★ METROPOLITAN NASHVILLE AIRPORT AUTHORITY ★

March 14, 2018 – Minutes of the General Aviation/Operations/Planning & Engineering Committee Meeting



Date: March 14, 2018 Place: Nashville International Airport

Nashville, Tennessee

Time: 9:00 a.m.

Committee Members Present: Bill Freeman, Chair; John Doerge and

Amanda Farnsworth

Committee Member Absent: Kabir Sandhu, Vice Chair and Dexter

Samuels

Others Present: Doug Kreulen and Cindy Barnett

Call to Order

Chair Freeman called the General Aviation/Operations/Planning & Engineering (GAOPE) Committee meeting to order at 9:06 a.m., pursuant to Public Notice dated March 9, 2018.

Approval of Minutes

Chair Freeman called for a motion to approve the minutes of the January 10, 2018, GAOPE Committee meeting. A motion was made by Commissioner Farnsworth and seconded by Commissioner Doerge. The motion carried by vote of 3 to 0.

III. <u>Items for Approval</u>

A. Purchased Goods and Services Contract for FIDS & PA – Visual Systems Replacement Project - CIP No. 1711

Ms. Traci Holton, AVP, Development and Engineering, briefed the GAOPE Committee on this item. Staff requested that the GAOPE Committee recommend to the Board that it accept the proposal by International Display Systems, Inc. (IDS) for the FIDS & PA – Visual Systems Replacement project BNA; and authorize the Chair and President & CEO to execute the purchased goods and services contract.

Background:

The airport's Public Address (PA) system is near the end of its useful life, is subject to failure of critical life safety components at any time, and parts have become very difficult to acquire. The head-end hardware, software, and cabling serving the airport's Flight Information Display System (FIDS) is also outdated and requires replacing to accommodate the BNA Vision program expansion and current and anticipated advances in technology. This project will replace the PA system in its entirety and upgrade the FIDS head-end to expand the system's capacity and provide technological upgrades to enhance the Nashville Airports Experience.

A Request for Proposals (RFP) was advertised on November 6, 2017 and November 9, 2017.

On December 5, 2017, four (4) responses were received. However, one (1) response was deemed non-responsive because they failed to meet the Small, Minority, Woman-Owned Business Enterprise (SMWBE) participation levels or provide acceptable good faith efforts. Three (3) responsive proposals were received, from Audio Communications Consultants, Inc. (ACCI), Ford Audio-Video Systems (Ford), and IDS.

The proposals were evaluated based on the following criteria:

- a. Mandatory Requirements
- b. Experience and Qualifications
- c. Project Approach
- d. Price
- e. SMWBE Participation

The selection committee determined that all three responsive firms were highly qualified and should be interviewed to demonstrate their proposed solutions.

The selection committee conducted interviews including demonstrations with ACCI, Ford, and IDS on February 6, 8, and 9, 2018, respectively. Interviews included additional questions regarding SMWBE; project approach; system technology and functionality; ease of use; up-front and ongoing costs, support, and maintenance requirements; and alternate pricing.

Below is a tabulation of the proposal prices, SMWBE participation, and evaluation scores including interviews.

Proposer	Base Proposal
Audio Communications Consultants, Inc. (ACCI)	\$ 4,124,087.00
Ford Audio-Video Systems (Ford)	\$ 3,056,611.00
International Display Systems, Inc. (IDS)	\$ 3,695,482.63

Proposer	Proposed SMWBE participation
Audio Communications Consultants, Inc. (ACCI)	33.92% M/WBE
Ford Audio-Video Systems (Ford)	21.02% MBE
International Display Systems, Inc. (IDS)	18.94% M/WBE

Proposer	RFP Evaluation Score Including Interviews	
Audio Communications Consultants, Inc. (ACCI)	451	
Ford Audio-Video Systems (Ford)	506	
International Display Systems, Inc. (IDS)	518	

The selection committee determined IDS to be the best qualified firm for the project, based on the following:

- IDS' proposal response demonstrated a thorough understanding of BNA's needs and the ability to provide a technologically advanced and comprehensive approach to upgrade both BNA's FIDS and PA systems.
- 2. IDS' proposal response demonstrated the ability to effectively create an easy-to-use and maintain platform for managing FIDS content and PA system integration with BNA's functional requirements.
- 3. IDS furnished and installed the existing FIDS; and their team is knowledgeable about BNA's implementation requirements and the existing FIDS hardware, software, and cabling installation to be upgraded.
- 4. Both the company and Project Manager have extensive recent experience on projects of equivalent size.
- 5. The company has established an effective history of technical competence and maintenance support with BNA.
- 6. Competitive pricing.

IDS' price was 12.5% lower than the engineer's, Arora, opinion of probable cost of \$4,223,989; and their price includes all aspects of the scope of work.

The SMWBE participation level set by the MNAA for this project was 9.47% MBE and/or WBE. IDS was able to obtain 18.94% by utilizing NRG Management Solutions and Access DNSI as subcontractors.

MNAA has evaluated the proposals and determined the proposal from IDS to be responsive and responsible and recommends award to International Display Systems, Inc.

Impact/Findings:

MNAA SMWBE Participation Level: 9.47% MBE and/or WBE

IDS's SMWBE Participation Level: 18.94% MBE and WBE

Anticipated Contract Start Date: April 2018

Duration of Contract: 270 calendar days

Contract Completion Date: January 2019

Contract Cost: \$3,695,500.00 NTE

Funding Source: 100% Bonds

Strategic Objectives:

- Safe and Secure MNAA Operations
- Maintaining the Nashville Airports Experience by meeting customer demands through new and expanded infrastructure
- Economically Sustained Services and Facilities

Options/Alternatives:

Do Nothing: The "Do Nothing" option requires MNAA to continue to maintain and repair the existing end of service life PA System and obsolete FIDS head-end. Increased costs and operational delays for repairs will continue to become more frequent with the aging equipment. Failure of the PA system will impair operation of the Airport's life safety fire alarm system.

A motion was made by Commissioner Doerge and seconded by Commissioner Farnsworth to recommend to the Board that it accept the IDS proposal for the FIDS & PA – Visual Systems Replacement project BNA; and authorize the Chair and President & CEO to execute the purchased goods and services contract. The motion carried by vote of 3 to 0.

B. Construction Contract for Reconstruct Taxiway Lima/Alpha Intersection, CIP 1702A

Ms. Holton briefed the GAOPE Committee on this item. Staff requested that the GAOPE Committee recommend to the Board that it accept the bid by Eutaw Construction Company, Inc. (Eutaw) for the Construction Contract for the Reconstruct Taxiway Lima/Alpha Intersection project at BNA and authorize the Chair and President & CEO to execute the construction contract.

Background:

The project consists of the full depth, full width reconstruction of the intersection of taxiways Lima and Alpha between Runway 2L/20R, the Runway 13/31 Runway Safety Area, and existing joints on Taxiway Lima West and Alpha North. 30-foot asphalt shoulders will be added in accordance with FAA Advisory Circular 150/5300-13A, Change 1, Airport Design, and all electrical infrastructure will be replaced.

The taxiway Lima/Alpha intersection is one of the busiest at BNA. It is part of the designated Aircraft Design Group V taxi routes for cargo and commercial passenger aircraft, such as British Airways' B787, as well as the Surface Movement Guidance & Control System (SMGCS) route. The current Pavement Condition Index (PCI) values in the area are between 53 and 68, indicating poor conditions. Furthermore, geotechnical

investigations performed in 2016 revealed poor subgrade conditions in the area. Analyses indicate that this pavement will deteriorate rapidly under the projected use of the Boeing 787 aircraft.

Topographical survey of the intersection obtained in 2016 revealed longitudinal grades on Taxiway Lima were out-of-standard with FAA Advisory Circular 150/5300-13A, Change 1, Airport Design, caused by Taxiway Alpha's shallow falling slope from the runway 13/31 edge. The proposed design corrects the longitudinal grade on Lima by lowering the center of the intersection by 10 inches.

An Invitation to Bid on the project was advertised on January 6, 2018 and January 11, 2018 and included one Base Bid Schedule.

On February 7, 2018 bids were received from Blakley Construction Services, LLC (Blakley), Eutaw, and Jones Bros. Contractors, LLC (Jones Bros.). Below is a tabulation of those bids:

Contractor	Base Bid	Disadvantaged Business Enterprise (DBE) %
Blakley	\$6,504,956.70	15.37% DBE
Eutaw	\$4,607,936.64	15.80% DBE
Jones Bros.	\$5,454,551.10	14.97% DBE

Below is a tabulation of the prices for asphalt received:

Bituminous Surface Course Price
\$130.40/TON
\$130.00/TON
\$97.50/TON

Eutaw's Base Bid was within MNAA's construction budget and exceeds the 14.69% DBE goal established for this project. Eutaw's DBE contractors include Jerry B. Young Construction, LLC and Rutherford Contracting, Inc.

Eutaw's Bid was 10.8% lower than the Engineer of Record, Garver's, opinion of probable construction cost of \$5,166,315.50 and 29.2% below the high bidder, Blakley.

MNAA and Garver have evaluated the bids and determined the bid from Eutaw to be responsive and responsible and recommend award to Eutaw Construction Company, Inc.

Impact/Findings:

MNAA DBE Participation Level: 14.69% DBE Eutaw DBE Participation Level: 15.80% DBE

Anticipated Contract Start Date: April 2018

Duration of Contract: 100 Calendar Days

Contract Completion Date: July 2018

Contract Cost: \$4,607,936.64

Funding Source: 100% PFC

Strategic Objectives:

Economically Sustained Services and Facilities

Safe and Secure MNAA Operations

Options/Alternatives:

Do Nothing: The "Do Nothing" option will result in continued deterioration of the asphalt pavement in the intersection of taxiways Lima and Alpha, which will negatively affect airfield operations.

A motion was made by Commissioner Farnsworth and seconded by Commissioner Doerge to recommend to the Board that it: accept the bid by Eutaw for the Construction Contract for the Reconstruct Taxiway Lima/Alpha Intersection project at BNA and authorize the Chair and President & CEO to execute the construction contract. The motion carried by vote of 3 to 0.

C. Professional Services Contract for Reconstruct Taxiway Lima East (T4 to B) - CIP 1807

Ms. Holton briefed the GAOPE Committee on this item. Staff requested that the GAOPE Committee recommend to the Board that it accept the statement of qualification by Garver, LLC (Garver) to provide engineering consulting services for the design of the Reconstruct Taxiway Lima East (T4 to B) project at BNA; authorize the Chair and President & CEO to execute the proposed professional services contract for the amount contained herein; and authorize and resolve that MNAA accept the discretionary grant from the Federal Aviation Administration (FAA).

Background:

Taxiway Lima is a full length parallel taxiway located on the north side of Runway 13/31 and provides east/west access across the airfield. Taxiway Lima East, between taxiways Bravo and Tango-4, was originally constructed of asphalt in 1984. The keel section was last reconstructed in 2005. The current Pavement Condition Index (PCI) values in this area are between 55 and 65 (Poor to Fair).

This contract consists of the design for the reconstruction of Taxiway Lima East between Taxiway Bravo and Taxiway Tango-4. 30ft shoulders will be added, where applicable, in compliance with FAA Advisory Circular 150/5300-13A, Change 1 – Airport Design. The total reconstruction area is approximately 300,000 square

feet. All airfield lighting, signage, and electrical infrastructure within the project area will be fully replaced with LEDs. The selected consultant will provide topographical survey, geotechnical investigation, preliminary and final design, bid phase services, and construction administration services. Design will be complete on schedule to advertise a completed bid package in July 2018. Design issues to be addressed include but are not limited to: construction safety and phasing, demolition, erosion control, grading, drainage, geometry, pavement design, pavement markings, and airfield electric design.

On November 3, 2017 and November 6, 2017, the MNAA published a Request for Qualifications (RFQ). On December 4, 2017, five Statements of Qualifications were received from AECOM Technical Services, Inc. (AECOM), Atkins North America, Inc. (Atkins); CHA Consulting, Inc. (CHA), Garver, and WSP USA, Inc. (WSP).

The evaluation selection committee evaluated the Statements of Qualifications based on the criteria below:

- 1) Comparable and recent experience.
- 2) Key personnel's professional qualifications and experience.
- 3) Qualifications and experience of subconsultants.
- 4) Understanding of the project's potential challenges and the sponsor's special concerns;
- Quality of projects previously undertaken and capability to complete projects without having major cost escalations or overruns;
- 6) DBE participation

The selection committee determined the following firms to be best qualified: Atkins, Garver, and WSP.

On February 1, 2018, the selection committee conducted interviews of these top candidates and their scores are listed below:

Firm	Score	Committed DBE Participation Goal
Atkins	585	8%
Garver	645	6%
WSP	593	6%

The selection committee determined Garver to be the most qualified firm for the Reconstruct Taxiway Lima East (T4 to B) project based upon responses to the following:

- 1) Ability to provide electrical support throughout the design and construction.
- 2) Procedure for quality control on expedited schedules.
- 3) Their understanding of the most challenging aspects of the project.
- 4) Internal SMWBE tracking and monitoring process.

All firms were well qualified, but the team from Garver demonstrated a good understanding of the needs of this particular project as well as experience with projects of similar scope.

The DBE participation level set by MNAA for this project was 5.58% DBE. Garver was able to obtain 6.04% DBE. Garver's DBE partner is Civil Infrastructure Associates, LLC.

The design team, as submitted to MNAA includes Garver, Terracon Consultants, Inc. and Civil Infrastructure Associates, LLC.

Impact/Findings:

MNAA DBE Goal: 5.58% Garver's DBE Goal: 6.04%

Anticipated Contract Start Date: March 22, 2018
Duration of Contract: 665 days
Contract Completion Date: December 2019

Contract Cost: \$624,951.00

Funding Source: 50% Federal and 50% PFC

Strategic Objectives:

Safe and Secure MNAA Operations

Economically Sustained Services and Facilities

Options/Alternatives:

Do Nothing: The "Do Nothing" option will result in continued deterioration of the asphalt pavement on Taxiway Lima East, which will negatively affect airfield operations.

A motion was made by Commissioner Farnsworth and seconded by Commissioner Doerge to recommend to the Board that it accept the statement of qualification by Garver to provide engineering consulting services for the design of the Reconstruct Taxiway Lima East (T4 to B) project at BNA; authorize the Chair and President & CEO to execute the proposed professional services contract for the amount contained herein; and authorize and resolve that MNAA accept the discretionary grant from the FAA. The motion carried by vote of 3 to 0.

D. Construction Contract for Reconstruct Taxiway Alpha South, CIP 1808

Ms. Holton briefed the GAOPE Committee on this item. Staff requested that the GAOPE Committee recommend to the Board that it accept the bid by Jones Bros. Contractors, LLC (Jones Bros.) for the Construction Contract for the Reconstruct Taxiway Alpha South at BNA and authorize the Chair and President & CEO to execute the construction contract.

Background:

The project consists of the full depth, full width reconstruction of Taxiway Alpha South (A1 to R3), including taxiways A1 and C1. Pavement geometry will be updated to current standards for a Group V Aircraft taxi route and 30-foot asphalt shoulders will be added in accordance with FAA Advisory Circular 150/5300-13A, Change 1, Airport Design, and all electrical infrastructure will be replaced.

Taxiway Alpha is a full length parallel taxiway located on the west side of Runway 2L/20R, providing north/south access across the airfield at BNA. The south half of Taxiway Alpha also provides airfield access for BNA's cargo and maintenance-repair-overhaul operators located on the west side of the airport, as well as several general aviation tenants. Records indicate that the pavement sections within the project limits were originally constructed of asphalt in 1977. MNAA completed various malignance activities and rehabilitation projects since construction, most recently in 2008. Current Pavement Condition Index (PCI) values in the area are between 56-60, indicating poor conditions. The current Taxiway Safety Area and Taxiway Object Free Area for Alpha South does not comply with the most recently published grading requirements for Group V Aircraft. The proposed design provides for updated geometry and strength to support Group V aircraft traffic.

An Invitation to Bid on the project was advertised on January 22, 2018, and January 25, 2018, and included one Base Bid Schedule.

On February 21, 2018, bids were received from Eutaw Construction Company, Inc. (Eutaw) and Jones Bros. Below is a tabulation of those bids:

Contractor	Base Bid	Small Minority and Women Owned Business Enterprise (SMWBE) %
Eutaw	*13,854,947.64	5.36% MBE and 7.81% WBE
Jones Bros.	\$9,855,354.33	8.62% MBE and 8.15% WBE

Below is a tabulation of the prices for asphalt received:

Contractor	Bituminous Surface Course (4" Thickness) Price
Eutaw	\$200/TON
Jones Bros.	\$93.18/TON

Jones Bros.' base bid was within MNAA's construction budget and exceeds the 5.32% MBE and 7.73% WBE participation level established for this project. Jones Bros. SMWBE contractors include Archangel Protective Services, Gibco Construction, McFall Sod & Seeding, Geotek Engineering Company, and Tennatee Services.

Jones Bros.' bid was 1.4% lower than the Engineer of Record's, Allen & Hoshall, opinion of probable construction cost of \$9,995,377.08 and 28.9% below the high bidder, Eutaw.

MNAA and Allen & Hoshall have evaluated the bids and determined the bid from Jones Bros. to be responsive and responsible and recommend award to Jones Bros. Contractors, LLC.

Impact/Findings:

MNAA SMWBE Participation Level: 5.32% MBE and 7.73% WBE Eutaw SMWBE Participation Level: 8.62% MBE and 8.15% WBE

Anticipated Contract Start Date: April 2018

Duration of Contract: 230 Calendar Days
Contract Completion Date: November 2018
Contract Cost: \$9,855,354.33
Funding Source: 100% PFC

Strategic Objectives:

- Economically Sustained Services and Facilities
- Safe and Secure MNAA Operations

Options/Alternatives:

Do Nothing: The "Do Nothing" option will result in continued deterioration of the asphalt pavement in the intersection of Taxiway Alpha South, which will negatively affect airfield operations and prohibit Aircraft Design Group V taxi routes, such as British Airways' B787.

A motion was made by Commissioner Farnsworth and seconded by Commissioner Doerge to recommend to the Board that it accept the bid by Jones Bros. for the Construction Contract for the Reconstruct Taxiway Alpha South at BNA and authorize the Chair and President & CEO to execute the construction contract. The motion carried by vote of 3 to 0.

IV. Adjourn

There being no further business before the GAOPE Committee, Chair Freeman adjourned the meeting at 9:25 a.m.

Aubrey B. Harwell, Ull
Board Secretary

★ METROPOLITAN NASHVILLE AIRPORT AUTHORITY ★

March 14, 2018 – Minutes of the Joint Meeting of the MNAA Finance, Administration, and Properties Committee and MPC Finance/Administration/Properties

Committee



Date: March 14, 2018

Place: Nashville International Airport

Nashville, Tennessee

Time: 9:00 a.m.

Committee Members Present:

Trey Harwell, Chair; Bill Freeman, Vice Chair;

Amanda Farnsworth, Bobby Joslin, and

Christy Smith

Committee Member Absent:

Mayor's Representative, Matt Wiltshire

Others Present:

Doug Kreulen and Cindy Barnett

Call to Order

Chair Harwell called the Metropolitan Nashville Airport Authority (MNAA) and MNAA Properties Corporation (MPC) Finance, Administration, and Properties (FAP) Committee meeting to order at 9:30 a.m., pursuant to Public Notice dated March 9, 2018.

II. Approval of Minutes

Chair Harwell stated that the minutes from the February 14, 2018 meeting of the FAP Committee were under review and approval would be deferred to the next meeting.

III. Item for Approval

Chair Harwell stated that there were no items for approval.

IV. Item for Acceptance

Chair Harwell stated that there were no items for acceptance.

V. Information Items

A. MNAA Retirement Committee Appointments

President Kreulen reported that in accordance with the Retirement Plan for Employees of the Metropolitan Nashville Airport Authority, as amended and restated effective July 1, 2008, Section 7.7 and 8.1 and MNAA Resolution 2007-19, the following personnel were appointed to the MNAA Retirement Committee:

Voting Members

Marge Basrai, CFO, Chair
Doug Kreulen, President and CEO
Ted Morrissey, AVP, Legal Services
Tom Bibb, AVP, Operations and Maintenance
Delphia Murphy, DPS
John White, Maintenance
Vacant, AVP, Human Resources

Non-Voting Advisory Member

Janice Mullinix, MNAA Retiree

Additional Contributors

Terri Barnhart, Paralegal, Committee Secretary Laurie Adams-Temple, Wells Fargo, Representative Shelley Farmer, Wells Fargo, Account Manager Laura Stewart, BPS&M, Consulting Actuary

President Kreulen stated that additional contributors may be asked to participate as determined by the MNAA Retirement Committee.

This item was presented for informational purposes and required no Committee action.

B. CFO Investment Update

Ms. Basrai provided an update on MNAA investments. She stated that at the last FAP Committee meeting, we presented the December 31, 2017, quarterly investment summary. On December 31, 2017, 64% of our funds were invested with Goldman-Sachs agency treasury money market funds.

At the encouragement of the FAP Committee, we made two additional transfers to Goldman-Sachs: \$25M on February 19, 2018 and \$25M on March 7, 2018.

As of March 7, 2018, the Authority has 78% of its cash invested with Goldman-Sachs.

The next quarterly summary will be for the quarter ending March 31, 2018.

Ms. Basrai reported that PFM's investment review is due March 31, 2018 and will include a cash flow analysis, policy update recommendations, and investment strategy recommendations.

President Kreulen added that he and Ms. Basrai had met regarding investments and budget. He further stated that the update presented was required by the Bylaws, which state that any time there is a significant transfer of money, the President will inform the Board of the transaction. Staff began with approximately 20% invested and has been working to get MNAA funds invested to the current percentage. Other considerations include requirements of bond covenants to keep funds in the designated accounts.

Ms. Basrai stated that cash equivalents are earning interest above the fees being charged, but not what it could be earning in a money market account. She also pointed out that there are a number of accounts with SunTrust, and PFM will try to identify which accounts are required by the Master Bond Ordinance. They are looking at each account to determine why we have the accounts, the history behind it, and which accounts can be closed or merged together.

Commissioner Freeman commended Ms. Basrai and staff for their work to ensure MNAA funds were invested and stated that \$72 million was still a lot of cash and cash equivalents as well as being charged fees for holding these funds is troubling. He stated that MNAA needed to get as much invested as possible and prudent. Staff can advise on the amount needed to have on hand, but these funds are only 24 hours away.

President Kreulen stated that PFM is also to provide recommendations for any modifications to MNAA's Investment Policy which may not be ready for the April Board but definitely by May. Staff should be able to present a new Investment Policy to the FAP Committee and Board which will give a few more options to do what the Board is encouraging staff to do.

This item was presented for informational purposes and required no Committee action.

C. CONRAC Refinancing Update

Ms. Basrai stated that as of February 21, 2018, PFM estimated that MNAA would have \$3.8 million of present value savings if the \$54.2 million of CONRAC Bonds are refunded.

On February 26, 2018, MNAA issued an RFP to solicit underwriting services and/or direct placement services from banks for the refunding with an anticipated schedule for RFP Proposals due back March 19, 2018; FAP Committee approval on April 11, 2018, Board approval of the transaction on April 18, 2018, and closing of Bonds by May 31, 2018. Ms. Basrai noted that direct placement services would be quicker and more cost effective.

This item was presented for informational purposes and required no Committee action.

V. Adjourn

There being no further business brought before the FAP Committee, Chair Harwell adjourned the meeting at 9:41 a.m.

Aubrey B. Harwell III, Board Secretary