## McDonald & Associates, Inc. Infrastructure Cost Audit City of Lawrence, Kansas

The City of Lawrence (City) engaged McDonald & Associates, Inc, (M&A) to audit the Rock Chalk Park (RCP) Infrastructure Project to determine:

- 1. Whether the construction work was delivered in accordance with the Development Agreement; and
- 2. Whether the City's expenditures for infrastructure (hard and soft costs) were in compliance with the Development Agreement.

Based on audit work, M&A determined that the construction work delivered met or exceeded the established specifications and the costs were compliant with the terms and conditions found in the Development Agreement.

The audit process included examination of project drawings, City Department of Public Works inspection logs and reports, expenditure detail as well as contract and subcontract agreements. City personnel were interviewed as were the principle parties of the Development Agreement and service providers. The audit also included physical inspection. Information requested during the audit process was available and provided in a timely manner. M&A appreciates the cooperation received from all parties involved including the City, Kansas University Endowment and Bliss Sports II.

The following analysis is based upon the Development Agreement dated July 10, 2013 by and between the City of Lawrence, Kansas, - RCP, LLC, - Bliss Sports and Bliss Sports II. Infrastructure payments made by the City of Lawrence are less than the authorized amount and less than the cost of the work. First, the amount available to pay for Infrastructure Improvements is calculated based upon the Development Agreement terms:

Maximum of Development Agreement Less:	\$ 22,500,000 <sup>1</sup>
Total Recreation Center Construction	10,550,630
Purchase Price	784,333
Recreation Center Architect's Fee	941,408
SUBTOTAL OF BALANCE REMAININIG	\$ 10,223,628
Assist Foundation Contribution	1,000,000 <sup>1</sup>
Subtotal	\$ 11,223,628
Additional funds appropriated through change orders	
approved by the City Commission	161,654³
Total Available for Infrastructure Costs	\$ 11,385,282

<sup>&</sup>lt;sup>1</sup> Article XI and again in Article XII of the Development Agreement limits the city's infrastructure cost liability to \$22,500,000 plus any additional contribution.

<sup>&</sup>lt;sup>2</sup> The data was compiled from the City of Lawrence Accounting records: the actual amounts paid confirmed by City personnel.

<sup>&</sup>lt;sup>3</sup> Changes to the infrastructure were not processed in a formal written change order. The City Auditor's January 8, 2014 memo concerning Interim Recommendations on changes to the work outlined this issue. As described in a Memo to the City Manager dated November 11, 2014 the City Commissioners approved \$161,654 in increases to the development agreement cap.

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The following schedule presents the attested Infrastructure construction costs and shows the Development Agreement Cap less payments made by the City. See the following:

TOTAL ATTESTED COSTS	\$ 13,211,798
Construction Management Fee – 2% of \$11,350,317.65	\$ 283,758
TOTAL PROJECT COST (Exhibit A)	\$ 13,495,556
Total Available for Infrastructure Cost	\$ 11,385,282
City Payments	\$ 10,359,633
Pending Payment Remaining	\$ 1,025,649

The City of Lawrence reduced payment of reimbursable costs by \$1,480,978 (Exhibit A) due to examination of physical quantities installed and compliance with specification. In addition, the audit identified \$114,149 (Exhibit A) in costs as non-reimbursable. These exceptions less the total project costs of \$13,495,556 are \$11,900,432. Adjusted attested costs still exceed the Development Agreement Cap by \$515,149. Based on the infrastructure cap and payments made to date, the city has a remaining balance owed on the Development Agreement of \$1,025,649.

DELIVERY OF INFRASTRUCTURE WORK				
Criteria	Condition	Cause	Effect	Recommendation
1. Article X - Final Acceptance of Infrastructure Improvements - "Upon the occurrence of Substantial Completion of the Infrastructure Improvements, RCP shall cause Bliss Sports II, pursuant to the Construction Contract, to submit to the City a Certificate of Completion in the form attached [in] Exhibit J, and within thirty (30) days the Citywill issue a certificate of acceptance for the Infrastructure Improvementsor state in a writing delivered to RCP and Bliss Sports II any alleged deficiency from the Infrastructure Improvement Plans. Any disagreementconcerning the deficiency will be resolved in	The City Manager indicated that the City did not execute the Article X Final Acceptance. The city relied on a letter from the City Engineer indicating substantial completion and indicating punch list items needing completion.	The contract makes provisions concerning a specific process for accepting and turning over the final project. This City has issued a conditional acceptance via Commission meeting notes and official memorandum.	The method for accepting and turning over the project based upon the Development Agreement was not followed. Based on testing, the contract requirements (less any minor punch list items) were fulfilled.	Execute the Final Acceptance document as described in the agreement.
accordance with Article XIV hereof"  2. Section 9.02 Infrastructure Improvements Site Access. Bliss Sports II agrees to permit the Cityaccess to inspect the constructionto ascertain and determine that the requirements of the City and the terms of this agreement have been met and that the infrastructure improvements are being constructed in accordance with the infrastructure improvements construction documents	City Engineers and inspectors performed continuous reviews of the construction process. In addition, testing firms provided sample analysis showing concrete and other construction processes conformed to specifications.	Engineering log books and testing reports were provided to the City of Lawrence and reviewed by Engineering personnel.	Engineering reports identified areas where construction was not completed to specifications. In these instances, the City withheld reimbursement for the estimated cost of the work not meeting specifications.	Along with audit exceptions and withheld amounts from the City—the cost Cap on project expenditures was exceeded. The city still owes the remainder of the cap on the development agreement.
3. Section 9.03 Reports. In this section Bliss Sports and Bliss Sports II agrees to provide the City monthly progress reports promptly after completion. These reports are to include: project status, construction issues, and	There were weekly and monthly meetings of the City, RCP and Bliss Sports II. Monthly status reports were formalized and weekly status reports were not. However, multiple testing firms validated	The City was provided testing reports from independent engineers.	City Engineering was able to make determinations concerning the quality of the work performed and whether or not the work was completed to	None.

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schedule compliance. Bliss Sports II is to provide a line item budget with percent completion, budget expended, material submittal information, concrete weight/batch tickets, and line items out of budget.	completion of the work and compliance with specifications as well as daily City Engineering reports.		satisfaction of city specifications.	
4. Article IX - City Oversight of Construction of Infrastructure Improvements - "Section 9.01 Infrastructure Improvements Updates and Team. The City shall have the right toattend an Infrastructure Improvement team meetingto review the development and constructionto determine that the Infrastructure Improvements are being developed and constructed in accordance with this Agreement, the Infrastructure Improvement Documents and all Applicable Laws and Requirements."	Because concrete was the majority of infrastructure expense, Penny's Concrete delivery tickets were examined and the totaled independently. City employees observed quantities installed during construction and prepared inspection reports documenting their observations, which when summed provide a total amount of concrete delivered. Schedule I of the Development Agreement provides an estimate of the quantity of concrete required to fulfill the specifications.	The quantities determined independently and by the City Inspection Reports were compared to the Schedule I estimate.	Schedule I estimate was 7,276 cubic yards of concrete. The delivery tickets total 7,171 cubic yards and the City Inspection reports total 7,081 cubic yards. The percentage variance from the Schedule I estimate is 98.6% delivery tickets and 97.3% City Inspection Reports.  The amount of concrete delivered is 1.4% under the estimate or may be 2.7% under the estimate if the City Inspection Reports are used.	According to information provided by the National Organization of Professional Estimators, a 3% waste variance is an acceptable tolerance for concrete poured on grade. These variances are within this percentage and therefore no adjustment is recommended.
5. The audit requested access to asbuilt drawings of the Infrastructure Development for the purpose of testing compliance to specifications.	As-built drawing could not be viewed as none were prepared.	Based on discussions with the City Manager and City Engineer, a decision was made to save money by not requiring as-built drawings of the infrastructure.	As-built drawings could not be used to calculate delivered quantities and to confirm receipt of all items specified. However, the Public Works Department was able to provide logs of inspections performed. The records provided by the Public Works Department	Consider obtaining as-built drawings (record drawings) so that the record of what was installed and the location of same can be more easily ascertained should there be a need for this information in the future.

DELIVERY OF INFRASTRUCTURE WORK				
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			and interviews with	
			employees of that	
			department provided	
			evidence that inspections	
			were performed and the	
			work was completed. A site	
			visit by the auditor was also	
			performed and certain parts	
			of the Infrastructure were	
			confirmed as being in place.	

EXPENDITURE COMPLIANCE				
Criteria	Condition	Cause	Effect	Recommendation
6. Based on Exhibit I and terms of the Development Agreement (section 11 and 12). The City negotiated prices for the infrastructure and agreed on quantities and costs.	Quantities were compared against unit costs for some of the infrastructure items with comparable City projects.	Prices negotiated in the Development Agreement and Negotiated by the City were reasonable.	Comparison against comparable unit price totals for similar material showed that the costs per specified quantity (whether percentage of total costs or installed cost of a specific commodity) appear normal or comparable to similar project costs.	None.
7. Article XI Infrastructure Payment Section 11.01 Payment of the Infrastructure Development. This section provides the formula the City uses to pay for Infrastructure Improvements. The total of \$24,500,000 less any amount not received from a donation of \$2,000,000 described in Section 12.02(b). The payments by the city	received a contribution from Assist Foundation of \$1,000,000. Therefore the total amount available for the project was \$23,500,000. Expenditures were: Architectural \$941,408.23, Land Cost \$784,333.00 and Recreation Center Construction	The contractor incurred more cost than was anticipated. In addition, the City questioned all or aspects of the presented construction costs and has not made full payment.	All appropriated funds have not yet been dispersed.  The contractor's expenditures are high enough that even the exceptions noted by the City and the audit do not affect the total owed by the City in the Development	The City should consider paying an amount up to the total described in the Development Agreement plus additive change orders.

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are to be applied in the following order: 1) Recreation Center Construction Contract amount, all Recreation Center Construction Contract change orders, 2) the Recreation Center Architect's fee up to \$925,000 and 3) the Purchase Price (which is the purchase of 26.135 acres of land valued at \$30,000/acre or \$784,050), with the remainder available to pay for the Infrastructure Improvement.	\$12,276,371.36 expended, leaving a total of \$11,223,628.64 for Infrastructure. Infrastructure costs presented were \$11,598,439.03 plus change orders of \$161,654.00 for a total of \$11,760,093.03. The amount available was therefore short of the infrastructure cost \$536,464.39.		Agreement.	
8. Section 11.02 Infrastructure Improvements Cost. Exhibit I is described as agood faith estimate of costs and elements are valid and should be included. This section requires Bliss Sports II to provide RCP and the City copies of books and records which validates costs incurred and payments made by Bliss Sports II. This section states, "Without limitation" soft cost included are: interest in financing, loan origination, design and legal fees, compliance and other professional services attributable to preconstruction costs, Recreation Center Site permitting, Infrastructure Improvements and negotiation of the development and land purchase agreement and infrastructure construction contract.	Bliss Sports II accumulated costs and presented attestations for payment but could not provide a formal job cost ledger. However, Bliss Sports II provided cancelled checks, and subcontracts/service agreements.	The Work began before all agreements were in place and Bliss Sports II did not provide a complete accounting for the project. To make up for the lack of accounting attestations were requested and received.	Bliss Sports II could not provide a job cost ledger. In order to evaluate all costs, the audit created an estimated job cost ledger for purposes of testing.  Bliss Sports II made payments in excess of the Development Agreement's infrastructure cap.	Although there was no formal job cost, the backup provided was sufficient to support costs in excess of the Development Agreement cap.  If the City wants transparency, job cost should be required in all future projects.
9. <b>Development Agreement contract type</b> . Section 12.02 says that the city will pay a maximum of \$22,500,000. However, Section 11.02 says that	The City of Lawrence interprets the agreement as cost reimbursable. However, RCP and Bliss Sports II see the contract as a lump sum	Full agreement as to the contract type was not reached.	Contractual ambiguity leads to mixed expectations among parties. This could present needless or	In the future, if transparency is desired throughout the construction process, specific audit language should be

EXPENDITURE COMPLIANCE				
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costs incurred (hard and soft) will be auditable.	agreement.  Although the costs are auditable an audit was not a requirement assigned to RCP or the City.		additional costs to the parties involved.	added to construction contracts to examine all records proving cost and installed quantities.  In addition, steps should be taken to assure the contract is fully understood and that task assignment is addressed.
10. Based on contract law standards, construction contracts should be clear, unambiguous, unmistakable and conspicuous in order to be enforceable.	Alpha Omega Geotech performed inspection work and Gould Evans performed site plans, zoning and preconstruction up-front work for both the stadium and infrastructure projects without formal subcontracts.	Some preconstruction and testing services were performed under verbal authorization from the Developer.  There is no specific scope of work or costs applied between projects.	Alpha Omega provided a division of costs between the stadium and infrastructure. This division appeared reasonable.  The lack of agreements makes it difficult to determine if costs were properly applied between the stadium and infrastructure project.  There was no evidence that Gould Evans worked on any other scope of work other than the city infrastructure project. Payments to Gould Evans were validated by cancelled check and a vendor attestation of costs.	An adjustment to project cost is not recommended. Evidence was sufficient to indicate work in these areas was delivered. In addition, even removal of these expenses from project cost would not affect the remaining amounts owed on the project.  On future projects assurance should be gained that all Work is contracted.

## **EXHIBIT A**

Cost attestation was determined through a review of vendor/subcontractor affidavits. These verifications were provided on the City website. The following table shows the vendor detail for attested costs:

	<b>Attested Cost</b>	
Kings Construction	\$	9,104,318.00
DFC Company	\$	1,403,716.33
Emprise Bank	\$	713,064.34
Mid America Court Works	\$	526,600.00
Qualite	\$	325,000.00
Earnies Mechanical	\$	305,530.00
Paul Werner Architects	\$	250,000.00
Poisinelli (Legal Fees per Development Agreement)	\$	212,535.81
Gould Evans	\$	100,000.00
Alpha Omega Geotech	\$	84,242.72
Landplan Engineering	\$	76,955.98
Hoss & Brown	\$	44,000.00
Black Hills Energy	\$	39,750.00
Approved Paving	\$	26,085.00
TOTAL ATTESTED COST	\$	13,211,798.18
Construction Management Fee – 2% of \$11,350,317.65		283,758.00
TOTAL PROJECT COST	\$	13,495,556.18

The following table shows amounts that the City of Lawrence claimed were not to specification or in excess of specification:

TOTAL CITY ADJUSTMENTS	\$ 1,480,977.59
Approved Paving	\$ 9,885.00
Mid-America Court Works, Qualite, Earnie's Mechanical	\$ 63,600.00
Earnies Mechanical	\$ 127,701.24
DFC Company	\$ 471,965.20
Kings Construction	\$ 807,826.15

The audit examined legal service timesheets. The timesheets and corresponding cost detail identified services occurring prior to the creation of Bliss Sports II (soft costs were defined as those incurred under Bliss Sports II). In addition, the audit identified non-Development Agreement Bliss Sports II business activities. The following table shows amounts questioned through the audit process:

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TOTAL AUDIT ADJUSTMENTS	\$ 114,148.56
Interest Outside Development Agreement Period	\$ 10,167.59
Legal Fees Not Related to Development Agreement	\$ 24,367.89
Legal Fees Outside Development Agreement Timing	\$ 79,611.08