

**REPORT OF
THE VIRGINIA STATE CRIME COMMISSION**

**CAPITAL CONSTRUCTION
PRACTICES OF THE
DEPARTMENT OF CORRECTIONS**

**TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA**



HOUSE DOCUMENT NO. 82

**COMMONWEALTH OF VIRGINIA
RICHMOND
1998**



COMMONWEALTH of VIRGINIA

VIRGINIA STATE CRIME COMMISSION

General Assembly Building

Rich Savage
Director

December 16, 1997

MEMBERS:

FROM THE SENATE OF VIRGINIA

Janet D. Howell, Vice-Chair
Mark L. Earley
Kenneth W. Sicile

FROM THE HOUSE OF DELEGATES

Clifton A. Woodrum, Chairman
James F. Almand
Jean W. Cunningham
John J. Davies, II
R. Orange Deeds
Raymond R. Guest, Jr.

APPOINTMENTS BY THE GOVERNOR

Robert C. Epps
Terry W. Hawkins
Robert J. Humphreys

ATTORNEY GENERAL'S OFFICE

Richard Cullen

TO: The Honorable James S. Gilmore, III, Governor of Virginia, and
Members of the General Assembly:

House Joint Resolution 464, agreed to by the 1997 General Assembly, directed the Virginia State Crime Commission to study the capital construction policies and projects of the Department of Corrections, and to submit its findings and recommendations to the Governor and the 1998 session of the General Assembly.

In fulfilling this directive, a study was conducted by the Virginia State Crime Commission in 1997. I have the honor of submitting herewith the study report.

Respectfully submitted,

Clifton A. Woodrum
Chairman

**VIRGINIA STATE CRIME COMMISSION
MEMBERS**

From the Senate of Virginia

Janet D. Howell, Vice Chair
Mark L. Earley
Kenneth W. Stolle

From the House of Delegates

Clifton A. Woodrum, Chairman
James F. Almand
Jean W. Cunningham
John J. Davies, III
R. Creigh Deeds
Raymond R. Guest, Jr.

Appointments by the Governor

Robert C. Bobb
Terry W. Hawkins
Robert J. Humphreys

Attorney General

Richard Cullen

HJR 464 - Capital Construction Practices of the Department of
Corrections

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I. Authority for the Study

During the General Assembly's 1997 legislative session, Delegate Clifton A. Woodrum sponsored House Joint Resolution 464 directing the Virginia State Crime Commission to study the capital construction practices of the Department of Corrections.

Section 9-125 of the Code of Virginia establishes and directs the Virginia State Crime Commission to “study, report, and make recommendations on all areas of public safety.” Section 9-127 of the Code of Virginia provides that “the Commission shall have the duty and power to make such studies and gather information in order to accomplish its purpose, as set forth in Section 9-125, and to formulate its recommendations to the Governor and the General Assembly.” The Virginia State Crime Commission, in fulfilling its legislative mandate, undertook the study of the capital construction practices of the Department of Corrections.

II. Members Appointed to Serve

At the April 15, 1997, meeting of the Crime Commission, Chairman Clifton A. Woodrum of Roanoke appointed Janet D. Howell to chair the Law Enforcement Subcommittee and Delegate Raymond Guest, Jr., to chair the Corrections Subcommittee. The following Members were selected to serve on the respective subcommittees:

Law Enforcement

Senator Janet D. Howell
Delegate James F. Almand
Mr. Robert C. Bobb
Delegate R. Creigh Deeds
Senator Mark L. Earley
Mr. James S. Gilmore, III
Mr. Robert J. Humphreys

Corrections

Delegate Raymond Guest
Delegate James F. Almand
Delegate Jean W. Cunningham
Delegate John J. Davies, III
Sheriff Terry W. Hawkins
Senator Kenneth W. Stolle
Delegate Clifton A. Woodrum

III. Executive Summary

Information for the Crime Commission's study concerning the capital construction practices of the Department of Corrections was gathered through: interviews, working groups, discussions with representatives of the Department of Corrections, discussions with local and state officials, and extensive site visits. During the course of the study, the Commission addressed and made recommendations on issues pertaining to policies and procedures of the Department. The Commission made the following recommendations:

- After conducting follow-up visits to numerous Department of Corrections facilities, staff recommends that each of the recommendations contained within the APA report be adopted by this Commission.
- The Crime Commission should continue to monitor the capital construction projects of the Department of Corrections, particularly as related to change orders and the costs associated with the completion of final projects.

IV. Background

During 1996, the Virginia State Crime Commission discovered numerous problems associated with the capital construction policies and procedures of the Department of Corrections. Due to the severity and systemic nature of the problems, the House of Delegates, with the Senate concurring, adopted House Joint resolution 464.

Concurrent with the Crime Commission's discovery of these problems, the Auditor of Public Accounts undertook his own investigation of the capital construction projects of the Department of Corrections. After extensive site visits and numerous interviews, the Crime Commission determined that the report issued by the APA addressed all of the Commission's concerns. The Crime Commission adopts and incorporates by reference the APA's report.¹

¹ See appendix B.

V. Findings and Recommendations

Finding A.

The Department of Corrections capital construction policies, procedures, and projects underwent a thorough and complete audit by the Auditor of Public Accounts (APA) during the previous year. The audit was completed on June 6, 1997. The APA found the capital outlay procedures utilized by the Department to be "adequate."²

Recommendations:

1. After conducting follow-up visits to numerous Department of Corrections facilities, staff recommends that each of the recommendations contained within the APA report be adopted by this Commission.
2. The Crime Commission should continue to monitor the capital construction projects of the Department of Corrections, particularly as related to change orders and the costs associated with the completion of final projects.

Finding B.

The reporting structure of the Inspector General of the Department of Corrections is adequate. The current Inspector General continues to perform his job in an adequate manner.

² For the Department of Corrections' December 1997 capital outlay status report, see appendix C.

Appendix A

GENERAL ASSEMBLY OF VIRGINIA -- 1997 SESSION

HOUSE JOINT RESOLUTION NO. 464

Directing the Virginia State Crime Commission to evaluate capital construction policies and procedures of the Department of Corrections and to evaluate the reporting procedures of the Inspector General of the Department of Corrections.

Agreed to by the House of Delegates, February 20, 1997

Agreed to by the Senate, February 19, 1997

WHEREAS, defects in construction have become apparent in several of the Department of Corrections new correctional facilities, particularly medium security dormitories; and

WHEREAS, Department of Corrections' funds expended to correct construction problems have been substantial; and

WHEREAS, final payments and performance bonds have been released while serious questions still exist concerning contract performance; and

WHEREAS, new construction that is currently being performed or scheduled in the near future represents a substantial investment in state resources; and

WHEREAS, the position of Inspector General of the Department of Corrections is established by the Code of Virginia; and

WHEREAS, the Inspector General of the Department of Corrections reports to the Director; and

WHEREAS, the Inspector General is empowered to investigate allegations of criminal behavior which affects the operations of the Department; and

WHEREAS, to maintain the confidence of the people of the Commonwealth, an examination of the construction practices of the Department of Corrections and an examination of reporting procedures of the Inspector General within the Department of Corrections are necessary; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Virginia State Crime Commission be directed to evaluate capital construction policies and procedures used by the Department of Corrections, including, but not limited to, contract compliance and legal recovery for inadequate, incomplete, or substandard construction, and to evaluate the reporting procedures of the Inspector General of the Department of Corrections.

All agencies of the Commonwealth, particularly the Department of Corrections and the Office of the Attorney General, shall provide assistance to the Commission, upon request.

The Commission shall complete its work in time to submit its findings and recommendations to the Governor and the 1998 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

Appendix B

Department of Corrections
and
Department of Juvenile Justice
Capital Construction Projects

June 6, 1997

Report from the:
Auditor of Public Accounts

AUDIT SUMMARY

In the past five years, Corrections has built and opened several new prisons. Currently, there are three major facilities under construction and more are necessary as the adult prison population continues to grow. Corrections projects there will be approximately 50,000 inmates sentenced to state facilities, within the next nine years. This represents an increase of 107 percent over the present population of 24,104. Even after new construction decreases, Corrections and Juvenile Justice will continue to spend significant capital expenses in maintenance reserve projects.

This report reviews the capital construction processes at Corrections, evaluates the organization of the capital outlay divisions at Corrections, documents prison construction projects for the past five years and reviews construction issues at Juvenile Justice. While overall, we found the capital outlay management processes at Corrections and Juvenile Justice to be adequate, our report contains several recommendations for improvement.

RECOMMENDATIONS

1. Corrections and Virginia Correctional Enterprises should work together in facility design to ensure the design incorporates appropriate industry space.
2. Project managers should document on-site inspections by documenting inspection dates, their purpose, and the results.
3. The Capital Outlay Division should communicate deficiencies in Contractors work promptly to Corrections management.
4. Corrections should formally evaluate the Architect/Engineer and the Contractor and emphasize the quality of the design, timeliness of reviews, clarity of drawing and specifications, resolution of construction problems and cooperation.
5. Management should clarify employees' duties and objectively base evaluations on those duties.
6. The personnel division should ensure applicants meet minimum job qualifications before recommending applicants for interviews. Management should document the comparison and ranking of all candidates during the hiring process.
7. Salaries charged to VPBA projects, including those of support staff, should be in direct proportion to the amount of time staff spend managing and administering the VPBA project.
8. Based on the future workload, Corrections should determine the optimum number of classified positions necessary to provide management and support to capital outlay projects and take appropriate measures to fund those positions.
9. Corrections should perform cost analysis to ensure contracting the project management function is cost beneficial to the project.
10. The Population Policy Committee should expand its method of determining the data elements in the projection model. The model should consider a review of prior years' projection variances to determine if the Committee should include data elements in the current model that affected prior years.

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INTRODUCTION

In the past five years, Corrections has built and opened several new prisons. Currently, there are four major facilities under construction and more are necessary as the adult prison population continues to grow. This report reviews the capital construction processes at the Departments of Corrections and Juvenile Justice.

This report reviews the typical prison construction process, evaluates the organization of the capital outlay divisions at Corrections, reviews construction issues at Juvenile Justice and documents prison construction projects (see appendix A and B). While overall, we found the capital outlay management processes at Corrections and Juvenile Justice to be adequate, our report contains several recommendations for improvement.

DEPARTMENT OF CORRECTIONS NEW PRISON CONSTRUCTION PROCESS

Introduction

This section documents the processes Corrections' Division of Architectural and Engineering Services uses for a typical new prison construction project. We selected the Lunenburg Medium Security Dormitory (MSD) as an example because of its recent completion and its prototype design. This section describes the Lunenburg project from inception to completion. We based our information on documentary evidence, interviews with Corrections staff, and procedures outlined in Corrections' policies and procedures manuals and the Commonwealth's Capital Outlay Manual.

Identifying the Need For a Prison - 1991

Corrections identifies the need for new prisons in its preparation of a Master Plan. Preparing an Inmate Population forecast is the first step in updating the Master Plan. Annually, Corrections' Planning and Certification Group prepares an Inmate Population Forecast using current population and other variables. The group compares the population forecast to the anticipated capacity in a Ten-Year Master Plan. In 1991, the Master Plan noted a deficit of 2,336 beds by the year 1995. To address the deficit, Corrections concluded that three additional facilities were necessary. One of the additional facilities would be a medium security dormitory (MSD) prison housing 648 inmates; the fifth of its type constructed by Corrections.

Corrections needed to select a location for MSD #5. As an effort to promote local employment opportunities, the Victoria Industrial Development Authority in Lunenburg County donated 206 acres of land for the construction of the prison. In the past, if a locality did not donate land for a facility location, Corrections purchased a site. State law now requires Corrections to obtain approval from localities to construct prisons within their jurisdiction.

Project Description

The Lunenburg Project based all building structures on prototypical plans prepared for the MSDs at four other locations. The plans, prepared by MMM Design Group of Norfolk, were site adapted and modified by the Architectural and Engineering (A/E) firm of Hayes, Seay, Mattern & Mattern of Roanoke. The Lunenburg prison would provide an administration building, a program building, six housing units, a segregation building,

a service building for vocations, food service, medical, industries, a warehouse/maintenance building, and 4 guard towers. Corrections also had to construct a pump station, an elevated water tank, a water and sanitary system, and infrastructure such as fencing, roads, and parking. Corrections included space for Virginia Correctional Enterprises but did not know how they would utilize that space.

Recommendation: #1

Corrections does not always receive detailed input from Virginia Correctional Enterprises for facility design. Therefore, industrial programs must later conform to constructed space. Corrections and Correctional Enterprises should work closely together in facility design to ensure the design incorporates appropriate industry space. This could reduce the need for potentially costly change orders.

Project Approval and Funding

To obtain funding for a project, Corrections must obtain appropriate approvals. First, Corrections Project Engineers and Architects prepared a cost estimate. Second, the Capital Outlay Construction Unit included the estimate, \$28,257,000, in a Capital Project Request and submitted it to the Department of Planning and Budget for consideration in the Governor's Budget Bill. Capital Project Requests are subject to a review process by Planning and Budget, and the Department of General Services' Division of Engineering and Buildings and Bureau of Capital Outlay Management. These agencies examined the project for conformity with program guidance established by the Governor, provided other recommendations, and included the project in the 1992 Governor's Budget Bill. The General Assembly approved the Lunenburg project authorizing \$26,500,000 in Chapter 878 of the 1992-1994 Acts of Assembly.

Authority to Initiate Capital Outlay Project - June 1992

In order to start the project, Corrections had to receive approval from the Governor. Governor Douglas Wilder signed the CO-2EZ granting authority to initiate the Lunenburg project in June of 1992.

Construction Project Engineer Selection

Corrections assigned an in-house Construction Project Engineer as project manager to the project. Typically the project manager coordinates Architect and Contractor activities, oversees inspections, and files all paperwork with the appropriate agencies for approval. The project manager prepared the Request for Proposal for Architectural and Engineering services and for program consultant services, aided in selecting both, and prepared the initial project budget. Because of staffing shortages, Corrections hired an outside Program Consultant to perform inspections and remain on site during construction.

Environmental Studies - August 1992

Before breaking ground on any construction project, Corrections must receive approval from the Department of Environmental Quality on an environmental hazard survey and an environmental impact study. The A/E firm performed the Environmental Hazard Survey on an open-ended contract and Corrections Construction and Engineering Services conducted the Environmental Impact Study. Corrections submitted the results of the studies to the Department of Environmental Quality in June 1992 and received approval in August 1992.

Selection of Architect and Engineer Firm - February 1993

Corrections needed an A/E Firm to perform the Environmental Hazard Survey, a Topographical Survey, and provide Construction services for the remainder of the project. Hayes, Seay, Mattern & Mattern, Inc. performed the Environmental Hazard Survey on an open-ended contract for \$5,250.

For the Topographic Survey and remaining A/E services, Corrections issued a request for proposal in June 1992. A "Short List Committee" of Corrections personnel pre-screened the 15 A/E Firms that responded to the request. The "Short List Committee" identified six A/E Firms for consideration on the Lunenburg project. The Building Committee, composed of another set of Corrections personnel and one member from General Services' Bureau of Capital Outlay Management, interviewed the six qualifying firms. The Building Committee selected Hayes, Seay, Mattern & Mattern, Inc. to perform the Topographic Survey and the remaining A/E services. In January 1993, the A/E signed a contract to perform the topographic survey for \$50,000. A month later, Hayes, Seay, Mattern & Mattern, Inc. signed a contract to provide A/E services for the remainder of the project for \$989,000.

Selection of Program Consultant - June 1994

Corrections advertised for a Program Consultant in June 1992 and received seven responses. The "Short List" Committee selected three of the respondents for an interview. The selection committee chose Gilbane Building Company and awarded a contract in June 1994. The contract agreed to pay Gilbane \$146,101 for design phase services and \$736,056 for construction phase services.

Approval of Drawings - Site Preparation - June 1994

All schematics, preliminary and final site work drawings must receive proper approval. General Services' Division of Engineering and Buildings approved the preliminary drawings in January 1994 and final drawings in March 1994. After receiving approval on site work drawings, Corrections advertised for a contractor to prepare the site for construction and received five bids. Central Builders, Inc. submitted the lowest bid of \$327,753. The General Services' Division of Engineering and Buildings approved awarding of the contract to Central Builders in June 1994.

Awarding of Construction Contract - September 1994

Corrections received approval of the construction working drawings in April 1994. Since Corrections used the same design at four other locations, there was no need for preliminary drawings. Corrections advertised for a Contractor in June 1994 and received one bid. After negotiating with the sole bidder, Kenbridge Construction Company, Corrections applied for approval to award a contract for \$19,973,000. The General Services' Division of Engineering and Buildings gave approval to award the contract in August 1994. Kenbridge Construction Company signed a contract in September 1994 and received a Notice to Proceed. Construction began September of 1994.

Approval Of Change Orders

Corrections must approve a Change Order for all contract changes involving contract cost or performance time. Both the A/E and the Contractor initiate change orders, which may increase or reduce the cost of the contract. The Consultant, project manager, and Corrections Capital Outlay Program Director review the change orders for scope and accuracy. The Capital Outlay Program Director grants approval for change orders within his authority or forwards the change order to General Services' Bureau of Capital Outlay Management for

approval. At Lunenburg, the A/E submitted three change orders resulting in \$274,659 of additional charges. The Contractor requested 98 change orders resulting in \$640,000 of additional charges. Change orders at Lunenburg resulted primarily from:

1. unforeseen site conditions (e.g., encountering unsuitable soil conditions while constructing the perimeter road),
2. change in agency requirements (e.g., installing additional fencing at the housing units as the result of recent disturbances at similar facilities),
3. conflict (e.g., specified equipment is no longer available or does not meet the intended purpose), and
4. items not shown or specified (e.g., modifying electrical service as the result of changes to the design or equipment).

We reviewed the change orders approved for the Lunenburg project as well as other projects with large quantities of change orders. We found change orders only for appropriate conditions and all had Corrections management's approval.

Construction Meetings and Inspections

As construction goes on, the A/E, Contractor, Project Consultant and Corrections' Project Manager have weekly meetings at the site. The purpose of the meetings is to discuss construction progress, scheduling of work and inspections, results of inspections and any other issues. The A/E is responsible to be on site to ensure the contractor builds the facility to the drawings it made and to answer any questions the contractor may have about the drawings. The Project Consultant on this project observes inspections, reports the construction schedule, and serves as a liaison between the A/E and the contractor and Corrections. The role of Corrections' Project Manager is to oversee the entire process and make sure the quality of design is acceptable. Documentation of site visits, meetings, concerns and inspections are critical in showing Corrections' awareness of progress, delays and issues. On current projects, Corrections has assigned a Warden and a Buildings and Grounds Supervisor to be on site during construction.

Recommendation #2

Project managers should document on-site inspections. At Lunenburg as well as at 2 other facilities, there was no documentation of on-site inspections by project managers. Due to inadequate documentation, we could not determine if the Project Manager performed inspections. Proper documentation will minimize exposure to contractual disputes. Project managers should document inspection dates, their purpose, and the results.

Recommendation #3

The Capital Outlay Division should follow procedures to communicate deficiencies in contractors work promptly to Corrections management. As further explained in the project summary for the Women's Multi-Custody facility in Fluvanna County, the A/E and the Contractor had a major dispute on the required height of various masonry walls. The project manager knew of this dispute, but did not inform senior management until shortly before the Contractor filed for a court injunction. Project managers should inform Capital Outlay Management of discrepancies not resolved within 30 days. In turn, Capital Outlay Management should inform the Deputy Director of Administration of potential issues so senior management can promptly resolve issues.

Schedule Of Values

Monthly, throughout the construction period, the Contractor submits a "Schedule of Values and Certificate for Payment" for review and Corrections approval. The schedule of values indicates the goods and services for which the Contractor is requesting payment. Corrections retains 5 percent of all payments until it finalizes all unresolved items. Both the A/E and Project Consultant review each schedule. The A/E recommends payment, and the Project Consultant determines the appropriateness of the payment. The project manager and a member of Corrections Building Committee must then approve the schedule for payment.

Substantial Completion - December 1995

As each building drew near to completion, the Contractor notified Corrections by submitting a "Certificate of Partial or Substantial Completion by the Contractor." The A/E affirmed the completion date and scheduled inspections. Corrections Project Manager, the A/E, the State Fire Marshall's office, and General Services' Division of Engineering and Buildings inspected the facility work and prepared a "punchlist" of items needing completion. The A/E submitted a "Certificate of Partial or Substantial Completion by Architect/Engineer" to the Division of Engineering and Buildings.

Occupancy - December 1995

The Warden came to the prison in November of 1995. Corrections loaded prisoners at the Lunenburg facility in December of 1995. Before occupying any State owned building, the General Services' Division of Engineering and Buildings must issue a "Certificate of Use and Occupancy". In December 1995, before final completion, the Division of Engineering and Buildings approved Certificates of Use and Occupancy for all structures. The Certificates approved the use of the buildings contingent upon meeting specific conditions such as completing the "punchlists" and ensuring the remaining construction did not present a safety hazard to the occupants. The issue of the Certificates permitted Corrections to load prisoners.

Final Inspection - May 1996

After the Contractor completed the items on the "punchlist," the A/E scheduled final inspections. The project manager, A/E, State Fire Marshall's office, and General Services' Division of Engineering and Buildings performed final inspections of the facility to determine the that "punchlist" items were complete. Engineering and Buildings received the certificates of completion from the Contractor and A/E, and the Fire Marshall's Inspection Report. Engineering and Buildings then issued the final "Certificate of Use and Occupancy" for all structures.

Close Out

Upon final completion and inspections, Corrections makes a final payment to the contractor releasing the percentage of amounts previously earned by the contractor, but held pending completion. During our audit we reviewed the procedures used to authorize vendor payments, including final payments. We found those procedures to be adequate and generally followed; except that Corrections does not formally gather and document vendor performance for use in future contractor selections. The Lunenburg project remains open due to construction of a warehouse.

Recommendation #4

As a part of the project close out, Corrections should formally evaluate the Architect/Engineer and Contractor. Chapter 6 section 11.0 of the Capital Outlay Manual, requires agencies to complete a form evaluation upon project completion. The Evaluation should emphasize the quality of the design, timeliness of reviews, clarity of drawing and specifications, resolution of construction problems and cooperation. These evaluations will help Corrections in ranking A/E and Contractor firms in future project awards.

Postscript

Corrections uses several different methods of constructing capital outlay projects. The previously described procedures are typical, but not the only ones available. Some construction projects use a design/build contract which requires the A/E to design and constructs the entire project. Other projects use an enhanced management contract, where the A/E performs additional inspections, without a Program Consultant. Corrections therefore assigns Project Managers to the project on a full time basis. The contract management method is a management decision made by Corrections and dictated by the Capital Outlay Manual.

OVERVIEW OF ARCHITECTURAL AND ENGINEERING SERVICES DIVISION

The Division has four primary functional units; Capital Outlay Design, Capital Outlay Construction, Environmental Services, and the Corrections Construction Unit (See the Division's organization chart at Exhibit 1). Each unit receives support from clerical, financial, and drafting personnel.

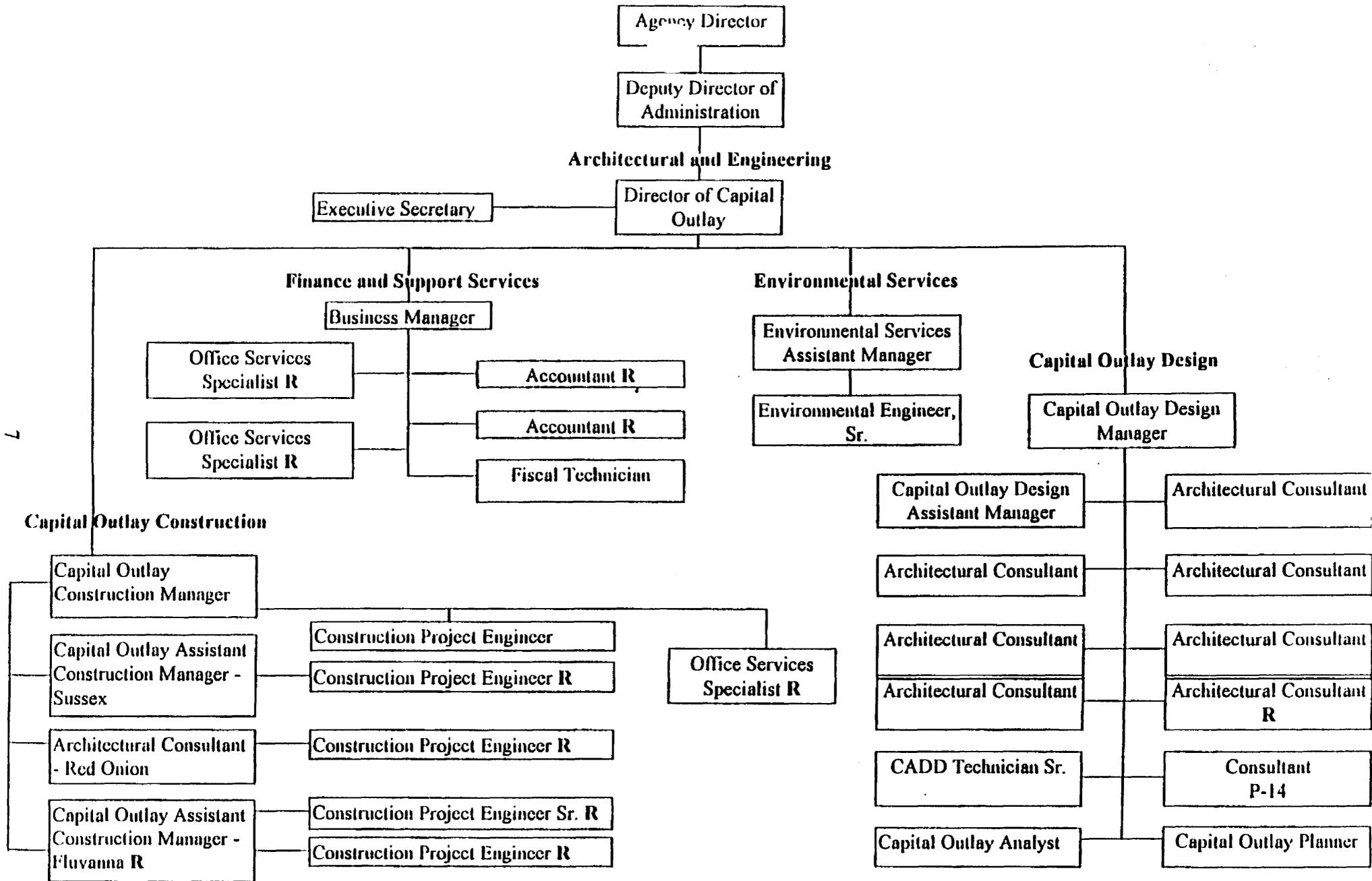
Functional Units and Division Personnel

The Capital Outlay Design Unit manages design of capital outlay projects. The Unit's chief architect and two other architects have primary design responsibility for all major projects. Once a major project is designed and ready for bid, the responsibility for the project goes to the capital outlay construction unit. However, the Capital Outlay Design Unit will continue to track the projects throughout construction to assist with design issues. The Unit's other Architects and Engineers manage both the design and construction of smaller capital outlay and maintenance reserve projects.

The Capital Outlay Construction Unit provides project management for new prison construction. The Unit's Manager is responsible for supervising all major construction management activities. Assistant Managers supervise Corrections' personnel assigned to their field office, communicate daily with the contractor and A/E, and approve change orders under \$5,000. The Project Engineer Seniors perform project scheduling, track requests for information, requests for proposals, and change orders. Buildings and Grounds Superintendents (not shown in Exhibit 1) also initially serve as construction inspectors. Once projects are substantially complete, the individual then reports to the facility wardens on a permanent basis.

The Environmental Services Unit is responsible for providing technical engineering skills in water/wastewater design and construction. The Unit also evaluates existing systems and develops future modifications based on the evaluations.

The Corrections Construction Unit (CCU) (not shown in Exhibit 1) is an inmate labor unit at Powhatan Correctional Center. The Unit has approximately 18 staff and between 30 - 100 inmates. Unit supervisors provide construction expertise and supervise guarded crews, which work on capital improvement maintenance reserve projects (e.g., installation of the water booster pump station at the Virginia Correctional Center for Women and roof repairs). Corrections Construction Unit averages \$1.2 - 1.5 million in contracted services per year.



R = Restricted VPBA Funded Positions

Organizational Structure

The organizational structure of the Architectural and Engineering Services has undergone several changes. Although very little turnover has occurred at the staff level, there have been three different Directors in the last 5 years. Each Director, including the current, re-organized Architectural and Engineering Services' structure and reassigned staff responsibilities. Due to these changes, staff did not always have a clear understanding of their role in Corrections.

As part of our audit, we interviewed employees and managers, inspected personnel files, performance evaluations, and visited facilities under construction. We found employees' job titles did not correspond to actual duties. Also, management did not use matching job criteria or actual duties during employee evaluations nor did evaluators justify above average ratings.

Recommendation #5

Management should clarify employees duties and base evaluations on those duties. Management must rate employees objectively because this is their tool to properly deal with employees that are not performing. Management should consider evaluation training for supervisors.

The Division hired a project manager that did not appear to meet the minimum job qualifications. Although the employee may have been the most qualified candidate, management did not document how the candidate ranked in knowledge, skills and abilities when compared to other candidates.

Recommendation #6

Before recommending applicants for interviews, the personnel section must ensure applicants minimum job qualifications. Management should also document the comparison and ranking of all candidates during the hiring process.

Staffing

Considering the number and complexity of projects managed by Architectural and Engineering Services, management is facing future staffing issues. It is critical that Corrections have adequate representation on-site and provide support for all projects, including significant maintenance projects. To obtain adequate representation, management must either, hire and pay consultants or provide in-house project management by funding classified positions.

Currently, Architectural and Engineering Services has 11 restricted positions (see Exhibit 1) funded solely by VPBA projects. The VPBA funds new prison construction and other capital projects which require the purchase of real estate or the raising of a building. Based on our review of expenses charged to VPBA projects, Corrections improperly charged VPBA projects for salaries of Buildings and Ground Superintendents and support staff without documenting their time spent administering the construction project. A Department of Planning and Budget representative stated that Superintendents salaries are unallowable VPBA costs unless they are acting as a project manager. Support personnel salary allocations do not reasonably reflect actual amount of time spent on projects, but appear as arbitrary charges to open projects.

Recommendation #7

Management should only charge project costs allowed by VPBA to comply with state requirements. Expenses charged to VPBA projects, including those of support staff, should be in direct proportion to the amount of time staff spend managing and administering the VPBA project.

In the next few years, new prison construction will decline, VPBA funds will slowly diminish and Architectural and Engineering Services will lose restricted employees in critical positions. Architectural and Engineering Services will experience large increases to maintenance reserve projects in the 1998-2000 budget for preventative maintenance and re-roofing programs. (see Exhibits 2 & 3). Additionally, the practice of double bunking increases the amount of wear and tear on facilities, accelerating the aging process and increasing the number of needed repairs.

Exhibit 2

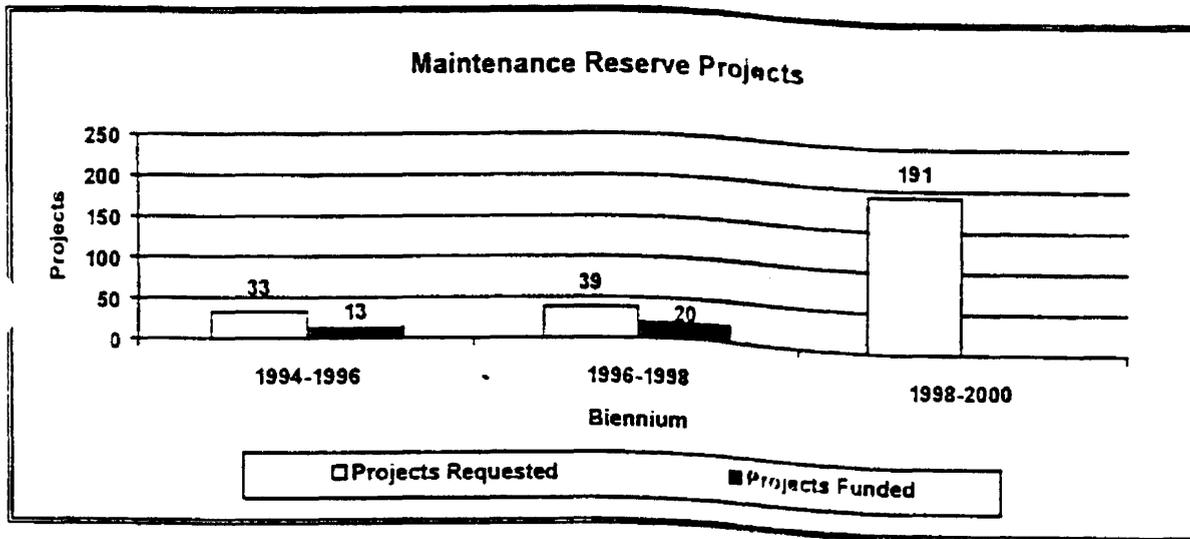
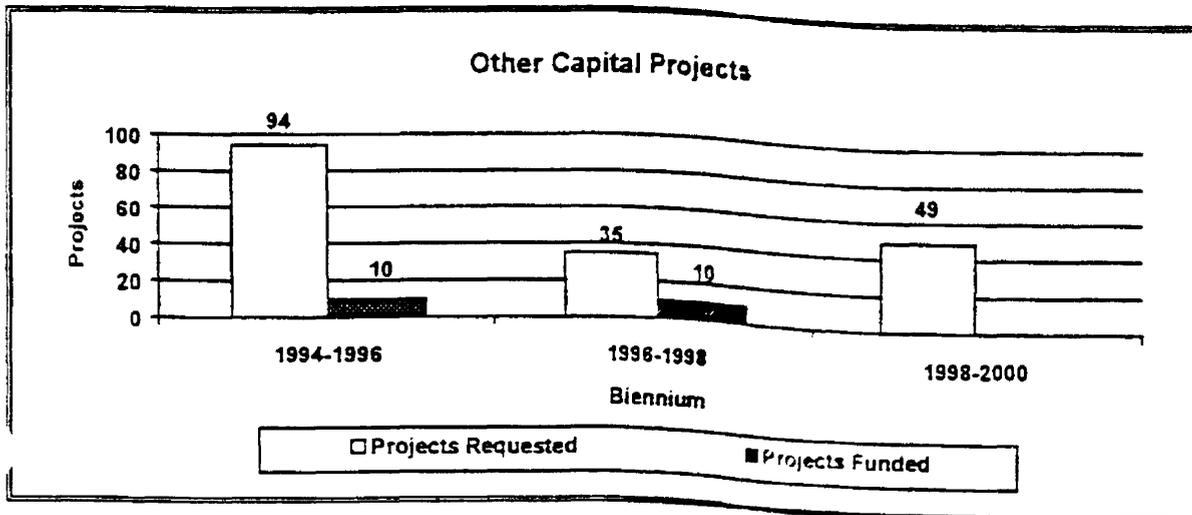
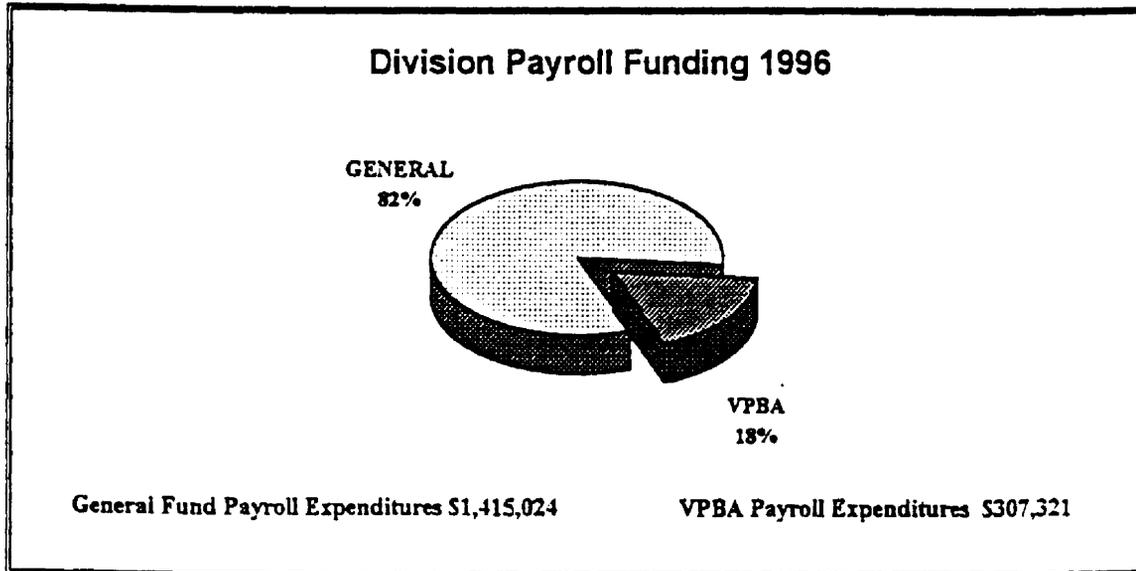


Exhibit 3



As it loses its VPBA funding, the Capital Outlay Construction Unit will lose funding for four of their five Project Managers and one Assistant Construction Manager. Also, the Finance and Support Services Unit will lose their two Accountants and two Office Service Specialists. In total, Architectural and Engineering Services may lose up to 18 percent of its payroll funding (see Exhibit 4).

Exhibit 4



In the past, due to staffing shortages, Corrections hired a program consultant to serve the role of project manager. Average consulting fees are \$85 per hour. Average fees for Corrections project managers are \$125 per hour plus benefits.

Recommendation #8

Based on the future workload, Corrections should determine the optimum staffing level necessary to provide management and support to capital outlay projects. Corrections should perform a cost analysis considering the cost of outside consultants compared to funding classified positions. If appropriate, Corrections should take necessary measures to fund classified positions.

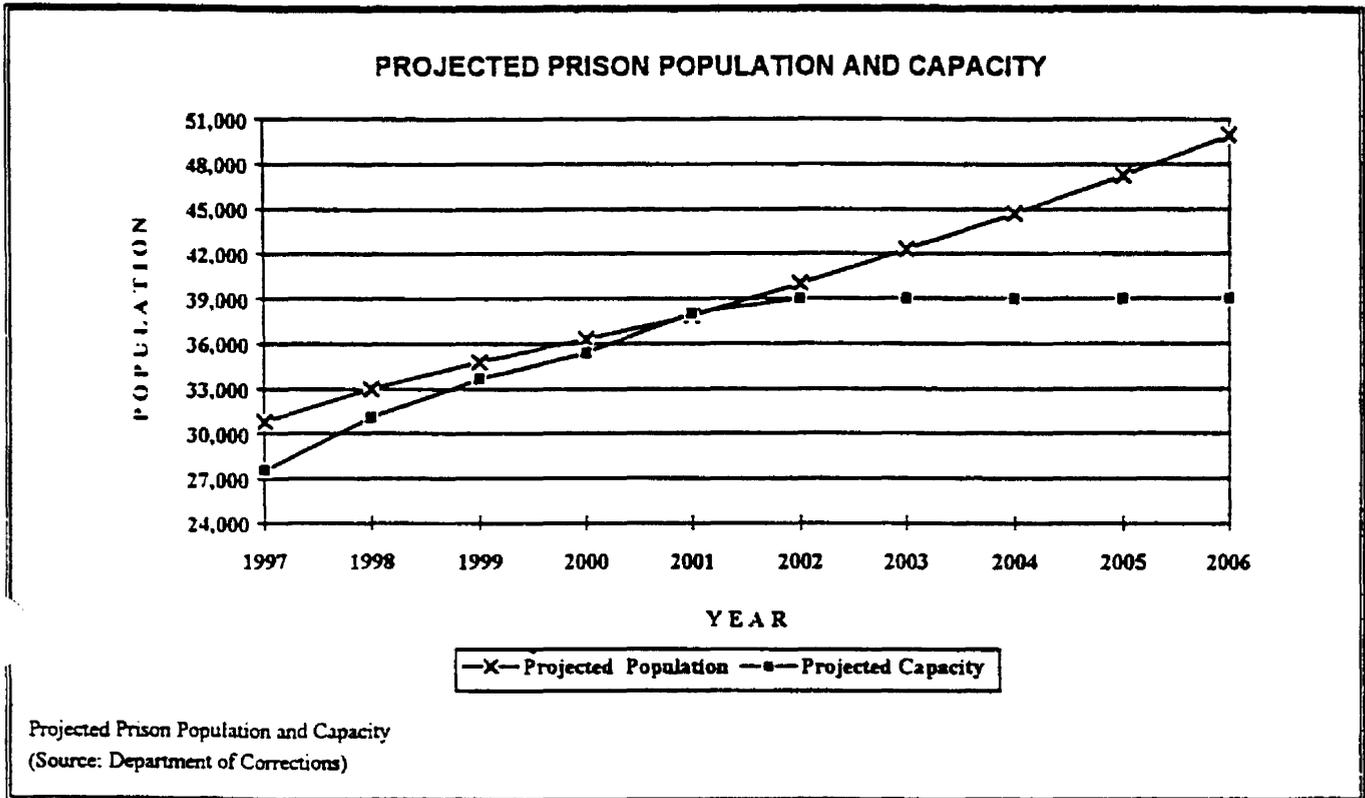
CURRENT CONSTRUCTION AND FUTURE PLANS

Population Projection

A number of state officials participate with Corrections and Juvenile Justice in forecasting youth and adult inmate populations. The forecasting of these populations is the basis for long range planning for major capital improvements at Corrections and Juvenile Justice. Once the need for a new facility is recognized, the state experiences a lengthy budgeting and planning process of 3 to 3½ years before inmates occupy the facility. With the time lag between identifying needs and actual occupancy, the forecasting of future inmate population levels becomes a critical component of the planning and construction process.

Corrections projects there will be approximately 50,000 inmates sentenced to state facilities, within the next nine years. This represents an increase of 107 percent over the present population of 24,104. Management from Corrections, Juvenile Justice, the state Department of Planning and Budget and other state officials must continually meet to properly plan the future needs of the growing inmate populations. Exhibit 5 shows how imperative it is that management continues to plan for future projected shortfalls and communicate with applicable officials to obtain necessary funding.

Exhibit 5



Corrections currently prepares population projections by utilizing a two-committee process. The Policy Committee determines data elements for inclusion in the analysis; the Technical Committee performs the actual data analysis utilizing *Profit* software from the National Council on Crime and Delinquency (NCCD).

We reviewed Corrections long-range planning for facility needs through reviews of planning documents and discussions with individuals involved in that process, both at Corrections and at other agencies. We found that while facility planning adequately considers population projections, Corrections is experiencing a variance of 4 percent to 5 percent annually in its population forecasting. While this is within the low end of variances obtained by other states reviewed, it is above the anticipated margins of 2 percent to 3 percent as stated by NCCD.

Recommendation #9

The Policy Committee should improve its method of determining the data elements in the projection model. The Policy Committee should continue to review prior years' projection variances to determine how to include or exclude data elements in the current model that affected prior years.

DEPARTMENT OF JUVENILE JUSTICE
CAPITAL OUTLAY OVERVIEW

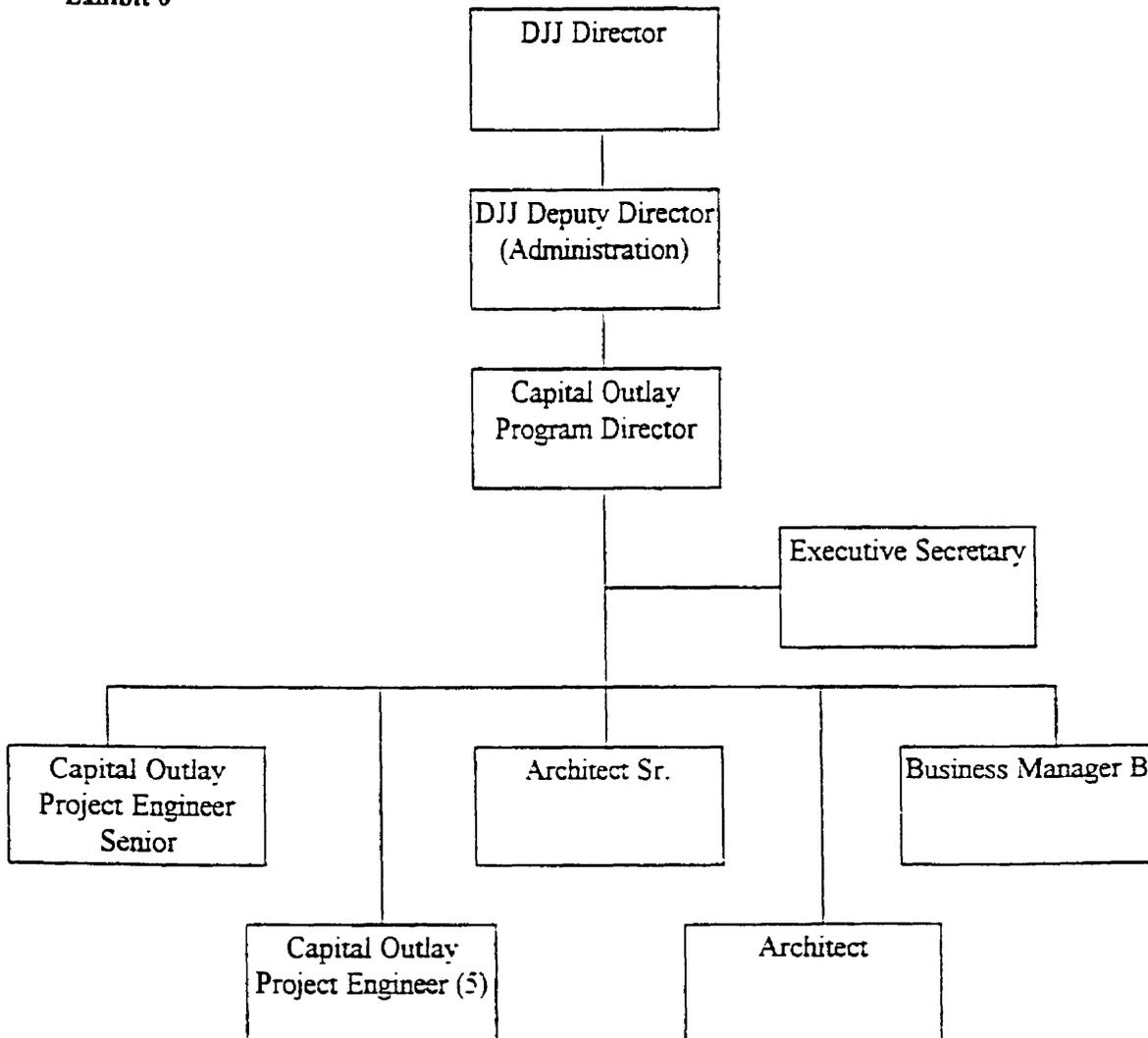
Organizational Structure

The organizational structure of the Capital Outlay Management Unit has remained stable over the past five years with no turnover of key personnel. Capital Outlay Management consists of a Capital Outlay Director who reports to the Deputy Director of Administration, an Executive Secretary, a Business Manager, eight Architectural/Engineering Project Management personnel, and one part-time support staff. (see Exhibit 6)

Capital Outlay Management allocates its resources among several types of capital outlay projects. Projects include new correctional facility construction, renovations, maintenance reserve and other capital outlay projects such as wastewater management systems.

Department of Juvenile Justice Division of Administration
Capital Outlay

Exhibit 6



Policies and Procedures

Capital Outlay Management follows similar capital outlay policies, procedures and processes for construction projects as Corrections.

Construction Projects and Funding

Juvenile Justice will experience changes similar to Corrections in the types of construction projects managed in the future. Maintenance reserve projects will increase as juvenile correctional facilities open in 1997 and 1998. Staffing of Capital Outlay Management consists of 11 employees: 5 classified, 5 restricted, and one P-14 support staff (not shown at Exhibit 6). Juvenile Justice funds the restricted employee positions with Virginia Public Building Authority (VPBA) funds. Restricted salaries paid in fiscal year 1996 constitute \$64,760, or 26 percent of total payroll dollars and included payroll for 2 restricted personnel.

Completed Projects

Juvenile Justice did not complete a juvenile corrections facility in the last five years, but started construction on four facilities during fiscal years 1993 through 1995.

Other Projects

In addition to the on-going facility projects at Beaumont, Culpeper and Bon Air, Juvenile Justice is pursuing Federal funding to construct a new 45-bed Boot Camp. Juvenile Justice is also proposing to acquire and expand the federally owned Natural Bridge Juvenile Correctional Center that has a 60-bed capacity.

SUMMARY OF CORRECTIONS CAPITAL PROJECTS

Exhibits 7, 8 and 9 reflect Corrections construction activities with descriptions of those completed in the past 5 years, currently under construction and other future projects.

Exhibit 7**COMPLETED PROJECTS**

Project Description	Year Funded	Year Completed	Total Appropriations	A	B	(A/B)
				Actual Cost	Original # Bed Capacity	Cost per Capita
<u>Medium Security Dormitories</u>						
Dillwyn	1990	1993	24,048,000	23,003,695	825	27,883
Indian Creek	1990	1993	24,664,000	21,687,568	825	26,288
Haynesville	1990	1993	22,806,000	21,832,724	825	26,464
Coffeewood	1991	1994	28,631,429	27,894,167	825	33,811
Lunenburg	1992	1995	29,849,500	28,015,560	825	33,958
Deerfield	1991	1994	14,380,459	13,999,381	375	37,332
<u>5 Work and 2 Detention Centers</u>	1994	1995	28,835,000	25,896,860	1,500	17,265

Medium Security Dormitories (MSD)

The following six facilities are prototypes fashioned partially after the Deep Meadow dormitory facility. Each facility has approximately 157,000 square feet of building space, 6 general housing units and a segregation unit of 48 beds. The institutions also include an administration building, dining, maintenance, medical, multi-purpose/visiting rooms, a warehouse and an industries program. Original design capacity was for 600 inmates; however, Corrections intended to operate at 135 percent capacity at opening. Due to severe overcrowding in local jails, MSD's have operated as high as 180 percent capacity.

Dillwyn Correctional Center

This Prototype 1 is located in Buckingham County. During the construction of this facility, the project experienced 135 change orders, totaling over \$1.6 million, which equated to 10 percent of original contract prices.

- Branch and Associates served as the general contractor for the construction of the main facility; they had 64 change orders processed increasing the original contract price by \$776,000.
- MMM Design Group provided architect and engineering (A/E) services. Corrections approved 19 change orders totaling \$317,091.
- Brown and Root Building Co. supplied program consulting services.
- Other Contractors had 52 change orders processed totaling \$569,690.

Indian Creek Correctional Center

This Prototype 2 is located in Chesapeake. Corrections processed approximately 147 change orders, totaling over \$1.1 million and equaling to 6 percent of original contract prices.

- Armada/Hoffler Corp. served as the general contractor for the facility; Corrections processed 80 change orders equaling \$504,089 of the contract amount.
- MMM Design Group supplied A/E services; they processed 13 change orders totaling \$203,101.
- Brown and Root Building Co., provided program consulting services and processed 1 change order amounting to \$230,101.
- Other Contractors processed 53 change orders in the amount of \$344,196.

Havnesville Correctional Center

This 3rd Prototype located on the Northern Neck had approximately 115 change order for this project totaling approximately \$767,000, equating to 5 percent of original contract prices.

- Kenbridge Construction Co. served as the general contractor for the construction of the main facility; processed 74 change orders increasing the original contract price by \$270,100.
- MMM Design Group provided A/E services and processed 18 change orders amounting to \$302,294.
- Brown and Root Building Co. provided program consulting services.
- Other Contractors processed 22 change orders equaling \$195,037.

Coffeewood Correctional Center

The . Prototype is located in Culpeper County. This project experienced 62 change orders, totaling in excess of \$1.8 million, equating to 9 percent of original contract prices.

- Lott Constructors, Inc. served as the general contractor for the construction of the main facility; processed 26 change orders amounting to \$924,941.
- MMM Design Group provided A/E Service and they processed 10 change orders equaling \$536,319.
- Turner - Smoot (Joint Venture), supplied program consulting services.
- Other Contractors processed 36 change orders totaling \$384,388.

Lunenburg Correctional Center

The 5th Medium Security Prototype is located in Lunenburg. This project had 104 change orders, totaling over \$950,000, and 4 percent of original contract prices.

- Kenbridge Construction is the general contractor for the construction of the facility. The constructor processed 98 change orders equaling \$640,956. The numerous change orders were for additional drainage construction that had to be done because of underground springs on the site.
- Haves, Seav, Mattern & Mattern provided A/E Services; they processed 3 change orders totaling \$274,659.
- Gilbane Building Co. supplied program consulting services.
- Other Contractors processed 3 change orders in the amount of \$39,347

Replacement of Deerfield Correctional Center

This Modified Medium Security Dormitory, located in Southampton County is a prototype of Deep Meadow. Designed to house 300 inmates, Corrections housed approximately 500 with double bunking. The construction of this facility replaced the previous trailer facility and included pre-engineered metal buildings for administration, maintenance, multi-purpose/visiting, general housing and recreation. Corrections processed approximately \$757,000 of change orders, approximately or 7 percent of original contract price.

- Lott Constructors, Inc. was hired as the general contractor for the construction of the main facility; 80 change orders totaling \$295,301.
- McDonald, Williams, Banks, Corneille provided architect and engineering (A/E) Services; they processed 6 change orders in the amount of \$297,100.
- Turner - Smoot (Joint Venture) supplied program consulting services.
- Other Contractors processed 21 change orders equaling \$164,649.

Work and Detention Centers

During the 1994 Special Session, the General Assembly approved funding for the construction of seven work centers at existing prison locations. The centers are enclosed within separate fenced compounds to house inmates who leave the premises to work during the day. The existing prisons provide food and support services for each work center. The design of each center includes a building that houses inmates and provides administrative space. Two of the centers have an additional housing unit increasing their capacity to 300. Two others are serving as detention centers. The Brunswick center is now a women's facility. Corrections designed the centers to house 1,500 inmates.

	<u>Populations</u>
<u>Work Centers</u>	
Cold Springs	150
White Post	150
James River	300
Greensville	300
Brunswick	200
<u>Detention Centers</u>	
Nottoway	200
Southampton	<u>200</u>
Total for Centers	<u>1,500</u>

Site construction started in December 1994 and inmates occupied the centers seven months later, June 1995. For all seven centers, Corrections processed approximately 17 change orders, totaling over \$4.6 dollars, 17 percent of original contract prices.

- Turner Construction was the general contractor for construction of all the main facilities; the constructor processed 5 change orders totaling \$4,602,733.
- Haves, Seav, Mattern & Mattern provided A/E services; 1 change order was processed equaling \$3,917.
- Two companies, Roache, Mercer, & Faison and Dunbar, Milby, & Williams provided additional inspection services.
- Other Contractors processed 11 change orders that totaled \$31,994.

Exhibit 8

CURRENT PROJECTS

Project Description	Year Funded	Anticipated Completion Date	A Total Appropriations	Expended To Date	B Original # Bed Design	A/B Budgeted Cost per Capita
Red Onion Mountain	1992	July 1998	72,000,000	39,006,033	1,267	30,786
Sussex 1 & 2	1993 and 1994	Dec. 1997 and May 1998	142,472,000	86,434,588	2,388	36,195
Women's Multi-Custody	1993	Nov. 1997	53,110,312	39,888,557	1,200	33,240
Mecklenburg Expansion/Renovation	1994	Sept. 1998	9,000,000	1,512,891	728	2,078

Red Onion Mountain

Located in Wise County, this super maximum-security prison (Keen Mountain prototype 2) had an original opening date in late 1995. As a result of various issues related to property acquisition and site preparation, the 1995 General Assembly halted the project. The General Assembly's action halted design activities, with 40 percent of the working drawings complete. The Governor restored funding for the project during the 1995 veto session, allowing Corrections to reactivate the project and reclassify the facility as super maximum security. Upon reactivation, the project became a design-build contract. This 324,800 square foot facility will house approximately 1,267 inmates when completed. Major features will include an administration building, 8 housing units, education, industries, dining, medical, multi-purpose/visiting rooms, a maintenance warehouse and power plant. There were 4 change orders relating to the original design contract totaling over \$454,480 or 1 percent of the contract.

- Brown and Root Building Co. were hired to design and build the facility.
- Daniel, Mann, Johnson, Mendenhall, Inc. provided A/E services under the original design scope; and processed 4 change orders of \$454,480. These change orders were made to the original contract, mostly for documentation that had to be done when the project was halted.

Sussex 1

This 3rd maximum-security prototype facility, located in Sussex County, had an original design to house 528 inmates within 3 housing units. Later, additional funding for a 4th housing unit increased the number of inmates to 704. Construction will provide over 364,000 square feet of building space and potentially could house 1,121 inmates. Other buildings will include administration, program support, central maintenance, central plant, and a maintenance warehouse. When completed, this facility will become the home to Virginia's Death Row.

Sussex 2

This is the 4th maximum-security prototype facility located at the same site as Sussex 1. Total appropriations are \$68 million and the facility will include essentially the same number and types of buildings as Sussex 1. Eventually this facility will house 1,267 inmates when it opens in the Fall of 1998.

To date, there have been approximately 20 Change Orders, representing 22 items for both projects totaling over \$3.8 million, and representing 4 percent of original contract prices.

- Moselev, Harris & McClintock secured the services of designing both facilities simultaneously; 12 change orders were processed equaling \$3,675,329. Approximately \$3.6 million were attributed to the design of Sussex 2, which was not in the original contract cost.
- Archer-Western served as the general contractor for the construction of the main facilities; and processed 8 change orders totaling \$136,170.

Men's Multi-Custody

Located in Fluvanna County, Corrections designed this facility to house a population of 816 inmates in four units. The General Assembly authorized funding to increase the planned capacity to 1,200 inmates. The housing units will be multiple custody in that living spaces will accommodate all three custody levels. Included at the facility will be administrative offices, maintenance warehouse, educational and vocational program areas, medical and mental health facilities, and a reception/classification component.

Corrections originally received preliminary drawings in December 1994. However the Bureau of Capital Outlay Management delayed bidding of the project for four months due to extended reviews. Further project delays occurred due to the extensive debate over the viability of an on site central power plant, the feasibility study of a waste water system and because preliminary cost estimates exceeded appropriated amounts.

In November 1995, Corrections awarded the construction contract to Turner Construction Company. In July 1996, a dispute arose between the A/E and the general contractor concerning the height of masonry walls. In January 1997, Corrections reported that work was continuing on all major buildings and masonry work was complete in many of the buildings. In February 1997, the A/E issued a "Notice of Defective or Non Conforming Work" to the contractor insisting that masonry walls extend to the roof deck. In March, the masonry subcontractor filed a temporary injunction against Turner. Under Court urging, Corrections management and the A/E reached an agreement, in April, regarding materials and height of the walls. Corrections' senior management did not know of this dispute until March. Upon completion in November 1997, the two parties will resolve payment issues.

Corrections processed approximately 30 Change Orders totaling over \$861,000 or 2 percent of original contract prices.

- Turner Construction was hired as the general contractor for the construction of the main facility; having 10 change orders equaling \$196,059.
- Moselev, Harris & McClintock provided A/E services; had 10 change orders totaling \$768,584.
- Other Contractors processed 10 change orders in the amount of \$144,170.

Expansion/Renovation of Mecklenburg

In the 1994 Special Session of the General Assembly, Corrections received authorization to renovate and convert the existing facility into a reception and classification center. This was a cost effective alternative that would more than double the earlier population. Renovation work will occur on the kitchen, perimeter fence, and existing support spaces to provide reception and classification functions. New construction will include a dining hall, expansion of existing warehouse and construction of a maintenance building. Upon completion of Sussex 1, Death Row will move to that facility. Corrections has processed 6 Change Orders totaling approximately \$109,000, representing 7 percent of established contract prices.

- Dewberry & Davis is providing A/E services; has 1 change order in the amount of \$80,405.
- KBS, Inc. serves as the general contractor; has 1 change order equaling \$1,893.
- Other Contractors processed 4 change orders totaling \$24,543.

Exhibit 9

OTHER PROJECTS

Project Description	Facility Type	Anticipated Completion Date	A	Expended to Date	B	A/B
			Anticipated Cost		Original # Bed Design	Budgeted Cost per Capita
Tazewell	Max.	To be determined	85,000,000	160,835	1,267	67,088
Wallens Ridge Big Stone Gap	Max.	Oct. 1998	77,500,000	32,458,554	1,267	61,168
Lawrenceville Brunswick County	Private Medium	March 1998	44,260,000	22,260,921	1,500	29,506
Charlotte	Private Medium	Jan. 2000	35,550,000	N/A	1,000	35,551
Medium Security Celled Facilities 1 and 2	Medium	To be determined	110,000,000	1,000,000	2,764	Unknown

Tazewell

This facility is the 2nd super maximum security prototype and similar in design to Red Onion. Corrections originally requested funding in the amount of \$81.3 million during the 1994 Special General Assembly Session. A vote by the Northampton County Board of Supervisors, in June 1995, eliminated the location of a facility in their county. This prompted the purchase of the current property in Tazewell County in December 1996. Corrections' has reduced project funding to \$200,000 for the production of schematic drawings. Currently, the project is on hold; however, Corrections will request additional funding in the future. With double bunking, the estimated inmate population will be 1,267, featuring 8 housing units and other support facilities.

- Joint Venture between Moseley, McClintock and I.V. Harris & Associates provides current architectural services.

Wallens Ridge / Big Stone Gap

Authorized by the 1995 General Assembly, this was the first privately financed and constructed prison project in Virginia. The Big Stone Gap Redevelopment and Housing Authority issued bonds to fund the project and the Wallens Ridge Development Corporation will manage the construction of the facility. Gilbane Building Company, hired in November 1995, will design and build the prison; also fashioned after the Red Onion facility. It will hold approximately 1,267 inmates. Once completed, Corrections will lease the facility for 20 years at which time ownership will transfer to the Commonwealth. Total financed cost is \$77.5 million.

Lawrenceville

The 1995 Appropriation Act included provisions to contract for site selection, construction, financing, maintenance, and operation of up to 3,800 private beds for adult offenders. The 1996 Appropriation Act later specified that a 1,500-bed medium facility be located in Lawrenceville, Brunswick County. This would serve as a pilot program to test the cost-effectiveness of private medium security facilities compared to similar facilities already in operation in Virginia. The 1997 Appropriation Act specifies that the facility be open on or before March 1, 1998. In July 1996, Corrections entered into contracts with Corrections Corporation of America (CCA) to design, engineer, develop, construct, furnish, operate and manage the facility. Shown below is an overview of the applicable contracts between Corrections and other parties:

1. Contract between Corrections, CCA & Industrial Development Authority (IDA) that Corrections Corporation of America will design and construct the facility;
2. In order to finance the project, the IDA of Brunswick County will issue \$58,095,000 of Virginia Correctional Facility Lease Revenue Bonds, Series 1996 Tax Exempt Bonds with Crestar Bank as Trustee for the bondholders;
3. Corrections and CCA entered into a contract whereby CCA will operate and manage the prison for an initial term of up to 5 years.

The average cost per inmate will be approximately \$12,460 per inmate in the first year, \$11,041 in the second year and thereafter an inflation rate of three percent each year will apply.

Corrections will lease this facility for 20 years, after which the Commonwealth will have the option to purchase the leased project for \$1.

- CCA subcontracted the construction of the facility to Canam Construction Co.
- CCA hired Mosely, Harris, and McClintock for additional inspection services.
- CCA subcontracted the design of the facility to Arrington, Watkins and to Moseley, Harris, and McClintock
- As additional insurance, Corrections hired Dewberry & Davis to provide inspections on technical aspects of the project.

Charlotte County

The 1996 Appropriation Act further specified that a 1,000-bed minimum facility be privately contracted and erected in Charlotte County before April 1998. Corrections sought and received approval from the 1997 General Assembly to change the construction to a medium type facility, based on future population projections, and move the completion date to January 2000. Corrections contracted with Wackenhut Corp. as the private contractor to design, construct and operate the facility. The contracted structure will be very similar to the CCA project.

Roy Anderson Corporation of Gulfport, Mississippi will be Wackenhut's general contractor. Hayes, Seay, Mattern and Mattern will be its architect. The contract price for designing, constructing, and furnishing the facility will be \$35,550,990. The first year operating cost will be \$12,275 per inmate. The second year operating cost will be \$11,384. Subsequent year operating costs are subject to Consumer Price Index inflation adjustments.

Medium Security Celled Facilities 1 and 2

Corrections was investigating two sites in Lee County when the 1997 General Assembly eliminated funding. At this time, only the preliminary design was complete. The Governor's budget identified \$1.2 million in federal funds to resume the design phase. Currently, the two projects are on hold pending the availability of federal funds. Once completed, each facility will have 768 cells. With double bunking, each will house 1,382 inmates.

- NBBJ/Hening Vest Covey will provide A/E Services.

SUMMARY OF JUVENILE JUSTICE CAPITAL PROJECTS

CURRENT PROJECTS

Project Description	Year Funded	Anticipated Completion Date	A		B	(A / B)
			Total Appropriations	Expended to Date	Original # Bed Design	Budgeted Cost per Capita
Beaumont Medium and Maximum Security Juvenile Correctional Facilities	1993-1994	Nov. 97	30,997,500	5,609,469	322	96,265
Culpeper Maximum Security Juvenile Correctional Facility	1995-1996	June 1998	30,530,000	962,508	275	111,018
Bon Air Medium Security Juvenile Correctional Facility	1995	July 1997	11,250,000	2,874,766	180	62,500

Beaumont Juvenile Correctional Centers

Beaumont Juvenile Correctional Center projects, located in Powhatan County, include the renovation of an existing medium security facility and the construction of a maximum-security facility. Upon completion, they will house 200 and 122 juveniles, respectively. The 36,558-square-foot medium security facility consists of two buildings. Each building includes housing, administration/support, education, medical, recreation, resident intake/release, dining and laundry units. The 71,001-square-foot maximum-security facility consists of one building and includes units similar to the medium facility. The VPBA fully funded both facility projects. The General Assembly approved funding for the medium facility renovation in 1992 and the planning and design for the renovation began in 1993. The General Assembly approved funding for the maximum facility construction in 1993 and planning and design for the new facility began in 1994. After approval of the maximum facility, Department management decided to perform both projects under the same Architectural/Engineering and General Contractors for the sake of economy and efficiency. Haves, Seav, Mattern and Mattern, Inc. provided A/E services for both facilities; having processed 3 change orders totaling approximately \$475,000.

- Kenbridge Construction Company, Inc. performed renovation and construction services; 31 change orders have been processed totaling just over \$1,000,000.
- Other Contractors processed 3 change orders totaling about \$9,000

Culpeper Juvenile Correctional and Detention Center

The Culpeper Juvenile Center project, located in Culpeper County, includes the construction of a maximum-security facility and detention center. When completed, it will provide 225 juvenile correction beds and 50 juvenile detention temporary holding beds. The 157,998-square-foot facility consists of four housing units, one gatehouse, a warehouse and an administration building that includes resident intake/release and a dining facility. The VPBA fully funded the project. Funding for the facility occurred in 1995 and 1996, and planning and design for the renovation began early fiscal year 1996.

- The Mosley McClintock Group and I.V. Harris and Associates (joint venture) provided A/E services; 3 change orders have been processed totaling just over \$26,000.
- Tompkins Builders, Inc. was hired to construct the facility; 8 change orders have been processed totaling just over \$200,000.

Bon Air Juvenile Correctional Center

The Bon Air Juvenile Correctional Center project, located in Chesterfield County, includes the construction of a medium security facility, which will house 180 juveniles. The 67,395 square-foot facility is similar to the Beaumont facilities. The project is both General and Special Fund Appropriations funded. Funding approval for the facility occurred in 1995 and planning and design for the renovation began in 1996.

- Haves, Seav, Mattern & Mattern, Inc. was hired to provide A/E services; 1 change order has been processed for approximately \$3,500.
- Turner Construction Company constructed the facility; 13 change orders have been processed totaling just under \$200,000.



Commonwealth of Virginia

Auditor of Public Accounts
P.O. Box 1295
Richmond, Virginia 23218

Walter J. Kucharski, Auditor

June 6, 1997

The Honorable George F. Allen
Governor of Virginia
State Capitol
Richmond, Virginia

The Honorable W. Tayloe Murphy, Jr.
Chairman, Joint Legislative Audit
and Review Commission
General Assembly Building
Richmond Virginia

INDEPENDENT AUDITOR'S REPORT

We audited the financial records and operations of Department of Corrections and Department of Juvenile Justice - Capital Construction Projects and completed our fieldwork on June 6, 1997. We conducted this audit in accordance with Government Auditing Standards.

Objectives and Methodology

We planned our audit using the following objectives:

- To determine whether the organization structure is appropriate in relation to the number, value and complexity of construction projects;
- To assess whether management follows adequate procedures to ensure that qualified staff are hired, retained, supervised, and properly evaluated;
- To review long-range planning to identify facility needs to meet future population projections and evaluate the completeness of the planning process;
- To determine whether adequate procedures are followed to bid, negotiate and award construction and consultant contracts;
- To determine the procedures used to manage, inspect and accept construction projects and to evaluate the effectiveness of those procedures;
- To evaluate the procedures used to authorize contractor payments and to record, monitor, and report project expenses and progress; and
- To review the process used to initiate and approve change orders to construction projects.

We evaluated and considered materiality and control risk in determining the nature and extent of our audit procedures. In meeting our audit objectives we employed the following methods and other procedures.

- We documented and reviewed the capital construction projects managed by the Departments of Corrections and Juvenile Justice for the past five years.
- We obtained an understanding of the relevant policies and procedures used in determining facility needs based on population projections and programming needs.
- We documented and reviewed the procedures, policies, and processes used in initiating, procuring, managing, and accepting construction projects. Also, we evaluated those policies and procedures.
- We evaluated the organizational structure, management, and supervision of staff involved in the capital construction process.
- We visited five correctional facilities, including facilities under construction and facilities recently completed. At those facilities, we discussed construction issues with project managers, architects, wardens, and other staff and contractors.
- We reviewed and evaluated project files including procurement records, project management reports, payments, inspections, and other transactions. We also performed other procedures including analyzing and evaluating financial data.

Management's Responsibility

Management has the responsibility for establishing and maintaining an internal control structure complying with applicable laws and regulations. The objectives of an internal control structure are to provide reasonable, but not absolute, assurance that assets are safeguarded and transactions are processed in accordance with management's authorization, properly recorded, and comply with applicable laws and regulations.

Our audit was more limited than would be necessary to provide an opinion on the internal control structure or on overall compliance with laws and regulations. Because of inherent limitations in any internal control structure, errors, irregularities, or noncompliance may nevertheless occur and not be detected. Also, projecting the evaluation of the internal control structure to future periods is subject to the risk that the procedures may become inadequate because of changes in conditions or that the effectiveness of the design and operation of policies and procedures may deteriorate.

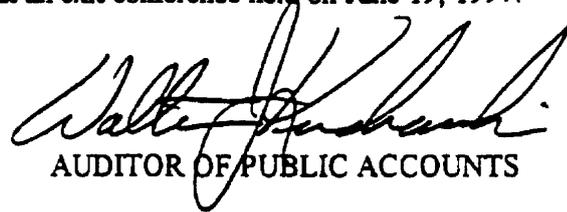
Audit Findings and Conclusions

We found that the Departments of Corrections and Juvenile Justice properly stated, in all material respects, the amounts recorded and reported in the Commonwealth Accounting and Reporting System relating to capital construction projects. The Departments of Corrections and Juvenile Justice record their financial transactions on the cash basis of accounting, which is a comprehensive basis of accounting other than generally accepted accounting principles. The financial information presented in this report came directly from the Commonwealth Accounting and Reporting System and the Departments' records.

We noted no matters involving the internal control structure and its operation that we consider to be material weaknesses. A material weakness is a reportable condition in which the design or operation of one or more of the internal control structure elements does not reduce to a relatively low level the risk that errors or irregularities in amounts that would be material to the Departments' financial operations related to capital construction projects may occur and not be detected promptly by employees in the normal course of performing their assigned duties. However, our report identifies concerns over capital construction project management that adversely affect the Department of Corrections ability to operate efficiently and properly manage capital construction projects.

The results of our tests of compliance with applicable laws and regulations found no issues of noncompliance that we are required to report herein under Government Auditing Standards.

We discussed this report with management at an exit conference held on June 19, 1997.



AUDITOR OF PUBLIC ACCOUNTS

JHS:kwp

Appendix C

Capital Outlay Project Status Report

A Quarterly Briefing for the Board of Corrections

Division of Administration
Architectural & Engineering Services

December 1997

Capital Outlay Project Status

	<u>Page Number</u>
Executive Summary	2
Red Onion State Prison	3
Sussex I & II State Prisons	4
Wallens Ridge State Prison	5
Fluvanna Correctional Center for Women	6
Renovation of Mecklenburg	7
Maximum Security Prison 3	8
Medium Security Celled Facilities 1 & 2	9

Capital Outlay Project Status

Executive Summary

Construction Activities

Red Onion State Prison: All building structures are enclosed. Progress continues on plumbing, mechanical, and electrical work. Warehouse/maintenance buildings are expected to be turned over to DOC in January 1998. (Anticipated Load Date: July 1998)

Sussex I& II State Prisons: DOC operations staff is occupying the administration, power plant, warehouse, and maintenance buildings at Sussex I. Final completion of Sussex I is expected in mid-January. Electrical, mechanical, plumbing work continues at Sussex II (Anticipated Load Date: Sussex 1: February 1998; Sussex 2: October 1998)

Wallens Ridge State Prison: All building structures are enclosed. Plumbing, mechanical and electric work continues. Warehouse/maintenance buildings are expected to be turned over to DOC in January 1998. (Anticipated Load Date: October 1998)

Fluvanna Correctional Center for Women: Project is nearing completion. Final completion is expected in January 1998. (Anticipated Load Date: 30 days after final completion)

Mecklenburg Correctional Center: Renovations continue in buildings 1 and 5. (Anticipated Load Date: Fall 1998)

Design Activities

Maximum Security Prison 3: Project is expected to close in December due to the reduction of project funding due to legislative action. This is the last report on this project until further funding is authorized.

Medium Security Celled Facilities 1 and 2: Federal VOI-TIS grant funds have been allocated to the project, and design activities have resumed as a result. (Anticipated Load Date: To be Determined)

Capital Outlay Project Status

Red Onion State Prison Wise County, Virginia

Architect

DMJM, Inc.
Arlington, Virginia

Design Build Construction Manager

Brown & Root Building Co.
Houston, Texas

DOC Project Management Staff

David L. Hawkins
Gary L. Weddle

*Anticipated Loading Date**

July 1998

*Loading dates are subject to change; as a consequence, the information contained herein should not be used for program planning. More current information can be obtained by contacting Architectural & Engineering Services.

Project Description

This project will be a 704 cell facility and will house a total population of 1,267 inmates. Buildings include 8 housing units, a program support (includes administration, gymnasium, industry, medical, food service and vocational areas) reception building, warehouse/ maintenance, 2 guard towers, and a gatehouse/ armory building.

Project Status

All building structures are enclosed. Above ground electrical, mechanical, and plumbing work is ongoing. Housing unit #4 is being finished out along with the program support building areas A, B, and C. Other buildings finish work will follow. Warehouse/ Maintenance building anticipated to be turned over to the DOC in January 1998. Paving is complete. Concrete walkways are being installed along with perimeter fence system.

Amount Authorized: \$72,000,000

Capital Outlay Project Status

Sussex I & II State Prisons

Sussex County, Virginia

Architect

The Moseley Group/Harris
Richmond, Virginia

Contractor

Archer Western Contractors, Ltd.
Alexandria, Virginia

DOC Project Management Staff

John Makriyianis
Greg Moore

*Anticipated Loading Dates**

Sussex 1 February 1998
Sussex 2 October 1998

*Loading dates are subject to change; as a consequence, the information contained herein should not be used for program planning. More current information can be obtained by contacting Architectural & Engineering Services.

Amount Authorized:

Sussex 1: \$74,472,000
Sussex 2: \$68,000,000

Project Description

Sussex 1 will consist of 704 cells and is projected to house 1,121 inmates. It will become the location of Virginia's Death Row. Buildings to be constructed include 2 housing buildings containing 4 housing pods, a program support building, administration building, central maintenance building, central plant, support

facilities, guard towers, and warehouse building.

Sussex 2 will consist of 704 cells and is projected to house 1,267 inmates. Buildings to be constructed include 2 housing buildings containing 4 housing pods, program support building, administration building, support facilities, guard towers, and a warehouse building.

Project Status

Sussex I As of November 18, 1997, the administration, power plant, warehouse, and maintenance buildings received certificates of occupancy. Operation staff are training and occupying these buildings.

The reception and support buildings expected to be completed during December. Final completion of the entire Sussex I complex is expected in mid-January.

Sussex II Masonry construction is nearing completion in the support building. Mechanical, electrical, and plumbing trades are roughing in and trimming out their work throughout the project. The availability of manpower is expected to increase after the completion of Sussex I.

Capital Outlay Project Status

Wallens Ridge State Prison Big Stone Gap, Virginia

warehouse/maintenance, 2 guard towers,
and a gatehouse/armory building.

Architect

DMJM, Inc.
Arlington, Virginia

Project Status

Design Build Construction Manager

Gilbane Construction

All building structures are enclosed. Above ground mechanical, electrical, and plumbing trades continue. Housing unit #3 has been inspected and is nearing substantial completion. Program support building areas A, B, and C, and housing unit #2 are being finished. Warehouse/ Maintenance building is anticipated to be turned over to DOC in January 1998. Site concrete and paving work continue. Perimeter fence system is being installed.

DOC Project Management Staff

David L. Hawkins

Wallens Ridge Development Corporation Construction Administrator

Dewberry & Davis

*Anticipated Loading Date**

October 1998

*Loading dates are subject to change; as a consequence, the information contained herein should not be used for program planning. More current information can be obtained by contacting Architectural & Engineering Services.

Amount Authorized: \$77,500,000

Project Description

This project will be a 704 cell facility and will house a total population of 1,267 inmates. Buildings include 8 housing units, a program support (includes administration, gymnasium industry, medical, food service, and vocational areas), reception building, a

Capital Outlay Project Status

Fluvanna Correctional Center for Women Fluvanna County, Virginia

Architect

Moseley/HOK
Richmond, Virginia

Contractor

Turner Construction Co.
Glen Allen, Virginia

DOC Project Management Staff

Jim Schrecengost

*Anticipated Loading Date**

Expected 30 days after final completion
which is anticipated in mid-January 1998.

*Loading dates are subject to change; as a consequence, the information contained herein should not be used for program planning. More current information can be obtained by contacting Architectural & Engineering Services.

Amount Authorized: \$53,110,312

Project Description

This project will provide housing for a total population of 1,200 inmates. The new facility will be multiple custody in that living spaces will be designed to accommodate all three custody levels. The facility will include program areas, complete

medical and mental health facilities as well as a reception and classification component.

Project Status

The Project is nearing substantial completion. The 30 day security system shakedown is in progress. The contractor is working to complete deficiency lists and final cleaning prior to substantial completion.

The contractor projects substantial completion around mid-December with final completion in mid-January 1998.

All work on the water and wastewater treatment plants and the pumping station at Mechunk Creek is complete with the exception of the power company hook-up.

Capital Outlay Project Status

Renovation of Mecklenburg Boydton, Virginia

Architect

Dewberry & Davis

DOC Project Management Staff

Wayne Ellis

*Anticipated Loading Date**

Fall 1998

*Loading dates are subject to change; as a consequence, the information contained herein should not be used for program planning. More information can be obtained by contacting Architectural & Engineering Services.

Amount Authorized: \$9,000,000

Project Description

This project will convert Mecklenburg into a reception center. This alternative use will double the population and should significantly reduce its per capita cost of operation. Construction/renovation work will include renovation of the perimeter fence, dining hall addition, and construction of reception and classification facilities. In addition, this project will address the facility's water and wastewater treatment needs.

Project Status

Work continues on building 5. Substantial inspection is expected in late November for building 1. Work will begin in January on building 4. Work on building 2 will begin at the completion of building 5.

Capital Outlay Project Status

Maximum Security Prison #3

Architect

Moseley/Harris

DOC Project Management Staff

David L. Hawkins

Anticipated Loading Date

To be determined

Amount Authorized: \$200,000

Project Description

This project will provide housing for an estimated population of 1,267 inmates. The facility will include 8 housing units, an administration and program support building, warehouse/maintenance building, reception building, central plant, 2 guard towers, gatehouse/armory building, and a regional medical building.

Project Status

Project funding has been reduced by legislative action. As such, the project design will be suspended midway into schematic development.

Project is anticipated to be closed in December 1997. This will be the last update on this project until additional project funding is authorized.

Capital Outlay Project Status

Medium Security Celled Facilities 1 & 2

Architect

NBBJ/Hening Vest Covey

DOC Project Management Staff

Robert Jones

Anticipated Loading Date

To be determined

Amount Authorized:

Medium Celled 1 \$1,950,000

(Includes VOI-TIS Grant)

Medium Celled 2 \$250,000

Project Description

The 363,677 square foot institution will have 616 cells and dormitories to support 1,382 inmates. The project scope includes the acquisition of the site. The location has not yet been determined. There will be no guard towers.

The institution consists of an entry building, three identical general housing buildings, each with 176 cells, a special housing building, an administration building, an education building, a vocational training building, a recreation building, a food service, health services, laundry and processing building, a Correctional Industries building and perimeter security fencing with a vehicle sally port enclosing an approximately 55 acre compound. Located outside the perimeter will be hazardous materials

building, and a maintenance and warehouse building.

Each of the three general housing buildings will be subdivided into 4 pods of 44 cells. These 176 cells will be double bunked for a building population of 352. They will have china plumbing fixtures.

Project Status

The use of VOI-TIS grant funds to restart design has been approved and the next phase of design has begun. The review of preliminary documents by BCOM is complete with the exception of one issue. BCOM has taken exception to the use-group classification of some of the support buildings. The Department has requested a code interpretation from building officials and code administrators interpretation committee to help resolve the issue with BCOM. Once this issue is resolved, design will proceed through working drawings. Various sites already owned by the Department are being evaluated as a possible site for this facility.

