**ATTACHMENT B**

**SAMPLE OF DESIRED INFORMATION IN WORK PRODUCT**

**Security Systems Evaluation: Video**

**WORKSHEET**

Date:

County:

Facility ID #:

Facility Name:

Address:

**Head End**

Check all that apply. Make Model Age Est. Remaining Life

 DVR

 NVR

 VMS

 Matrix

 Multiplexer(s)

 PC

 Switches

 Encoders, etc.

 Other components

**Viewing**

Monitors:

Client workstations #:

Other viewing stations #:

Viewing Controller type(s):

**Cameras**

Total #:

Analog #:

IP#:

PTZ #:

Multi-view (360, etc.) #:

Mixture IP/Analog:

Exterior #:

Accessibility requirements (ladder, lift, etc.):

**Cabling**

COAX:

Twisted Pair:

Cat 5, 6, etc. (specify):

Patch Panels/cables:

Video integration with other systems:

 Access Control Duress Intercom Detention PLC Other

 Yes Yes Yes Yes Yes

 No No No No No

**Building Issues**

Asbestos:

Other (specify):

**Judicial Council Installed System (this section completed by JC staff)**

 Installation Date Latest update Service history/repair costs

 Yes Yes Yes

 No No No

**EVALUATION NARRATIVE**

**System Description (EXAMPLE)**

* On January 10, 2018, a security video system evaluation was conducted at the George McDonald Courthouse in Alameda County.
* The current system consisting of 42 analog cameras includes 37 interior fixed Pelco dome cameras, 2 exterior Pelco PTZ cameras, and 3 exterior Pelco fixed cameras.
* The head end equipment is managed by a Pelco Digital Sentry video recorder (DSSRV). The DSSRV was installed in 2010. Cameras vary in age from 5-12 years or more. There is a single client workstation with 2 monitors. A multiplexer is in place as well as a matrix bay. This equipment is over 10 years old.
* The analog cameras are at the end of serviceable life, as is the multiplexer and matrix, although the equipment is functioning at this time.
* The video system is integrated with the wireless duress system and the DSX access control system, resulting in camera call up when programmed events occur.

**Findings (EXAMPLE)**

* Per available service records and interviews with court staff and system operators, this system has been experiencing increasing service issues and failures. Some cameras have been replaced, as well as RAID drives, monitors, and other equipment, as should be expected for a system of this age.
* Most components are significantly outdated. Some are obsolete/no longer supported or manufactured. All have reached or exceeded the life expectancy for this type of equipment.
* Failures can be expected to increase, and catastrophic failure will occur upon sudden failure of the DVR, matrix switch(s), or multiplexer.

**Recommendations (EXAMPLE)**

1. With the availability of sufficient funding, a complete system replacement with new components, cabling, work/viewing stations, etc., is recommended.
2. Absent sufficient funding for complete system replacement, a systematic refresh of major components is recommended. Additional longevity may be achieved by applying the following measures.
* Install lacer strips to hold BNC connectors in place: [list product example here].
* Use BNC tool for maintenance so cameras on other connections are not affected.
* Lace and support cabling.
* Label cables.
* Create loading schedule.
* Existing matrix bay is at end-of life and may fail without warning. Current matrix bay could be replaced by a product similar to: [American Dynamics Mega Power 3200].
* Existing multiplexer (and its technology) is obsolete and replacements are very difficult to locate. Replace with client workstation with sufficient capabilities to handle multiple streams and processing alarms from access control, and an NVR or VMS able to support multiple monitors. Use a product similar to: [x-view client workstation] or [other example link here].
* To improve video quality and resolution, replace existing analog cameras as they fail with high resolution IP cameras.
* To avoid the costs associated with re-cabling, install switches to allow transmission of IP video across existing COAX or twisted pair wiring, using a product similar to: [ethernet poe over coax switch].

**Costs (EXAMPLE)**

Rough order of magnitude based on current pricing of similar new equipment as described, using current industry geographical labor estimates.

1. Recommendation # 1—Complete System Replacement
* [Describe major components.]
* [Describe material.]
* [Describe labor.]
1. Alternative Recommendation # 2—Systematic refresh/maintenance
Recommendations for refreshing existing equipment, in order of priority:
2. Upgrade workstations with pre-installed VMS software. $
3. Lace cabling and add wire management to improve and maintain reliable signal transmission. $
4. Install and pre-program I/O boards to accommodate camera call up from access control, duress, and intercom systems. $
5. Add switch(s) to accommodate IP signal transmission over existing cabling. $
6. Upgrade monitors to support high definition images, allow camera call ups, etc.
$
7. Replace existing matrix bay. (Replacement will allow the continued use of currently installed technology only). $
8. Replace analog cameras as they fail with IP cameras. $
9. Alternative Recommendation #3—Major refresh
Replace major head end equipment, utilize existing cabling, upgrade workstations, and replace cameras with IP as failures occur.

**Priority Level**

Depending on degree of concern, age, etc., we may include a priority 1-4 to assist with scheduling work in the future.