

REPORT OF INVESTIGATION

File Number: 11-075

Agency: Georgia Department of Corrections

Basis for Investigation: Complaint

Allegations: Conflict of Interest

Date Opened: April 22, 2011

Investigated By: Staff of Office of the State Inspector General

Date of Report: October 3, 2011

EXECUTIVE SUMMARY

On April 22, 2011, the Office of the State Inspector General ("OIG") received a tip concerning an alleged conflict of interest between a consultant and a contractor employed by the Georgia Department of Corrections ("GDC"). Based upon the information provided in the tip, OIG investigators identified three corporations of interest: Engineered Systems for Manufacturing, Inc. ("ESM"), Correctional and Security Consulting, Inc. ("CSC"), and Correctional Electronics Supply, Inc. ("CESI"). CSC has, at times, served as consultant on Division 17 projects and locking control projects for GDC. ESM has, at times, bid on Division 17 projects and locking control projects for GDC. ESM purchases components for Division 17 projects and locking control projects from CESI. OIG investigators discovered that during the period under review significant relationships existed between ESM, CSC, CESI and the principals of those companies, to include: the companies shared office space, office staff, computer services and credit cards; Michael Lovelady, the owner of CSC and CESI, by and through a company identified as L3C, LLC, served as the landlord for ESM, CSC and CESI; Michael Lovelady owned fifty (50%) percent of ESM until December 31, 2007, at which time he allegedly transferred his interest in ESM to his son, Gary Lovelady; Charles T. Cimarik, who owned the other fifty (50%) percent interest in ESM, transferred his interest in ESM to Gary Lovelady in November 2010; and, Michael Lovelady and Charles T. Cimarik resided together for approximately thirty years.

It is unclear from OIG's investigation as to when and under what circumstances GDC was notified that Michael Lovelady had divested himself of a direct ownership interest in ESM. Witnesses stated to OIG investigators that they were informed orally that Lovelady had disposed of his interest in ESM; however, OIG investigators could not identify a date certain on which this information was initially provided. OIG investigators did not locate any documents purporting to provide notice to GDC that Michael Lovelady had divested himself of his ownership interest in ESM or providing any proof thereof. Moreover, OIG investigators did not locate any document by which any of the principals in ESM notified GDC that Gary Lovelady had acquired a fifty (50%) percent interest in ESM in December 2007.

Third-party consultants hired by GDC for Division 17 projects and locking control replacement and renovation projects play a crucial role in the process. The consultants prepare bid specifications, identify problem areas in the operations of the existing system, assess the condition of the existing panels, make recommendations for improvement, and provide oversight of a project until completion. In light of this role, it is imperative that conflicts of interest between consultants and installers/manufacturers be avoided so as to ensure that the best interests of GDC are protected and to maintain an open and competitive bidding process.

It is the opinion of OIG that a conflict of interest existed in connection with any GDC Division 17 project or GDC Locking Control Renovation or Replacement project on which CSC was utilized as the consultant for Division 17 services and/or security electronic services and on which ESM was permitted to bid. In particular, a clear conflict of interest existed on the part of CSC, ESM and CESI with respect to a Locking Control Renovation project at Smith State Prison. On that particular project, CSC served as the consultant and prepared bid specifications; ESM bid on and was awarded the \$638,950 contract; and ESM used CESI components on the project. During this period of time, CSC, ESM and CESI shared multiple resources. Moreover, at the time bids were submitted for this project, Michael Lovelady's son owned fifty (50%) percent of ESM – a fact that was not, to OIG's knowledge, disclosed to GDC during the bidding process.

Moreover, for the reasons set forth in the preceding paragraph, it is the opinion of OIG that a conflict of interest existed in connection with any GDC Division 17 project or GDC Locking Control Renovation or Replacement project on which CSC was utilized as the consultant for Division 17 services and/or security electronic services and on which CESI provided components for that project or otherwise served as an approved vendor for such components.

It is further the opinion of OIG that Larry Latimer, as Director of GDC's Engineering and Construction Services Division, failed to investigate the relationship between CSC, ESM, CESI and the principals of those companies, and further failed to exercise any measure of due diligence to determine whether those relationships gave rise to a conflict of interest.

I. BASIS FOR INVESTIGATION.

On April 22, 2011, the Office of the State Inspector General ("OIG") received a tip concerning an alleged conflict of interest between a consultant and a contractor employed by the Georgia Department of Corrections ("GDC"). In particular, the complainant alleged that a consultant for GDC wrote specifications for security systems for GDC and then provided electronic components pursuant to those same specifications through a company owned by his son and identified as Engineered Systems for Manufacturing, Inc. ("ESM").

II. INVESTIGATION NARRATIVE

Upon receipt of the tip on April 22, 2011, OIG investigators initiated an initial inquiry. On April 27, 2011, OIG investigators reviewed corporate records maintained on-line by the Georgia Secretary of State's office. OIG investigators identified three corporations of interest: ESM, Correctional and Security Consulting, Inc. ("CSC"), and Correctional Electronics Supply, Inc. ("CESI"). The records maintained by the Georgia Secretary of State's office revealed significant connections between ESM, CSC and CESI. For example, the companies shared, at various times, common addresses, frequently filed their annual registrations on the same date with the Georgia Secretary of State's office², and, on at least three occasions, appear to have used a shared payment method to process the registrations filed with the secretary of state's office.³ OIG investigators also indentified two individuals who appeared to be closely associated with the operations of the companies – Michael Lovelady and Charles T. Cimarik.

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¹ OIG also met with a representative of the secretary of state's office on May 23, 2011 to secure additional details concerning the records maintained by the secretary of state, to include information on the manner in which annual registrations are filed with the secretary of state's office.

² ESM and CSC filed their annual registrations with the Georgia Secretary of State's office on the same day in 2003,2004, 2007, 2008, 2009 and 2011. In addition, CESI filed its annual registrations on the same day as ESM and CESI in 2008, 2009 and 2011. In fact, the annual registrations filed in 2008, 2009 and 2011 were filed within minutes of each other. For example, CESI's 2008 annual registration was filed on March 21, 2008 at 2:50 p.m., ESM's registration was filed at 2:55 p.m. (See Exhibit A, attached hereto).

According to records obtained from the Office of the Secretary of State, the 2008 annual registrations for ESM, CSC and CESI were all paid using an American Express card ending in the numbers 1008. The 2009 annual registrations for ESM, CSC and CESI were all paid using an American Express card ending in the numbers 2006. The 2011 annual registrations for CSC and CESI were paid using an American Express card ending in the numbers 2005 – the same card that was apparently used by ESM to pay its annual registration on November 29, 2010. The 2011 annual registration for ESM was paid using an American Express card ending in the numbers 2007 – the same card that was apparently used to pay the 2010 annual registration of CSC on January 17, 2010.

In addition to the foregoing, OIG investigators reviewed bid documents from the Georgia Department of Administrative Services' ("DOAS") Bid Registry concerning GDC Division 17 projects and Locking Control Replacement or Renovation projects that went out to bid between March 20, 2007 and October 27, 2009.

Set forth in Table A is a summary of the information obtained by OIG:

Table A:

<u>Date</u>	Date Project Name		Bids administered by:	Security Specs Prepared by:	Winning Bidder		
3/20/07	Design and build locking system for NW PDC	6901	GDC	GDC	ESM		
3/20/07	Design and build locking system for SE PDC	6903	GDC	GDC	ESM		
4/9/07	Wilcox State Prison Division 17	6958	GDC	unclear	ESM		
4/18/07	Autry State Prison Division 17	6966	GDC	unclear	ESM		
10/4/07	Hays State Prison Division 17	7412	GDC	Rosser & Associates	ESM		
3/24/08	Design and build locking system for Telfair SP	7676	GDC	GDC	ESM		
5/28/08	Division 17 Coastal SP	0023	GSFIC	Rosser & Associates	ESM		
9/25/08	Division 17 Telfair SP	031	GSFIC	Rosser & Associates	CMI Electronics (but work subsequently performed by ESM)		
9/25/08	Division 17 Rutledge SP	0032	GSFIC	Rosser & Associates	Bids rejected		
9/25/08	Division 17 ASMP	0033	GSFIC	Rosser & Associates	CMI Electronics (but work subsequently performed by ESM)		
10/22/08	Division 17 Central SP	0034	GSFIC	Rosser & Associates	CMI Electronics (but work subsequently performed by ESM)		
6/3/09	Locking Control Smith SP	0057	GSFIC	CSC	ESM		
6/5/09	Locking Control Central SP	0053	GSFIC	CSC	ESI Companies (ESM second lowest)		
6/9/09	Locking Control Coastal SP	0122	GSFIC	Tanner Consultants	ESI Companies (ESM second lowest)		

6/11/09	Locking Control Pulaski SP	0150	GSFIC	Tanner Consultants	ESM
6/12/09	Locking Control Hancock SP	0054	GSFIC	Tanner Consultants	ESI Companies (ESM did not bid)
6/17/09	Locking Control Telfair SP	0139	GSFIC	Rosser & Associates	ESI Companies (ESM did not bid)
6/18/09	Locking Control Phillips SP	0141	GSFIC	Rosser & Associates	ESI Companies (ESM did not bid)
6/30/09	Locking Control Baldwin SP	0052	GSFIC	Tanner Consultants	Norment Security Group (ESM did not bid)
7/14/09	Locking Control Replacement SW PDC	0044	GDC	Unclear	ESM
7/16/09	Locking Control Replacement McEver PDC	0057	GDC	Unclear	ESM
10/27/09	Division 17 Georgia Diagnostic and Classification Prison	GDC0032	GSFIC	Rosser & Associates	ESM

As reflected in Table A, OIG investigators identified twenty-two (22) projects put out to bid between March 20, 2007 through October 27, 2009.⁴ ESM bid on eighteen (18) of those projects and won 66% of them. ESM was subsequently awarded the contract on three additional projects due to the withdrawal of the original low bidder.⁵ As a result, ESM ultimately was awarded the contracts on 83% of the projects it bid on during the period under review. Of the projects directly administered by GDC during the applicable period, ESM won 100% of the bids submitted.⁶ In addition, OIG investigators noted that on one particular project – the Smith State Prison Locking Control project – CSC served as the consultant and ESM bid on and was awarded the \$638,950 contract. In addition, in the specifications prepared by CSC for the Smith State Prison Locking Control project, CESI is identified as one of three pre-approved equipment

⁴ This period was dictated by documents available on DOAS's website at the time of OIG's investigation.

 $^{^{\}rm 5}$ ESM was the second lowest bidder on each of those projects.

⁶ According to information provided by GDC Procurement Services, CSC was paid a total of \$334,614.21 between August 28, 2007 and February 2, 2011 on various GDC contracts. ESM was paid a total of \$5,626,513.40 between May 1, 2007 and June 29, 2011 on various GDC contracts. CESI was paid a total of \$1,966,779.00 between September 10, 2009 and June 9, 2011 on various GDC contracts.

manufacturers and ESM is identified as one of three pre-approved contractors. (See Exhibit B for Smith State Prison bid tabulation sheet and Exhibit C for Smith State Prison locking control specifications).

Based on the foregoing information, OIG investigators determined that there was sufficient evidence of a potential conflict of interest to proceed forward with a full investigation.

On May 5, 2011, OIG investigators reviewed title records made available through the Georgia Superior Court Clerks' Cooperative Authority ("GSCCCA"). According to that review, Michael Lovelady and Charles T. Cimarik acquired title to a commercial property located in Norcross, Georgia on or about September 29, 2004. That particular property thereafter served as offices, at various times, for CSC, ESM and CESI. On or about that same date, Michael Lovelady and Cimarik executed a security deed on the Norcross property in favor of First Security National Bank. On or about December 7, 2004, Cimarik quitclaimed his interest in the Norcross property to Michael Lovelady. However, on or about January 26, 2005, Cimarik cosigned another security deed with Michael Lovelady in favor of First Security National Bank. On or about August 29, 2008, Michael Lovelady executed yet another security deed in favor of First Security National Bank with respect to the Norcross property.

On May 9, 2011, OIG investigators met with representatives of GDC. During the meeting, Becky East, Director of GDC's Administrative Division, answered questions pertaining to GDC purchasing procedures. East explained the construction services procurement process from the preliminary need recognition phase to the actual awarding of a contract to a vendor. East indicated that, to her knowledge, the process initiates when a regional engineer identifies a scope of work for a project and provides information on the project or contracts with a consultant to compile the specifications of the project. East also indicated that GDC's Engineering Department selects consultants and would therefore be able to explain the process more fully.

Later that same day, OIG investigators met with Jeff Lacks, Contracts Manager at the Georgia State Financing and Investment Commission ("GSFIC"). Jim Hyde, also a Contracts Manager for GSFIC, was present. Lacks and Hyde provided OIG with a general overview of GSFIC managed construction projects and agency managed construction projects. In 2007, DOAS delegated construction projects to GSFIC. Projects managed by GSFIC are typically

bond funded. GSFIC handles the procurement of construction projects up to completion and subsequently remits payments to respective firms. Projects managed by state agencies can also be bond funded. GSIFC participates in those projects through the award of the contract, and then the project is administered by the agency.

On May 11, 2011, OIG investigators met with Charles Smith from GDC's Procurement Division. Smith, who serves as GDC Director of Procurement, has worked for GDC since 2005. Smith provided OIG investigators with a general overview of the procurement process within GDC and stressed that the agency has a responsibility to conform to DOAS guidelines. Smith stated that with over two hundred facilities, most of which are aging, there are many projects being driven by GDC's Engineering Department. When asked if he had ever received complaints from vendors or other individuals about ESM, CESI or Michael Lovelady, Smith replied that he had not. However, he noted that these companies appeared to be "getting most of the business." Smith had worked with Ken Stone of GDC Engineering to attract other qualified vendors who were also interested in working with GDC. Smith recalled that initially his efforts seemed productive and other vendors were responding to solicitations. However, he stated that it seemed like GDC Engineering Staff and the institutions always wanted to return to working relationships with Michael Lovelady. Regarding the conflict of interest allegation, Smith stated that in the fall of 2010, he heard that Gary Lovelady, Michael Lovelady's son, was buying ESM from Cimarik. He recalled attending a November 2010 meeting wherein the issue was discussed among representatives from GDC Engineering, GDC Legal and GDC Procurement. Smith said that until the meeting occurred, he was unaware of the father/son-contractor/consultant relationship between Michael and Gary Lovelady. Smith believed, however, that GDC Legal concluded there was no conflict. Additionally, he recalled there were two ESM purchase orders that were nearly complete at the time of the actual buy-out -- Smith State Prison and Pulaski State Prison -- which amounted to approximately one million dollars.

On May 12, 2011, OIG investigators spoke by telephone with Mark Guzzi, GDC's Assistant General Counsel. Guzzi was informed that OIG investigators were in the process of obtaining emails for certain employees of GDC. Guzzi subsequently told OIG about an email he had recently learned about which indicated that GDC Engineering staff had previously posed a question to GDC Legal as to whether a conflict of interest may have existed with respect to the

companies at issue. Guzzi indicated he would try to find a copy of the email and fax it to OIG. OIG investigators thereafter received a six-page fax reflecting an email dialogue between GDC Legal and GDC Engineering Staff concerning whether Gary Lovelady's purchase of ESM would create a conflict of interest with respect to his father, Michael Lovelady. The initial email was dated September 28, 2010. The emails do not reflect a resolution of the conflict issue.

On May 16, 2011, OIG investigators met with GDC Assistant Legal Counsel Kristine Pham to secure additional information concerning the conflict of interest question arising from the purported buyout of ESM. Pham stated it was her understanding that the sale had occurred, and that Cimarik was no longer an owner of ESM. She said that GDC's main concern was ensuring that current projects would be completed, irrespective of a change in company ownership. Pham seemed to believe she had determined that no conflict of interest existed. Pham agreed to provide OIG investigators with copies of her working file. OIG investigators subsequently received copies of Pham's file on this issue. OIG investigators, however, could not locate any memorandum, report, letter, email, or other document which provided any guidance as to the resolution of the conflict issue.

OIG investigators thereafter interviewed Bryan Perry, Senior Project Engineer for GDC. Perry stated that he began working in GDC's Engineering and Construction Services Division in November 2003. In January 2008, Perry became a project engineer in GDC's Technical Support Group. Perry now reports to Ken Stone, GDC's Technical Support Manager, who reports to Larry Latimer, Director of Engineering and Construction Services. In his role as project engineer, Perry manages projects pertaining to life and security systems, to include locking, fire, duress and intercom systems. When asked about the nature of the conflict of interest issue arising from Gary Lovelady's purchase of ESM, Perry provided some additional background information. According to Perry, Cimarik previously owned ESM. ESM had been awarded a contract by GDC to replace the locking control systems at Smith State Prison. According to Perry, Michael Lovelady provided the specifications for the Smith State Prison project as a consultant for GDC. The replacement project had not yet been completed by ESM when Gary Lovelady, Michael Lovelady's son, purchased ESM from Cimarik. Perry indicated that he was told by either Ken Stone or Larry Latimer that Cimarik was having financial difficulties, which caused him to sell ESM to Gary Lovelady. Additionally, Perry stated that Michael Lovelady had

told him that Cimarik owed Lovelady money for locking control panels he purchased for a project at Lee State Prison. In fact, according to Perry, Michael Lovelady stated that he could not provide Cimarik with any more locking control panels until Cimarik paid him. When Perry learned of the buyout of ESM by Gary Lovelady in September 2010, Perry notified Gwen Lyle, GDC Legal, about the relationship between the Michael and Gary Lovelady, and inquired about the potential for a conflict of interest. Subsequent to his initial inquiry, Perry sent an email in November 2010 documenting his request for assistance from GDC Legal with determining if the relationship constituted a conflict of interest and determining how to proceed with future contracts between the two companies. Perry stated that he never received a definitive answer to his question. However, he met with representatives from GDC Legal and GDC Procurement in November 2010, and it was decided to reissue ESM's contracts in Gary Lovelady's name. Perry also stated that since the contract was executed when Cimarik owned ESM, he did not think the purchase of ESM by Gary Lovelady constituted a conflict of interest. However, he stated that Gary Lovelady and Michael Lovelady should not be allowed to work on projects together as contractor and consultant, respectively, in the future.

Perry stated that he was informed by either Larry Latimer or Ken Stone that Michael Lovelady and Cimarik started ESM together, but had severed their business relationship several years ago. According to Perry, he was under the impression that Michael Lovelady owned CESI and CSC, and that Cimarik owned ESM -- until Gary Lovelady purchased ESM in 2010.

OIG subsequently learned that both ESM and CSC previously worked on a project for the Georgia Department of Human Resources ("DHR"). From June 7 through June 9, 2011, OIG investigators reviewed the DHR project files maintained by GSFIC. In the course of that review, OIG investigators secured copies of depositions taken during the course of a civil action that arose from the DHR project. One of the witnesses deposed during the course of the civil action was Michael Lovelady. In his deposition on August 12, 2008, Lovelady was asked the following question:

"How are these two companies, Engineered Systems For Manufacturing and your company, CSC, how are they related?"

Lovelady responded under oath as follows:

"Other than we do similar or complementary type work, *that's really the only relationship between the two entities*." ¹⁰

On June 15, 2011, OIG investigators interviewed Ken Stone, Technical Support Manager for GDC's Engineering and Construction Services Division. Stone stated that he began working for GDC in 1997, at which time he served on the perimeter security team. In 2000, Stone was promoted to Technical Support Manager. In his role as Technical Support Manager, Stone is responsible for Division 17 security systems in all GDC facilities, to include, but not limited to, electronic locking, fire alarm, CCTV, duress and intercom systems. Stone currently supervises five employees, including Bryan Perry. Additionally, Stone and Perry serve as project engineers on all Division 17 security system replacement projects. Stone reports directly to Larry Latimer, the Director of GDC's Engineering and Construction Services Division.

When asked about GDC's consultant selection process, Stone indicated that GDC personnel select consultants on consulting projects that do not exceed \$75,000. If the consulting fees will exceed \$75,000, the consultant selection is subject to an open-market, competitive bid process. Stone stated, however, that most consulting contracts do not exceed the \$75,000 threshold. If a project falls under the threshold, consultants are selected from a pre-approved list, and their selections are based on the number of projects on which the consultants are currently working. No standard selection protocol otherwise exists for the selection of consultants. The consultants on the pre-approved list include CSC and four other consultants.

According to Stone, consultants write the project specifications, prepare bid documents, and administer the contracts, which include quality control tests throughout the life of the contracts. Stone stated that after consultants are selected, they are allowed to participate in walk-throughs of facilities, during which time a GDC representative, typically Stone or Perry, explains the prospective scope of work to them. Stone and/or Perry also provide cost ceilings to the consultants, and the consultants must design systems that will not exceed the allocated budget.

¹⁰ Cimarik was deposed approximately a year later on August 18, 2009. His deposition testimony differed significantly from that offered by Lovelady. For example, Cimarik testified, in part, that CSC and ESM had office space in the same building, that CSC and ESM shared office staff, that Michael Lovelady owned the building in which ESM was located, and that ESM paid rent to Michael Lovelady.

On all projects, Stone stated, consultants are instructed not to communicate with prospective bidders.

When asked if he was aware of any relationship between ESM, CESI and CSC, Stone said he knows that Michael Lovelady, who currently owns CSC and CESI, formerly owned half of ESM with Cimarik. However, he was told that Michael Lovelady relinquished his ownership in ESM to Cimarik in the early to mid 2000s. Cimarik then became the sole owner of ESM until Gary Lovelady purchased the company in 2010. Stone noted that although Michael Lovelady relinquished his control of ESM, he maintained control of CESI and CSC. According to Stone, CESI and ESM were located in the same office building in Norcross, Georgia; however, CSC's place of business was Michael Lovelady's personal residence. Stone noted that ESM primarily used CESI products on its jobs with GDC.

When asked his opinion on whether these relationships created a conflict of interest, Stone indicated that he did not think they did. Stone did admit that he was initially concerned about the relationships; however, he addressed his concerns with his supervisor, Larry Latimer. Latimer informed him that he did not have a problem with the relationships. Stone did not question the relationships again. To Stone's knowledge, the matter was not discussed again until Gary Lovelady, Michael Lovelady's son, purchased ESM in November 2010. According to Stone, Bryan Perry questioned whether the new relationship created a conflict of interest. GDC Engineering Staff posed the conflict of interest question to GDC Legal and, according to Stone, it was determined that the relationship did not constitute a conflict of interest.

Stone was then provided evidence by OIG investigators that Michael Lovelady owned the property at which ESM was located. Additionally, Stone was provided the annual corporate registrations filed by CSC, ESM and CESI with the Georgia Secretary of State's office. After reviewing this information, Stone indicated that if he had known this information earlier, he would have never allowed ESM to bid on projects on which Michael Lovelady consulted because the relationship created a conflict of interest. Stone indicated in a later interview that he feels like Michael Lovelady, Chuck Cimarik, and Gary Lovelady deceived him into thinking the companies and their principals had separated. Stone added that he believes Latimer was also deceived in the same manner.

OIG investigators subsequently interviewed Larry Latimer, Director of GDC's Engineering and Construction Services Division. Latimer stated that he has served as Director since 2004, when he was promoted from his role as Assistant Director of Engineering. Latimer served as the Assistant Director of Engineering between 2000 and 2004. Prior to his stint as the Assistant Director of Engineering, Latimer also held the positions of Director of Technology Operations (1996-2000) and Project Engineer (1990-1996) at GDC. In his role as the Director of the Engineering and Construction Services Division, Latimer oversaw five sections, including Construction Services, Technical Support Operations, Architectural and Engineering, Capital Assets Management, and Administration. The Technical Support Operations section, which is managed by Ken Stone, is primarily focused on electronics and physical security systems inside GDC facilities.

Latimer was asked if he had ever received information pertaining to an alleged conflict of interest between CSC, ESM and CESI. Latimer stated that he had never received any complaint of a conflict of interest between these companies from anyone outside of GDC. In fact, Latimer stated that Bryan Perry, Project Engineer in the Technical Support Operations section, was the first person to express concerns about a potential conflict when Gary Lovelady purchased ESM in the latter part of 2010. According to Latimer, Perry discussed his concerns with Ken Stone and was instructed to notify GDC's legal office of the situation. Latimer reiterated that he has never had anyone raise any concerns about Gary and Michael Lovelady's involvement together, and added that he thought they were working at the same company at that time.

When asked if anyone, internally at GDC or external vendors, ever expressed concerns over the business relationship between Michael Lovelady, Cimarik and their companies, Latimer stated that no one had ever raised any concerns about the relationship. Latimer stated that Michael Lovelady and Cimarik were business partners for many years and then severed the partnership. To Latimer's knowledge, Michael Lovelady branched off to perform consulting work, and Cimarik continued to focus on installation and maintenance of security systems. Latimer stated that he thought Lovelady's first consulting job was for the Georgia Department of Human Resources on a project in Milledgeville, Georgia, but he soon after began consulting for

¹¹ Latimer's statement that no one had ever raised any concerns about the relationship between the companies appears to be contradicted by the statement of Ken Stone.

GDC. Later in his interview, Latimer recalled that just after the companies separated a vendor may have raised concerns over the relationship to some of Latimer's "rank and file employees"; however, the concerns were mitigated because it was explained to the vendor that ESM was subject to the competitive bid process like any other vendor.

Latimer explained that a consultant's role, as it pertains to Division 17 systems, includes identifying problem areas in the operations of the existing system, assessing the condition of the existing panels, making recommendations for improvement, creating bid documents and "shepherd[ing]" the project until completion. Latimer admitted that consultants should not have any interest or affiliation with any prospective bidders on projects that arise out of their consulting engagements. When asked when Michael Lovelady and Cimarik severed their partnership, Latimer stated he thought it occurred approximately five (5) years ago. However, Latimer stated that he could not recall specifically when the relationship ended. Latimer further stated that no documentation was ever provided by Lovelady or Cimarik indicating they had ended the partnership -- one of them simply told him about the restructuring. ¹² Latimer was asked if he would consider it a conflict if Michael Lovelady maintained a relationship with Cimarik and ESM after they informed him of the split. Latimer responded that he does not know what kind of relationship Michael Lovelady and Cimarik maintained after they split the business, but indicated that he knew Michael Lovelady created a manufacturing business to make parts for control panels and marketed those products through a local electronics distributor in his area. Latimer also knew that Cimarik bought parts from Michael Lovelady to use in his operations at ESM. Latimer added that he was not sure if he perceived this relationship to be a conflict of interest as long as they conducted business at a "fair profit to each other." If so, Latimer considered Lovelady's manufacturing business as simply another vendor of ESM.

Latimer was provided the testimony of Cimarik, which was taken in a deposition in August 2009, in which he admitted that CSC and ESM shared office space in Norcross, Georgia, and shared administrative staff. Additionally, Latimer was informed that Michael Lovelady owned the building located in Norcross, Georgia, and ESM paid rent to Michael Lovelady.

¹² In fact, OIG has not been able to locate any documentation that GDC was ever formally notified that Michael Lovelady had divested himself of his interest in ESM. Similarly, OIG has not found any documentation that any employee of GDC ever requested such assurances.

Latimer stated he was aware that they shared office space; however, he was unaware that CSC and ESM shared administrative staff or that ESM paid rent to Michael Lovelady.

Latimer was informed that OIG was focusing on a particular project at Smith State Prison and provided him with a timeline of events in 2008 and 2009. Latimer was then shown the annual corporate registrations for ESM, CSC, and CESI for 2008 and 2009, which were retrieved from the Georgia Secretary of State's office. Latimer was asked if this time period was after the companies had allegedly split apart, and he indicated that, to his knowledge, the split occurred earlier than the time period being discussed. Latimer was then informed that the bid specifications were completed in January 2009 and the request for proposals was posted in April 2009. Latimer was then asked if he knew where the three companies were currently located. Latimer indicated that he did not. Latimer was informed that ESM is currently located at the same facility in Lafayette, Georgia as CSC and CESI. Based on the information provided, Latimer expressed concerns about Michael Lovelady's ability to remain independent in light of his affiliations to ESM.

When asked if he believes Michael Lovelady's inclusion of CESI as an approved manufacturer in specifications he provides as a consultant to GDC constitutes a conflict of interest, Latimer responded that he cannot prevent Lovelady from marketing his products to vendors. However, Latimer stated he has prohibited Michael Lovelady from including his products by name or number in his specifications. Lovelady is only allowed to specify the type of components for a hard-wired, relay-based system. When asked whether it would constitute a conflict of interest if Gary Lovelady, as owner of ESM, were to bid on projects on which Michael Lovelady served as the consultant, Latimer indicated that he thinks it would. However, Latimer stated that he would need a legal review to determine if he could prohibit Gary Lovelady from bidding on projects on which his father serves as a consultant.

When asked if he knew that Gary Lovelady worked for ESM for a number of years, Latimer indicated that he did not know which company employed Gary Lovelady. Latimer thought Gary Lovelady worked for his father at one time as well.

Latimer was asked again if he thought the relationship between the companies presented a conflict of interest. Latimer stated that if the same individuals owned all three companies, he

believes the relationship would constitute a conflict of interest. Inspector General Hicks asked Latimer if the general connections between the companies, especially the landlord-tenant relationship, would constitute a conflict of interest even if no direct ownership existed. Latimer stated that he believes the three companies could operate independently, even with the landlord-tenant relationship. However, Latimer conceded that the connections, at a minimum, created the appearance of a conflict of interest.

When asked if he thought the relationships between the companies could create a "chilling" effect on other potential bidders, Latimer stated that he was concerned about these effects when the companies separated. However, to his recollection, he believed that many years passed between the time GDC was told the companies separated and the time GDC first hired CSC or Michael Lovelady as a consultant. Latimer conceded that if he had "connected the dots" as OIG investigators had, he would have asked GDC's Legal Department for an opinion on whether the relationships created a conflict of interest.

On June 20, 2011, OIG investigators interviewed Gary Lovelady, the current owner of ESM and the son of Michael Lovelady. Gary Lovelady stated that he acquired fifty (50%) percent of ESM's shares in November of 2010 from Cimarik, which provided him full operational control of the business. Cimarik and Michael Lovelady had co-owned ESM between approximately 1989 and sometime in 2007 or 2008. According to Gary Lovelady, he discovered in early 2010 that he owned fifty (50%) percent of ESM. At that point, Gary Lovelady requested that Cimarik provide him full access to all financial documents of ESM. Cimarik granted him access to everything except the checkbook. Gary Lovelady thereafter offered to purchase Cimarik's half of the company.

Gary Lovelady explained that he first began working with his father at ESM when he was eleven years old. At that time, he traveled in ESM's "rig" to GDC facilities, which would remain parked outside the facility. Because he was a minor, Gary Lovelady would work outside the facility while his father worked inside the facility. At around 16 years of age, he was allowed to accompany his father inside the facilities but had to remain under his father's supervision at all

¹³ OIG Investigators spoke with representatives from two companies that have historically bid on Division 17 and locking control renovation/repair projects for GDC, both of whom stated that their companies would no longer bid on any projects on which CSC – i.e., Michael Lovelady -- served as the consultant.

times. Gary believed the permission for him to work inside GDC facilities was granted by Larry Latimer. ¹⁴ Over the years, Gary worked with ESM as a Field Technician, Service Manager, and Field Operations Manager. In 2007, Gary stopped working at ESM and began working with CESI as a Production Manager. In 2009, he became a Field Engineer with CESI's Service Team, a division created at the request of Larry Latimer and called upon often for maintenance work by Larry Latimer and/or Ken Stone. ¹⁵

OIG Investigators also questioned Gary Lovelady about his knowledge of the annual registration filed on behalf of CESI on January 29, 2009. At that time, the CEO of CESI was changed on the secretary of state's website from Michael Lovelady to an individual named Augustin Roman. Another annual registration was filed on behalf of CESI on May 27, 2009. At that time, the CEO of CESI was changed from Augustin Roman to Gary Lovelady. Gary Lovelady denied any knowledge of why Roman had been named CEO of CESI, although he acknowledged that he knew Roman. He described Roman as a childhood friend who had been incarcerated for a few years as a minor. Several years after his release, Roman reached out to Gary for assistance. As a result, Michael Lovelady extended an opportunity for Roman to work at CESI as a production technician. At some point, Roman and his family moved in with Michael Lovelady, Gary Lovelady, and Cimarik. Roman later violated company policies, which resulted in the termination of his employment at CESI in May 2009.

When questioned in more detail about ESM, CESI, and CSC, Gary Lovelady explained that for years the three companies operated at the same facility in Norcross, Georgia before moving to Lafayette, Georgia, where they are now located. He acknowledged that staff and

¹⁴ Latimer denies granting such permission.

¹⁵ GDC Engineering established a list of companies that could service various electronic security and life safety systems within state correctional facilities. Included on this list were both ESM and CESI. It is the understanding of OIG that the list was prepared to provide facilities with a choice of service providers. A former employee of CESI informed OIG investigators that employees were provided two sets of uniforms – one for ESM and one for CESI. Moreover, ESM and CESI would remit invoices to GDC from the same email address. For example, on December 10, 2010, Ken Stone received an email from a CESI email address at 10:23 AM that enclosed an invoice for service work performed by ESM. Barely an hour later, Stone received another email from the same email address that enclosed an invoice for service work performed by CESI. (See Exhibit D, attached hereto). There is no indication that anyone at GDC ever questioned this practice.

¹⁶ According to Gary Lovelady, Michael Lovelady and Cimarik resided together for approximately thirty (30) years.

other resources, including a computer server, were shared between the companies. Gary stated that ESM paid and continues to pay \$5,000 a month to Michael Lovelady to rent office space.

Subsequent to his interview, Gary Lovelady contacted OIG via telephone to provide some additional information about his initial stock acquisition in ESM. Lovelady stated that he spoke with his father, Michael Lovelady, after his interview, and his father informed him that in the early to mid 2000s, he transferred his fifty (50%) percent stock ownership in ESM to Gary, which was placed into a trust since Gary was not of legal age to make business decisions on behalf of ESM. However, Gary reiterated that he was not aware of his purported fifty (50%) percent ownership in ESM until early 2010.

On June 21, 2011, OIG investigators interviewed Charles "Chuck" T. Cimarik, former owner of ESM. Cimarik explained that he sold ESM to Gary Lovelady in the fall of 2010 after having co-owned the company with Gary's father, Michael Lovelady. ESM was created to perform low voltage electrical contractor work and provide security electronics for correctional facilities. Cimarik provided general office administration and contract work while Lovelady focused on the operational side of the business. In 2002 or 2003, Cimarik and Lovelady "split" the duties and opened CESI as a manufacturing arm. In addition, sometime around 2003, Lovelady opened his consulting business, CSC. Then in 2005 or 2006, Michael Lovelady formally divested himself by putting his shares of ESM in the name of his son -- Gary Lovelady. Cimarik recalled that he facilitated the stock transition when Gary took ownership and seemed to recall that Gary was actually present in their Norcross office when the paperwork was completed.

Cimarik explained that ESM and CESI shared office space at the same facility in Norcross, Georgia, as well as other resources including computers, credit cards, and staff. Cimarik described how ESM acted as an employment agency for CESI by contracting out its employees and administrative staff. According to Cimarik, ESM invoiced and was reimbursed by CESI for this labor arrangement. In addition, ESM paid Michael Lovelady \$5,000 per month in rent since ESM used approximately 8,000 of the 12,000 square foot office building in Norcross, Georgia. He stated that the rent was actually paid to a company owned by Michael Lovelady by the name of L3C Properties.

Cimarik stated that Gary Lovelady officially began working for ESM around the age of sixteen but subsequently went to work for CESI. He also recalled that Augustin Roman worked at CESI for a few years. However, Cimarik maintained that he knew nothing about the filing of the annual registrations with the Secretary of State's Office that listed Roman as the CEO of CESI in 2009. He expressed uncertainty as to whether the accountant may have completed the registration or perhaps he had done so at the direction of Michael Lovelady. When shown copies of the various registrations, Cimarik acknowledged that he probably completed the registration renewals using an American Express card. He also acknowledged that there were times when the companies shared credit card accounts "due to the realities of running a small business" and the fact that ESM had an umbrella account with multiple cards for use by employees.

Cimarik admitted there were challenges to keeping the businesses separate internally. Cimarik explained that ESM experienced financial constraints and issues wherein employees took liberties with company credit cards. He told OIG investigators that his heart was not in the company for the last couple of years, his management lacked, and that the company had struggled with financial issues. As payment for selling his portion of ESM to Gary Lovelady, Cimarik currently receives structured payments. The payments are compensation for a personal loan he fronted to keep ESM operational and other personal funds he invested in the business.

When he reflected on the timeframe that ESM initially started, he recalled Larry Latimer was a GDC project manager with whom he and Michael "had a kinship." He stated that over the years Ken Stone was the main point of contact at GDC and that their interaction with Latimer became more infrequent as Latimer rose in rank. He volunteered that the most recent contact he had with Latimer occurred sometime in November 2010, near the time he sold his share of ESM. During a telephone call, Latimer asked him if he had interest in consulting for GDC by conducting conditions assessments of GDC facilities. Cimarik expressed interest but has not yet reached any agreement with GDC on future consulting engagements.

On June 23, 2011, OIG investigators interviewed Michael Lovelady, owner of CESI and CSC. When asked about his businesses, Michael Lovelady referred to a historical timeline he had sketched on a white board prior to OIG's arrival. The timeline depicted the period between 1989 and the present. He pointed out that the companies were founded as follows: ESM in 1989;

CSC in 2002; L3C in 2004; and CESI in 2005. He clarified that L3C was created to handle his personal real estate holdings.

Lovelady recalled having health problems in 1999 that escalated and eventually led to the creation of CSC for consulting work in 2002. He stated it was around 2002 or 2003 when he resigned his position as VP of Engineering at ESM; however, he retained stock ownership. According to Lovelady, there was supposed to have been a trust set up for his son, Gary Lovelady, and the shares were to be placed in the trust until Gary reached age twenty-one. He said Cimarik, whom he described as "the CEO/Administrative arm of ESM", should have taken care of the paperwork. However, the transfer of shares did not occur until December 2007.

Lovelady maintained that until 2004, ESM and CSC operated out of separate addresses, and that in 2005, when CESI began, all operations moved to the same facility in Norcross, Georgia. The businesses were all located in a 13,000 square foot building which was separated into four sections. According to Lovelady, the businesses shared administrative staff and the same accountant. Lovelady denied that ESM and CESI shared field staff.¹⁷

Lovelady stated that his son, Gary, began working with ESM at approximately eleven years of age. When Gary reached age fifteen or sixteen, GDC officials allowed Michael to escort Gary inside the facilities, provided he remained with him at all times. Michael confirmed that Gary purchased ESM from Cimarik around November 2010.

In regards to CSC, Lovelady maintained that CSC moved out of the shared facility in 2007, and that he primarily operated this "project based business" out of his cabin near Lafayette, Georgia. Lovelady recalled, "I wasn't managing much at CESI [...] CESI was active in the manufacturing of circuit boards, control panels, intercoms, etc. for ESM." Lovelady acknowledged that all of the companies (ESM, CSC and CESI) shared computer servers.

When asked about the fact that records from the Georgia Secretary of State's office indicated that Augustin Roman replaced him as CEO of CESI between January and May of 2009, Lovelady responded that he was the CEO, not Roman. He further replied, "I don't have a

¹⁷ In a later interview, however, Michael Lovelady admitted to OIG investigators that ESM and CESI shared employees through a leasing arrangement.

clue. I didn't instruct that change, I didn't change it." Lovelady described Augustin as a "neighborhood kid" whom he had helped as he did many at-risk youth. Lovelady recalled how he allowed Augustin and his wife and children to live in one of his rental properties somewhere between 2007 and 2008, while Augustin worked for him. Lovelady maintained he tried to "give him a second chance" but he violated company policy, which resulted in his employment termination.

Concerning company registrations and annual renewals via the Secretary of State's Office, Lovelady stated that Cimarik renewed them and that he may have used an American Express card that was used in conjunction with the businesses. He said that Cimarik was the primary obligor on the account and that they basically had a gentleman's agreement as to how to keep each business' charges separate. Lovelady acknowledged that the businesses were operated "more personal than corporate, although not necessarily the best."

When asked about the consulting, manufacturing, and installation aspects of the businesses, Lovelady maintained he and Cimarik were able to operate as separate entities and that Cimarik never asked to see consulting specifications concerning projects on which he would subsequently submit bids.

In reference to the creation of CESI's service team, Lovelady stated that the team resulted from his "good reputation with GDC" and mentioned that Ken Stone asked him if it was something he could do in order to help all of the institutions.

When asked about details concerning when he divested himself from ESM and created CSC and CESI, Lovelady stated that as his and Cimarik's business relationship evolved, it became clear they had different philosophies and approaches. More specifically, Cimarik only wanted to conduct bid and service work. Lovelady stated he was a shareholder of ESM until 2007, at which time he signed his shares over to his son Gary. He also mentioned that ESM is

¹⁸ OIG has yet to secure any explanation for why Augustin Roman was named as CEO of CESI in 2009. Based on a review of the secretary of state's website and the process for filing an annual registration, it does not appear that this could have taken place by accident, as Roman's name was entered four times on each registration. (See Exhibit E, attached hereto). It should further be noted that this change occurred ten (10) days after CESI was listed as an approved manufacturer in the specifications prepared by CSC for the Smith State Prison project. Efforts by OIG investigators to contact Augustin Roman were unsuccessful.

paying Cimarik monthly payments via an installment agreement over the course of a year. When asked about his knowledge of the issue of a conflict of interest being raised around the time of Gary Lovelady's buy-out of ESM from Cimarik, Lovelady said he was under the impression that the issues were directed to GDC Legal and "everything was satisfied and could move forward" since his and his son's companies are two separate entities that do not co-mingle funds.

Regarding the shared facility in Norcross, Georgia, Michael Lovelady stated that ESM paid \$5,000 per month for rent to L3C, his real estate company. CSC and CESI also paid rent to L3C. However, he stated that ESM did not pay any rent in 2010.

On June 29, 2011, OIG investigators re-interviewed Mark Guzzi, GDC's Assistant General Counsel. Mr. Guzzi is the direct supervisor of Kristine Pham. Guzzi was asked if he knew of the possible conflict of interest between the companies, to which Guzzi responded that he thought Bryan Perry, a project engineer in the Engineering and Construction Services Division, had emailed him with some concerns. Guzzi stated that he told Perry to work with Pham to handle the situation, but did not follow-up on the resolution of the issue. Guzzi also stated that he was not aware of the meeting between GDC Legal, GDC Engineering and GDC Procurement to determine whether a conflict of interest existed.

On July 12, 2011, OIG investigators met with David Dick, a Certified Public Accountant at Simmons & Jamieson, P.C. and former accountant for ESM, CESI, and CSC. Dick allowed OIG to review the tax returns of ESM for the period 2004-2009, CESI for the period 2005-2009, and CSC for the period 2004-2009. Additionally, Dick made ESM's payroll records from 2005 through 2010 available for review by OIG investigators. From its review, OIG confirmed that that Michael Lovelady and Chuck Cimarik co-owned ESM until 2007, at which time Michael Lovelady's interest was apparently transferred to Gary Lovelady. OIG investigators also confirmed that CESI leased employees from ESM, although the records indicated that CESI did not reimburse ESM for employee labor in 2009.

The payroll records reviewed by OIG investigators indicated that Cimarik was on ESM's payroll throughout the entire period covered by the records (2005 through the third quarter of 2010). According to the records, Gary Lovelady was an employee of ESM from 2005 through

¹⁹ Mr. Dick obtained the permission of ESM, CESI and CSC to speak with OIG investigators.

2010, except for the third quarter of 2009. Additionally, Augustin Roman began receiving compensation from ESM in the fourth quarter of 2008 and remained on the payroll through the second quarter of 2009. Michael Lovelady was never included on ESM's payroll for the period covered by the records.

III. CONCLUSIONS

Third-party consultants hired by GDC for Division 17 projects and locking control replacement and renovation projects play a crucial role in the process. The consultants prepare bid specifications, identify problem areas in the operations of the existing system, assess the condition of the existing panels, making recommendations for improvement, and provide oversight of a project until completion. In light of this role, it is imperative that conflicts of interest between consultants and installers/manufacturers be avoided so as to ensure that the best interests of GDC are protected and to maintain an open and competitive bidding process.

The Georgia Procurement Manual provides, in part:

3.2. Using Third-Party Consultants

The procurement professional must interview any individuals who will contribute to preparing the solicitation, including, but not limited to, third-party consultants, *to ensure no individual has an impermissible conflict of interest*.

A third-party consultant is an individual or company that is paid to assist in the development of the solicitation. Third-party consultants who participate in this process will be required to prepare and submit a nondisclosure statement regarding the procurement. Any third party consultant who assists in the development of a solicitation document will be prohibited from submitting a bid/proposal in response to that solicitation or from otherwise performing work on any contract directly resulting from that particular solicitation document, unless the SPDAC expressly waives this restriction in writing.

Based upon the information obtained by OIG investigators during the course of this investigation, it is clear that significant connections existed between ESM, CSC, CESI and the principals of those companies during the period under review, to include:

- The three companies shared office space, office staff, computer services and credit cards;
- Michael Lovelady, by and through a company identified as L3C, LLC, served as the landlord for ESM, CSC and CESI;
- Michael Lovelady owned fifty (50%) percent of ESM until December 31, 2007, at which time he allegedly transferred his interest in ESM to his son, Gary Lovelady;
- Gary Lovelady purchased Cimarik's interest in ESM in November 2010; and
- Michael Lovelady and Chuck Cimarik resided together for approximately thirty years until sometime in 2008 or 2009. Michael and Gary Lovelady continue to live at the same residence.

Despite the existing connections, GDC officials believed that the companies and the historical business partnership between Michael Lovelady and Cimark had been severed. This information was apparently transmitted orally to GDC officials by either Michael Lovelady, Cimarik, or both. OIG has not located any written documentation notifying GDC that Michael Lovelady had formally divested himself of his ownership interest in ESM or providing any proof thereof. Therefore, it is unclear as to when and under exactly what circumstances GDC was actually notified of this occurrence. OIG investigators did not find any evidence that GDC officials were notified that Michael Lovelady had transferred his interest in ESM to his son, Gary Lovelady. After learning of these connections and ownership interests, one GDC official stated that he felt as though he had been deceived. The official added that if he had learned of these connections prior to OIG's investigation, it would have affected his decisions to use the companies.

Based on the foregoing, it is the opinion of the Office of the State Inspector General that a conflict of interest existed in connection with any GDC Division 17 project or GDC Locking Control Renovation or Replacement project on which CSC was utilized as the consultant for Division 17 services and/or security electronic services and on which ESM was permitted to bid. In particular, a clear conflict of interest existed on the part of CSC, ESM and CESI with respect to the Locking Control Renovation project at Smith State Prison. On that particular project, CSC served as the consultant and prepared bid specifications; ESM bid on and was awarded the

contract; and ESM used CESI components on the project. During this period of time, CSC, ESM and CESI shared multiple resources, to include staff, office space, credit cards, and computer services. Moreover, at the time bids were submitted for this project, Michael Lovelady's son owned fifty (50%) percent of ESM – a fact that was not, to OIG's knowledge, disclosed to GDC during the bidding process. The same scenario occurred with the Central State Prison project; however, ESM did not win the contract because another vendor submitted a lower bid price.

It is further the opinion of the Office of the State Inspector General that a conflict of interest existed in connection with any GDC Division 17 project or GDC Locking Control Renovation or Replacement project on which CSC was utilized as the consultant for Division 17 services and/or security electronic services and on which CESI provided components for that project or otherwise served as approved vendor for such components.

It is the opinion of the Office of the State Inspector General that Larry Latimer, as Director of GDC's Engineering and Construction Services Division, failed to investigate the relationship between CSC, ESM, CESI and the principals of those companies and further failed to exercise any reasonable measure of due diligence to determine whether those relationships constituted an impermissible conflict of interest.

The Office of the State Inspector General appreciates the cooperation provided by GDC Commissioner Brian Owens, GDC General Counsel Rob Jones, and other GDC staff during this investigation. We also are grateful to staff from the Georgia Bureau of Investigation, the Georgia Department of Law, the Office of the Georgia Secretary of State, the Georgia State Finance and Investment Commission, and the Georgia Department of Administrative Services for their ongoing professional assistance and courtesy.

IV. RECOMMENDATIONS

OIG offers the following recommendations to the Georgia Department of Corrections. OIG requests that GDC provide a written response regarding implementation of these recommendations within thirty (30) days of the issuance of this report.

- 1. OIG recommends that the contracts utilized by GDC for consultant services and professional services should be revised to include language consistent with Section 3.2 of the Georgia Procurement Manual and O.C.G.A. § 16-10-22.
- 2. OIG recommends that the bid documents utilized by DOAS, GSFIC and/or GDC for construction and related services should be revised to specifically prohibit collusion between the bidding party and any employee, representative, agent or consultant of the agency for whom the work is to be performed. The documents should include reference to the provisions of O.C.G.A. §16-10-22.
- 3. OIG recommends that all contracts utilized by GDC Engineering Staff should be reviewed by GDC Legal staff prior to execution, with the exception of such form agreements and contracts previously prepared or approved for use by GDC Legal.
- 4. OIG recommends that any vendor, third-party consultant or professional contracts utilized by GDC should include a provision permitting GDC to terminate said contract upon the discovery of an undisclosed conflict of interest on the part of the vendor, third-party consultant or professional services provider.
- 5. OIG recommends that written protocols be established for the selection of third-party consultants in those situations in which competitive bids are not required.
- 6. In light of the extensive use of consultant services by GDC in recent years, strict guidelines should be established for employees involved in the selection, award,

and/or administration of a contract. This policy should stress the need for employees to be cognizant of the potential for conflicts of interest and outline specific actions employees must follow in the event they become aware of a potential conflict of interest.

7. OIG recommends that GDC commission an independent assessment of the technology currently utilized for GDC Division 17 projects and GDC locking control systems to determine whether the relay-based, hard-wired systems currently used by GDC represent a cost-effective and efficient use of current technologies.

EXHIBITS

EXHIBIT A



Office of the Secretary of State **Corporations Division**

315 West Tower #2 Martin Luther King, Jr. Dr. Atlanta, Georgia 30334-1530 (404) 656-2817

05/18/2011

Chauncey Newsome Director

Secretary of State, Brian P. Kemp

Invoice Number: 5716116

Invoice Date: 03/21/2008 02:50 PM

User ID: 590

Billing Information

CORRECTIONAL ELECTRONICS

SUPPLY, INC.

907 S MAIN STREET LAFAYETTE, GA 30728

Product De	escription	Certification Number	Order Date	Qty	Pages	Item Cost	Extended	Amount Due
Registration	arles Cimarik	2427779	03/21/2008	1	1	30.00	30.00	Paid
	Credit Ba	lance as of 05/18/2	011 6:46 PM:	***************************************	\$0.00	***************************************		
Payment Det	tails:					Invoice T	otal:	\$30.00
	: \$30.00 from Web with Credi XXXXXXXX1008, Auth: 137		AMEX Acct		P	ayment T	otal:	\$30.00
Contact(s):	Michael Lovelady 2900-A Cole Court Norcross, GA 30071 United States mal-csc@comcast.net 404 915 6939					Amount I	Due:	\$0.00

Include invoice number on all correspondence and send to:

Corporation Inquiries:

Corporations Division 315 West Tower

#2 Martin Luther King, Jr. Dr.

To discuss payment for Corporation items call:

(404) 656-2817

5/18/2011 6:46:04 PM

Invoice Number: 5716116

Page 1 of 1



Brian P. Kemp Secretary of State

Office of the Secretary of State **Corporations Division**

315 West Tower #2 Martin Luther King, Jr. Dr. Atlanta, Georgia 30334-1530 (404) 656-2817

Secretary of State, Brian P. Kemp

05/18/2011

Invoice Number: 5716150

Invoice Date: 03/21/2008 02:52 PM

User ID: 590

Chauncey Newsome

Director

Billing Information

ENGINEERED SYSTEMS FOR MANUFACTURING, INC. 909 S Main St

LaFayette, GA 30728

Product De	escription	Certification Number	Order Date	Qty	Pages	Item Cost	Extended	Amount Due
Registration	arles Cimarik	2427845	03/21/2008	1	1	30.00	30.00	Paid
	Credit Ba	nlance as of 05/18/2	011 6:38 PM:	**********	\$0.00	***************************************		
Payment Det	tails:					Invoice T	otal:	\$30.00
	\$30.00 from Web with Cred XXXXXXXX1008, Auth: 170		AMEX Acct		P	ayment T	otal:	\$30.00
Contact(s):	Charles Cimarik 2900-A Cole Court Norcross, GA 30071 United States ctcimarik@eng-sys.net 770 246 9364					Amount I	Oue:	\$0.00

Include invoice number on all correspondence and send to:

Corporation Inquiries:

Corporations Division

315 West Tower

#2 Martin Luther King, Jr. Dr.

To discuss payment for Corporation items call:

(404) 656-2817

5/18/2011 6:38:18 PM

Invoice Number: 5716150



Office of the Secretary of State **Corporations Division**

Chauncey Newsome Director

315 West Tower #2 Martin Luther King, Jr. Dr. Atlanta, Georgia 30334-1530 (404) 656-2817

Brian P. Kemp Secretary of State

Secretary of State, Brian P. Kemp

05/18/2011

Invoice Number: 5716174

Invoice Date: 03/21/2008 02:55 PM

User ID: 590

Billing Information

CORRECTIONAL AND SECURITY

CONSULTING, INC.

907 SOUTH MAIN STREET

LAFAYETTE, GA 30728

Product De	escription	Certification Number	Order Date	Qty	Pages	Item Cost	Extended	Amount Due
Registration	arles Cimarik	2427891	03/21/2008	1	1	30.00	30.00	Paid
	Credit Ba	lance as of 05/18/2	011 6:42 PM:	***************************************	\$0.00			
Payment De	tails:					Invoice T	otal:	\$30.00
	: \$30.00 from Web with Credi XXXXXXXX1008, Auth: 198		AMEX Acct		P	ayment T	otal:	\$30.00
Contact(s):	Michael Lovelady 319 S. Peachtree St Norcross, GA 30071 United States mal-csc@comcast.net 404 915 6939					Amount I	Oue:	\$0.00

Include invoice number on all correspondence and send to:

Corporation Inquiries:

Corporations Division

315 West Tower

#2 Martin Luther King, Jr. Dr.

To discuss payment for Corporation items call:

(404) 656-2817

5/18/2011 6:42:29 PM

Invoice Number: 5716174

of

EXHIBIT B

GEORGIA STATE FINANCING AND INVESTMENT COMMISSION BID TABULATION SHEET Project No. GDC-08-057 Smith State Prison Locking Control Replacement

6/3/09 2:00 PM

COMPANY NAME	ADDENDA	BID	BASE BID	ALTERNATE #1	ALTERNATE #2
	1, 2, 3, 4	BOND			
Engineered Systems for Manufacturing, Inc.	V	√	\$638,950.00	N/A	N/A
Norment Security Group, Inc.	V	V	\$1,575,000.00	N/A	N/A

EXHIBIT C

SECTION 17020

INTEGRATED LOCKING CONTROL SYSTEM

PART 1-GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this section.

1.2 SUMMARY

- **A.** The work included under this section of the specifications consists of the installation of complete integrated locking control systems as described herein. Provide all labor, equipment, materials, and supervision to install, calibrate, adjust, document, and test the total system as required herein and on the drawings.
- **B.** Replace the Locking Control Panels (LPC), Security Equipment Cabinet (SEC) and associated control systems including Public Address, Lighting and Television Control, as described in these specifications, with a hard-wired relay based system.
- **C.** The contractor shall review the specifications, schedules, and existing project control systems to ensure that all devices are controlled and/or monitored for all existing hardware.

1.3 QUALITY ASSURANCE

- **A.** All work specified under this division shall be performed in accordance with the following codes:
 - 1. NEC 70-1999 with Georgia Amendments
 - **2.** NFPA 72
 - **3.** NFPA 101

1.4 DETENTION EQUIPMENT MANUFACTURER QUALIFICATION / PREQUALIFICATION

- **A.** The detention control equipment furnished under this specification shall be a standard product of manufacturers who have been supplying similar equipment for a minimum of 5 years for use in the detention industry.
- **B.** All control equipment assemblies shall be manufactured by the same manufacturer.
- **C.** The owner reserves the right to disqualify manufacturers or equipment suppliers who do not comply with the requirements of this article of the specifications.
- **D.** All equipment manufacturers not pre-approved and listed must request approval and shall submit the following to the architect in writing no later than 10 days prior to bid. Manufacturers which are approved by submission shall be acknowledged by addendum. Any submission received after the due date will not be considered. Manufacturer shall be listed on the bid form. Any bid without preapproved manufacturer will be not be considered and removed from the bid process as non-qualifying. The following information must be submitted to qualify for review for preapproval:

Correctional & Security Consulting, Inc January 19, 2009 LOCKING CONTROL SYSTEM REPLACEMENT 17020 SMITH STATE PRISON LOCKING CONTROL SYSTEM

- 1. List 10 projects similar in scope of this project with manufacturer's equipment which has been in successful operation for a minimum of 5 years. For each facility, list name, location, owner, owner contact with phone number.
 - 2. Provide certified financial statement.
 - **E.** The following equipment manufacturers are pre-approved to furnish equipment for this project:
 - 1. Stealth Technologies, Inc., Memphis, Tenn.
 - 2. Correctional Electronic Supply, Inc., Norcross, Ga.
 - 3. Southern Folger Detention Equipment Co., San Antonio, TX.

1.5 CONTRACTOR QUALIFICATION / PREQUALIFICATION

- **A.** The contractor shall have a minimum of 5 years experience in the installation and integration of detention control equipment similar to that in this specification.
- **B.** The owner reserves the right to disqualify contractors who do not comply with the requirements of this article of the specifications.
- C. All contractors not pre-approved and listed must request approval and shall submit the following to the architect in writing no later than 10 days prior to bid. Contractors which are approved by submission shall be acknowledged by addendum. Any submission received after the due date will not be considered. Contractor shall be listed on the bid form. Any bid without preapproved contractor will be not be considered and removed from the bid process as non-qualifying. The following information must be submitted to qualify for review for preapproval:
 - 1. List 10 projects similar in scope of this project with manufacturer's equipment which has been in successful operation for a minimum of 5 years. For each facility, list name, location, owner, owner contact with phone number.
 - 2. Provide certified financial statement.
 - **3.** Submit a letter from the surety company stating that a 100% payment and performance bond can be supplied if selected as the successful contractor.
 - **4.** Provide names and resumes of the Project Manager, Project Engineer, Site Superintendent and lead technician to be assigned to the project.
- **D.** The following contractors are pre-approved to furnish equipment for this project:
 - **1.** ESI Companies, Inc., Memphis, Tenn.
 - 2. Easter Owens / Integrated Systems, Inc., San Antonio, TX.
 - 3. Integrated Systems, Inc., San Antonio, TX.
 - 4. Engineered Systems for Manufacturing, Inc., Norcross, Ga.

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5. Prequalification does not relieve contractor from furnishing materials from approved manufacturers.

1.6 WARRANTY

- **A. Installation:** Contactor shall warrant all installation work for a period of one year after completion and acceptance of project by owner. Warranty shall include full replacement or repair of all materials installed including labor for replacement or repair at no cost to owner during the warranty period.
- **B. Manufacturers:** Manufacturers shall warrant all equipment installed for a period of 2 years after completion and acceptance of project by owner. Warranty shall be for full replacement or repair of defective goods returned under the warranty period and transferrable to owner after expiration of contractor warranty.
- **C. General:** Manufacturer and Contractor shall supply executed written warranty to owner in compliance with terms of this specification at time of final acceptance of project. Manufacturer warranty does not relieve Contractor of responsibility to repair or replace defective equipment during the Contractor warranty period.

1.7 SUBMITTALS

- **A.** No later than fifteen days after notice to proceed, a pre-design meeting shall be held at GDOC headquarters in Atlanta, Ga. to review the project with the contractor.
- **B.** After Submittals have been approved and the design and installation documents are prepared by the contractor, a pre-construction meeting shall be held at GDOC headquarters to review the design and compliance to the specification.
- C. The contactor shall submit for the engineer a complete data set from the equipment manufacturer which shall include electrical and mechanical characteristics, model number, performance specifications and diagrams of equipment to be used.
- **D.** Each submittal item shall be marked with the applicable specification section to which it complies.
- **E.** An operational narrative of the complete operation of the equipment with annotation of applicable specification section shall be provided.
- **F.** System one-line and riser diagrams shall indicate all interconnections of system components including field devices, location and quantity.
- **G.** Dimensioned floor plan layouts indicating location of equipment as well as conduit routing and cabling schedules shall be provided.
- **H.** All submittals shall be cross tabbed and index by system and applicable specification number and bound in a 3 ring binder. Copies of all full size prints submitted shall also be provided in the binder as folded and bound 11 X 17 paper.
- I. Full size scale drawings of panel faceplates shall be provided with part number and color information for panel graphic overlay, LED, and Switch colors.
- J. Completed submittals shall be provided within 60 days after notice to proceed. Partial Submittals shall not be accepted.
- K. Warranty information shall be submitted for the Contractor and Manufacturer products. Correctional & Security Consulting, Inc January 19, 2009 LOCKING CONTROL SYSTEM REPLACEMENT 17020 SMITH STATE PRISON LOCKING CONTROL SYSTEM

L. Contractor bears the sole responsibility for compliance to the contact documents and is granted no relief by the review of the submittals by the engineer.

1.8 CLOSEOUT DOCUMENTATION

- A. Contractor shall provide to owner all design and installation drawings reflecting the final configuration of the installation and equipment installed as part of this project a minimum of two weeks prior to final inspection and acceptance of the project. Documentation shall include but limited to the following:
 - 1. Operational Narrative
 - 2. Equipment schematics and mechanical layout drawings including point to point wiring with color codes
 - 3. Point to point field wiring including field wiring termination identification and color codes for field terminations at control system and field detention hardware.
 - 4. Bill of Materials with reference designations and manufacturer part numbers
 - 5. Executed warranty information
 - 6. Training Video
 - 7. Manufacturer' certification of installation compliance

PART 1-GENERAL

1.1 SYSTEM DESCRIPTION

A. The locking control systems shall control all electrically controlled hardware, motorized gates and doors, housing unit lighting, television and inmate telephone systems as well as provide integrated public address systems. The system shall monitor and annunciate the status condition of all electrical door and gate hardware. The logic functions necessary for operating and annunciating the locking control system shall be provided by a hard-wired relay logic control system as described herein. All systems shall be hardwired without the use of programmable devices or controllers.

1.2 GENERAL CONTROL AND ANNUNCIATION - HOUSING UNITS

- A The following describes the operational and functional descriptions for various control operations of the control panel and SEC for Housing units.
 - 1. Door Annunciation: Each door or gate to be monitored shall illuminate a red LED during any non-secure condition. Each electrically controlled door or gate shall be monitored. On sliding doors and gates the annunciation shall occur upon the first movement of the lock bar. On swing doors and gates the annunciation shall occur on the first movement of the locking mechanism. Door and gate position switches shall cause the annunciation on any non-secured position. The secured status of controlled doors and gates on this project will typically be monitored by two or more position switches which include but are not limited to door/gate position, lock bar position, roller bolt position, latch bolt position, and motor switches. limit The non-secure condition shall be annunciated by any one non-secure switch on a given hardware set.

- 2. Door Control: Electrically operated doors or gates shall be unlocked by depressing a momentary action pushbutton switch. Unlock switches shall be color coded blue. Releasing the momentary action pushbutton switch shall de-energize the lock allowing the door or gate to secure.
- 3. Interlock active: Any door or gate which is included in an interlock function shall light a yellow LED denoting that the interlock status is active when that door goes from a secure state to an unsecure state. During the interlock active period only the initial unsecure door control shall work until such time as the door has been secured preventing the operation of any other door in the interlock scheme. Emergency release functions shall override the interlock system. Simultaneously depressing multiple door unlock switches in an interlock scheme shall not prevent the interlock from functioning properly.
- 4. Interlock bypass: Should an interlock active state exist and another door in the interlock scheme be required to operate prior to securing the active door, the interlock may be overridden by depressing and holding the Interlock Bypass switch while depressing the appropriate door unlock button. Pressing the Interlock Bypass switch shall illuminate a red LED indicating Interlock Bypass mode. Upon releasing the Interlock bypass switch, the interlock system returns to normal operation. Interlock Bypass switches shall be color coded yellow.
- 5. Group Unlock: Pressing and releasing the momentary Group Unlock switch shall initiate a door unlock sequence in which each door in the group will sequentially unlock and remain unlocked. The time between each successive unlock shall be a minimum of 1 second and a maximum of 2.5 seconds. A red LED shall annunciate that the sector of locks are in group unlock. Upon a second press and release of the Group Unlock switch, the locks shall return to the de-energized state and the Group Unlock LED shall extinguish. Group Unlock switches shall be color coded black in housing units D,E,F,G,H and color coded red in housing unit J. Group Unlock switches in Housing Unit J shall only function if the Emergency Enable switch is being pressed simultaneously. Should a group unlock remain activated for a period exceeding 3 minutes, a specific audio alert shall sound until the condition is corrected.
- 6. Inmate Access: Each graphics control panel shall have a momentary switch which when depressed and released shall put that all cells in Inmate Access mode and illuminate a corresponding yellow LED for that cell. While in Inmate Access, depressing the call switch in the cell shall cause the lock for that cell to be energized while the switch is being pressed. Depressing and releasing the Inmate Access switch a second time extinguishes the Inmate Access LED and returns the call switch to normal operation. Inmate Access switches shall be color coded vellow.
- 7. Call Annunciation: Each cell shall have a green LED on the graphics control panel which shall indicate if a call has been initiated. When the call button in the cell is depressed, the green LED shall flash and the graphics control panel shall provide a specific audio alert output. If the silence button is depressed, the audio alert will stop and the LED will light solid (Subsequent presses of the call switch in the cell shall have no further effect while in this state). Pressing the Reset switch on the graphics control panel will extinguish the LED, silence the sounder and return the call switch to normal operation. If a call is placed and the Reset switch is pressed, the call is cancelled and the call is returned to normal operation. If a call is placed and the Inmate Access switch is depressed, the call is cancelled, the audio alert silenced, and the call switch performs as described in Inmate Access mode.

- **8. Officer Duress:** The graphics control panel shall have a momentary switch which when depressed and released simultaneously with the Emergency Enable switch shall illuminate a red LED and provide a specific audible alert. In addition, the action shall provide a signal to the central graphics panel LPCG illuminating a flashing LED and creating a specific audio alert.
- 9. Central Override Lockdown: Each graphics control panel shall have a red LED which shall illuminate should the SEC receive a lockdown signal from Central control. While in lockdown mode, all control functions are removed from the panel, all group unlocks are cancelled and officer duress is reset. Door annunciation, Duress, and Central override annunciation remains in effect. A silenceable specific audio alert shall be generated indicating that the building is in lockdown. The power indication LED, if applicable, shall extinguish at the time of execution. Upon removal of the lockdown condition, all systems shall return to a normal operational state with previous group unlock functions cancelled.
- 10. Central Override Emergency Release: Upon receipt of a signal from main control, the SEC will begin an unlock sequence in which locks will be energized sequentially at no less than 1 second intervals and remain energized until cancellation of the signal. The release sequence shall begin with emergency exits first and then proceed to the cell doors. The release mechanism shall allow for field configuration to allow the removal or addition of doors to the emergency release sequence. Upon activation of the emergency release signal, a red LED shall illuminate and remain illuminated until cancellation of the contact closure. A silenceable specific audio alert shall be generated indicating that the building is in Emergency Release. The Central Override Emergency release shall super cede all other prior operations.
- 11. Night Secure: Night Secure mode shall be a momentary action pushbutton. To activate Night Secure mode, push the Night Secure pushbutton, which shall illuminate the ON secure mode LED in a steady mode. If any door becomes non-secure for any reason when the Night Secure mode is on, it will turn on the specific door's DPS red LED in a fast flashing mode and a distinctive audible alert shall sound. Pressing the panel Silence pushbutton shall silence the audible alert and the flashing DPS door LED shall illuminate in a slow flashing mode. Pressing Reset shall cause the DPS door LED to track the current status of the door. Doors that are to be included in secure mode are all doors in the housing units. An alarm shall not prevent sequential alarms from being activated.
- 12. Fire Doors: The pushbuttons shall be red and momentary action. The red door status LED shall track the secure deadlock door status at all times. Pressing and holding the Emergency Control Enable pushbutton on the associated locking control panel and then pressing momentary action (Fire Exit) door unlock pushbutton shall cause the associated fire door to be unlocked by the local locking control system. The red (unlock) LED shall illuminate in a steady mode when the Fire Exit door is not secure. A Lockdown from Central Control shall disable the fire door unlock function, until the Lockdown has been reset from Central Control.
- **13. Television Control:** The pushbuttons shall be Green and momentary action. Upon activation, a green LED shall illuminate and remain steady until the selected television circuit is deenergized.
- **14. Telephone Control:** The pushbuttons shall be Green and momentary action. Upon activation, a green LED shall illuminate and remain steady until the selected telephone circuit is deenergized.

- **15. Public Address Control:** The pushbuttons shall be Green and momentary action. Upon activation, a green LED shall illuminate and remain steady until the selected paging zone is de-energized. The public address system shall provide two way simplex communication with the area selected.
- **16. Lamp Test:** Depression of the momentary lamp test switch shall cause all LED's and a specific audio alert to activate for the duration the switch is depressed.
- 17. Power Switch: Each control panel indicated shall have a MEDECO key activated power control switch which allows key removal in the on or off state. When the power control is switched on a green power LED shall illuminate and all panel functions are normal. In the power off state, all LED's, audiles, silence and reset switches remain operable while all other controls are disabled.
- **18. Power Trouble:** In the event of a power supply failure or fuse failing, a power trouble LED on the control panel will turn on and a specific audio alert will Sound. Pressing silence will turn off the alert. The LED will turn off when the power supply resumes normal operation or the fuse has been replaced. Power monitoring shall include both main power fuses as well as individual locking relay fuses.
- **19 UPS Trouble**: In the event that the UPS internal diagnostics detects a fault, a power trouble led on the control panel will turn on and a specific audio alert will Sound. Pressing silence will turn off the alert. The led will turn off when the fuse has been replaced and there are no other bad fuses.
- 20. System Trouble: Individual lock state indication switches and door position switches shall be monitored by the SEC. Should lock indication and door position indications not coincide, the system malfunction LED shall flash along with the associated door indication LED and a specific audio alert shall sound.

1.3 GENERAL CONTROL AND ANNUNCIATION - MAIN CONTROL

- **A.** The following describes the operational and functional descriptions for various control operations of the control panel and SEC for Housing units.
 - 1. Door Annunciation: Each door or gate to be monitored shall illuminate a red LED during any non-secure condition. Each electrically controlled door or gate shall be monitored. On sliding doors and gates the annunciation shall occur upon the first movement of the lock bar. On swing doors and gates the annunciation shall occur on the first movement of the locking mechanism. Door and gate position switches shall cause the annunciation on any non-secured position. The secured status of controlled doors and gates on this project will typically be monitored by two or more position switches which include but are not limited to door/gate position, lock bar position, roller bolt position, latch bolt position, and motor limit switches. The non-secure condition shall be annunciated by any one non-secure switch on a given hardware set.
 - 2. Door Control: Electrically operated doors or gates shall be unlocked by depressing a momentary action pushbutton switch. Unlock switches shall be color coded blue. Releasing the momentary action pushbutton switch shall de-energize the lock allowing the door or gate to secure.

- 3. Interlock active: Any door or gate which is included in an interlock function shall light a yellow LED denoting that the interlock status is active when that door goes from a secure state to an unsecure state. During the interlock active period only the initial unsecure door control shall work until such time as the door has been secured preventing the operation of any other door in the interlock scheme. Emergency release functions shall override the interlock system. Simultaneously depressing multiple door unlock switches in an interlock scheme shall not prevent the interlock from functioning properly.
- 4. Interlock bypass: Should an interlock active state exist and another door in the interlock scheme be required to operate prior to securing the active door, the interlock may be overridden by depressing and holding the Interlock Bypass switch while depressing the appropriate door unlock button. Pressing the Interlock Bypass switch shall illuminate a red LED indicating Interlock Bypass mode. Upon releasing the Interlock bypass switch, the interlock system returns to normal operation. Interlock Bypass switches shall be color coded yellow.
- 5. Central Override Functions: The Central Control locking control panel shall contain an Emergency Release and Lockdown for each remote area that contains locking control panels. The Emergency Release and Lockdown shall be red momentary action pushbuttons. Pressing and holding the Central Control Emergency Control Enable pushbutton and simultaneously pressing the Emergency Release pushbutton shall activate the Emergency Release Timer. A specific audio alert shall sound during the countdown sequence. An Emergency Release Timer and an Abort switch shall be provided on the Central Control locking control panel. Pressing the Abort pushbutton will abort and reset the Emergency Release function. The timer shall be adjustable from 0 to 60 seconds, with digital readout. Changing the time shall be by manual means, with no external programming. There will be no countdowns for Lockdown. The Emergency Release can be aborted by pressing the Abort button on the Central Control locking control panel or by pressing and holding the Emergency Control Enable pushbutton and simultaneously pressing the associated Emergency Release pushbutton again.
 - **A.** If the Abort function is pressed or the Emergency Release function is reset, the Emergency Release Timer will automatically be reset to the preset time. When the Emergency Release Timer has count down to zero, the Emergency Release function selected from the Central Control locking control panel will activate.
 - **B.** The Emergency Release shall unlock all cell doors sequentially, and hold them open. Control room and control to dayroom doors shall stay locked until the control officer elects to open them from the local locking control panel and shall not be included in the Emergency Release sequence.
 - C. The Emergency Release LED on the Central Control locking control panel shall illuminate in a steady mode. The Emergency Release LED shall be red. A specific audio alert shall sound until the associated locking control panel Silence switch is pressed or the action is canceled.
 - **D.** With an active Remote Emergency Release, pressing and holding the Emergency Control Enable pushbutton and simultaneously pressing the respective Emergency Release pushbutton on the Central Control locking control panel shall send a signal to the remote area which will reset the Remote Emergency Release condition, and all associated LED's shall turn off. All doors shall return to their locked position. Sliding doors or gates stay open until their associated close switch is activated.
 - **E.** Pressing and holding the Central Control Emergency Control Enable pushbutton and simultaneously pressing the Lockdown pushbutton shall send a signal to the associated

- remote area to activate Lockdown. Activation of Lockdown will illuminated an LED and sound a specific audio alert. With an active Lockdown, pressing and holding the Emergency Control Enable pushbutton and simultaneously pressing the Lockdown pushbutton on the Central Control locking control panel shall cause the control system to reset the remote locking control system, which will return lock power control to all locks, and the red Lockdown LED shall be extinguished indicating that all systems are in normal operation.
- F. Receipt of an Officer Duress signal from a remote locking control system to the Central Control locking control system shall cause the red Officer Duress LED to illuminate steadily and a specific audio alert shall sound on the Central Control locking control panel. The Duress signal shall simultaneously activate the corresponding zone for the Duress location on the Public Address/Monitoring station in Central Control to establish an immediate communication path. Pressing the Silence pushbutton on the Central Control locking control panel shall cause the audible tone to silence. Control will then press Emergency Control Enable switch and Lockdown to begin the lockdown feature in the associated area.
- **G.** When there is an active Officer Duress, activating the Lockdown function for the associated remote locking control panel will reset the Officer Duress in the corresponding area and shall send a signal to the remote locking control system and extinguish the red Officer Duress LED. The Duress initiated zone on the Central Paging/Monitoring system shall remain activated until manually reset by the Central Control Officer.
- **H.** Lockdown is reset by again pressing the associated Lockdown switch and Emergency Control Enable simultaneously.
- **6.** Fire Doors: The pushbuttons shall be red and momentary action. The red door status LED shall track the secure deadlock door status at all times. Pressing and holding the Emergency Control Enable pushbutton on the associated locking control panel and then pressing momentary action (Fire Exit) door unlock pushbutton shall cause the associated fire door to be unlocked by the local locking control system. The red (unlock) LED shall illuminate in a steady mode when the Fire Exit door is not secure.
- **7.** Lamp Test: Depression of the momentary lamp test switch shall cause all LED's and a specific audio alert to activate for the duration the switch is depressed.
- **8.** Power Enable: Each control panel shall have a MEDECO key activated power control switch which allows key removal in the on or off state. When the power control is switched on a green power LED shall illuminate and all panel functions are normal. In the power off state, all LED's, audiles, silence and reset switches remain operable while all other controls are disabled.
- **9.** Power Trouble: In the event of a power supply failure or fuse failing, a power trouble LED on the control panel will turn on and a specific audio alert will Sound. Pressing silence will turn off the alert. The LED will turn off when the power supply resumes normal operation or the fuse has been replaced. Power monitoring shall include both main power fuses as well as individual locking relay fuses.
- 10. UPS Trouble: In the event that the UPS internal diagnostics detects a fault, a power trouble led on the control panel will turn on and a specific audio alert will Sound. Pressing silence will turn off the alert. The led will turn off when the fuse has been **replaced and there are** no other bad

fuses.

11. System Trouble: Individual lock state indication switches and door position switches shall be monitored by the SEC. Should lock indication and door position indications not coincide, the system malfunction LED shall flash along with the associated door indication LED and a specific audio alert shall sound.

DESCRIPTION OF INDIVIDUAL COMPONENTS

2.1 Control Panel.

- A. The control panels shall consist of switches, light emitting diodes, and audible devices mounted on a hinged, framed, .25" cast acrylic top substrate with a matte finish on the surface, and an opaque black coating on the reverse. This layer shall be reverse laser engraved with all graphics and text and back painted in a multicolored scheme. This panel shall then be attached on top of a .25" cast acrylic sheet back painted with laser engraved terminal addressing to indicate the termination point of the factory wiring. The completed panel shall subsequently mount on sloped-top rugged polymer, Celtec, turrets.
- **B.** Switches used in this design shall be industry standard P3 series Otto switches, shown to be long lasting and durable. All switches shall be momentary, normally-open type. Attachment to the wiring harness shall be with solder connections. The design shall provide the necessary arrangement and number of contacts to perform the specified function for each switch. All pushbutton switches installed shall be of the "guarded head" type, reducing the chance of accidental activation.
- C. All visual indicators shall be T 1-3/4 red, yellow or green light emitting diodes (LED). LEDs shall be terminated to internal wiring by solder connections. Current limiting resistors and lamp test diodes shall be provided as required for operation on 24VDC. The indicators shall be rated for not less than 50,000 hours of operation at 20mA, and produce a minimum of 147 lumens/watt. All resistors are sized according to manufacturer's recommendations and adjusted to produce uniform brightness among all LED's. Resistors and protective diodes shall be mounted on printed circuit boards with connectors for wiring mounted within the base of the turret, enabling easy keyed-access for troubleshooting and/or replacement. LEDs are mounted to the panel face in a manner to allow replacement of the acrylic top substrate without damaging the LED's. The color of each LED shall be determined from functional descriptions contained within the Specification or as indicated on the plans provided.
- **D.** Audible signals shall be separate solid-state devices producing required intelligible audible signals. Audible signals are an integral component of the control panels.
- E. The mounting plate and the enclosure shall be fabricated from minimum 0.75 inch thick polymer, Celtec, with all necessary provisions to mount devices as specified in the Specifications and on the plans. A solid steel "piano" style hinge allows the front panel to swing up. This panel may only be opened with a key. A metal trim assembly holds the graphic overlay and conceals the overlay edges. The plate is securely mounted to the enclosure with screws. Wiring between turret and panel face consists of ribbon cable and discrete wiring consistent with the Specification. Connectors used shall be industry standard, rugged, and may be easily disconnected so that the panel face can be removed for service. All cables and connection base plates are identified so that cable connections may be easily verified to be accurate.

- **F.** For linear and graphic panels, switches and LED's shall be grouped in a manner consistent with engineering drawings provided and industry standards.
- **G.** All cabling shall be securely mounted to the structure of the turret and control cabinet with cradle mounts and wire ties. Cabling source and destination shall be clearly labeled for precise connection and maintenance purposes. Cable bundles shall be securely held with wire ties between cradle mounts. Cradle mounts shall be attached to the substrate and cabinet with studs or screws. Adhesive mounted cradles are not acceptable. All terminations to panel components are 22AWG wire soldered into switches and 28AWG soldered to the LED leads.
- **H.** Identification of all internal equipment and field termination points shall be identified by permanently engraved reference designations. Reference designations shall correspond to those utilized in schematics and mechanical assembly drawings provided in compliance with this specification.
- **I.** Provide system ventilation sized to maintain a maximum temperature of no more than 10 degrees F over ambient air under worst case conditions. Ventilation intake shall contain a field replaceable filter.
- J. All control turrets shall be constructed of .75" rugged polymer, Celtec, consistent with industry standards and similar installations. All dimensions shall be driven by the requirements of the cabinet equipments to fulfill he functions required in the Specification. In addition, the dimensions shall be minimized such that they may be easily transported and constructed on-site in the area given by accurate engineering drawings provided. Turrets are installed on top of the cabinets with cabling routed internally to the cabinets. The control cabinets shall be secured and have keyed access.

2.2 Security Electronics Enclosure (SEC)

- A. The locking interface electronics shall be accomplished with IDEC RH-XU-24VDC standard mechanical interposing relays utilizing a plug in base with retaining clip. Each individual relay output shall be fused utilizing AGC style glass fuses per field device power rating. Each relay output state shall be annunciated utilizing red LED indicators. The coil of each relay shall be wired to accommodate a sinking (24v return) input to energize. The coil of each relay shall be shunted with an external 1N4001 diode or equivalent.
 - **B.** The relay assembly including relay, relay base, LED and fuse shall be mounted to a carrier which will interface with a standard DIN rail. The relay carrier assembly shall contain groups of no more than eight but not less than four relay assemblies and provide interface to field wiring via removable plug in connectors manufactured by Phoenix or equivalent.
 - C DPS annunciation shall activate utilizing a sinking (24v return) input. On sliding doors and gates the annunciation shall occur upon the first movement of the lock bar. On swing doors and gates the annunciation shall occur on the first movement of the locking mechanism. Door and gate position switches shall cause the annunciation on any non-secured position. The secured status of controlled doors and gates on this project will typically be monitored by two or more position switches which include but are not limited to door/gate position, lock bar position, roller bolt position, latch bolt position, and motor limit switches. The non-secure condition shall be annunciated by any one non-secure switch on a given hardware set.

- **D**. Emergency release and group release functions shall sequentially unlock doors as described in this specification. This shall be accomplished utilizing solid state field configurable release drivers which operate eight doors maximum and may be cascaded with other release drivers. These drivers must interface directly with and derive power from the locking relay assembly. To prevent surge induced releases, the driver must be configured such that it is not powered up unless a release command has been issued.
- **E.** Inmate access and call functions shall be provided as described in this specification. Control and annunciation shall activate utilizing a sinking (24v return) input.
- **F.** Interlock functions shall be provided as described in this specification. The Interlock controller shall consist of a two door controller which may be cascaded to allow for multiple doors. This controller shall contain integral lamp test circuitry and consist of discrete components on a din rail carrier
- **G.** All power supplies shall be individually fused. Power supplies for the purpose of controlling relays or providing annunciation shall be separate from those utilized to power field devices.

2.3 **SEC**

- A. Internal wiring shall comply with the following:
 - 1. All internal wiring shall be stranded THHN copper wire.
 - 2. Annunciation wiring shall be a minimum of 20 AWG.
 - 3. Control wiring shall be a minimum of 20 AWG.
 - 4. Lock power wiring shall be a minimum of 14 AWG.
 - 5. Internal AC voltage greater than 26 VAC shall be bundled separately and maintained at a separation of 1 inch minimum to adjacent control wiring.
 - 6. All wiring shall be color coded by function and denoted on shop drawings.
 - 7. All circuits shall be clearly labeled and identified.
 - 8. Internal wiring shall terminate to a terminal block or connector at the point of transition to field wiring. No splicing of conductors is allowed.
- **B.** All wiring shall be bundled utilizing nylon wire ties at 8 inch minimum spacing. The wire bundle shall be affixed to the SEC back plate via screw attached cradle mounts (adhesive cradles are not allowed) at 10 inch intervals or enclosed with Panduit style raceway.
- **C.** Provide system ventilation sized to maintain a maximum temperature of no more than 10 degrees F over ambient air under worst case conditions. Ventilation intake shall contain a field replaceable filter.
 - **D**. Identification of all internal equipment and field termination points shall be identified by permanently engraved reference designations. Reference designations shall correspond to those utilized in schematics and mechanical assembly drawings provided in compliance with this specification.

2.4 Power Distribution

A. DC power supplies shall be sized as required to provide 24 volt regulated within +/- 5% from no load to full load., filtered DC power for locking controls and signal devices. Output power shall be 24 volt DC with ampere rating not less than 150% of load imposed on power supply under most severe

- conditions of load. Power supply shall not exceed 12 amps. Acceptable manufacturers include Lambda, Power One and Condor.
 - **B.** Separate power supplies shall be utilized for the control circuitry and lock power. These power supplies shall remain electrically isolated from each other.
 - **C.** Primary power input for the lock power supply shall be provided via a DIN mounted Circuit breaker rated at no more than 15 amperes.
 - **D.** Power supply outputs shall be fused with standard, AGC type, glass, replaceable fuses rated for the maximum rating of the power supply.
 - **E.** Power shall be distributed to the load in such a manner as to divide load among power supplies so as not to exceed 10 amps continuous on any given circuit under most severe conditions.
 - **F.** Power output to control locksets shall be individually fused at a maximum of 4 amps each.
 - **G.** Power supply internal over current protection shall not prevent the activation of primary or secondary fuse protection in the event of a short circuit on the supply output.

2.5 UPS

- **A.** In the event of a utility or emergency power failure, the control system shall be fully operational for a period of four hours and shall continue to operate normally with no operational power loss on transitions between utility and emergency generator power. On restoration of utility or emergency power the batteries shall automatically be recharged. Battery power backup is not required for power sources which actually operate the hardware except for power necessary to produce security status signals and call-in functions.
- **B.** UPS shall have a capacity rated to maintain control and annunciation circuitry for a minimum of 4 hours. Lock Power shall not be part of the UPS circuit.
- C. UPS shall have internal diagnostics to monitor fault conditions including but not limited to internal circuit failure, battery trouble, under voltage, over voltage, and overload conditions.

2.6 RELATED WORK

A. Requirements in other sections and divisions which require work, materials and/or functional characteristics of systems in this section shall be furnished under this section provided they do not conflict with requirements contained in this section. Conflicts shall be brought to the attention of the Architect before ten (10) days prior to bidding otherwise the conflict shall be resolved by the Contractor at the direction of the Architect with no additional cost.

2.7 SHOP DRAWINGS

- **A.** Submit shop drawings for the complete locking control system and all components.
- **B.** Certification of hardware coordination: Prior to preparation of shop drawings for locking control systems, review the electrical and operational characteristics of each electrically controlled and monitored hardware type that is installed on this project. Submit, with shop drawings, written certification that the locking control system has been configured to be both electrically and functionally compatible with the hardware. The Contractor must ensure that the indication circuit

- C. have sufficient current to work correctly with the switch provided in the security hardware. The contractor must survey each area of the facility and provide control for all existing hardware types.
- **D.** Shop drawings for graphic locking control panels shall contain layout drawing at not less than ½ full scale illustrating graphic layout, orientation for area served, Control Room Identifications and all devices to be installed in panel.
- **E.** Shop drawing for non-graphic locking control panel shall include layout of all devices to be installed in panel.
- **F.** Shop drawings for auxiliary cabinets shall include cabinet dimensions and layout of all equipment to be installed within cabinet.
- **G.** Shop drawings for graphic panels, non-graphic panels and auxiliary cabinets shall include full dimensional drawings and construction specifications.
- **H.** Shop drawings shall include specification and data sheets on all control devices, pilot lamps, auxiliary relays, control power transformers, power supplies, terminal boards, conductors and lugs.
- I. Point to point wiring diagrams with color code shall be noted on drawings.

PART 3 PRODUCTS

- **3.1** Locking Control Panels: Locking control panels shall consist of switches, light emitting diodes and audible devices mounted on a 0.25 inch acrylic panel with graphics, colors and text applied by reverse laser etch techniques on a 0.25 inch acrylic overlay, mounted on millwork in sloped-top PVC turrets or on PVC cabinets in PVC turrets.
 - **A. Switches**: Switches shall be OTTO Series pushbutton switches as required by specific function contained elsewhere in these specifications and on the plans. Provide the necessary arrangement and number of contacts to perform the specified function for each switch. Provide sufficient depth in the enclosure for clearance. Contact ratings shall be coordinated with voltage and current to be switched. Necessary mounting provisions shall be made to insure sufficient mounting strength exists to keep assembly from rotating in the panel face. The switch operator shall completely cover the mounting holes through the panel face materials. Where pushbutton operators are required, the "guarded head" type shall be provided. See typical panel drawing for switch colors.
 - **B. Light Emitting Diodes**: All visual indicators shall be T 1-3/4 Light Emitting Diodes (LED) with resistors and lamp test diodes as required for operation on 24 volts D.C. The indicators shall be rated for not less than 50,000 hours of operation at 20 ma DC, and produce a minimum of 147 lumens/watt. Resistors shall be sized according to manufacturer's recommendations and adjusted to produce uniform brightness among all LED's. Resistors and lamp test diodes shall be mounted on double sided printed circuit board inside turret as a LED driver board that drives several LEDs. Mounting hardware shall not be visible from the face of the panel. The LED's shall be Hewlett Packard HLMP series or equal. LED's shall be mounted to the panel face in a manner to allow replacement of the panel graphics without damaging the LED's. The LED shall be mounted on the under side of the locking panel for back lighting through the panel overlay. The color of each LED shall be determined from functional descriptions contained elsewhere in this specification or as indicated on the plans.

C. Audible Devices: Audible signals shall be solid state devices with capability of producing specific audio alerts. Alert signals shall be integral component of the locking control panels with provisions made to ensure ample signal volume of XX dB minimum and provide a field adjustable volume control. Alert Signals shall be initiated by dry contact or application of 0 VDC to field termination connector. Alert Signals shall be grouped such that the highest priority alert shall sound over lower priority alerts in the event that multiple alerts are received. Lower priority alerts shall sound only when higher priority alerts have been silenced. Distinguishable alert signals shall consist of the following:

Priority 1 Emergency Release Activated: Upon activation, alert shall begin with a tone burst consisting of 3 400 Hz to 900 Hz sweeps with a period of 2 seconds followed by a voice annunciation of "Emergency Release is Now Activated." and a 3 second pause. Sequence shall repeat until the silence button is depressed.

Priority 2 Emergency Release Sequence Activated: Upon activation, alert shall begin with a tone burst consisting of 3 400 Hz to 900 Hz sweeps with a period of 2 seconds followed by a voice annunciation of "Emergency Release Sequence has been Activated, Press Abort to Cancel activation of Emergency Release." and a 3 second pause. Sequence shall repeat until the action is cancelled.

Priority 3 Duress: Upon activation, alert shall begin with a tone burst consisting of 3 400 Hz to 300 Hz sweeps with a period of 2 seconds followed by a voice annunciation of "An Officer Duress Signal has been received. Dispatch Security Personnel to Duress location. Lockdown Duress Location." and a 3 second pause. Sequence shall repeat until the action is cancelled.

Priority 4 Lockdown: Upon activation, alert shall begin with a tone burst consisting of 3 400 Hz to 900 Hz sweeps with a period of 2 seconds followed by a voice annunciation of "Area Lockdown has been Initiated." and a 3 second pause. Sequence shall repeat until the silence switch is depressed.

Priority 5 Night Secure: Upon activation, alert shall begin with 3 tone bursts consisting of a 500 millisecond 800 Hz tone followed by a 500 millisecond 900 Hz tone followed by a voice annunciation of "A Night Secure Alarm Has Occurred, Dispatch Security to Location Indicated." and a 3 second pause. Sequence shall repeat until the silence switch is depressed.

Priority 6: Fire alarm: Upon activation, alert shall begin with two tone bursts consisting of a 400 Hz tone with a period of 1 second followed by a 900 Hz tone with a period of 1 second repeated 3 times. A voice annunciation shall then occur consisting of "A fire alarm has been received. Verify cause of alarm and notify security." The annunciation shall be followed by a 3 second pause and the sequence repeated until silenced.

Priority 7 Group Unlock: 3 minutes after a group unlock has been activated, an alert shall begin with a tone burst consisting of 3 800Hz tones with a period of 2 seconds, followed by a voice annunciation of "The Group Unlock Activation Period Has Expired, Deactivate Group Unlock to Cancel This Alert." Followed by a 3 second pause. Sequence shall repeat until all Group Unlock functions are cancelled.

Priority 8 System Trouble: Upon activation, an alert shall begin with a tone burst consisting of 3 900 Hz tones with a period of 500 milliseconds, followed by a voice annunciation of "A Trouble With the Locking Control System Has Been Detected. Notify Maintenance Personnel Immediately." Followed by a 3 second pause. Sequence shall repeat until the silence switch is depressed

Priority 9 Fire alarm Trouble: Upon activation, alert shall begin with a tone burst consisting of a 900 Hz tone with a period of 500 milliseconds repeated 3 times followed by a voice annunciation consisting of "A trouble with the fire alarm system has been detected. Notify maintenance personnel immediately" followed by a 3 second pause with the sequence repeated until silenced.

Priority 10 System Malfunction: Upon activation, alert shall begin with a 900 Hz tone with a period of 500 milliseconds repeated 3 times followed by a voice annunciation consisting of "A system malfunction has been detected. Notify maintenance personnel immediately." A 3 second pause shall follow the annunciation and the sequence shall be repeated until silenced.

Priority 11 Inmate Call: Upon activation, alert shall begin with 1 tone burst consisting of a 0.5 second 500Hz tone followed by a 0.5 second 400Hz tone followed by a voice annunciation of "An Inmate Call Has Been Activated." and a 3 second pause. Sequence shall repeat until the silence switch is depressed or the call location put into Access Mode.

Priority 12 Lamp Test: Upon activation, a voice annunciation of "Tone test completed" followed by a 3 second pause and repeated until the lamp test switch is released.

- A. Panel Substrate: The Substrate shall be fabricated from 0.25 inch thick acrylic with all necessary provisions to mount devices as specified in these specifications and on the plans. The panel shall be reinforced as necessary to provide a stiff mounting surface which shall not exhibit noticeable flexing, warping or bending under surface pressures up to twenty pounds. The Substrate shall not exhibit permanent warping or bending under surface pressures up to 100 pounds. A Piano style hinge shall be attached to the plate and removed at the top in a manner to allow the plate to be pivoted up for maintenance. A metal trim assembly shall be provided which holds the graphic overlay and conceals the overlay edges. The plate shall be held down by a Medco lock, plus the hinge. A handle shall be provided for lifting the panel up. The panel face once lifted to a vertical position for service shall be held securely in place with Gas Spring Shocks mounted on the underside of the panel. Wiring between turret and panel face shall be flexible and allow room to open and close easily.
 - 1. Connectors shall be used to allow wiring to be easily disconnected so that the faceplate can be removed for service. All cables and connection base plates shall have identification so that cable connections can be made properly.
 - **2.** All terminations at switches and LED's shall be soldered with sufficient wiring service loop to enable multiple replacement of devices.
- **B. Acrylic Substrate**: All locking control panels shall have graphics, text and colors reversed laser etched on a 0.25 inch thick cast acrylic panel with anti-glare surface. The construction of the panels shall allow easy replacement after installation. The acrylic shall be continuously protected against damage during construction. Where locking control panels are indicated as being graphic type, the acrylic display shall be similar to the typical graphic panel in the plans modified for the specific area and orientation of the panel within the building. On panels indicated as being linear, the control devices shall be arranged and grouped to clearly define control function and in basic special relationship to the devices being controlled and the orientation of the panel within the building. The contractor must coordinate with the Owner for all text to be used on new panels.
- **C. Control Turret:** Control turrets shall be provided as indicated on the drawings and coordinated with millwork available space and control device requirements. The vertical dimension shall be determined by minimum depth requirements of the control devices and shall be minimized. No

flat surface shall be provided at back of turret. Turret top for housing units shall have a 15 degree slope off the vertical axis. Turret top for main control shall have a 30 degree slope off the horizontal axis with provisions for hinged top or hinged panel (see locking control panels). The turret shall be bolted to top of millwork or metal cabinets with concealed raceway entrance. The turret shall be constructed of 0.75 inch PVC with rounded edges. Submit colors for approval. Alternate construction methods may be submitted for approval, however, they must conform to the basic requirements of these specifications..

Prior to manufacture of graphic and linear locking control panel consoles, the Contractor shall submit sample of acrylic overlay to the Architect for approval. Submission shall include one housing unit type panel. Acrylic overlay shall be of the exact type and construction intended for use on the project. Overlays shall be inspected for construction, color, graphic content, and nomenclature.

- **3.3 Security Equipment Cabinet**: The Control System shall be a hard-wired relay-based system, with the following, but not limited to, the following materials to be used:
 - **1.** Additional cabinets shall be required to be installed to house auxiliary equipment for television and telephone control.
 - **2.** The voltage to the control switches shall be 24 volt control voltage to interface relays. No power shall be switched directly from the panel control switches.
 - 3. Relays and relay boards shall be din rail mounted in the SEC. Each relay shall have fuses to protect field wiring and power supplies or circuits. Fuses shall be sized at all relays for highest load (amps) that could be imposed on the circuits. Relays shall be base and socket relay types.
 - **4.** The Public Address/Monitoring system shall consist of a rack mounted amplifier and audio path matrix controlled by the locking panel. The amplifier shall be rack mounted in the control room millwork with the associated matrix. A speaker shall be provided in the control panel for monitoring selected zones as well as an integrated microphone. Microphone shall be activated with a push to talk switch located on the locking panels. Amplifier shall have the minimum ratings:

Audio Output: 60 Watts RMS

Distortion: 5%

Frequency Response: 20-20,000 Hz

Volts: 25 V

- **3.4 Central Communications:** All central override and control functions including but not limited to Duress, Lockdown, Emergency Release and door monitoring/control shall be communicated from the individual housing units and central control utilizing a peer-to-peer network. The network shall be configured such that a node failure shall affect only that node and not prevent proper functioning of other independent nodes. Network nodes shall be self-monitoring for functionality. Nodes which malfunction or enter an offline state shall be annunciated on the Central Graphics Processor within 15 minutes. A communication failure indicator shall illuminate on graphics panel LPCG and initiate a distinct audible alert.
- **3.5 Central Graphics Processor**: A PC based processor with logging printer shall be provided in central control for monitoring of all global central functions. The graphics display shall provide a redundant representation of all functions included on the LPCG graphics panel. The system shall be configured such that failure of the processor shall have no effect on the functionality of the the LPCG panel. All data received by the Central Graphics Computer shall be time and date stamped, printed in real time, and stored on the processor in a searchable database. The database shall be self maintaining and retain a minimum of

- 30 days activity. Data shall be automatically purged in a First In First Out (FIFO) basis. The display unit of the processor shall be a flat screen with a minimum display size of 17 inch diagonal. The processor must be configured in such a manner as to restart the monitoring and control software automatically without operator interface in the event that a reboot occurs. Program shall be password protected to prevent unauthorized exiting of the monitoring and control software.
- **3.6 Speakers**: All speakers shall be two-way communication type for use as audio monitoring devices as well as public address speakers. Each speaker installation shall be complete including matching transformers, brackets and baffles compatible with the finished system. The existing back boxes, speakers and raceways shall be reused. Speakers shall be rated for 16 Watts continuous power and sized for the maximum diameter the back boxes will accommodate.
- **3.7 Speaker Baffle**: The speaker baffles shall be reused. Any damaged or missing baffles must be reported to the owner in the form of a punch list. Any new baffles required shall be of the security type constructed of high tensile (40,000 PSI) cast aluminum.
- **3.8** Wiring: The work under this section of the specifications includes the installation of all wiring for the electric operated locks, gates and doors. The actual connections in the control panels and consoles shall be made by the Division 17 Contractor. Coordinate this portion of the work with the existing security hardware.
 - 1. The Contractor will be required to provide terminal strips to land existing wire and then extend new wire to the control devices when required.
 - 2. Power wiring for motor operated sliding doors and solenoid operated lock sets operating at 120 volts, shall not be smaller than No. 14 THWN, THHN, MTW or XHHW. Motor operated and solenoid operated lock sets operating at 24 volts A.C. or D.C. shall be connected with no smaller than No. 14 THWN THHN MTW conductors. Power to sliding interior doors shall be from control voltage serving locking controls. All power wiring for 24 volt or 120 volt locks shall be equipped with a separate grounding conductor.
 - 3. All wiring for status indicators shall be class one signaling circuits as defined by Article 725 of the National Electrical Code, 1996 Edition. All conductors shall be no smaller than No. 16 MTW THHN THWN XHHW and shall be installed in common raceways and equipment enclosures with other conductors for locking devices within limitations defined be Article 725-15 of the National Electrical Code. When control and power wiring is installed in same raceway, the Contractor shall ensure that this will not cause problems with false indication or feedback that will affect the control system in any manner.
 - **4.** All wiring systems shall be stranded copper conductors.
 - **5.** Audio wiring shall consist of single twisted pair shielded cables sized to meet the requirements of the system with a minimum of 18 AWG.
 - **6.** All new conductors within junction boxes, pull boxes and equipment enclosures shall be grouped and laced with nylon tie straps, in individual sets serving individual lock sets or operating mechanisms. Terminals and boards should be clearly marked to indicate room or operator served.
 - 7. Locking system conductors shall not be spliced (except on new terminals); conductors shall be continuous between lock sets and/or operators and termination point for control.
 - **8.** New junction boxes and pull boxes required for installation of the locking system wiring must be installed to be fully accessible as required by the National Electrical Code. Work under this section of the specification must be closely coordinated with existing conditions.

- **9.** Junction boxes and pull boxes shall not be installed in inmate accessible areas. All conductors within junction boxes, pull boxes and equipment enclosures shall be grouped and bundled with nylon tie straps in groups by individual device served.
- **10.** Wiring systems for locking devices shall comply with the conditions specified in this section and with the applicable provisions of other sections of Division 17.
- 11. All new underground/under slab wiring shall be rated for direct burial applications.
- **3.9 Conduit**: Conduit systems required for locking systems wiring shall be installed as required to install the new locking control system. All system conductors shall be contained in concealed raceway except in equipment rooms. Provide conduit sized per the specific system requirements and applicable codes. The minimum conduit size shall be 3/4". Provide conduit as required to provide path for conductors necessary for totally operational systems interconnecting all system components and interfaces to systems. Conduit fill shall not exceed 40% fill maximum. The Contractor must review the manufacturers recommendations for pulling tension and conduit fill for all conductors and increase conduit size where required.
 - **1. Transient Voltage Protection**: All conductors which leave the footprint of the building shall be protected with surge devices rated at the appropriate voltage to protect connected equipment. Devices shall be installed and bonded per manufacturer's instructions. Devices should be plug in for ease of replacement and shall incorporate avalanche diode technology.
- **2. D.C. Power Supply:** Provide low voltage D.C. power supply units as required to provide 24 volt regulated, filtered D.C. power for locking controls, D.C. locks and signal devices. Output power shall be 24 volt D.C. with ampere rating not less than 150% of load imposed on power supply under most severe conditions of load. D.C. output shall be fused. Output voltage shall be regulated within plus or minus 2% from no load to full load. Power supply shall be UL listed.
 - **A.** The power supply(s) shall not be rated for more than 15 AMPS D.C. (maximum connected load of 10 amps including in-rush current). Maximum load shall be based on worst condition created by the control system.
 - **B.** Where low voltage D.C. requirements for control devices operated at maximum load exceed output of a single power supply, multiple power supplies shall be provided and loads subdivided to prevent overloading power supply unit.

PART 4 EXECUTION

- **4.1** Factory Testing: All Systems shall be fully tested prior to Installation. The contractor shall perform a full operational test on the integrated equipment. Test data sheets detailing each function to be tested, the results of each test, test date and test technician shall be generated on each fully integrated system. The architect and owner shall be contacted two weeks prior to testing and may at their discretion be present for witnessing functional testing.
- **4.2** Field Testing: The contractor shall be responsible for the testing of existing panels prior to the beginning of the SEC reconstruction and shall provide a list of any and all deficiencies found with the detention hardware. It is the contractor's responsibility to determine if the deficiency lies with the control panel or detention hardware and provide that information to the customer in the form of a punch list. The architect and owner shall be contacted two weeks prior to testing and may at their discretion be present for witnessing functional testing.
- 1. Existing field wiring to locksets is to be reused. The contractor shall be responsible for testing field wiring for continuity and insulation integrity through 5 kV high potential resistance measurements. A written report of all measurements, including pass/fail critera shall be provided to the customer prior to installation of equipment.

- **2.** Existing field communication wiring to is to be reused. The contractor shall be responsible for testing field wiring for continuity and insulation integrity through 5 kV high potential resistance measurements. A written report of all measurements, including pass/fail critera shall be provided to the customer prior to installation of equipment.
 - 3. The existing SEC cabinet is to be reused. All new equipment is to be installed on a new back plate and installed into SEC.
 - 4. All existing low voltage lightning protection devices are to be replaced with new. The lightning protection devices shall be of the avalanche diode type and shall be DIN rail mounted. Termination to the lightning protection devices shall be through removable connectors. All high voltage TVSS devices are to be tested by the contractor. A list of the test results including clamping voltage are to be supplied to the engineer.
 - **5.** The contractor shall be responsible for verification that area speakers are intact for the Public Address System/Intercom. Any field devices found to be unusable should be reported to the owner in the form of a punch list.
 - **6.** All field testing for pre-existing conditions must be completed and documentation turned over to the owner prior to beginning installation of the system for each location.
 - 7. Final Testing of the completed installation shall be scheduled with the owner and architect two weeks in advance. The contractor shall provide all equipment and personnel required including detailed test data sheets and as-built documentation for each system necessary to facilitate 100% testing of all system functions including field devices.
 - **8.** Auxiliary Enclosures: Separate NEMA enclosures shall be provided for remote switching of television, lighting, fans and telephone circuits as required and connected to existing conduits to form a complete raceway. A separate enclosure shall be provided for all audio amplifiers and associated audio switching. Enclosures shall be mounted in a manner to facilitate ease of maintenance and repair. New conduit shall be run from the SEC or panel if required to remote switching enclosures to provide raceways for low voltage control of remote switching units.
 - **9.** Installation Sequence: Installation of the new locking control system shall begin with Housing Unit D. The installation of each system shall be coordinated with the facility warden. Installation shall be limited to one housing unit at a time. Installation shall be complete and all field testing and acceptance testing performed with the owner's representative prior to moving to the next building.
 - 10. Security Requirements: During system installation, Fire Exits and Exterior Entrance Sallyports shall remain functional at all times that contractor personnel are not on site and actively working on the installation of the system. The Warden shall be notified 24 hours in advance of taking door controls from electronic control to key control. The contractor shall provide the Warden with daily briefings as to the status of the installation for the purpose of assessing staffing requirements and security risk. Field testing of the central communications field wiring shall be coordinated with the facility. Interuption of the central communications loop shall be minimized during testing and communication must be restored prior to the contractor leaving the facility.

PART 5 PROTECTION OF EQUIPMENT

5.1 Due to the security and communications equipment's sensitivity to dust, dirt, condensing humidity and other products normally found on construction sites, the Contractor shall take all necessary precautions to insure the equipment is kept clean of foreign substances. Where the equipment has been contaminated by

foreign substances, it shall be removed and replaced with new equipment. Cleaning of equipment, if acceptable by the Architect, shall be conducted by the manufacturer of the specific equipment.

1. END OF SECTION

Correctional & Security Consulting, Inc January 19, 2009

EXHIBIT D

Donaldson, Bill

From: Ken Stone [stonek00@dcor.state.ga.us]
Sent: Thursday, September 22, 2011 11:56 AM

To: Donaldson, Bill

Subject: Fwd: Invoice from Engineered Systems for Manufacturing, Inc.

Attachments: Inv_LAF1000016_from_Enginee.pdf

Below and attached

Ken Stone Georgia Department of Corrections Engineering & Construction Services P.O. Box 1529 Forsyth, GA 31029 Physical Address:

Georgia Department of Corrections Engineering & Construction Services State Offices South @ Tift College 300 Patrol Road

Forsyth, GA 31029

478-992-5298 office 478-992-5296 fax ESM Invoice sent from CESI Email Address

>>> "CESI" <<u>cesi@windstream.net</u>> 12/10/2010 10:23 AM >>>

Dear Customer :

Your invoice appears below. Please remit payment at your earliest convenience.

Thank you for your business - we appreciate it very much.

Sincerely,

Engineered Systems for Manufacturing, Inc.

770-246-9364

How's My Service?

It is GDC's goal to provide Exceptional Customer Service. Please take a moment to click on this link to report your experiences involving our staff, systems, and processes.

http://www.gdcjobs.com/csrsurvey/jsp/survey.jsp

Donaldson, Bill

From: Ken Stone [stonek00@dcor.state.ga.us]
Sent: Thursday, September 22, 2011 11:57 AM

To: Donaldson, Bill

Subject: Fwd: Invoice from CESI Service
Attachments: Inv_WO201011015_from_CESI_S.pdf

Below and attached

Ken Stone
Georgia Department of Corrections
Engineering & Construction Services
P.O. Box 1529
Forsyth, GA 31029
Physical Address:

Georgia Department of Corrections Engineering & Construction Services State Offices South @ Tift College 300 Patrol Road

Forsyth, GA 31029 478-992-5298 office

478-992-5296 fax

CESI Invoice sent 1 Hour after ESM Invoice

>>> "CESI" <<u>cesi@windstream.net</u>> 12/10/2010 11:26 AM >>>

Dear Ken Stone :

Your invoice is attached. Please remit payment at your earliest convenience.

Thank you for your business - we appreciate it very much.

Sincerely,

CESI Service 4049156939

How's My Service?

It is GDC's goal to provide Exceptional Customer Service. Please take a moment to click on this link to report your experiences involving our staff, systems, and processes.

http://www.gdcjobs.com/csrsurvey/jsp/survey.jsp

EXHIBIT E



STATE OF GEORGIA 2009 Corporation Annual Registration

Control No: 0470126 Date Filed: 01/29/2009 12:08 PM Karen C Handel Secretary of State

OFFICE OF SECRETARY OF STATE

Annual Registration Filings P.O. Box 23038 Columbus, Georgia 31902-3038

Entity Control No. 0470126

Information on record as of: 1/29/2009

CORRECTIONAL ELECTRONICS SUPPLY, INC. 2900 COLE COURT NORCROSS GA, 30071

Amount due from this entity is indicated below. Annual fee is \$30. If amount is more than \$30, total reflects amount(s) due from previous year(s). Renew by April 1, 2009

Renew at www.georgiacorporations.org or by submitting bottom portion with check payable to "Secretary of State".

Officer, address and agent information currently of record is listed below. Please verify "county of registered office." If correct and complete, detach bottom portion, sign, and return with payment. Or, enter changes as needed and submit. Complete each line, even if the same individual serves as Chief Executive Officer, Chief Financial Officer and Secretary of the corporation. Please PRINT LEGIBLY.

Note: Agent address must be a street address in Georgia where the agent may be served personally. A mail drop or P.O. Box does not comply with Georgia law for registered office. P.O. Box may be used for principal office and officers.

Any person authorized by the entity to do so may sign and file registration (including online filing).

Please return ONLY the original form below and fee. Other filings and correspondence should be sent to our Atlanta address: Corporations Division, 315 West Tower, #2 Martin Luther King Jr. Drive, Atlanta, GA 30334.

Visit www.georgiacorporations.org to file online or for more information on annual registration. Or, call 404-656-2817.

Current information printed below. Review and update as needed. Detach original coupon and return with payment.

CORPORATION NAME	ADDRESS		CITY	S	TATE	ZIP
CORRECTIONAL ELECTRONICS SUPPLY, INC.	2900 COLE COURT		NORCROSS		GA	30071
CEO: MICHAEL A. LOVELADY	319 S. PEACHTREE STREET		NORCROSS		GA	30071
CFO: MICHAEL A. LOVELADY	319 S. PEACHTREE STRE	ET 1	NORCROSS		GA	30071
SEC: MICHAEL A. LOVELADY	319 S. PEACHTREE STRE	ET 1	NORCROSS		GA	30071
AGT: MICHAEL A. LOVELADY	319 S. PEACHTREE STRI	ET 1	NORCROSS		GA	30071
IF ABOVE INFO	RMATION HAS CHANGED, TYPE OR PRI	NT CORRECTION	S BELOW:			
Corporation Addr:				1		
CEO: Augustin Roman	2900 Cole Court		Norcross	(ЭA	30071
CFO: Augustin Roman	2900 Cole Court		Norcross	(GΑ	30071
SEC: Augustin Roman	2900 Cole Court		Norcross	(3A	30071
AGT: Augustin Roman	2900 Cole Court P.O. BOX NOT ACCEP	NOT ACCEPTABLE Norcross			GA	30071
I CERTIFY THAT I AM AUTHORIZED TO SIGN THIS FORM AND THAT THE INFORMATION IS COUNTY OF TRUE AND CORRECT. COFFICE:			EGISTERED	COUNTY CHANGE OR CORRECTION:		R
AUTHORIZED SIGNATURE: Michael Lovelady	DATE: 1/29/2009		INNETT		Gwinnett	
TITLE: Filer						
R203 2009 Corporation Annual Registration			Amount Due	\$30.00		

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