

*State of New Jersey*  
*Office of the Inspector General*

Mary Jane Cooper, Inspector General



**New Jersey Schools  
Construction Corporation**

**Operations Review Report**  
Design and Construction Division

**December 21, 2005**



State of New Jersey  
OFFICE OF THE INSPECTOR GENERAL  
PO Box 208  
TRENTON NJ 08625-0208

RICHARD J. CODEY  
*Acting Governor*

MARY JANE COOPER  
*Inspector General*

December 21, 2005

The Honorable Richard J. Codey  
Acting Governor  
PO Box 001  
Trenton, NJ 08625-0001

Dear Acting Governor Codey:

Enclosed is our final report of an operations review of the Design and Construction Division of the New Jersey Schools Construction Corporation (SCC) undertaken at the request of new SCC leadership.

We are in the process of writing a follow-up to our April 21, 2005 report on the SCC. The follow-up will report SCC efforts to implement the recommendations you mandated after our initial report as well other SCC matters that we have been reviewing since the initial report was issued.

Please contact us if you have questions or comments.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Mary Jane Cooper".

Mary Jane Cooper  
Inspector General

c: Honorable Albio Sires, Speaker of the Assembly  
Peter Maricondo, Acting Chief Executive Officer, SCC

**NEW JERSEY SCHOOLS CONSTRUCTION CORPORATION  
OPERATIONS REVIEW REPORT  
Design and Construction Division**

**Purpose of Review**

This report is the result of the Office of the Inspector General's (OIG) review of the structure of the Design and Construction Division (D&C) of the New Jersey Schools Construction Corporation (SCC).

**Background**

OIG's initial report on SCC, issued on April 21, 2005, recommended that several corrective actions be taken within SCC before the building of new school projects could resume. Acting Governor Richard J. Codey immediately accepted the recommendations, mandated that the corrective actions be implemented, and oversaw several subsequent appointments to the SCC Board and executive management positions. Since our initial report was issued, we have been working closely with new SCC leadership as they implement the corrective actions mandated by Acting Governor Codey.

During the course of our work with new SCC leadership, we were asked by them to conduct a review of D&C to assess the overall organizational structure, management operations, human resources, and staffing of D&C to determine its ability to perform its important role in the completion of SCC's core mission to efficiently and effectively build schools. Within SCC, D&C is responsible for oversight of school construction from concept through implementation, including predevelopment activities for all Abbott districts. Because the successful completion of the SCC's mission relies greatly on D&C, we agreed that this was an appropriate review for OIG to conduct and that it could contribute to our ability to recommend further efficiencies in SCC operations.

**Methodology**

In addition to the document reviews and interviews we conducted for other matters, we reviewed documents particularly related to the organizational structure and staffing of D&C. These included organization charts, curricula vitae, job descriptions, an SCC construction manual, and past employee-performance evaluations. Over the course of two months in fall 2005, we interviewed 42 D&C management and non-clerical staff to determine:

- knowledge and understanding of specific job duties and responsibilities;
- manner and processes utilized by D&C employees to perform their duties as compared with written job descriptions and specifications supplied to us by SCC;
- how staff and their supervisors believed that staff conduct conformed to any requirements;
- level of authority and responsibility delegated to staff;

- supervision administered by senior management;
- supervision that D&C staff provided to subordinates; and
- any training provided by SCC.

As described below, a critical D&C function to oversee project management firms (PMFs) is delegated to SCC Project Officers (POs). Therefore, during our interviews, we paid particular attention to this area. Our review was not intended to evaluate the skills or performance levels of particular SCC employees.

### **D&C Organizational Structure and Functions**

D&C staff includes four Regional Directors as well as two Assistant Directors who are in supervisory roles. Regional Directors report to the Managing Director of D&C, who, until summer of 2005, reported directly to the Chief Executive Officer (CEO) and the Chief Operating Officer (COO). As part of restructuring, the Managing Director of D&C now reports to the Senior Director of Construction who reports directly to the CEO. D&C staff has included as many as 44 PO positions, some designated as Supervising POs or Assistant POs, who report to the Regional Directors. (At the time of this report, only 34 of these positions were staffed.) POs are responsible for one or more school construction projects that are simultaneously in varying stages of completion.

Rather than D&C directly managing the SCC building projects, the SCC has retained PMFs to actually manage the projects from design to completion. For instance, PMFs work with local school boards in preparing plans; work with architects to develop designs; work with inspectors to obtain permits; and supervise prime contractors on a school construction project. PMFs have been allocated broad responsibilities in decisions affecting the cost of SCC construction projects, and they review and recommend all progress-payment requests and change orders (COs).

At times throughout SCC's history, there have been as many as 13 PMFs assigned to manage all SCC projects in as many defined areas of the State. Once winning an initial contract, a PMF is approved to manage projects in its region with Construction Cost Estimates (CCE) totaling up to \$300,000,000 to \$500,000,000. PMFs are paid a fee based on various criteria, but the bulk of the fees are based on a percentage of the CCE. The SCC estimates that in the aggregate, PMFs are paid on average about 10 percent of the CCE.

PMF fees can be increased by COs that they initiate. According to SCC records, PMFs have been paid more than \$275,000,000 and they have recommended billions of dollars in payments to contractors and consultants, including about \$500,000,000 worth of COs for themselves, for contractors, or for consultants. SCC pays PMF fees, as well as payments to contractors and consultants, based on the PMF's representations of the percentage of completion of the projects managed by the firm.

In the current D&C organizational structure, POs are the main point of contact between SCC and PMFs. In addition, they are the SCC personnel solely or primarily responsible for oversight of PMFs, and they approve all payments to and authorized by PMFs.

### **Summary of Conclusions**

The review revealed weaknesses in the relevant organizational and management infrastructure. Lacking were clear definitions of key areas of authority and responsibility and appropriate supervision. For example, although POs are described as responsible for oversight of PMFs, the written description of their particular duties did not indicate that they had any oversight role or authority over the PMFs nor did it provide clear directions on how they were to interact with PMFs.

Internally, there was insufficient formal discipline and structure necessary to enhance a results-oriented culture that fostered knowledge sharing and empowered the workforce to accomplish specific program goals. In addition, the review revealed indications that staffing of some critical positions was not sufficient in number of personnel or technical skills to permit D&C to successfully accomplish its mission.

These weaknesses resulted in extreme differences in work practices by POs. Many felt frustrated in their attempts to oversee PMFs, who were not motivated by incentives or penalties to adhere to budget and schedule. Still other POs were satisfied to rely more completely on the personnel and representations of the PMFs they were supposed to oversee and those POs only sporadically performed onsite evaluations to verify accuracy of PMF representations. Some D&C managers became involved in PMF oversight issues only when it was evident that major issues in project management had developed, while other managers intervened regularly, thereby diminishing the authority of the POs. Accountability for performance shortcomings was rare. This inconsistent and often minimal oversight of PMFs created an environment conducive for enormous cost and schedule over-runs.

Strong executive leadership must be combined with effective organizational alignment, strategic human-capital management, and results-oriented business process reform. In order to achieve its mission and goals and to provide accountability for its operations and efficiency in spending, the OIG recommends that the observations, conclusions, and recommendations described in the remainder of this report be considered by SCC management to ensure the continuous improvement of its operations.

In an effort to facilitate the improvements and restructuring needed by the organization, the results of this review were discussed with executive management of the SCC on an on-going basis and they were receptive to the recommendations.

## **Observations, Conclusion and Recommendations**

### **I. Organizational/Management Structure**

SCC's organizational structure did not provide the overall framework for planning, directing, and controlling the daily operations of D&C. Review of the limited policies and procedures available revealed that management functions and reporting relationships within D&C, among D&C and other divisions, and with other state and local agencies were not clearly defined or followed. In addition, SCC's management structure did not clearly define and communicate the chain of command, reporting relationships, delegation of authority, assignment of responsibility for operational activities, and authorization protocols that contribute towards assuring results-oriented success. Specific decision making responsibilities were not clearly defined and critical issues were left to the judgment of mid-level management without the proper supervision and monitoring by senior or executive management to ensure effective and efficient performance.

#### **Recommendations:**

- Reorganize SCC management and staff into appropriate operating divisions to ensure effective oversight and monitoring.
- Assign staff with expertise in specific skill sets to statewide assignments.
- Evaluate the management structure and create a reporting environment that includes appropriate supervision, clearly defined assignments of responsibility, and delegation of authority.
- Define employee-reporting relationships, span of control, delegation of authority, assignment of responsibilities, and accountability necessary to ensure the efficiency and effectiveness of D&C.
- Define relationships of D&C with other SCC divisions and other state and local entities.
- Identify specific responsibilities of staff positions and required qualifications necessary to perform functions.
- Identify functional duties and responsibilities of the D&C staff, including specific performance processes; development of results-oriented performance measures and monitoring assessment tools, and the required expectations regarding relationships with other SCC divisions and external organizations.
- Ensure that the reorganized structure provides a systemic measurement of performance; incorporates results-oriented performance measures and reviews; has effective oversight and monitoring; and establishes a means of accountability for all functions in the organization and the D&C operation.

## **II. Policies and Procedures**

There were no formal policies and procedures that dictated the manner in which critical D&C operations would be completed or prescribed or how goals and objectives of the organization would be fulfilled. The lack of formal policies and procedures created an environment where employees used inconsistent processes, compliance was not required or enforced, and performance was not measured against clearly defined standards or objectives. In addition, the review revealed that the organization did not adequately communicate or provide training to the employees regarding policies and procedures.

### **Recommendations:**

- Conduct an evaluation of organizational needs to assure effective oversight of management of each and all projects undertaken by SCC;
- Develop written policies for both administrative and technical operations and implement the procedures necessary to maintain compliance with the organization's policies.
- Provide oversight and monitoring; implement formal, structured practices; establish well-defined processes for measuring and monitoring employee and operational performance; and adjust the policies and procedures as needed to reflect changing circumstances.
- Provide training on policies and procedures.

## **III. Position Requirements and Staffing**

In the absence of clear, defined job duties and responsibilities for D&C management and POs, it is difficult to determine that resources are being used efficiently and effectively. Based on the information obtained during the review, several issues were raised regarding the sufficiency of the staffing for the PO position. The SCC has not established the specific duties and responsibilities of the PO position. Also, the manner in which the POs perform the oversight function of the PMFs or the evaluation criteria for adequate and acceptable performance has not been established or consistently followed.

### **Recommendations:**

- Analyze and forecast the organization's manpower requirements considering the current capital plan of construction projects and the estimate of work to be completed.
- Evaluate the experience and qualifications of the current staff, reassign employees, and make changes to the corporate and D&C organizational structure necessary to achieve the organization's goals.
- Assign work to staff based on individual experience and the construction discipline(s) necessary to ensure successful project completion.

- Compare duties and responsibilities of the PO position with the responsibilities of PMFs to avoid duplication of services and provide the opportunity for the SCC to utilize its resources in a manner that provides successful project performance in light of schedule and budget milestones.
- Provide meaningful oversight by POs of PMFs' performance based on established objectives through the use of formal practices, criteria, and measurement objectives.

#### **IV. Staff Performance**

Performance attributes and measurement criteria for successful performance had not been defined. As a result, the POs did not use consistent practices in the performance of their specific duties and were not always aware of management's expectations.

#### **Recommendations:**

- Assess the PO qualifications and technical expertise required to successfully perform oversight of PMFs.
- Identify, define, and communicate to all employees the required duties and responsibilities for their positions, including their roles as they relate within their operating division and among the other SCC operating divisions.
- Define positions requiring sophisticated and complex technical skills and designate experts to be available to all projects to ensure consistency and promote a higher level of competence for the PO responsibilities.
- Develop standard procedures and practices, including documentation, communication standards, measurement criteria, and accountability to provide a consistent process for the performance of the specific duties and responsibilities.
- Implement a well-defined process of formal management review, oversight, and monitoring of employee and operational performance.
- Continually assess staff performance and provide feedback to staff.

#### **V. Human Resources**

The SCC requires an integrated human resources plan that identifies its goals, problems, improvement initiatives, intended results, and incorporates the strategies and metrics to support the goals. The SCC's human resources function did not appear to be utilized in a manner that provides the necessary critical resources to management and technical staff. SCC did not offer sufficient orientation and training programs (initial or ongoing) to its staff. Also, SCC did not provide the means for well-defined performance measurement, monitoring, and accountability necessary to ensure successful accomplishment of its objectives.



## **Recommendations:**

- Implement an effective performance management system that can drive the necessary internal changes to achieve external results.
- Evaluate current human resources function and implement initiatives and training necessary to lead the internal changes to contribute to the achievement of results-oriented organizational goals.
- Establish communication and collaboration both within and across organizational boundaries to achieve results and demonstrate a commitment to lead and facilitate change.
- Train staff regarding responsibilities, authority, and appropriate oversight relationship with PMFs.
- Provide staff with the resources, support, and authority necessary to perform assigned responsibilities.
- Provide comprehensive training for all employees to ensure that the business processes are successfully implemented and consistently utilized throughout the organization to achieve integrated budget and schedule milestones within all SCC operating divisions.

## **VI. Information Systems**

A common concern expressed by nearly all D&C management and staff interviewed was the lack of an information system that would provide timely, reliable and accurate data. The employees interviewed expressed dissatisfaction with the ineffective information systems and processes available. Many D&C staff expressed the need for an integrated, “real time” information system to track and maintain the data needed for accurate reporting of project status. These concerns were verified by our experience in attempts to obtain information from the SCC which could have been readily available from a more relevant system.

The lack of an adequate system impacts the ability to collect, maintain, and report accurate and reliable data regarding PMF and project performance. Employees expressed the need for improved communication and sharing of information between D&C and other operating divisions of SCC, and the PMFs. The review also revealed that PO staff did not have access to the technology in the field necessary to review and monitor project status in a timely and reliable manner.

The lack of reliable, day-to-day information impacts D&C POs’ ability to provide the oversight of the PMFs and monitor project status. The POs often work independent of the systems and data available from the PMFs. This creates ineffective business processes that resulted in inadequate management information. As a result of the inefficient and inadequate information systems and technology, the POs work in an environment that presents tremendous opportunity for inaccuracies and errors.

## **Recommendations:**

- Implement an information management system, including the appropriate technology, that will streamline financial and project status reporting used by the POs. The system should be appropriately configured and interfaced with the systems and information available from the PMFs.
- Implement disciplined practices, effective human resources and an information management system to reduce risks of inaccuracies to an acceptable level.
- Minimize the impact of past mistakes and begin to gain the benefit of operating with integrated systems to provide overall corporate planning strategy and forward thinking necessary to achieve SCC goals.
- Develop an integrated enterprise master schedule and budget system that considers the input and functionality required for each SCC division to achieve goals and objectives.

## **VII. Other**

SCC was not proactive in identifying both internal and external sources that may impact the business operations and did not provide the means to identify its risks, strengths and weaknesses, lessons learned, and best practices. Employee suggestions and contributions for improvement were not solicited. During the interviews, some employees volunteered suggestions that may provide the SCC with opportunities for improved efficiency and effectiveness. These areas include:

- the development of design standards to be used for all schools;
- formal standards for PMF qualifications and formal standards for the evaluation of PMF performance;
- monitoring changes to the land acquisition process so that only “clean” land is turned over to D&C to avoid unplanned costs;
- availability of pre-qualified contractors to handle emergencies and unusual and unforeseen circumstances such as asbestos removal; and
- changes to the contract process to exclude non-construction items.

## **Recommendations:**

- Develop a mechanism to capture and communicate lessons learned, including training, program reviews, and periodic revisions to policy and procedures.
- Implement a process that allows for employee ideas and suggestions for improvement to assist management with the identification of strengths and weaknesses of SCC’s operating division.
- Provide continued oversight to ensure effective business processes and recognized best practices that will result in adequate and acceptable management information to allow informed decision making at all levels in the organization.
- Consider risks and continually monitor the internal and external sources that affect its operations.