FINAL REPORT



A Report to the Audit Committee

> **Mayor** John Cooper

Department of General Services Director Nancy Whittemore

> Audit Committee Members Kevin Crumbo Thom Druffel Charles Frasier Brackney Reed Jim Shulman Zulfat Suara

> > Metropolitan Nashville Office of Internal Audit

Audit of the Davidson County Criminal Justice Center Construction Project

November 4, 2020



EXECUTIVE SUMMARY

November 4, 2020



Why We Did This Audit

The audit was conducted due to the important role capital projects play in the financial health of the Metropolitan Nashville Government and the significant funding required to complete the project.

What We Recommend

- Ensure a guaranteed maximum price is established within a reasonable time period and in accordance with the Metropolitan Nashville Government General Provisions for Design and Build.
- Consider including in future contracts a requirement for the prime contractor to disclose related parties.
- Ensure contractual documentation requirements for background checks on contractor personnel are consistent with internal policies and management expectations.
- Consider reducing lump sum general conditions and other charges to units of measure so reviews help ensure actual billings are at the lowest possible cost.

Audit of the Davidson County Criminal Justice Center Construction Project

BACKGROUND

The process of building the new Davidson County Criminal Justice Center began in 2015. The Metropolitan Nashville Government determined that the age and condition of the previous facility had deteriorated to the extent that safety and other operational requirements could not be met.

The Metropolitan Council approved ordinance BL2015-1142 that provided initial funding of \$113.4 million for the project. The Metropolitan Council, through several subsequently adopted resolutions, approved additional funding of \$61.6 million for a total budgeted amount of \$175 million. The \$175 million was managed by the Department of General Services. Project construction also included an additional \$3.2 million that was appropriated to and managed by the Davidson County Sheriff's Office. The amounts budgeted for the project totaled \$175 million. Total amount spent under the Department of General Services' appropriation was \$171.6 million as of March 31, 2020. The cost incurred by the Davidson County Sheriff's Office was \$3.3 million bringing total cost incurred on the project to \$174.9 million. The completed building was transferred over to the Davidson County Sheriff's Office on November 1, 2019.

OBJECTIVES AND SCOPE

The objectives of this audit are to determine if:

- Project management controls are in place to achieve successful project delivery that met management's objectives.
- Fiscal policies and industry best practices are followed to control project costs.

The scope of the audit included the review of project information from January 1, 2016, through March 31, 2020.

WHAT WE FOUND

Project management and fiscal controls generally operated to ensure that management and cost objectives were met. Stakeholders routinely conducted meetings to provide project updates and to resolve any issues. Various levels reviewed amendments, purchase order authorizations, payment applications, and other project costs to ensure transparency, reasonableness, and fiscal compliance with project objectives.

However, the audit identified areas for improvement. The guaranteed maximum price was not established until late in the life cycle of the project. The final contract did not require the prime contractor to disclose related parties. General conditions costs could be more detailed in contractual agreements to ensure lowest possible cost. Lastly, background check documentation requirements for contractor personnel were not consistent between contractual agreements and internal policy. Inconsistency in requirements led to noncompliance with contractual terms.

GOVERNANCE

The Department of General Services within the Metropolitan Nashville Government was responsible for the overall management of the Criminal Justice Center project. The Department of General Services procured the services of Capital Project Solutions to serve as the project manager on behalf of the Metropolitan Nashville Government. A design-build contract was entered into with Bell & Associates Construction, L.P. to serve as the construction manager. The organizational structure of the construction project is presented in Appendix C.

BACKGROUND

The construction of the new Criminal Justice Center was initiated due to the age of the previous center, which was built in 1982. The condition of the previous facility had deteriorated to the extent that safety and other operational requirements could not be met. A study determined that renovation of the existing facilities was not the optimum choice. The study recommended the construction of a new facility.

Initial construction plans located the new Criminal Justice Center near Harding Place. The property encompassed 163 acres and would require minimal demolition and other expenses. Citizens raised concerns about the new Criminal Justice Center's construction at the Harding Place location, and the Metropolitan Nashville Government elected to construct the new center at the original downtown location. Additional benefits to the downtown location included such things as retaining inmate processing downtown, continuing to allow auxiliary functions such as attorneys and bail bonds to operate downtown, and maximizing inmate bed count.

However, construction at the downtown location enhanced the complexity and cost of the project. Complexities included things such as environmental abatement and demolition of the existing facility, temporarily relocating inmates housed at the existing facility, enhancing inmate relocation facilities, constructing an underground parking garage, and managing more extensive traffic control due to limited staging areas.

Completing the new Criminal Justice Center at the downtown location extended the estimated completion date from January 2018 to Fall 2019. The extension resulted in market escalation impacting the value of the original funding by \$13 million. Extensive value engineering and diligent cost control mitigated much of the impact. However, the project was left with very limited contingency funds of approximately 3.5% of construction costs including a portion of temporary provisions at the Harding and Hill sites.

Bell & Associates Construction, L.P. was selected as the general contractor for the project in January 2016. The official groundbreaking occurred in early 2017. The completed building was turned over to the Davidson County Sheriff's Office on November 1, 2019.

The state-of-the-art facility sits on approximately 4 acres of land and houses a total of 816 beds and 436 cells. The new facility includes a bonds and warrants section, various administrative offices, and a new behavioral health center. The facility was awarded a Leadership in Energy and Environmental Design by the United States Green Building Council.

Project Budget and Actual Cost

Exhibit A shows the breakdown of total project budget and expenditures related to the appropriated amount managed by the Department of General Services. Exhibit B shows additional project expenditures from the Davidson County Sheriff's Office budget appropriation.

Exhibit A - Department of General Services P	Project Budget and Expenditures
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Capital Budget Details	Budget Amount by Fiscal Year	4% Reserve Fund	Total Budget by Fiscal Year
FY 2016 - Project Initial Budget	\$ 113,400,000	\$-	\$ 113,400,000
FY 2017 - Criminal Justice Center Appropriation	20,000,000	-	20,000,000
FY 2018 - Project Development and Inmate Relocation	17,684,300	-	17,684,300
FY 2018 - Female Housing Unit Appropriation	8,161,000	-	8,161,000
FY 2019 - Criminal Justice Center Appropriation	10,000,000	-	10,000,000
FY 2020 - Criminal Justice Center Close Out Appropriation	5,800,000	-	5,800,000
Total Budget	\$ 175,045,300	-	\$ 175,045,300
Capital Expenditures Details	Actual Expenditures	Encumbered	Total Expenditures
Construction	\$ 118,399,649	\$ 75,805	\$ 118,475,454
Sitework	8,095,491	-	8,095,491
Architect & Engineering	9,977,779	-	9,977,779
Information Technology Services	1,384,750	-	1,384,750
Furniture, Fixtures, and Equipment	1,705,933	-	1,705,933
Temporary Provisions and Relocation (see note on "Subsequent Event" on page 3)	31,865,681	-	31,865,681
All Other	110,888	-	110,888
Total Expenditures	\$ 171,540,171	\$ 75,805	\$ 171,615,976

Source: Metropolitan Nashville Government Oracle R12 Financial System

Exhibit B - Davidson County Sheriff's Office Budget and Expenditures

Capital Budget Details	Budget propriation	Ex	Actual penditure	En	cumbered	Exp	Total penditure	der(Over) Budget
FY18 General Fund 4% Reserve	\$ 600,000	\$	754,815	\$	-	\$	754,815	\$ (154,815)
FY19 General Fund 4% Reserve	1,700,000		1,974,555		213,925		2,188,480	(488,480)
FY20 General Fund 4% Reserve	945,000		-		306,978		306,978	638,022
Administration Support Services	-		51,609		-		51,609	(51,609)
Totals	\$ 3,245,000	\$	2,780,979	\$	520,903	\$	3,301,882	\$ (56,882)

Source: Metropolitan Nashville Government Oracle R12 Financial System

A listing of all vendors used during the project, their respective roles, and amounts paid are presented in Exhibit C below.

Construction Vendor	Role		Amount
Bell & Associates Construction, L.P.	Construction Manager	\$	123,244,160
CoreCivic	Temporary Inmate Housing		24,237,461
HOK Architects/Others	Design and Consulting		8,621,327
Messer Construction Company	Construction and Modular Units, Temporary Provisions, Perimeter Fence		6,940,448
Capital Project Solutions	Project Manager		4,585,235
Other Vendors	Various		1,628,608
Metro ITS Vendors	Various		1,384,750
GEOTEK Engineering Company	Material Testing, Inspection, and Consulting		973,987
	\$	171,615,976	

Exhibit C - Project Expenditures by Vendor

Source: Metropolitan Nashville Government Oracle R12 Financial System

Audit Approach

This audit was a combined construction program control and construction cost control engagement. Construction program control audits seek to review the processes, procedures, policies, best practices, and internal controls that surround the management of a construction project. Construction program controls, when properly designed, help to mitigate project risks and improve project return on investment.

Construction costs audits seek to review direct and indirect costs associated with the project. Direct costs include materials, labor and labor burden, supplies and equipment costs, subcontract costs, as well as other tangible and intangible costs that may be part of the contract provisions. The indirect costs include general conditions, construction management fees, and insurance and bonding as may be defined in the contract.

Subsequent Event

In March 2020, the Metropolitan Nashville Council appropriated \$5.8 million to cover additional expenditures that became necessary after the completed building was transferred to the Davidson County Sheriff's Office on November 1, 2019. Approximately \$1.6 million of this amount was expended in October, November, and December of 2019 and is reported in 'Temporary Provisions and Relocation' in Exhibit A above. Additional expenditures of approximately \$3.1 million were paid after March 31, 2020, leaving approximately \$1 million to be expended. The Office of Internal Audit will complete audit procedures over the \$3.1 million in subsequent expenditures and the \$1 million remaining balance as part of follow-up audit procedures to be scheduled at a later date.

AUDIT OBJECTIVES AND CONCLUSIONS

1. Were project management controls in place to achieve successful project delivery that met management's objectives?

Generally, yes. The Department of General Services designed and implemented numerous controls to ensure project objectives were achieved. A study was conducted on whether to renovate the existing facility or construct a new one. The design-build project delivery method was chosen to best meet the needs of the project and was consistent with best practices. This delivery method allowed the contractor, architect, consultants, and other stakeholders to participate in the pre-construction, design, and all other phases.

The Mayor's Office and the Metropolitan Council approved all related funding through applicable capital spending plans. The solicitation and selection process for the general contractor and four major direct vendors were reviewed. Each solicitation and selection process generally complied with the Metropolitan Procurement Code and Regulations. Additionally, the Department of General Services' construction management team was involved in the Bell & Associates Construction, L.P. sub-contracting process in accordance with contractual agreements and departmental guidelines.

Internal and external stakeholders met on a routine basis during the project lifecycle. Seventeen stakeholder meetings were reviewed noting that each meeting had agendas, attendance lists, and minutes generated. Two meetings were observed by the Office of Internal Audit staff. Meeting participants discussed project status and the resolution of any issues. Capital Project Solutions utilized a project management system that comprehensively retained project related data and documentation. The Department of General Services had a dedicated contract compliance officer who monitored compliance.

Opportunities for control enhancements exist. The contract with the general contractor did not require disclosure of related party relationships. Contractual background check documentation requirements for contractor personnel were not consistent with the internal Department of General Services policy. The inconsistency led to noncompliance with contractual background check requirements. (See Observation A.)

2. Were fiscal policies and industry best practices followed to control project costs?

Generally, yes. The management team implemented multiple fiscal policies to ensure project costs were appropriate and controlled.

Forty-seven payment applications with schedule of values totaling \$133 million were submitted as of March 2020. A review of all 47 applications revealed payment applications were generally supported with adequate documentation, including subcontractor supporting documentation and invoices. The process of paying payment applications involved multiple layers of review and was consistent with contract provisions and applicable guidelines. Each payment application was mathematically correct. Amounts requested in the payment applications agreed to amounts in the underlying detail. Amounts billed in sub-contractor payment applications agreed to amounts billed to the Metropolitan Nashville Government by the primary contractor.

Seventeen amendments and purchase order authorizations totaling approximately \$121 million were made during the lifecycle of the project. Each amendment and purchase order authorizations were reviewed. Amendments and purchase order authorizations were supported with adequate documentation, including subcontractor support. Amendments and purchase order authorizations

were generally appropriate and in compliance with contractual terms. Labor rates agreed with contract rates where applicable.

Bell & Associates Construction, L.P. utilized 63 subcontractors during the lifecycle of the project. Contractual agreements between Bell & Associates Construction, L.P. and each sub-contractor were consistent with contractual requirements set forth in the Metropolitan Nashville Government's contract with Bell & Associates Construction, L.P. Testing of 19 subcontractor contracts totaling approximately \$104 million revealed Bell & Associates Construction, L.P. paid each subcontractor timely. Additionally, payment applications submitted by subcontractors were generally supported with adequate documentation and conformed to contract requirements.

A review of payments to four other direct vendors for a total of approximately \$33 million was performed. Each payment complied with contractual provisions and the Metropolitan Nashville Government's Procurement Code. Payments were properly reviewed and approved by authorized Department of General Services staff.

A contingency fund of \$5.3 million was established for the project. As of March 2020, \$4.5 million in contingency funds had been expended. Each of the 116 contingency requests had appropriate documentation and were properly reviewed and approved or rejected by qualified personnel in both the Department of General Services and Capital Project Solutions.

General condition costs on the project were not broken out to the lowest unit of measure. Increasing the detail in contractual agreements for general condition costs could help ensure the lowest cost. (See Observation B.)

AUDIT OBSERVATIONS

Internal control helps ensure entities achieve important objectives to sustain and improve performance. The Committee of Sponsoring Organizations of the Treadway Commission (COSO), Internal Control – Integrated Framework, enables organizations to effectively and efficiently develop systems of internal control that adapt to changing business and operating environments, mitigate risks to acceptable levels, and support sound decision-making and governance of the organization. See *Appendix B* for a description of the observation *Assessed Risk Rating*.

Observation A – Project Management Controls

The Department of General Services was responsible for oversight of the overall project with day to day monitoring and quality control activities delegated to a full time owner representative, Capital Project Solutions. The following project monitoring concerns were observed.

Establishment of a Guaranteed Maximum Price

A guaranteed maximum price was not established until a large portion of construction costs had been incurred. Construction on the project began in 2016. The guaranteed maximum price was not established until April 1, 2019. Approximately \$132 million had been incurred at this time.

Section 4.4.2 of the Metropolitan Nashville Government General Provision for Design and Build prevents a contractor from proceeding with construction of the project, excluding early construction work, until execution of a guarantee maximum price amendment is made by both parties. The policy was not followed.

Per management, the lack of an established guarantee maximum price was a function of the scope of the Criminal Justice Center changing dramatically during the project. The scope changes impeded the ability to establish a guaranteed maximum price. All budgetary funding for increases in the project amount were approved by appropriate parties. Additionally, all amendments to the applicable contracts were also approved by various parties.

The inability to establish a guaranteed maximum price increases the Metropolitan Nashville Government's financial risk and exposure.

Disclosure of Related Parties

The contract with Bell & Associates Construction, L.P. did not contain a requirement for the disclosure of related parties. Best practices require construction contractors who will subcontract to disclose related parties. Disclosures help avoid conflicts of interest arising out of the subcontracting process. Lack of such a requirement also violates contract provisions of the Metropolitan Nashville Government's procurement non-discrimination program.

Inconsistent Documentation Requirements for Background Checks

Contractual agreements for this project required contractor personnel performing work on-site to successfully complete a Metropolitan Nashville Police Department security background screening. Department of General Services' internal policy states only specific contactor personnel with access to specific areas complete background checks. The Department of General Services did not maintain complete documentation of compliance with contractual agreements. Background checks, especially at construction sites where employees work with heavy equipment and materials, help to keep workers and workplaces safe and free of accidents consistent with regulations and standards set by the Occupational Safety and Health Administration.

Lack of Policies and Procedures over Contingency Fund Management

Formal policies related to construction contingency funds were not present. The construction contingency fund for this project was established at approximately \$5.3 million. The fund was managed by the construction manager and administered and approved by the Department of General Services. As of March 2020, a total of \$4.5 million was approved and expended.

As of March 2020, the Department of General Services had 11 contingency requests totaling approximately \$1.4 million pending further review and justification. No formal contingency fund policy for capital projects exists. Contingency funds are inherently high risk. Accordingly, best practices require the establishment of formal policies for contingency fund activity. Policies should include establishing a contingency usage form, creating dollar approval thresholds, and creating a contingency log. The contractor maintained a contingency log, but the pending items were not adequately supported by documentation for the pending items.

Criteria:

- *COSO*, Control Activities—Principle 10—The organization selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels.
- Metropolitan Nashville Contract Numbers 376568 (Bell), 368939 (CPS), 355078 (CoreCivic), 19693 (GEOTEK), 377145 (Messer)
- Metropolitan Nashville Procurement Code and Regulations

Assessed Risk Rating: <mark>High</mark> / <mark>Medium</mark>

Recommendations for management of the Department of General Services:

- 1. Ensure the guaranteed maximum price is established within a reasonable time period and in accordance with the Metropolitan Nashville Government General Provision for Design and Build.
- 2. Ensure contractual requirements pertaining to contractor background checks are consistent with internal policy and management expectations.
- 3. Establish a written policy and procedures over contingency fund management so actual results can be evaluated.

Recommendation for management of the Department of Finance:

4. Consider including requirements in contract solicitations for the disclosure of related parties, especially those for construction contracts.

Observation B – General Condition Costs

A more detailed analysis and line item determination of what costs should be classified as allowable under general conditions was not performed. Approximately \$3.9 million was paid to the construction manager for general conditions costs. The costs relate to project field personnel and were negotiated as a lump sum during the contracting phase. Lump summing of general conditions costs tends to be more expensive than the alternatives due to the potential masking of the underlying cost structure without clarifying which costs are allowable or unallowable. Detailed contractual costs enhance the ability to ensure the amounts charged are correct and at the lowest rate. Additionally, the impact of schedule changes may be difficult, if not impossible, to compute.

Criteria:

COSO, Control Activities—Principle 10—The organization selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels.

Assessed Risk Rating: Low

Recommendation for management of the Department of General Services:

Consider reducing lump sum general conditions and other charges to units of measure so they can be reviewed to help ensure actual billings are at the lowest possible cost.

GOVERNMENT AUDITING STANDARDS COMPLIANCE

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our observations and conclusions based on our audit objectives.

METHODOLOGY

To achieve the audit objectives, auditors performed the following steps:

- Reviewed Metropolitan Nashville Government Code of Laws and ordinances, Metropolitan Nashville Government policies, and Department of General Services guidelines and policies.
- Reviewed Metropolitan Nashville Government contracts with the construction manager, other major contractors, the project manager, and subcontractors.
- Interviewed key personnel within the Department of General Services, the project managing firm, and the construction manager's office.
- Reviewed prior audits performed by the Metropolitan Nashville Office of Internal Audit and by other jurisdictions.
- Reviewed and analyzed financial data to determine compliance with contract, fiscal, and best practices.
- Evaluated internal controls currently in place.
- Toured the substantially completed facility.
- Considered risk of fraud, waste, and abuse and information technology risks.
- Detail-tested sampled project costs and other transactions.

AUDIT TEAM

Laura Henry, CFE, Assisting Auditor

Innocent Dargbey, CPA, CMFO, CICA, In-Charge Auditor

Bill Walker, CPA, CIA, CFE, Principal Auditor

Lauren Riley, CPA, CIA, ACDA, CMFO, Metropolitan Auditor

Metropolitan Government of Nashville and Davidson County

John Cooper, Mayor Nancy Whittemore, Director



Department of General Services Richard H. Fulton Campus 730 2nd Avenue South P.O. Box 196300 Nashville, TN 37219-6300 615-862-5050, 615-862-5035 (fax)

October 9, 2020

Ms. Lauren Riley Metropolitan Auditor Office of Internal Audit 404 James Robertson Parkway, Suite 190 Nashville, Tennessee 37219

RE: Audit of the Davidson County Criminal Justice Center Construction Project

Dear Ms. Riley:

This letter acknowledges that the Department of General Services has received the Audit of the Davidson County Criminal Justice Center Construction Project and has reviewed the comments and recommendations.

The Department of General Services will implement the recommended improvements.

It was a pleasure working with you and your team on this project. We specifically thank Mr. William Walker for his guidance, and Mr. Innocent Dargbey for his exceptional attention to detail reflected in the audit report.

Sincerely,

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Nancy Whittemore, Director Department of General Services

APPENDIX A – MANAGEMENT RESPONSE AND ACTION PLAN

We believe that operational management is in a unique position to understand best their operations and may be able to identify more innovative and effective approaches, and we encourage them to do so when providing their response to our recommendations.

Risk	Recommendation	Concurrence and Action Plan	Expected Completion Date							
Red	Recommendations for management of the Department of General Services:									
н	A.1 Ensure the guaranteed maximum price is established within a reasonable time period and in accordance with the Metropolitan Nashville Government General Provision for Design and Build.	Accept: The existing design-build contract template (General Provisions for Design Build) includes a provision for the establishment of a guaranteed maximum price (GMP) before proceeding with construction, excluding early construction work. The timing of incremental funding authorized for the CJC project hindered the ability to adhere to this best practice. The adoption of Bill BL2019-77 on December 20, 2019 requiring disclosure of full cost itemizations prior to submission of capital expenditure authorization legislation to the Metropolitan Council will address this issue in the future.	Completed							
м	A.2 Ensure contractual requirements pertaining to contractor background checks are consistent with internal policy.	Accept: The Department of General Services did follow internal policy requirements for background checks even though requirements included in the solicitation were not consistent with this language. General Services, in partnership with the Procurement Division of the Metro Finance Department, will ensure contractor background check requirements are appropriately referenced in all future solicitations and contracts.	Completed							
м	A.4 Establish a written policy and procedures over contingency fund	Accept: As of August 2020, design- build construction contracts will include language describing allowable uses for construction contingency and	Completed							

L	management so actual results can be evaluated. evaluated. B.1 Consider reducing lump sum general conditions and other charges to units of measure so they can be reviewed and benchmarked against market or industry rates.	the approval process by Metro. The management process is described in the language copied below: "Contractor shall submit a detailed monthly report to Metro indicating how the Construction Contingency was used in the reporting period, and the status of the Construction Contingency. Metro has the authority to reject any use of the Construction Contingency after it has been submitted if Metro believes, in its reasonable judgement, that some or all of the amount included in the use of the Construction Contingency is not a legitimate expense for the Project." Accept – Although general conditions were submitted in a competitive bid format with each proposal evaluated against the others to determine the best value for Metro, General Services	Completed
		will modify the bid form template to include specific units of measure.	
Re	commendation for management of the Depar	tment of Finance:	
Ν	A.3 Consider including requirements in contract solicitations for the disclosure of related parties, especially those for construction contracts.	Accept -The Purchasing Division will consider the manner with which any requirement related to recommended disclosures are included in solicitations, along with any implication on the Procurement Regulations which would require action of the Procurement Standards Board.	June 30, 2021

APPENDIX B – ASSESSED RISK RANKING

Observations identified during the course of the audit are assigned a risk rating, as outlined in the table below. The risk rating is based on the financial, operational, compliance or reputational impact the issue identified has on the Metropolitan Nashville Government. Items deemed "Low Risk" will be considered "Emerging Issues" in the final report and do not require a management response and corrective action plan.

Rating	Financial	Internal Controls	Compliance	Public		
HIGH	Large financial impact >\$25,000 Remiss in responsibilities of being a custodian of the public trust	Missing, or inadequate key internal controls	Noncompliance with applicable Federal, state, and local laws, or Metro Nashville Government policies	High probability for negative public trust perception		
MEDIUM	Moderate financial impact \$25,000 to \$10,000	Partial controls Not adequate to identify noncompliance or misappropriation timely	Inconsistent compliance with Federal, state, and local laws, or Metro Nashville Government policies	The potential for negative public trust perception		
LOW/ Emerging Issues	Low financial impact <\$10,000	Internal controls in place but not consistently efficient or effective Implementing / enhancing controls could prevent future problems	Generally, complies with Federal, state, and local laws, or Metro Nashville Government policies, but some minor discrepancies exist	Low probability for negative public trust perception		
Efficiency Opportunity	An efficiency opportunity is where controls are functioning as intended; however, a modification would make the process more efficient					

APPENDIX C – ORGANIZATIONAL STRUCTURE OF THE CONSTRUCTION PROJECT

