The security electronics system was installed in 2005 when the jail was constructed. Portions of the system have been replaced as they have failed including:

- the DVR equipment in 2013,
- the analog matrix switcher was replaced in 2015 to convert the analog matrix to a virtual matrix, and
- analog camera replacements which are funded through the jail equipment replacement plan.

The project scope is modified to allocate existing project funding for the following items in 2019: \$75,000 for additional consulting services to develop detailed system specifications to allow for a competitive purchasing process, and \$80,000 for an upgrade of the security electronics system that is used to control jail doors, due to that system being de-supported at the end of 2019. There may be a request for additional funding in the 2020, through the 2020-2024 capital planning process, after more accurate cost estimates from the detailed system specifications are available.

The system is utilized 24 hours a day and is a vital component of the jail's safety and security monitoring ability. It is clear the system has a defined life span, so the Sheriff's Department is requesting that the system be replaced prior to failure.

The Sheriff's Department is requesting to replace the current security electronics system with a digital security electronics system. This is a change in scope from the originally proposed DVR recording replacement project due to the recommendation from a study completed in 2016 from a security electronics consultant. The Sheriff's Department hired a consultant to review the existing security electronics system and recommend a process to replace the existing analog system with a digital system. The goals of the study included but are not limited to: ability to safely and securely monitor jail activities; ability to record up to 30 days of video; the installation of a system that would be supported for a minimum of seven years; and the ability of nonprofessional IT staff to perform the day-to-day administrative functions on the system. The consultant reviewed the replacement of the system in a "piecemeal" approach as well as a complete "rip and replace" of the current analog system with a fully digital system. Based on the goals of the study and the need for a fully operational security system 24-hours a day, the consultant recommended the complete replacement of the analog security electronics system with digital system, which is the basis for the scope and cost update of this project.

Project Title:	Security System Recording & Display Equipment Replacement	Project #:	201615
Department:	Sheriff's Department	Project Type:	Equipment Replacement
Phase:	Design	Sponsor:	Sheriff's Department
Budget Action:	C - Scope	Manager:	Donn Hoffmann/John Gorski, IT
Date:	March 29, 2019		

The cost estimate provided by the consultant included the re-cabling of the jail from coaxial cable to Cat5/Cat6 cable, the replacement of the analog cameras with digital cameras, the replacement of the DVR equipment which record video with a server based recording system, software licenses for management of the security system, backup power supply, replacement work stations, and built in system redundancy for device failures.

While the upfront costs of the upgrade would be higher, the consultant noted that it would be less changing to manage a fully digital system than a hybrid system. The consultant further noted that the higher upfront costs would result in lower long-term costs, easy system expandability with minimal cost, a system that supports future technology, superior camera quality, and a more secure video system.

This project also includes \$30,000 to complete a study to review available alternatives for the replacement of the current video visitation system. The current video visitation equipment is thirteen years old. The vendor that maintains the equipment indicates that, due to the age of the equipment, that it is nearing its useful life and that the Sheriff's Department should begin the process to plan its replacement. Since there are number of different replacement options that the Department could consider, funds to complete a study to identify replacement options, with the best return on investment, are included. Following the study, video visitation replacement is funded in a separate capital project (#201702).

Location

Waukesha County Jail

Analysis of Need

The security electronics system is vital to the daily operations of the jail. Without the security electronics system, additional staff would be required to monitor movement into, out of, and throughout the jail in order to ensure that only authorized individuals are in the facility. This would result in significant additional personnel costs to provide necessary levels of operational and facility security.

Alternatives

The security electronics system is critical to the operation of the jail. As previously noted there are over 320 cameras in the jail to monitor doors, elevators, halls, pods, medical services, kitchen, laundry, program areas, etc.

Maintain the Existing Analog Cameras and Use Hybrid DVRs. This option was analyzed by the security electronics consultant as an option but was not their recommendation. This option involves the replacement of the recording equipment and associated management hardware while leaving the existing cameras in place and only replacing those cameras when necessary. The upfront cost of this option is less expensive at \$344,500. However, the option involves utilizing the legacy cabling and infrastructure which the consultant noted would become more difficult to manage and maintain as the system continues to age. The legacy system also has limited expansion ability and relies on technology that is outdated and may become unsupported. This option also lacks in security, scalability and overall system management.

Utilize overtime to monitor the building. The camera system is so vital to the daily operation of the jail that when portions of the system are down, additional staff are brought in on overtime to provide the monitoring ability that the cameras provide until the system is operational. Monitoring using personnel is extremely cost prohibitive. A correctional officer currently costs about \$47.50 per hour of overtime on average (including WRS and Social Security) so the money budgeted for this project would purchase about 15,900 hours of overtime.

Ongoing Operating Costs

The on-going costs of the security electronics system will be dependent on the system selected and the maintenance support required by the vendor. However, the consultant noted that 10% of the total cost of the system is an approximate on-going cost of a video system or approximately \$75,000 per year.

Previous Action

Approved as a new project in the 2016-2020 capital plan. Approved as planned in the 2017-2021 capital plan. Approved with a scope and cost update in the 2018-2022 capital plan. Approved as planned in the 2019-2023 capital plan.



Voting Results for Ordinance 174-O-014

Modify Capital Project 201615 Security System Reconfiguring And Display Equipment Replacement To Allocate Funds For System Design And Integration With Other Components Of The Security Electronics System

Passed With 17 Yes Votes Needed

AYE: 22

NAY: 0

ABSENT: 3

D1 - Foti		AYE
D2 - Zimmermann		AYE
D3 - Morris		AYE
D4 - Batzko		AYE
D5 - Dondlinger	Second	AYE
D6 - Walz		AYE
D7 - Grant		AYE
D8 - Michalski		AYE
D9 - Heinrich	Motion	AYE
D10 - Swan		AYE
D11 - Howard		ABSENT
D12 - Wolff		ABSENT
D13 - Decker		AYE

D14 - Wood		AYE
D15 - Mitchell		AYE
D16 - Crowley		AYE
D17 - Paulson		AYE
D18 - Nelson		AYE
D19 - Cummings		AYE
D20 - Schellinger		AYE
D21 - Gaughan		AYE
D22 - Wysocki		AYE
D23 - Hammitt		AYE
D24 - Whittow		ABSENT
D25 - Johnson		AYE