

Montgomery County, Maryland
Office of the County Executive
Office of Internal Audit



**Program Assessment of the Department of General Services' Use of
Change Orders and Field Orders in Facility Construction Projects**

Department of General Services

May 20, 2019

Highlights

Why MCIA Did this Assessment

The Division of Building Design and Construction (DBDC) within the Department of General Services (DGS) is responsible for planning, design, and construction/renovation of Montgomery County government buildings.

In April 2018, the County's Office of Internal Audit (MCIA) initiated a program assessment to gain an understanding of the current practices and procedures followed by DBDC in the use of field orders and change orders. The focus was to determine if the field order and change order practices comply with the County Procurement Regulations and support effective management practices for facility construction/renovation projects. The assessment was conducted by the accounting firm SC&H Group, Inc. (SC&H), under a contract with MCIA.

MCIA is making four recommendations to the change order and field order processes to strengthen the County's internal controls, reduce risk, and promote compliance with the County Procurement Regulations.

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What MCIA Found

There are opportunities for the County to improve the oversight of construction project spending, specifically with respect to the use of change orders and field orders to modify construction requirements and costs. There appears to be a large disparity between the number of field orders used to facilitate additional project work, and the number of change orders used, which may result in decreased County oversight outside of DBDC.

We identified four findings related to the use of field orders for DBDC construction projects that would ultimately impact the application of both field orders and change orders. These findings relate to:

1. The justification provided for field orders to evidence adherence to the County Procurement Regulations
2. Supplemental guidance concerning the conditions and criteria consistent with the Procurement Regulations for the use of field orders
3. Appropriate segregation of duties with respect to department review and approval of change orders
4. Feasibility of streamlining the change order review and approval process for facility construction/renovation projects

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Objectives

This report summarizes the program assessment (assessment) performed by SC&H Group, Inc. (SC&H), under contract with the Montgomery County (County) Office of Internal Audit (MCIA), of the Department of General Services' (DGS) Division of Building Design and Construction (DBDC). The assessment focused on DBDC's use of change orders and field orders when modifying requirements and costs of facility construction/renovation projects.

Specifically, the County engaged SC&H to accomplish the following objectives:

1. Understand the current practices and procedures followed in the use of field orders and change orders
2. Determine whether such practices comply with County procurement regulations, and support effective management practices for facility construction/renovation projects (projects)
3. Identify potential risks or vulnerabilities that should be addressed
4. Evaluate opportunities for improved controls or processes

This assessment was performed in accordance with the Statement on Standards for Consulting Services (SSCS) issued by the American Institute of Certified Public Accountants (AICPA). SC&H's procedures were developed to meet the objectives stated above and were reviewed and approved in advance by MCIA. The interviews, documentation review, and fieldwork procedures were conducted from May 2018 to December 2018.

Background

DGS was established by the County to consolidate functions that provide essential services in support of other County departments. Within DGS, DBDC is responsible for planning, design, and construction/renovation of County government buildings. DBDC manages the completion of projects approved through the County's Capital Improvement Program (CIP). Types of projects include fire stations, police stations, libraries, and recreation facilities. DBDC is also responsible for managing build outs, renovations, and improvements to existing facilities. The FY2019 through FY2024 CIP Budget includes DBDC managed construction projects within the following categories: General Government (\$497M), Public safety (\$152M), Libraries and Recreation (\$104M), and Health and Human Services (\$20M).

DBDC Staffing

DBDC consists of a Division Chief, a Deputy Division Chief, six Section Chiefs, and 27 Project Managers. Personnel are divided into six different sections known as CIP Studios. Each Studio manages certain functional areas such as permitting, design, contracting, etc. Employees in each Studio report to the Section Chief. Each Section Chief manages a portfolio of assigned construction projects, leads and manages his/her designated Studio, and supervises the Project Managers, who each manage one or more assigned construction projects.

CIP Construction Project Budgeting

The CIP covers a variety of construction project types including small projects like renovations, and large projects like new County buildings. CIP construction project budgets include funding for five categories:

1. Planning, design, and supervision: Includes all of the consulting services and internal administration costs that contribute to the project (e.g., site surveys, traffic studies, design services, permit fees, quality assurance)
2. Land acquisition: Includes the cost of acquiring land for the project site and related legal fees
3. Site and utility: Includes the cost of preparing the site and providing utility services
4. Other costs: Includes other related costs (e.g., equipment, security, signs)
5. Construction: Includes the actual cost of construction and could include multiple construction contractors. This represents the total cost to perform the project construction work

The construction cost is developed through a formula that considers the following projected labor and materials components needed to complete construction, calculated at present cost:

- a. Overhead, profit, insurance, and bonds
- b. Known risks: A multiplier based on the population of known risks that could increase project costs (e.g., unknown site conditions, increases in material costs, weather problems)
- c. Design contingency: A contingency amount based on unknown design risks
- d. Bid unknown risks: Unknown market condition factors that could impact construction contract bid pricing
- e. Construction contingency: A contingency amount based on unknown construction risks (e.g., site problems, design omissions)
- f. Escalation: Updates the present cost of construction costs based on the projected mid-point of construction

The total of the above calculation is the cost of construction. DBDC revises the factors used in the calculation with the Office of Management and Budget (OMB) as part of each annual CIP review/approval cycle.

Construction Contingency

OMB has the authority to determine the amount/percentage of construction contingency funding as part of the CIP project approval process. The construction contingency amount is generally five to ten percent of the estimated construction cost and is specific to each project. Renovation projects typically include a higher contingency percentage than new construction projects due to the likelihood of encountering unforeseen challenges. Contingency funds, which are encumbered through purchase orders (POs), are released available for use through County-executed change orders or field orders issued to the construction contractor. The amount of the construction contingency is not communicated to the contractor; however, staff acknowledged that a contractor that had done business with the County previously may be aware of the general contingency percentage.

Modifications to the Scope of Work of Construction Projects

The County Procurement Regulations (“Regulations;” Chapter 11B of the Code of Montgomery County Regulations) provide the regulatory context for how modifications to contracts are to be

administered. Specifically, section 11B.00.01.11¹, *Contract Modifications*, addresses the use of change orders and field orders.

Change Orders

Change orders are tools for modifying construction contracts. The Regulations state:

11B.00.01.11.2 Change Orders:

11.2 Change Orders

11.2.1 Change orders may be initiated as provided in the contract. Generally, a change order is initiated by the contract administrator. The change order may not become effective, and a contractor may not proceed with performance of the change order, until and unless the change order is executed by the contracting officer.

11.2.2 Changes which are outside the scope of the contract should not be processed in the form of a change order.

11.2.3 The Director reviews the proposed change order, with attachments. If the net cost of all the changes in the proposed change order exceeds the threshold for an IFB or RFP², the Director must refer the change order to the CRC for review. Otherwise, the Director may approve the change order.

11.2.4 The CRC reviews change orders referred by the Director. The CRC may approve, approve with conditions, or reject any change order in whole or in part.

A contractor can request a change order by submitting a Proposal for Change Order (PCO) to DBDC, which can subsequently become a change order. An RFI form that includes the proposed scope of work and any supporting documentation is submitted to the Project Manager assigned to the project. If the PCO is approved, the Project Manager and Contract Administrator complete a change order request form supporting the change order. The change order request form is then sent from DBDC to Procurement for review. If approved, the Contract Specialist/Buyer signs the change order request form and a notice to proceed (NTP) can be issued by the Contract Administrator. If a change order is not approved, DBDC must consider the reason for the rejection and determine whether to modify and resubmit or cancel the request.

As required under the Regulations, if the total cost of all changes in a proposed change order exceeds \$100,000, the change order requests must go to the Contract Review Committee (CRC) for review and approval³. The CRC is a four-person committee composed of personnel from OMB, Procurement, the Assistant Chief Administrative Officer, and the Office of the County

¹ <http://montgomeryco-md.elaws.us/code/comcor/11b.00.01/>

² The threshold for an Invitation for Bid (IFB) and Request for Proposals (RFP) is \$100,000, as set forth in the Regulations, §11B.00.01.04.1.1.2 and §11B.00.01.04.1.2.2, respectively.

³ Section 11B.00.01.11.1.4.1 of the County's procurement regulations: "The Director reviews the proposed contract modification, with attachments if any. If the value of the proposed contract modification exceeds the threshold for an IFB or RFP, the Director must refer the contract modification to the CRC unless the Director determines that the change in compensation results from a mechanical application of an established cost indexing provision or other contract option which pre-determines price."

Attorney⁴ (OCA). The Office of Procurement has further interpreted the Regulations to require that once the value of change orders for a project has a combined value of greater than \$100,000, all future change orders must go to the CRC for review and approval.

Once a change order is approved, the funds are encumbered by Procurement through a PO issued to the contractor through one of two methods:

1. The existing PO can be modified to reflect the updated amount that includes the change order (more common).
2. A new PO can be issued specifically for the amount of each change order. The new PO would be referenced on separate contractor invoice (less common).

Once the modified or new PO is issued by Procurement, then a notice to proceed (NTP) can be issued by the Contract Administrator.

For the population of DBDC construction projects (excluding “level of effort” contracts) for the previous six fiscal years, the sum of all change orders totaled approximately \$6.2M. This represents 1.1% of the \$586.3M in total construction costs of the standalone projects completed during the same period.

Field Orders

As defined under the Regulations (11B.00.01.11.3 Field Orders), “11.3.1 *Field orders are used only in the following limited situations:*

11.3.1.1 To direct work when unforeseen and unanticipated conditions arise which require immediate action to mitigate costs or avoid delay claims, and there is insufficient time to process a change order;

11.3.1.2 To order a minor change in the work not involving an adjustment in the contract sum or an extension of the contract time, not inconsistent with the intent of the contract documents;

11.3.1.3 To provide a written interpretation, including drawings, necessary for the proper execution or progress of the work consistent with and reasonably inferable from the contract documents if the interpretation does not adjust the contract sum or the contract time.

In addition, the authority to execute a field award is limited by delegations from the Director of Procurement:

11.3.2 A field order may be issued by a person specifically delegated the authority to issue a field order under the contract and who acts as a contracting officer for the purpose of issuing the field order. If the estimated value of the field order exceeds the threshold for an IFB or RFP, the Using Department Head must consent to the field order prior to its issuance. A Using Department Head may not delegate this authority to the authorized government official at the place of performance.

Finally, the Regulations limit the use of field orders:

⁴ A representative from OCA attends CRC meetings and provides guidance as appropriate, but does not vote unless another CRC member is absent from the meeting.

11.3.3 Prohibited field orders. Field orders are not permitted if there is sufficient time to process a change order, a contract amendment, or, if appropriate, a new procurement to satisfy the County's needs.

While field orders involving additional cost to the County add to the compensation the contractor receives, field orders do not change the construction contract since they do not involve a modification of the contract.

For field orders, the contractor would submit a PCO as described in the change order discussion above. If the Project Manager determines that a field order would be appropriate for preventing delay or increased costs, the Project Manager completes a field order form on which the Project Manager defines the additional work to be performed and the cost to perform the work, if known.

The field order form is reviewed and approved by the Contract Administrator, the DBDC Division Chief, who signs the form as evidence of his/her approval. For current projects, the DGS Director is required to review and approve field orders over \$100,000. Field orders are funded through a construction contingency PO that is created prior to the initial NTP being issued by DBDC. DBDC submits a requisition to Procurement, who reviews and approves the requisition, and creates the PO. The construction contingency PO would be referenced on contractor invoices related to field orders.

There are two types of field orders that could be utilized by DBDC:

1. Bilateral: These field orders are used when the Contract Administrator and the contractor agree on a price and the work does not cause a time delay. There is no cost threshold associated with bilateral field orders beyond the approved construction contingency amount and the amount available on the field order PO. The County pays the resulting invoices when the field order work is completed.
 - a. As bilateral field orders are paid directly through the field order PO, they are not subject to CRC review as part of their approval process.
2. Unilateral: These field orders are issued without a defined cost or timeline for completion. The cost of unilateral field orders are expected to be further negotiated and settled as part of the project completion process. DBDC can issue unilateral field orders at any time and the contractor is required to perform the work.
 - a. The cost of unilateral field orders can be agreed upon during the project and turned into a bilateral field order. If an agreement does not occur until the end of the construction project, it's included as part of the final settlement.
 - b. The final settlement amount is negotiated between DBDC and the contractor and is included on a settlement change order provided by DBDC to Procurement that must be reviewed and approved by the CRC based on a recommendation from DBDC.
 - i. Unilateral field orders are subject to CRC review as part of the settlement change order, assuming that the settlement change order (alone, or when combined with other project change orders) exceeds the \$100k threshold.

For the population of DBDC standalone construction projects for the previous six fiscal years, the sum of all field orders totaled approximately \$39.2M. This represents 6.7% of the \$586.3M in total construction costs of the standalone projects completed during the same period.

Scope and Methodology

The program assessment was initiated in May 2018 and fieldwork procedures were completed in December 2018. The program assessment focused on the policies, procedures, and controls in place at the time of the assessment. Samples were selected from the population of stand-alone DGS construction projects that were completed, or at least reached the point of “substantial completion”⁵ within the previous six fiscal years (FY2013-2018).

In order to achieve the objectives, SC&H performed the following:

Documentation Review

SC&H obtained and reviewed current DBDC process documentation and other supporting documents from the Division Chief and Section Chiefs. The documentation included the current DBDC organization chart, the DBDC’s Project Management Handbook For Project Managers (Rev. March 26, 2018), internal performance monitoring reports, and the 2014 OLO Report: Change Orders in County Government Construction Projects⁶.

Program Understanding

Following the review of the DBDC documentation, SC&H interviewed representatives from DBDC and the following offices/departments:

1. Office of Procurement
2. Office of the County Attorney
3. Office of Management and Budget
4. Department of Transportation
5. Department of Environmental Protection

The interviews focused on:

1. Developing an understanding of the roles each office/department performs in the construction process
2. Obtaining the perspectives of each office/department on the current processes and the use of change orders and field orders
3. Understanding the potential impacts of change orders and field orders on the responsibilities, objectives, and controls within each office/department

Comparative Analysis

SC&H also contacted eight local/county governments to obtain information about their uses of field orders as an allowable contract modification tool to provide a comparative analysis to Montgomery County’s use:

1. Frederick County, MD
2. Washington County, MD

⁵ As defined by DBDC management, substantial completion is reached when a) project costs have been paid, except for the retainage amount, b) the facility is functional and usable, c) remaining work does not impede the inhabitants, d) occupancy permit has been pulled, and e) remaining items must be completed within 30 days.

⁶

https://www.montgomerycountymd.gov/OLO/Resources/Files/2014_reports/FinalChangeOrderReport.pdf

3. Anne Arundel County, MD
4. Prince George's County, MD
5. Arlington County, VA
6. Prince William County, VA
7. Alexandria, VA
8. Washington, DC

Findings and Recommendations

Observations

DBDC Project Manager Handbook. Section 4.14.3.5 of the DBDC's Project Management Handbook briefly describes change orders and field orders. Specifically, change orders are described as appropriate for when the proposed modification will change the time or schedule of the contract. Field orders are noted to be issued to prevent cost increase or delay, and further describes the two types of field orders: unilateral and bilateral. Additional information regarding change orders and field orders can be found in the "*Modifications to the Scope of Work of Construction Projects*" portion of the Background section of this report. It should be noted that the Handbook does not provide additional, more detailed guidance concerning the specific factors that should be considered and documented when considering the need for a field order.

Typical Processing Time. Based on conversations with Procurement and DBDC, the typical time to process a change order is four to six weeks: one to two weeks for the Project Manager to complete the change order request form with all the supporting documentation, one to two weeks for CRC review and approval, and one to three weeks for Procurement's review and approval⁷. If the CRC approves the change order request, it is signed by a contractor representative, DGS/DBDC, and a representative from OCA. It then proceeds through Procurement for review and approval.

Use of Field Orders by Other County Departments

All County departments that manage capital construction projects are subject to the same County regulations that govern DBDC's use of change orders and field orders. To compare DBDC's use of field orders to other County departments that manage construction projects, SC&H met with the Department of Transportation (DOT) the Department of Environmental Protection (DEP) to learn whether field orders are used as a tool for contract modifications.

DOT utilizes field orders in limited circumstances in which immediate correction is needed to prevent delay and there is insufficient time to process a change order. In these instances, the Area Engineer would complete the field order form, which would be reviewed and approved by the Contract Administrator or the Chief of Engineering Services. DOT estimates that on average it issues five field orders per project, with a combined cost that averages around 4% of the value of the main construction contract⁸.

⁷ It should be noted that Procurement estimated that Procurement's review and approval typically took one week to complete; while DBDC estimated that Procurement's review and approval tool up to three weeks to complete. SC&H did not verify these estimates.

⁸ Procurement believed DOT's average to be closer to 2% of the contract value. SC&H did not verify either the DOT or Procurement estimate.

DEP utilizes field orders in limited situations for unforeseen circumstances. In these instances, the Construction Project Manager would complete the field order form, which would be reviewed and approved by the Contract Administrator. DEP stated that they only utilize bilateral field orders, with a Bilateral Field Order Agreement signed by the contractor and the Contract Administrator. Based on the data provided by DEP, numerous field orders involve no additional cost to the County and only 2-3 field orders are issued for a typical project, with an average cost of less than \$14,000.

Results of Transactional Testing

SC&H obtained the population of DBDC construction projects from the DBDC Division Chief that reached substantial completion within the last six fiscal years, along with information related to the budget and actual spending, the associated contractors, and the project completion timelines for each project.

SC&H selected a sample of DBDC construction contracts from the population. The sample provided coverage over 38% of the count of construction projects (12 of 32) and 74% of the total budgeted construction costs (\$436.2M of \$586.3M). The sample also provided coverage over 79% of the total changes (\$35.8M of \$45.4M) from change orders (\$5.2M of \$6.2M) and field orders (\$30.6M of \$39.2M). For each sample project, DBDC provided the population of associated change orders and field orders, along with supporting documentation. The following table lists the DBDC construction projects selected for testing:

Project Number	Project Name	General Contractor	Opening Date	Original Contract Sum	# of Field Orders	# of Change Orders	Total Field Orders Paid	Total Change Orders Paid
010100	Council Office Building Renovations	NORESCO	10/01/18	\$30,060,000	46	1	\$2,379,000	\$583,000
500726	Data Center Rehabilitation	Denver-Elek	07/31/14	\$2,409,000	18	1	\$433,000	\$156,000
710300	Gaithersburg Library Renovation	Henlly	03/01/13	\$14,588,000	128	2	\$1,092,000	\$23,000
100300	Judicial Center Annex	Tompkins, Kane Shapiro and Duncan CP&R Inc	11/01/15	\$100,021,000	646	15	\$6,858,000	\$864,000
361109	MCPS & MNCPPC Maintenance Facility Relocation	Hensel Phelps	05/01/17	\$60,785,000	9	0	\$4,597,000	\$0
2000709	MCPS Food Distrib Facility Relocation	Costello Construction	12/01/14	\$37,790,000	50	0	\$2,303,000	\$0
720102	North Potomac Community Recreation Center	Dustin	08/01/16	\$18,932,000	108	10	\$1,437,000	\$379,000
470907	PSTA & Multi Agency Service Park - Site Development	Pleasant	08/01/14	\$13,052,000	20	1	\$982,000	(\$188,000)
471102	Public Safety Training Academy (PSTA) Relocation	HESS	11/01/16	\$68,755,000	138	1	\$4,273,000	\$377,000
710302	Silver Spring Library	Costello Construction	03/01/15	\$34,905,000	317	2	\$3,490,000	\$1,271,000
470906	Public Safety Headquarters	Coakley Williams	12/17/12	\$20,000,000	43	5	\$1,998,000	\$1,659,000
450900	Glenmont FS 18 Replacement	Keller Brothers	10/07/16	\$8,478,000	125	4	\$712,000	\$126,000
			Total:	\$409,775,000	1648	42	\$30,554,000	\$5,250,000

SC&H evaluated whether County procurement regulations and requirements were reasonably and appropriately applied in DBDC's use of field orders. We reviewed the description of the scope of work for every field order associated with the construction projects selected for testing. We identified a selection of field orders in which the descriptions of the scope of work requested on the field order form did not adequately justify the need for the field order to avoid delay or additional cost due to unforeseen and unanticipated conditions.

SC&H also evaluated whether appropriate review and oversight controls were in place and applied in the approval of field orders. We reviewed the evidence of review and approval for field orders from each of the projects selected for testing. Appropriate approval evidence was provided for each tested field order. For each of the tested field orders over \$100,000 we found documentation reflecting DGS Director review and approval of the field order.

SC&H also evaluated whether patterns or trends were observed that would warrant further review or analysis and noted the following:

- Project *471102: Public Safety Training Academy (PSTA) Relocation* began to utilize unilateral field orders as the project progressed. For this project, unilateral field orders were used to prevent a delay in the completion of the project and meet the expected date of completion.
- SC&H reviewed the average cost of field orders for each of the projects selected for testing and found that the average cost of the field orders for project *361109: MCPS & MNCPPC Maintenance Facility Relocation* was substantially higher than the other projects. For this project, each field order contained multiple line items of proposed tasks. Further, rather than submitting each proposed task on a separate field order, in some instances multiple tasks were aggregated onto individual field orders, which resulted in fewer total field orders and an increased overall field order cost. This was done through agreement with the contractor to minimize the administrative costs of processing additional individual field orders and invoicing, and to reduce the impact on scheduling. When disaggregating these field orders into separate field order requests, the average field order cost was more in line with the average field order cost for other projects.

Comparative Analysis

To provide a comparison, SC&H selected the following eight local/county governments to obtain information about their uses of field orders as an allowable contract modification tool:

1. Frederick County, MD
2. Washington County, MD
3. Anne Arundel County, MD
4. Prince George's County, MD
5. Arlington County, VA
6. Prince William County, VA
7. Alexandria, VA
8. Washington, DC

The procurement regulations for the counties/cities listed above did not specifically call out a field order as an available vehicle to modifying the scope of work of a construction project.

SC&H was able to establish contact with personnel representing seven of the eight organizations. The contacts for six of the seven indicated that they do not utilize field orders on construction projects. One of the seven governments indicated that field orders are not generally part of its construction project process, but they could be included as a component of specific projects to address unforeseen and unanticipated conditions, based on the size and timeline of the project.

General Observation

The use of field orders as a formal mechanism to increase the scope of work (and associated costs) performed in connection with a construction/renovation project and to increase the

associated cost of a project is not a common practice in surrounding jurisdictions. The County's Procurement Regulations seem to reflect an intent that field orders be used in "limited situations" where "unforeseen and unanticipated conditions arise which require immediate action to mitigate costs or avoid delay claims, and there is insufficient time to process a change order." Other conditions for use of a field order authorized in the Procurement Regulations ("minor change in the work not involving an adjustment in the contract sum or an extension of the contract time" or written interpretation...necessary for the proper execution or progress of the work...[that] does not adjust the contract sum or the contract time" do not involve cost implications. The frequent use of field orders (1,648 across 12 projects reviewed) and the resulting cost increases (in excess of \$30 million) would call into question whether the intent of the County's Procurement Regulations with respect to use of field orders is being followed.

Based on the procedures performed, SC&H identified four findings related to construction project change orders and field orders. The findings, associated risks, and recommendations are detailed below. The recommendations are designed to strengthen the County's internal controls regarding the use of field orders, reduce risk, and promote compliance with the County Procurement Regulations.

Ref	Finding	Risk	Recommendation
1	For each of the projects selected for testing, SC&H identified instances in which the information provided in the scope of work on the field order form did not provide sufficient justification to conclude that the field orders adhered to County procurement regulations that allow for the use of field orders <i>"To direct work when unforeseen and unanticipated conditions arise which require immediate action to mitigate costs or avoid delay claims, and there is insufficient time to process a change order."</i>	<p>1. The inappropriate use of field orders can result in unauthorized project spending and increased project costs.</p> <p>2. Insufficient information provided on field order forms can prevent a reviewer from identifying or detecting inappropriate use of field orders.</p>	<p>DBDC should revise the field order form process to require information that explains how the use of a field order prevents a delay or additional costs and is in fact due to unforeseen and unanticipated conditions. The information provided should justify allowing the requested work to proceed through a field order, versus being submitted as a change order.</p> <p>The Project Manager Manual should be updated to include the revised processes and additional requirements for the justification of the use of a field order.</p>
2	<p>The County's Procurement Regulations delineate three situations under which field orders may be used:</p> <ul style="list-style-type: none"> <i>To direct work when unforeseen and unanticipated conditions arise which require immediate action to mitigate costs or avoid delay claims, and there is</i> 	<p>The language in the Regulations concerning the use of field orders, and the absence of more specific County guidance on this issue can provide the opportunity to use field orders for situations that go beyond the apparent limited use intent of the Regulations: "Field order are</p>	<p>The County should consider convening a workgroup comprised of DBDC, Procurement, and OCA representatives to develop supplemental guidance concerning the County Procurement Regulations relating to the use of field orders. This supplemental guidance should provide additional detail and clarity</p>

Ref	Finding	Risk	Recommendation
	<p><i>insufficient time to process a change order;</i></p> <ul style="list-style-type: none"> • <i>To order a minor change in the work not involving an adjustment in the contract sum or an extension of the contract time, not inconsistent with the intent of the contract documents;</i> • <i>To provide a written interpretation, including drawings, necessary for the proper execution or progress of the work consistent with and reasonably inferable from the contract documents if the interpretation does not adjust the contract sum or the contract time.</i> <p>We could not identify supplemental guidance in any County document that provided clarification regarding the use of field orders. Field orders are not required to be reviewed and approved by either Procurement or OCA. Since the use of field orders is prevalent, particularly compared to the practices in other jurisdictions, in the projects sampled in this review, a more consistent understanding and agreement across DBDC, Procurement, and OCA is important regarding the application of the Regulations concerning field orders to minimize confusion and misunderstanding across the parties.</p>	<p>used only in the following limited situations....”</p>	<p>regarding the specific conditions and criteria under which the submission of requested work under a field order would be allowed.</p> <p>The DBDC Project Manager Manual should be updated to include the supplemental guidance developed by the County, and appropriate DBDC staff should receive training on the supplemental guidance.</p> <p>The County should also consider the need for periodic reviews, for example sponsored by the CRC, of the ongoing use of field orders and compliance with the supplemental guidance and Regulations.</p>

Ref	Finding	Risk	Recommendation
3	<p>The DBDC Division Chief is the Contract Administrator for current projects. The Division Chief is also the individual signing off as the Using Department on change orders being forwarded from DGS to Procurement/CRC. No formal delegation of the DBDC Division Chief's authority to act in this capacity exists.</p>	<p>The dual role being performed by the DBDC Division Chief raises a concern about appropriate segregation of duties and whether a sufficient level of review and oversight for change orders exists within DGS.</p>	<p>DGS should determine whether the current practice of the DBDC Division Chief signing on behalf of DGS on change order requests to Procurement/CRC provides sufficient oversight and separation of responsibilities. If the determination is to retain the current practice, the delegation of this authority to the DBDC Division Chief from the DGS Director should be formally documented, with a copy provided to Procurement for awareness.</p>
4	<p>DBDC management expressed concerns about the potential impacts of what they perceived as delays associated with the use of change orders, and the CRC/Procurement review and approval process. Delays can not only impact the schedule of the project, but also potentially cost.</p>	<p>If the change order process is viewed as too time-consuming, and the potential resulting delays are perceived as possibly endangering timely project completion, there may be an increased risk that field orders could be utilized as a more expedient method to change the work performed by the contractor; with such use not consistent with the Procurement Regulations.</p>	<p>The County (e.g., Procurement and the CRC) should consider the feasibility of streamlining the current change order review process for facility construction projects, particularly for those change orders associated with high-priority facility construction/renovation projects. Any changes to the process need to balance the interests of Procurement (such as ensuring an appropriate level of due diligence has been performed, and compliance with regulatory requirements) with the interests of the Using Department.</p>

Comments and MCIA Evaluation

We provided the Department of General Services (DGS) and the Office of Procurement (Procurement) with a draft of this report for review and comment on March 25, 2019. DGS responded with comments on April 17, 2019. Procurement responded with comments on May 16, 2019. The DGS response can be found in Appendix A. The Procurement response is included in Appendix B.

MCIA has reviewed the formal responses and while the report, and its findings and recommendations, remains unchanged, the following clarifications need to be made. This review was conducted under the multi-year audit plan prepared as part of the 2016 countywide risk assessment conducted by MCIA; the 2016 risk assessment had identified DGS' Building Design and Construction as a high-risk area. The Chief Administrative Officer authorized the conduct of the review; and while DGS cooperated in the conduct of the review, it would be factually incorrect to characterize, as stated in the April 17, 2017, DGS response, that DGS had requested the review.

It is also important to note that despite the discussions among Procurement, DGS, and the Office of the County Attorney (OCA) referenced in the DGS response that preceded the initiation of the current review, additional effort is required among the parties to work through differences in interpretation and application of the Procurement Regulations' provisions concerning appropriate use of field orders. At no point in the report did we state, as alluded to in the DGS response, that the Procurement Regulations' language concerning the situations under which field orders are authorized was "imprecise" or "subjective[ity]." As acknowledged in the report, the risks associated with these differences are substantial, particularly in light of the apparent frequency with which field orders are used by DGS (1648 field orders across the twelve sampled projects) and the funding level associated with these field orders (\$30.6 million across the twelve sampled projects). Actions taken by a workgroup⁹ comprised of Procurement, OCA, and DGS to address Recommendation #2 (i.e., to develop supplemental guidance concerning the use of field orders – to include additional detail and clarity regarding the specific conditions and criteria under which the use of a field order would be allowed – and to incorporate this supplemental guidance in the field order form DGS has recently implemented, as referenced in the DGS response) should be given a high priority to address the risks identified in the report. The potential role the CRC could play, both during the period while the supplemental guidance is being developed, and subsequent to the implementation of the guidance, may also be important to both inform the development of the guidance and the impact of its implementation.

⁹ The DGS response stated that "DGS will coordinate with the Chief Administrative Officer to develop a strategy for supplemental guidance." We want to emphasize that the recommendation contained in the report is that a workgroup comprised of Procurement, OCA, and DGS be established to develop the supplemental guidance identified in Recommendation #2.

Appendix A – Department of General Services Response



DEPARTMENT OF GENERAL SERVICES

Marc Elrich
County Executive

David Dise
Director

MEMORANDUM

April 17, 2019

TO: Bill Broglie, Internal Audit Manager
Office of the County Executive

FROM: David E. Dise, Director *Jald*
Department of General Services

SUBJECT: Program Assessment of the Department of General Services' Use of Change Orders and Field Orders in Facility Construction Projects

In April 2018, the County's Office of Internal Audit (MCIA) initiated the referenced program assessment at the request of the Chief Administrative Officer and the Department of General Services (DGS). For several months preceding the initiation of this assessment, there was much discussion amongst the Office of the County Attorney (OCA), the Office of Procurement (PRO) and DGS regarding use of field orders and change orders in construction projects.

Throughout those discussions, it was apparent that despite the straightforwardness of the regulations governing change order and field orders, there were certain procedural elements that were subjective and that those points of subjectivity were the cause of uncertainty and, at times, disagreement. Given the schedule and costs implications associated with the lack of clarity on procedural matters for active construction projects, DGS requested and fully supported this program assessment.

DGS has thoroughly reviewed the program assessment and findings. The assessment accurately captures the County's procurement regulations and the application of the regulations on a sampling of DGS projects. DGS offers the following response for each of the findings:

Office of the Director

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Finding #1

For each of the projects selected for testing, SC&H identified instances in which the information provide din the scope of work on the field order form did not provide sufficient justification to conclude that the field orders adhered to County procurement regulations that allow for the use of field orders "To direct work when unforeseen and unanticipated conditions arise which require immediate actions to mitigate costs or avoid delay claims and there is insufficient time to process a change order."

Response: DGS concurs with the recommendation that the field order format should be revised to ensure that documentation clearly and sufficiently justifies the use of the field order versus being submitted as a change order. Attached for your review is the template that has been developed and incorporated into the Project Manager Manual.

Finding #2

The County's Procurement Regulations delineate three situations under which field orders may be used:

- *To direct work when unforeseen and unanticipated conditions arise which require immediate action to mitigate costs or avoid delay claims, and there is insufficient time to process a change order;*
- *To order a minor change in the work not involving an adjustment in the contract sum or an extension of the contract time, not inconsistent with the intent of the contract documents;*
- *To provide a written interpretation, including drawings, necessary for the proper execution or progress of the work consistent with and reasonably inferable from the contract documents if the interpretation does not adjust the contract sum or the contract time.*

We could not identify supplemental guidance in any County document that provided clarification regarding the use of field orders. Field orders are not required to be reviewed and approved by either Procurement or OCA. Since the use of field orders is prevalent, particularly compared to the practices in other jurisdictions, in the projects sampled in this review, a more consistent understanding and agreement across DBDC, Procurement, and OCA is important regarding the application of the Regulations concerning field orders to minimize confusion and misunderstanding across the parties.

Response: DGS concurs that a better understanding of Procurement regulations and the use of field orders is necessary, and that additional details and clarity should be provided through supplemental guidance. DGS also agrees that imprecise language and subjective

interpretation of the regulations has been the cause of misunderstandings in the past. DGS will coordinate with the Chief Administrative Officer to develop a strategy for supplemental guidance.

Finding #3

The DBDC Division Chief is the Contract Administrator for current projects. The Division Chief is also the individual signing off as the Using Department on change orders being forwarded from DGS to Procurement/CRC. No formal delegation of the DBDC Division Chief's authority to act in this capacity exists.

Response: DGS concurs that past practice should be reviewed. Separation of duties and responsibilities will be reviewed by the Director's office and formally documented upon final determination. In the interim, all change orders submitted by the Division of Building, Design and Construction (DBDC) will be reviewed and forwarded to Procurement by the Director or Deputy Director.

Finding #4

DBDC management expressed concerns about the potential impacts of delays associated with the use of change orders, and the CRC/Procurement review and approval process. Delays can not only impact the schedule of the project, but also potentially cost.

Response: DGS believes that supplemental guidance documents that lessen the subjectivity of existing regulations combined with refinements to the Office of Procurement's processing of change orders would improve transparency and provide necessary documentation and adherence to procurement regulations. Further, DGS recommends that all ancillary procedural matters that impact the timely approval of change orders be reviewed, including MFD requirements, cost/price analysis, etc.

Appendix B – Office of Procurement Response



OFFICE OF PROCUREMENT


Marc Elrich
County Executive

Avinash G. Shetty
Director

MEMORANDUM

May 16, 2019

TO: Bill Broglie, Internal Audit Manager
Office of the County Executive

FROM: Avinash G. Shetty, Director
Office of Procurement 

SUBJECT: Program Assessment of the Department of General Services' Use of Change Orders and Field Orders in Facility Construction Projects

The Office of Procurement (PRO) has raised concerns regarding departmental use of field orders and change orders and has initiated numerous exchanges among stakeholders as well as recommendations to ensure transparency and efficiency in the process. PRO supports the County's Office of Internal Audit's (MCIA) program assessment into the current practices and procedures of the Department of General Services (DGS), Division of Building, Design and Construction's (DBDC) use of field orders and change orders. The Procurement Regulations clearly define the criteria in which field orders may be used. As a result of prior discussions initiated by PRO, an agreement was reached among PRO, DGS and the Office of the County Attorney (OCA) where a new change order request now requires the total dollars on prior change orders approved, as well as the total cost of field orders to date. This new process provides a more complete picture of the total contract price and supports transparency. PRO is eager to partner with DGS and OCA to ensure continued improvements are made for facility/renovation projects in this area, to maintain the integrity of the process.

In regards to the findings and recommendations, PRO provides the following:

Recommendation 1: PRO supports this recommendation for DBDC to revise the field order form process and update the Project Manager Manual. It is essential to establish sufficient justification prior to field order authorization to ensure appropriate use.

Recommendation 2: The Procurement Regulations limit the criteria under which field orders may be used to three specific criteria. PRO supports this recommendation to convene a workgroup consisting of

Office of Procurement

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PRO, DGS and OCA to provide supplemental guidance regarding the Regulations to address use of field orders that go beyond the limits established in the Regulations to prevent future inappropriate use.

Recommendation 3: PRO supports this recommendation for DGS to establish separation of duties and responsibilities regarding change orders.

Recommendation 4: PRO understands that the audit firm did not verify the time estimates related to perceived delays represented by DGS. While PRO's review of the timeline reflects a shorter estimate as noted in the report, it supports this recommendation. PRO has already worked with DGS and OCA to implement changes to the process and will continue to look for ways to streamline the process while balancing the necessary controls.