SUMMARY MINUTES JOINT BUSINESS ADMINISTRATION AND STRATEGIC DEVELOPMENT COMMITTEE SPECIAL MEETING OF MARCH 18, 2015

Mr. McDermott chaired the March 18 Special Joint Business Administration and Strategic Development Committee Meeting, calling it to order at 10:34 a.m. A quorum was present: Mr. Chapman, Co-Chair, Strategic Development Committee; Ms. Lang, Co-Chair, Strategic Development; Mr. Caputo, Mr. Curto, Ms. Hanley, Mr. Mims, Mr. Session, Ms. Wells, Mr. Williams, and Mr. Conner, *ex officio*. Mr. Kennedy was also present. Mr. Griffin joined the Meeting by phone.

Information Paper on Construction Manager at Risk Construction Acquisition Method at Reagan National. Ginger Evans, Vice President for Engineering, reported that staff would provide information on the Construction Manager at Risk (CMR) construction model under consideration for implementing some of the major elements of the Reagan National Capital Construction Program (CCP). She stated that the new Use and Lease Agreement authorized a 10-year CCP for Reagan National totaling \$1 billion and a three-year \$126 million CCP for Dulles International. Ms. Evans recalled that the Committee had concurred with the pre-solicitation terms for the architectural and engineering (A/E) services for the CCP in September 2014. In November 2014, staff had presented its recommendation regarding the award of the planning services contract, which the Strategic Development Committee and Board of Directors had approved. Additionally, staff had begun the National Environmental Policy Act process and review in February. Ms. Evans stated that the award for the A/E contract would be presented to the Board for approval at its April meeting. [Subsequent to this Special Meeting, staff learned that the contract award will likely be presented in May.]

Ms. Evans reviewed the three basic models for the primary care of construction services: 1) Design-Build (D-B) which utilizes the contractor to manage the detailed design and construction based on a schematic design; 2) Design-Bid-Build (D-B-B) where the contractor retains the responsibility for completion and quality of the design; and 3) Construction Manager at Risk (CMR) which is emerging as a best practice, particularly for complex projects that have multiple phases and multiple elements. She stated that CMR had been in common use for at least 10 years in the aviation industry. Ms. Evans explained that CMR

mobilizes the construction team, allows for ordering long lead materials and provides a guaranteed maximum price for completion of the project.

Ms. Evans stated that the Authority's interest in CMR for the program at Reagan National encompasses the complexity of relocating the corporate offices, building new spaces in other locations on the Airport and demolishing the Corporate Office Building, Hangars 11 and 12 for building the new North Pier. Additionally, extensive utility relocations, site remediation and geo-technical site preparation for the building foundations would be needed. Ms. Evans reported that some of these tasks would occur concurrently while the design is being finalized for the ultimate pier. She explained that this would require working with the stakeholders - the airlines, the operating airport managers, and several regulatory agencies. Ms. Evans explained the importance of having the complete work process coordinated by one entity in order to move the construction along expeditiously. She reiterated that space for daily and overnight operating requirements, as well as that needed to stage the construction of the support facilities and to store materials, would be very limited. All components would need to be carefully managed.

Ms. Evans reviewed the advantages of CMR for the enabling projects and the construction part of the program. She noted that other aspects of the program would be better served using D-B-B. With the use of CMR, other projects could be bid in the same time period as the design and the trade bids would occur sequentially during the following year as those separate packages are completed and designed. Ms. Evans explained that the ability to bid the foundation package early would allow preorders for specialized electrical equipment and the planned delivery of those materials to the site on an as-needed basis would be advantageous because more work would be completed quicker. Ms. Evans reported that the City of Phoenix and the Commonwealth of Massachusetts had used CMR, which had resulted in significant advantages.

Regarding the cost risk strategy, Ms. Evans reported that bidding the enabling projects a year after the CMR process had begun would involve trade packages prior to detailed information being available, which would add to the risk to impact contractor's bid prices. She explained that bidding trades as needed would engage the full attention of both the contractor and the management team resulting in a more informed bid. Ms. Evans reported that this strategy is permitted in the Authority's Contracting Manual and noted that any procurement would incorporate all of the construction contract requirements. She stated that it is

anticipated that a portion of the program would be eligible for the use of federal funds. Ms. Evans explained that the common use portion of projects relating to terminals at airports is always eligible to receive federal funds. She reported that staff believed it is a highly valuable candidate for consideration because the project is in response to accommodate the increased activity at Reagan National as a result of the last appropriations bill. She stated that once a determination had been made with regard to preserve the eligibility to seek federal funds staff would establish the use of Disadvantaged Business Enterprise or Local Disadvantaged Business Enterprise goals upon entering into a contract.

Ms. Hanley asked if staff had compared CMR to D-B-B. She stated that CMR appeared very similar to D-B, with additional contracts added as needed. Ms. Hanley asked for additional clarity. Ms. Evans responded that that was one major difference and that another major difference in the CMR methodology is the Authority would have a contract directly with the architect engineer (A/E) opposed to DB methodology whereby the A/E would report to the contractor.

Mr. Potter further explained that the CMR would provide a design contract with an A/E unlike that of a D-B-B where there is no interface between the designer and the construction company, except for clarification. The CMR methodology would enable a construction contractor to get involved earlier in the process before the design is completed enabling the construction contractor to collaborate with the design contractor to reach a mutual understanding on issues.

Ms. Wells inquired about the ability to track CMR and to determine if it is the best methodology in terms of savings. Ms. Evans explained that it will be tracked similarly as all of the Authority's capital programs by an established budget. She stated that the budget would be modified accordingly to the packaging for the best bid result and pricing. Ms. Evans noted that the project would be tracked first as a budget process, followed by an estimate and then an actual bid. All variances in the complete tracking process would be continuously monitored.

Ms. Evans reported that staff would retain estimates early for the entire program, which will provide for schedule improvements. It will be vital to have a construction program that is well planned and well organized to assure that there is no impact to the traveling public and aircraft operations. Ms. Evans stated that disciplined reports will be provided to

the Committee to communicate the progress and report how the overall objective is being achieved.

Mr. Kennedy asked how the use of CMR would impact the contingency portion of the contract. Ms. Evans responded that a vertical project, similar to the one at Reagan National, usually warrants general contractor fees of 11 or 12 percent embedded in the hard construction cost estimate. However, fees for this type of CMR delivery method are typically 4 to 5 percent, which are separate from contingencies. Ms. Evans noted that the contingencies are managed separately from the construction prices despite the selected delivery method.

Mr. Kennedy inquired about how the requirements on performance and labor material bonds would be assessed. Ms. Evans stated that they would be based on the contract value. She explained that the trade bids would be incorporated into the contract by increasing them into the bid amount, which will require bidders to provide bonds and insurance for the full amount of each package as they are bid.

Mr. Kennedy then inquired whether the full maximum contract amount would be used to assess the performance and labor material bonds, to which Ms. Evans responded affirmatively. She stated that the process would allow the general contractor to do enough work to be engaged, but not so much to impede competition. She stated that although staff had not dedicated much effort on the amount of self-performance requirements, it would be beneficial to do so because it will affect the integrity of the way the job proceeds.

Mr. Mims asked Ms. Evans to provide background on her experience with the CMR process. Ms. Evans stated that in a prior position as a contractor, she had performed several CMR contracts at several airports. At Miami International's South Terminal, she had been a part of a very complex terminal renovation project that was under construction during the September 11, 2001 events. As a result of new security requirements after the tragic events, finished walls and ceilings had to be torn out and redone. Additionally, Ms. Evans noted that she had been involved with a large civil project in Calgary to construct the longest runway in Canada to be used for freighters from China. Adding to the complexity of the runway was the inclusion of an underpass on one end. Ms. Evans reported that The Little Rock International Airport terminal expansion had also been constructed using the CMR methodology. She stated that a lot of the generalists who had been initially skeptical of the CMR

delivery method now preferred it because it provides for complete alignment on the team.

Mr. Session reflected on the collaborative process of D-B for Phase 2 of the Dulles Corridor Metrorail Project. He referred to the two-stage process used to qualify firms and accept the lowest bid. Mr. Session stated that contractors were engaged during the process and he believed that the D-B process addressed some of the complexities presently being referenced in the CMR process. He stated that he believed that the D-B model had worked very well. Mr. Session noted that by engaging the contractor community along the way, the possibility of a protest had been reduced. He requested staff to provide comparative analysis using the D-B process versus the CMR methodology. Additionally, Mr. Session requested that procurement staff provide input on how the terms of a solicitation would be designed using the CMR model. responded that airline or airport terminals generally are not considered good candidates for the D-B process because it the contractor has to know what the design will be after it is only 30 percent complete. She explained the different elements of the Reagan National project that would have to be designed separately and noted that the full schedule for this program highlights the different projects within other projects. Ms. Evans stated that waiting for all of them to be designed at a sufficient level would extend the completion date considerably, but stated that she would explore it further. She stated that staff had been engaged in extensive conversation with both General Counsel and primary care, and that a substantial amount of support would be needed from General Ms. Evans stated that CMR is usually a best value procurement process where qualifications and fees provide the ability to select the right contractor and realize the best price at the start.

Mr. Chapman stated that staff had reported that the CMR methodology is well suited for complex projects and he noted that building a project such as this while operating an airport at record levels of traffic is deemed very complex. He stated that he believed that CMR is a very good approach relative to the activity expected to occur over the next few years.

Mr. McDermott shared some observations previously made by Mr. Adams, Co-Chair, Business Administration Committee, who was not present at the day's Meeting, about the downside risks that might accrue in selecting this method. He stated that he and Mr. Adams concluded that the CMR method is highly appropriate under the present

circumstances. Mr. McDermott stated that staff alluded to the Commonwealth of Massachusetts' report, which provided very useful comparative data.

Ms. Evans stated that American Airlines had successfully used CMR methodology for the last 10 years and had expressed its support in proceeding with it.

The meeting was thereupon adjourned at 11:10 a.m.