

# **DEKALB COUNTY PUBLIC BUILDING COMMISSION**

A MUNICIPAL CORPORATION AND BODY POLITIC ORGANIZED PURSUANT TO THE "PUBLIC BUILDING COMMISSION ACT." <u>ILLINOIS REVISED STATUTES 1977</u> CHAPTER 85, SECTIONS 1031 THROUGH 1054 CHAPTER 85, SECTIONS 1031 THROUGH 1054

AND CURRENTLY UNDER ILLINOIS COMPILED STATUTES 50 ILCS 20/1 et seq.

# **MEETING OF MONDAY, JULY 11, 2011**

A regular meeting of the Board of Commissioners of the DeKalb County Public Building Commission (hereinafter "Commission") was held Monday, July 11, 2011, at 8:00 A.M. in Conference Room East of the DeKalb County Administration Building, pursuant to written notice to each Commissioner as required by the By-Laws.

#### **ROLL CALL**

The meeting was called to order by Chairman Matt Swanson at 8:00 a.m. Commissioners present were Chairman Matt Swanson, Dr. Richard Baker, Mr. George Daugherty, Mr. Larry Lundgren and Mr. Mike Larson. Also present were Mr. Gary Hanson, Treasurer, Mr. Matt Bickel of Wold Architects, Mr. Jim Scheffers, Facilities Manager and Ms. Mary Simons, Secretary.

# **APPROVAL OF MINUTES**

Chairman Swanson called for a motion to approve the minutes for the last meeting held Tuesday, April 12, 2011. Dr. Baker made a motion to approve the minutes. Mr. Lundgren seconded the motion. The motion was unanimously approved.

#### APPROVAL OF AGENDA

Dr. Baker requested that a discussion of the Financial Statement and the 2010 Audit Report be added to the agenda. Chairman Swanson stated that it would be added as item number 5 and item number 6 would become Adjournment. Mr. Daughterty made a motion to approve the agenda as amended. Mr. Lundgren seconded the motion and it was unanimously approved.

#### **COMMUNITY OUTREACH BUILDING**

WALL CRACKING: Mr. Bickel began the discussion by stating that at the last meeting the Commissioners requested that a forensic engineer be consulted to assist in resolving the issues with the cracking in the masonry wall at the COB. Three proposals were received 1. Inspec at \$3,880. 2. Wiss, Janney, Elstner Associates, Inc. at \$8,000 and 3. Exponent at \$16,500. Mr. Bickel stated that in consultation with Chairman Swanson and Gary Hanson, and due to the requested scope of the proposal, and noting the low bidder did not meet specifications, Wiss, Janney, Elstner Associates, Inc (WJE) was selected. (A copy of that report is attached as Exhibit "A".) Chairman Swanson explained that he, Gary Hanson and Matt Bickel reviewed all three reports and after discussion had independently concluded to choose WJE. Mr. Bickel said that prior to the report, three issues were defined relating to the construction of the masonry walls, specifically the cast stone walls. The first item was the mortar type that was used. It was suspected, based on reports submitted and a suggested potential cause for the cracking by the cast stone manufacturer, that type "S" mortar was used. The second item was the use of horizontal reinforcing where it was believed that the manufacturer's suggested reinforcing had not been installed in the walls which would relate to the issue of shrinkage of the units. Item three is the number of expansion joints that were installed where it was found that a deficient number of vertical expansion joints were installed as per the drawings and specifications. Mr. Bickel stated those were the three items that WJE responded to as well as providing their analysis and recommendations.

**Mortar Type:** Mr. Bickel explained that based on the component parts of the mortar tested by WJE, it was concluded that a Type "N" mortar was used which was one of the acceptable types for use with this material and negates our assumption that Type "S" was used.

**Horizontal Reinforcing:** In addressing the horizontal reinforcing, WJE implemented the use of metal detectors on the exterior walls. On page 7, item number 10, their report states "The metal reinforcing survey indicated that horizontal bed joint reinforcement was not used. Horizontal reinforcement is specified in the Typical Masonry Wall Base detail on Sheet 31003 by Wold Architects and Engineers and is shown to occur between the fifth and sixth course from the foundation wall." Mr. Bickel added that the WJE report did find that the horizontal reinforcing was not installed.

DeKalb County Public Building Commission Monday, July 11, 2011 Page 2

**Expansion Joints:** Regarding the expansion joints, Mr. Bickel explained that the WJE report states that "Within this wall type, movement joints are located at a maximum of approximately 24 feet on center and more typically approximately 10 feet on center." Mr. Bickel added that within a wide parameter they do fall within the minimum requirement of spacing which was called out in the drawings and specs but does not address the fact that there were several intermediate ones that were not installed as they should have been. Other than a few minor comments the WJE report does not further address the vertical expansion joints as being a major item.

At this time Mr. Bickel read the eleven items indicated in the "Conclusion" portion of the WJE report. (See Exhibit "A")

Regarding item #9 Chairman Swanson asked if the specs had called for "slip planes" and also do they call for "bed joint reinforcements". Mr. Bickel responded that they did not call for them. He added that he consulted with the WJE engineer and asked "because this is a shrinkage and cracking issue, should we have expected some sort of cracking or shrinkage right at that joint between the two dissimilar materials. Also if they are really moving should there be cracking where the slip planes would otherwise be installed." Mr. Bickel said the engineer's response was "maybe" and therefore inconclusive. Mr. Bickel added that in an email the engineer stated "In answer to your question, generally when materials with dissimilar growth and shrinkage characteristics are used within a masonry veneer there can be horizontal cracking with wide-spacing of vertical joints, closely spaced cracking without horizontal cracking or a combination of both of these. Where horizontal cracking occurs much of the stress that causes vertical cracking is relieved the same as if a slip plane were provided. Without horizontal cracking concrete masonry is under tension which results in vertical cracking." Mr. Bickel added that the engineer is suggesting that in absence of the slip plane and in the absence of the joint cracking where there would have been a slip plane is the reason the cracking being observed is vertical cracking instead of horizontal cracking. In responding to the question regarding "bed joint reinforcement" Mr. Bickel stated that the specs had called for them but according to item 10 of the WJE report they were not installed.

Mr. Larson stated that in his opinion there are two problems that need to be addressed. One being the choice of questionable design in the choice of materials are in a sense incompatible. The second problem appears to be a lack of oversight of the installation which would have been mitigated if all of the specified items would have been appropriately done. However, he think there would still have been cracking because one material is expanding and one is shrinking unless there had been a definitive break of some sort of metal barrier that it could not have migrated from one to another. Further lengthy discussion regarding design and construction took place which prompted the commissioners to ask which of the two options presented by WJE should be used. Mr. Bickel responded by explaining that Option #1 is a lower impact lesser cost of the two options. It would involve removal of the cracked masonry and replacing it with new and also creating a horizontal slip plane joint at the top of the concrete, creating a place to releive the stress between the concrete masonry below and the clay masonry above to allow each material to act independently of each other. The caveat for this option is that monitoring would have to be done since the same material is in place and future cracking could occur. He added that if option #1 is used, the additional vertical expansion joints that were not all installed originally should be installed to relieve stress from future expansion or shrinkage. A cost estimate for this option is approximately \$150.00 per cracked unit with 116 locations and additionally cutting in the joint option with an approximate total cost of \$20,000 to \$25,000. Option 2, which is more involved, calls for the complete removal of the masonry from 3 1/2 feet down and replacing it with clay brick. It is recommended to also install isolation or slip joints between the two and to further install lateral type expansion joints to make sure the new brick is properly tied back to the wall to conform with the way the top of the wall had been constructed. Mr. Bickel said there are 500 lineal feet, approximately 3 ½ feet tall equaling 1,750 square feet with an estimate of \$50.00 per square foot to remove and replace which would be a total of approximately \$90,000 to \$100,000.

Dr. Baker asked about the recommended accent band referred to in the report. Mr. Bickel responded that just below the roof line there is another one-course accent band of the same material. None of those bricks were cracked but there was cracking in the mortar. It was recommended that every 16 inches the mortar joint should be cut out and replaced with a caulked joint.

In responding to Mr. Larson's earlier comments regarding the design and construction, Mr. Bickel made the following statement, "Obviously I wish I could sit here today and say the wall was designed and detailed with a slip plane. Because if it had been constructed that way, I would be saying the design was good and the issues are independent from the design. I can't do that because it was not designed with that slip plane. It was something certainly from the design standpoint of the wall that we need to, in whatever way we can, be accountable for that portion of it. There certainly are other items that are there in the Rockford Structures' court in terms of non-conformance, but I think it would be great if the slip plane were not in play as a potential issue. Its' not in the specs and communicated in any way that it should have been done." It was at this point and after further questions and discussion of Mr. Bickel's statements by the Commissioners, that Mr. Lundgren made a motion to recess the meeting and move to an executive session to discuss possible litigation and

how to proceed with resolving these issues. The motion was seconded by Mr. Larson. Motion carried unanimously. The time was 9:00 A.M.

DeKalb County Public Building Commission Monday, July 11, 2011 Page 3

A motion was made by Mr. Daugherty to reconvene the regular meeting of the PBC at 9:30 A.M. The motion was seconded by Mr. Lundgren. Motion carried unanimously.

#### **PENDING LITIGATION:**

Mr. Hanson reported on the lawsuit with Maryott. Mr. Hanson stated that Mr. John Farrell A.S.A provided an email update as follows: The plaintiff rested their case and we made a motion for a direct finding at the close of the plaintiff's case. We supplemented that with a written brief that the gist of the argument on behalf of the PBC is that you cannot serve a mechanics lien if you have not fulfilled the contract. Judge Cargerman will make a ruling on July 21, 2011. If the motion is denied the trial will proceed. Rockford Structures has also made such a motion on the other counts. The email also stated I that we have and indemnification agreement with Rockford Structures which further protects us. Mr. Hanson added that the Judge assigned to this case is only here on Thursday each week which is the reason this matter is taking so long to resolve.

#### SINK HOLE:

Mr. Scheffers reported that Rockford Structures was at the site of the sink hole last Thursday and filled the hole with gravel and compacted it down. Mr. Lundgren asked if they are going to leave gravel for a period of time. Mr. Scheffers said they were going to give it time to settle. Mr. Swanson added that Wagner Excavating was also there on Friday and added grout to the area.

## FINANCIAL STATEMENT AND 2010 AUDIT REPORT.

Due to a previous appointment Dr. Baker left the meeting at 9:25 A.M., therefore, the discussion requested by Dr. Baker was postponed until the next PBC meeting

#### **ADJOURNMENT**

Mr. Lundgren made a motion to adjourn the meeting . The motion was seconded by Mr. Daugherty. Meeting adjourned at 9:50 A.M.

Matt Swanson, Chairman

Commissioner	Expiration of Term	<u>Office</u>	Original Appointment
Mr. Matt Swanson	September 30, 2012	Chairman	September 19, 2007
Dr. Richard Baker	September 30, 2011	Vice Chairman	September 30, 2005
Mr. George Daugherty	September 30, 2013		September 30, 2008
Mr. Larry Lundgen	September 30, 2014		April 2, 2010
Mr. Mike Larson	September 30, 2015	Nov	ember 17, 2010

## Non Voting-Commissioner:

Ms. Mary G. Simons	September 30, 2011	Secretary	March 7, 2000
Mr. Gary H. Hanson	September 30, 2011	Treasurer	February 18, 1984