



Audit of Highway and Bridge Maintenance Division's Oakland Park Blvd Bridge Rehabilitation Project

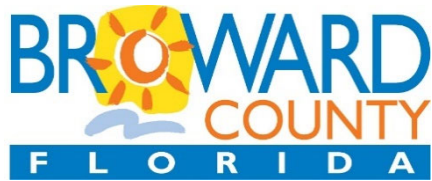
Office of the County Auditor

Audit Report

Robert Melton, CPA, CIA, CFE, CIG
County Auditor

Audit Conducted by:
Kathie-Ann Ulett, CPA, Deputy County Auditor
Jed Shank, CPA, CIA, CISA, Audit Manager
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Report No. 23-04
November 30, 2022



OFFICE OF THE COUNTY AUDITOR

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November 30, 2022

Honorable Mayor and Board of County Commissioners:

We conducted an audit of the Highway and Bridge Maintenance Division's Oakland Park Blvd Bridge Rehabilitation Project, supported by County Surtax and Gas Tax Funds.

The objectives of our audit were to determine whether the applied contracting model is in accordance with best practices and competitive solicitation; the project scope, in-house, and contractor's estimates were adequately prepared and reviewed; and pay applications were adequately reviewed, reflected actual work performed, and were compliant with contractual requirements.

Except as noted in this report, we conclude that the applied contracting model is in accordance with best practices and competitive solicitation. We conclude that the project scope, in-house, and contractor's estimates were adequately prepared and reviewed. We conclude that pay applications were adequately reviewed, reflected actual work performed, and were compliant with contractual requirements. Opportunities for Improvement are included in the report.

We conducted this audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient and 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 findings and conclusions based on our audit objectives.

We appreciate the cooperation and assistance provided by Broward County Highway and Bridge Maintenance Division throughout our audit process.

Respectfully submitted,

A handwritten signature in blue ink that reads "Bob Melton".

Bob Melton
County Auditor

cc: Monica Cepero, County Administrator
Andrew Meyers, County Attorney
Kevin Kelleher, Assistant County Administrator
Trevor Fisher, Director, Public Works Department
Anh Ton, Deputy Director, Public Works Department
Adriana Toro, Acting Director, Highway and Bridge Maintenance Division

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INTRODUCTION

The Office of the County Auditor conducts audits of Broward County's entities, programs, activities, and contractors to provide the Board of County Commissioners, Broward County's residents, County management, and other stakeholders unbiased, timely, and relevant information for use in promoting government accountability and stewardship and improving government operations.

We conducted an audit of the Highway and Bridge Maintenance Division's Oakland Park Blvd Bridge Rehabilitation Project. The objectives of our audit were to determine whether:

1. The applied contracting model is in accordance with best practices and competitive solicitation.
2. The project scope, in-house, and contractor's estimates were adequately prepared and reviewed.
3. Pay applications were adequately reviewed, reflected actual work performed, and were compliant with contractual requirements.
4. Any Opportunities for Improvement exist.

To determine whether the applied contracting model is in accordance with best practices and competitive solicitation, we conducted interviews, reviewed contract solicitation documents, and analyzed project cost elements.

To determine whether the project scope, in-house, and contractor's estimates were adequately prepared and reviewed, we conducted interviews, analyzed and compared the project scope, in-house estimate, and contractor's estimate, and reviewed the basis for estimates.

To determine whether pay applications were adequately reviewed, reflected actual work performed, and were compliant with contractual requirements, we reviewed each pay application for mathematical accuracy and evidence of review, compared unit prices to contract documents, and agreed selected quantities and line items to daily inspection reports and evidence of delivery and installation.

We conducted this 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 findings and conclusions based on our audit objectives.

Our audit included such tests of records and other auditing procedures deemed necessary. The audit period was the term of the project which spanned fiscal years 2021 and 2022; however, transactions, processes, and situations audited were not limited by the audit period.

Overall Conclusion

Except as noted in this report, we conclude that the applied contracting model is in accordance with best practices and competitive solicitation. We conclude that the project scope, in-house, and contractor's estimates were adequately prepared and reviewed. We conclude that pay applications were adequately reviewed, reflected actual work performed, and were compliant with contractual requirements. Opportunities for Improvement are included in the report.

Background

The Highway and Bridge Maintenance Division performs various maintenance and repair functions that are necessary to sustain the safety and operability of the County's roads and bridge infrastructure. The Oakland Park Blvd (west of Hiatus Road) Bridge Rehabilitation (OPBR) Project was performed to correct structural deficits identified by a Florida Department of Transportation (FDOT) inspection. The work performed included installation of new rod ties across panels underneath the bridge, resurfacing, and other improvements. The OPBR Project totals approximately \$5 million and is funded by County Surtax and Gas Tax Revenues. FG Construction, LLC performed the work under an existing open-end / master price agreement (Agreement) - PNC2120885B1, General Roadway and Bridge Maintenance and Repairs.

Under an open-ended / master price agreement model, a solicitation is advertised with items anticipated to be needed during the term of the contract (bid items) and the estimated quantities of each item. Bidders provide a unit price bid for each item which results in the total bid amount. The awarded vendor may then be assigned to perform individual projects at the unit prices bid for each bid item. **Figure 1** shows a simplified example of an open-end / master price agreement and the resulting assigned projects.

Figure 1 – Example of Open End / Master Agreement Model

Open-ended Master Agreement				Assigned Projects			
Bid Item	Quantity	Price Per Agreement	Total	Bid Item	Project Quantity	Price Per Agreement	Total
Item 1	100	\$10	\$1,000	Project 1			
Item 2	80	\$15	\$1,200	Item 3	5	\$20	\$100
Item 3	20	\$20	\$400	Item 5	10	\$5	\$50
Item 4	50	\$5	\$250	Item 6	10	\$30	\$300
Item 5	30	\$5	\$150	Total			\$450
Item 6	80	\$30	\$2,400	Project 2			
Item 7	20	\$15	\$300	Item 2	20	\$15	\$300
Item 8	40	\$20	\$800	Item 3	5	\$20	\$100
Item 9	60	\$20	\$1,200	Item 9	20	\$20	\$400
Item 10	90	\$10	\$900	Total			\$800
Total			\$8,600				

Source: Office of the County Auditor Example

The actual Agreement with FG Construction, LLC. included 817 bid items, was available for use by multiple projects, and was executed allowing for a maximum estimated expenditure totaling \$15,662,688 in the first year. Upon exercising the first annual renewal, the Agreement value was increased in the second year to \$31,325,376. The OPBR Project, one of the projects completed via this agreement, utilized 69 of the bid items at various quantities, resulting in an estimated project cost of \$4,920,083.

This open-ended / master price agreement model is commonly used as it allows multiple projects to be performed under the same Agreement and can reduce costs associated with performing individual solicitations for each project. Specific benefits may include expedited project completion due to reduced procurement times, reduced project design time and cost because project design is not used for bidding purposes, controlled change order cost increases due to established competitively bid unit pricing and locked in prices that hedge against inflationary and other price escalations.

However, this contract model may not always benefit the County and provide the most competitive approach. For example, if anticipated bid items and quantities are not accurately estimated in the solicitation for the open-ended / master price agreement (based on actual planned project needs), this may result in a poorly designed solicitation based on the County's actual needs and may effectively yield a vendor selection with the lowest total bid price for all items/quantities, but a combination of items priced above and/or below market value. Depending on which items are ultimately needed in assigned projects, this scenario increases the

likelihood that individual projects may not be competitively or consistently priced based on market conditions.

OPPORTUNITIES FOR IMPROVEMENT

Our audit disclosed certain policies, procedures and practices that could be improved. Our audit was neither designed nor intended to be a detailed study of every relevant system, procedure, or transaction. Accordingly, the Opportunities for Improvement presented in this report may not be all-inclusive of areas where improvement may be needed.

1. Procurement Methods Other Than Open-end / Master Price Agreements Should be Used for Significant Projects.

The use of the existing open-ended / master price agreement (Agreement) did not adequately provide for the competitive solicitation of the OPBR Project. The OPBR Project was a larger scale project, initiated at an estimated cost of \$4,920,083 which is a significant amount for utilization of an open-ended / master price agreement. Open-ended / master price agreements are more conducive to smaller projects that are not efficient to procure individually. Although County policies do not limit the dollar amount of projects that can be completed with an open-ended / master price agreement, larger construction projects benefit from the competitive advantage of individual project-specific solicitations.

We further noted that the OPBR Project utilized a significant portion of available funding under the Agreement which further warrants the OPBR Project having an individualized solicitation. As shown in **Figure 2**, the total Agreement utilization for the first year was \$15,662,688 for multiple projects including the OPBR Project; However, the OPBR Project alone accounts for nearly 1/3 of the Agreement value (\$4,920,083 OPBR Project value / \$15,662,688 Agreement) during this first year. The total Agreement value was increased in the second year to \$31,325,376 through an annual renewal.

Figure 2 – Example of Open End / Master Agreement Utilization

	Agreement (Year 1)	OPBR Project	Percent of Agreement
Value	\$15,662,688	\$4,920,083	31%

Source: Office of the County Auditor Analysis of Agreement
Bid Tabulation and Contractor's OPBR Project Estimate.

As shown in **Figure 3**, we also identified 15 bid items where the quantity used in the OPBR Project substantially exceeded the estimated quantities per the Agreement, demonstrating the impracticality of using the Agreement as a means to deliver this project. The OPBR project requirements were not accurately contemplated within the Agreement.

Figure 3 – OPBR Project Quantities in Excess of Agreement

	Agreement		OPBR Project	Excess over Agreement	
Bid Item (Summarized)	Units	Unit Price	Units	Units	Total Price
Guardrail Post Replacement	5 each	\$ 400	30	25	\$ 10,000
Traffic Control Officer	200 hours	\$100	320	120	\$ 12,000
Bullet Railings, Double Rail	100 linear ft.	\$ 100	222	122	\$ 12,200
Emergency Generator-Backup	5 days	\$ 400	53	48	\$ 19,200
Restoration, F-1 Epoxy	5 cu. ft	\$ 1,000	33	28	\$ 28,000
Removal Of Existing Bridge Joint	100 linear ft	\$ 110	444	344	\$ 37,840
Superpave Asphaltic Concrete	1800 tons	\$ 130	2,500	700	\$ 91,000
Cleaning Concrete Surface	1400 sq. ft.	\$ 5	20,580	19,180	\$ 95,900
Polymer Nosing	10 cu. ft.	\$ 1,000	120	110	\$ 110,000
Work Skiff*	5 days	\$ 1,500	105	100	\$ 150,000
Milling Exist Asph. Pavt.	5000 sq. yrd.	\$ 4	56,000	51,000	\$ 204,000
Asphalt Concrete Friction Course	1000 tons	\$ 150	4,100	3,100	\$ 465,000
Stainless Steel Dowel	500 linear ft.	\$ 200	3,216	2,716	\$ 543,200
Carbon Fbr. Rein. Plmr Laminate	500 sq. ft.	\$ 250	3,180	2,680	\$ 670,000
Canal Work Platform-5ft X 8ft*	5 days	\$ 1,000	1,260	1,255	\$ 1,255,000

Source: Office of the County Auditor Analysis of Open End / Master Agreement Bid Tabulation and Contractor's OPBR Project Estimate.

* Work Skiff and Canal Work Platform are further discussed in Opportunity for Improvement No. 2.

The Agreement quantities are intended to reflect the estimated annual usage for all projects over the term of the Agreement. As shown, the actual quantity utilization necessary for the OPBR Project exceeded the previously established Agreement quantities. For example, as shown in Figure 3, the Agreement estimated 5 units of guardrail post replacement for all projects, but the OPBR Project alone used 30 units. This substantial deviation from estimates indicates that the Agreement was not an appropriate procurement vehicle for the OPBR Project. Further, if the advertised and resulting Agreement quantities were not reasonably reflective of the actual

items/quantities needed to complete projects, then the Agreement unit prices may not be reflective of the competitive market or result in a competitive price for this specific project.

To determine whether the \$4,920,083 OPBR Project value was awarded at a competitive price based on use of the Agreement, we analyzed the amounts bid for these same line items by the other bidders to the open end / master agreement solicitation. We found that the OPBR Project was awarded at an estimated cost of approximately \$1 million, or 25%, more than the price that would have been obtained if the other bidders had been awarded the Agreement. For each vendor that responded to the open end / master agreement solicitation, **Figure 4** shows the Agreement bid tabulation total (summation of all bid items) and cost of the specific OPBR Project based on the unit prices bid and estimated quantities for each of the 69 bid items used by the OPBR Project.

Figure 4 - Open End / Master Agreement Bid and Estimated Project Specific Cost

Vendor	Lambert Bros Inc.	FG Const. LLC (Awarded)	DP Dev. LLC	Weekly Asphalt Inc.
Agreement Bid Tabulation Total	\$12,980,424	\$14,612,688	\$14,928,604	\$24,108,750
OPBR Project Specific Cost	\$3,901,924	\$4,920,083	\$5,503,376	\$3,802,142
Potential Savings	\$1,018,159	\$0	\$(583,293)	\$1,117,941

Source: Office of the County Auditor Analysis of Open End / Master Agreement Bid Tabulation and Contractor's OPBR Project Estimate.

The purpose of this analysis is not to suggest that another bidder should have been selected to award the contract, but rather, to highlight the significant differences in unit prices bid. Accordingly, the open-ended / master agreement contract format used to solicit bids for multiple Highway and Bridge Maintenance Division projects does not appear to be cost-beneficial based on the analysis of this individual project. Although the Agreement was competitively procured, the 69 bid items used by the OPBR project were not as competitively priced as the same 69 bid items from the other bidders. Based on our analysis, it appears that there should be greater consideration given to other methods of procurement such as:

- soliciting projects individually (i.e., one solicitation for one project)
- soliciting similar projects in groups with awards by individual project (i.e. one solicitation for a group of projects)
- maintaining a "library" of continuing service type agreements with multiple contractors or multiple master agreement / open end contracts

These methods should result in more competitive pricing and cost savings that outweigh the perceived benefits of the lessened administrative burden and related costs achieved with the open-ended/master agreement contract format used. These methods can also achieve some of the same benefits of using single open-ended / master agreements such as expedited project completion due to reduced procurement times, reduced project design time and cost because project design is not used for bidding purposes, controlled change order cost increases due to established competitively bid unit pricing, and locked in prices that hedge against inflationary and other price escalations. Highway and Bridge Maintenance Division already routinely procures projects individually for non-maintenance / non-urgent type of projects.

According to management, although the open end / master agreement with FG Construction results in some projects being performed at a higher cost, other projects are likely to be performed at a lower cost (as compared to other bidders). Management stated that the open end / master agreement with FG Construction should result in the lowest cost to the County once all projects are considered in totality. However, this does not negate the option of individual or group project solicitation to achieve greater competition and most favorable costs.

Management also emphasized that the existing open-end / master agreement procurement was selected based on the urgency and time sensitivity of the OPBR repairs. Management specifically stated that:

- Prior to rehabilitation, this bridge had weight restrictions and was classified as Structurally Deficient, causing large trucks (including fire rescue trucks) to take a circuitous route around the bridge causing delays. The rehabilitation method used had less impact to emergency vehicles and less environmental impacts due to bridge closure or longer routes.
- The bridge safety/structural deficiencies were corrected in a timely manner without further deterioration of the bridge or catastrophic consequences.
 - The FDOT bridge re-inspection completed after the bridge repair provided a score representative of a new bridge without the cost of a new bridge (favorable cost/benefit investment for the County),
 - After rehabilitation, the Sufficiency Rating improved from 41 to 95 (100 is the max.)

However, these benefits of timely completion and method of construction could have also been achieved using other more competitive procurement methods at cost savings. Based on when the bridge was first assessed as structurally deficient in 2019 and when construction began in July 2021 it appears that there was at least 18 months available to design and individually solicit the project. However, according to management, the OP Bridge Project used an innovative

construction technique that allowed for work to be performed under the bridge to minimize interruptions to traffic flow. This innovative technique required additional vetting and evaluation before design could be initiated in March 2021 making it unfeasible to individually solicit the project and still begin construction by July 2021.

Based upon a consideration of these factors, certain individual projects may be more costly when delivered via master price agreements. Individual project awards, especially for larger and more specialized construction efforts, may provide significant cost savings that may outweigh the perceived benefits of the lessened administrative burden and solicitation related costs.

We recommend management:

- A. Consider other procurement methods for large projects such as soliciting projects individually, soliciting projects in groups with awards by individual project, and/or maintaining a “library” of continuing service agreements with multiple contractors or multiple master agreement / open end contracts.
- B. Establish procedures that when using end / master agreements, for any estimated project quantities that substantially exceed quantities per the agreement, to perform additional cost analysis to validate the overall competitive pricing of the project and, if applicable, re-evaluate the selected procurement method.

2. Additional Costs Associated With an Alternative Work Methodology to Maintain Traffic Flow was not Clearly Reflected Within the Estimates or Properly Procured.

In completing the OPBR project, the Highway and Bridge Maintenance Division used an alternative innovative construction technique that allowed for work to be performed under the bridge to minimize interruptions to traffic flow. While this approach was vetted and appears appropriate, it resulted in the use of bid items and quantities which were not contemplated in the original competitively solicited procurement and resulting Agreement. The costs were contained within existing bid items within the Agreement that did not accurately reflect the work performed. These bid items, which were a “work skiff” and “lightweight canal work platform[s] – 5 FT x 8 FT” were estimated in limited quantities in the Agreement for incidental usage but used in substantial quantities by the Project. The unit cost for daily usage of these items were substantially higher than competitive market rates and reflected the cost of other work that was performed. **Figure 5** shows pictures of these items in use.

Figure 5 – Picture of “Work Skiff” and “Lightweight Canal Work Platform[s] – 5 FT x 8 FT”



Source: Highway and Bridge Maintenance Division

We identified these two bid items as having unusually high costs, and were used in significant quantity on the OPBR Project. As shown in **Figure 6**, the “work skiff” was charged at a daily rate of \$1,500 for 105 days at a total cost of \$157,500. We estimate the value of a new work skiff to be within \$10,000. The “lightweight canal work platform[s] – 5 FT x 8 FT” (work platform) were charged at a daily rate of \$1,000 for 1,260 days (15 – 18 per day are used) at a total cost of \$1,260,000. We estimate the value of a work platform to be between \$1,000 and \$3,000.

**Figure 6 – Unit Price, Quantities and Total Line-Item
Project Cost of Alternative Work Line Items**

FG Const. LLC (Awarded Cont.)	
WORK SKIFF	
Unit Price	\$1,500
Units	105 days
Total	\$157,500
WORK PLATFORM	
Unit Price	\$1,000
Units	1,260 days
Total	\$1,260,000
Total	
Total	\$1,417,500

Source: Office of the County Auditor Analysis
of OPBR Project Estimate.

The amounts paid for the use of these items during the project are significantly more than the actual value of these items, notwithstanding any mobilization and handling during the project. Based on discussions with Highway and Bridge Maintenance Division management, it appears that these bid items included additional non-transparent costs for work elements (labor efforts and other costs associated with under-bridge work) not associated with the defined bid item (daily use of equipment). According to management, these additional costs stem from the use of innovative construction techniques that allowed for effective under bridge work that does not disrupt traffic flow. Lack of definition in bid items may restrict the comparability of bids and competitive procurement and make the contract award process less effective.

Further, we found that the open ended / master agreement did not correctly contemplate the number of quantities (usage) of these line items as needed to complete the OPBR work. Specifically, this project used 105 days of the “work skiff” and 1,260 days of the “lightweight canal work platform – 5 FT x 8 FT”; however, the Agreement listed estimated usage of 5 days each for these items. The Agreement only contemplated incidental use of these items and not long-term use that the OPBR Project required. Therefore, it appears that the construction techniques that allowed for effective under bridge work was not contemplated by the Agreement, and given this significant change in construction methodology, demonstrates that this project work, with this approach, should have been competitively solicited under a new or revised procurement.

Solicited line items for competitive bids should be transparent and descriptions of required work involved should be clear to all vendors. Open-ended / master agreements should contemplate/ be inclusive of the work methodology to be performed or project specific bids should be solicited.

According to management, to address this issue going forward as it pertains to future projects, a new contract was procured with updated specifications to include the innovative bridge repair method and a new contract was procured (MA PNC2122388B1 – Bridge and Misc. Structures Repair)

We recommend management:

- A. Establish procedures to ensure that bid items accurately reflect the work performed.
- B. Establish procedures to ensure work methodologies to be performed are reflected within open-ended / master agreements or solicited through project specific bids.

3. Project Estimates Should Use Independently Determined Competitive Market Prices.

Management's estimate of the OPBR Project cost did not use independently determined cost estimates, which could have assisted Management in its decision to utilize the Agreement, or another procurement method. As noted previously, although the Agreement was competitively procured, the pricing evaluation for selecting the contractor was based on the summation of 817 bid items. Unit prices of individual line items may not be reflective of market, as there are no guarantees of which line items may or may not be used throughout the term of the Agreement. Additionally, open ended agreements may be bid upon differently by vendors than bidding on a specific project, where the actual work elements and effort are known, vs hypothetical estimates. Accordingly, in-house estimates, prepared by knowledgeable sources, should be developed for each project using competitive market prices that are determined independently from the contractors open-end bid price. This will result in effective use of cost estimates and vendor selection.

We recommend management establish procedures to prepare in-house estimates using competitive market prices that determined independently from the contractors open-end bid price.

MANAGEMENT'S RESPONSE



KEVIN B. KELLEHER, Assistant County Administrator

115 S. Andrews Avenue, Room 409 • Fort Lauderdale, Florida 33301 • 954-357-7320 • FAX 954-357-7360

M E M O R A N D U M

DATE: November 15, 2022

TO: Robert Melton, County Auditor

FROM: Kevin Kelleher, Assistant County Administrator 

SUBJECT: Management Response to County Auditor's Report on Oakland Park Boulevard Bridge Rehabilitation Project at the Broward County Highway and Bridge Maintenance Division (REVISED)

The Public Works Department (Public Works), Highway and Bridge Maintenance Division (HBMD), and Purchasing Division (Purchasing) along with County Administration have reviewed the Office of the County Auditor's Report on the Audit of Oakland Park Boulevard Bridge Rehabilitation Project and submits the following as Management's response.

Management concurs with the Auditor's overall conclusion that the applied contracting model is in accordance with best practices and a competitive solicitation; the project scope, in-house estimate, and contractor's estimate were adequately prepared and reviewed; pay applications were adequately reviewed, reflect actual work performed, and were compliant with contractual requirements. Additionally, Management acknowledges select Auditor's recommendations for improvement opportunities and as provided herein, HBMD has already implemented many of the recommendations, has incorporated procedural enhancements, and is working on other initiatives.

For context, upon the Oakland Park Boulevard Bridge Rehabilitation Project completion, the Florida Department of Transportation (FDOT) performed a bridge inspection and reported the bridge condition rating of eight (meaning very good condition) which is a significant increase from its previous rating of four (meaning poor condition - failures were present or imminent). The bridge was originally deemed as structurally deficient in the previous inspection, a significant exigent condition that was successfully addressed by this Project, allowing the bridge to safely carry all legal loads and the removal of bridge load posting signs. This resulted in an annual saving of 365,250 miles traveled by trucks, as well as faster response times for emergency vehicles, such as fire engine trucks, that were previously prevented from traveling the bridge due to weight restrictions.

The use of the innovative under-deck repair method used in this Project also had minimal impacts to traffic and reduced the number of days the traveling public was required to detour the bridge during construction, when compared to a conventional repair method. The reduced time of detours saved the public from traveling an additional 4,020,000 miles, as well as further disruptions as a result of any additional delays.

Below are detailed responses to each of the Auditor's opportunities for improvements and recommendations.

Opportunity for Improvement 1

Procurement methods other than open-end / master price agreements should be used for significant projects.

Recommendation A

Consider other procurement methods for large projects such as soliciting projects individually, soliciting projects in groups with awards by individual project, and/or maintaining a "library" of continuing service agreements with multiple contractors or multiple master agreement / open end contracts.

Response: Management partially concurs. Management concurs that, under certain circumstances, multiple awards and individual solicitations could be sought. However, Management illustrates that there are other factors to consider that are not always price driven, such as the ability to do the work, availability to perform the work, constructions methods, and quality of work product.

Price agreements can be used for this and other significant projects, as this method is a competitive solicitation process. Price agreements are competitively bid, which allows for competitive pricing and bring significant time-saving benefits, allowing projects to be initiated and completed faster. Furthermore, price agreements lock-in unit pricing from contractors for a set time period (e.g., initial or total term), which has led to overall time and project costs-savings, especially in the volatile market conditions that the County and the entire Nation are currently experiencing.

Recommendation B

Establish procedures that when using end / master agreements, for any estimated project quantities that substantially exceed quantities per the agreement, to perform additional cost analysis to validate the overall competitive pricing of the project and, if applicable, re-evaluate the selected procurement method.

Response: Management partially concurs and has procedures in place. HBMD Management review projects' scope, time limitations, and criticality of the project (e.g., FDOT Bridge Inspection Report evaluation) and selects or recommends the most appropriate contract or procurement method to complete the project. The process to evaluate the appropriateness of a particular price agreement focuses on the overall

project and not only on individual pay items. Solely focusing on individual line items may impact the overall cost or ability to timely and efficiently complete the overall project, especially projects that are time-sensitive or critical for public safety, such as this Project. Additionally, multiple price agreements that have been competitively bid by the County are evaluated to determine the most pertinent and cost-effective price agreement for each individual project. Management is confident that the current process ensures the most competitive prices are received for the entire project and its exigencies.

Opportunity for Improvement 2

Additional costs associated with an alternative work methodology to maintain traffic flow was not clearly reflected within the estimates or properly procured.

Recommendation A

Establish procedures to ensure that bid items accurately reflect the work performed.

Response: Management concurs and has procedures in place. HBMD already has procedures in place to ensure that bid items accurately reflect the work performed. When renewing or replacing a contract, HBMD staff reviews past usage, work changes, observed discrepancies, and known upcoming work to develop and improve on contract specifications and estimates. Notwithstanding, it is not possible to anticipate unforeseen work, or in this case, implementation of an innovative construction method. The use of innovative design and construction approaches have multiple project completion benefits, including lower overall project costs and minimal disruption to the public.

Recommendation B

Establish procedures to ensure work methodologies to be performed are reflected within open-ended / master agreements or solicited through project specific bids.

Response: Management concurs and has procedures in place. HBMD procedures were further updated and applied in 2021 when a replacement open-end contract, Bid No. PNC2122388B1, Bridge and Miscellaneous Structures Repair, was procured.

Opportunity for Improvement 3

Project Estimates Should Use Independently Determined Competitive Market Prices.

Recommendation

Establish procedures to prepare in-house estimates using competitive market prices that [are] determined independently from the contractor's open-end bid price.

Response: Management partially concurs and has procedures in place. HBMD already performs recommended analyses when contracts are procured and when bids are evaluated. Additionally, HBMD evaluates multiple price agreements that have been competitively bid to determine the most appropriate and cost-effective price agreement for each individual project at the time of use. As mentioned previously, the time savings

obtained by using an established price agreement is often an unrecognized financial savings, as additional processes or solicitations could add delays to the project(s) or significant increases to Contractor pricing (based on current market conditions).

Thank you for the opportunity to respond and provide Management's comments to the Audit Report. If there are any additions, deletions/omissions, or other changes or modifications to Management's response, please allow us with the opportunity to review prior to issuance.

Should you have any questions, please do not hesitate to contact me or HBMD Director.

c: Monica Cepero, County Administrator
Kimm Campbell, Deputy County Administrator
George Tablack, Chief Financial Officer
Trevor Fisher, Director, Public Works Department
Anh Ton, Director, Highway and Bridge Maintenance Division
Robert Gleason, Director, Purchasing Division
Adriana Toro, Assistant Director, Highway and Bridge Maintenance Division
Andrew Meyers, County Attorney