MINUTES OF THE SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY-EAST BOARD MEETING THURSDAY, APRIL 19, 2018

The regular monthly Board Meeting of the Southeast Louisiana Flood Protection Authority-East (Authority or FPA) was held on April 19, 2018, in the Second Floor Council Chambers, Joseph Yenni Building,1221 Elmwood Park Blvd., Harahan, Louisiana, after due legal notice of the meeting was sent to each Board member and the news media and posted.

Mr. Hassinger called the meeting to order at 11:10 a.m. and led in the pledge of allegiance. Mr. Kemp called the roll and a quorum was present:

PRESENT:

Lambert J. Hassinger, Jr., President Richard A. Luettich, Jr., Vice President Mark L. Morgan, Treasurer G. Paul Kemp, Secretary Clay A. Cosse Quentin D. Dastugue Andrew J. Englande, Jr. Herbert I. Miller

ABSENT:

Jason P. Latiolais

ADOPTION OF AGENDA:

Mr. Hassinger advised that agenda Items XII. A.2, A.3, A.4, A.5, A.7 and A.8 are being deferred as work is on-going on these items. A motion was offered by Mr. Miller, and seconded by Mr. Luettich, to amend the agenda to add the following item: Motion to encourage the U.S. Army Corps of Engineers (USACE) to give serious consideration to the installation of a trench drain at the Bellaire Drive seepage site. It was noted that discussion of the issue would take place under Agenda Item XII.B.4. Mr. Hassinger called for public comments on the amendment. There were no public comments. The Board unanimously adopted the amendment of the agenda by a roll call vote. The motion to adopt the amended agenda, offered by Mr. Miller and seconded by Mr. Luettich, was unanimously adopted.

RESOLUTION NO. 04-19-18-01 - APPROVAL OF MARCH 15, 2018 BOARD MEETING MINUTES

On the motion of Mr. Morgan, Seconded by Mr. Luettich, the following resolution was offered: **BE IT HEREBY RESOLVED,** that the Southeast Louisiana Flood Protection Authority-East approves the minutes of the Board Meeting held on March 15, 2018.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Cosse, Mr. Dastugue, Mr. Englande, Mr. Kemp Mr. Luettich, Mr. Miller and Mr. Morgan NAYS: None ABSENT: Mr. Latiolais

EMPLOYEE RECOGNITION AND APPRECIATION:

Mr. Hassinger explained that each month the Board takes the opportunity to recognize and thank a member of the staff who is instrumental in making the FPA a success. The success of the Authority in meeting its mission, doing what it says it is going to do and carrying out the principals that are important to the FPA depends on the day-to-day performance of the FPA team members. Each month the Board recognizes a staff member who exemplifies the best in the Authority. The Board recognized Carol Purcello and thanked Ms. Purcello for her contributions to making the FPA a success.

Ms. Purcello is the Administrative Assistant 3 for the East Jefferson Operations and Maintenance Division of the Flood Protection Authority. Ms. Purcello joined the East Jefferson Levee District (EJLD) on March 3, 1999 as a Clerk III. She advanced to Administrative Coordinator I on January 17, 2005, Mobile Equipment Operator Light on April 20, 2006, Mobile Equipment Operator 1 on October 31, 2006 and was promoted to Administrative Assistance 3 on August 14, 2008.

Ms. Purcello is known throughout the FPA for her willingness to help anyone who needs assistance. She is always kind, courteous and proficient, and truly exemplifies the Authority's values. She is clearly a team player who values all members of the Flood Protection Team. Her actions demonstrate her commitment to the mission of the Flood Protection Authority.

A submittal by a member of the EJLD Police Department for inclusion in GEM's (Going the Extra Mile) section of the Employees' newsletter demonstrates her willingness as a member of the Operations and Maintenance staff to do whatever she can to help anyone in any part of the organization. The submittal reads: "Ms. Carol Purcello has always been a go to person for EJLD Police. She is always helping us with internal matters and does a lot of work behind the scenes. I personally rely on her for assistance and she never refuses. She is an angel of a person and I'm glad to have such a great relationship with her. Ms. Carol always goes the extra mile. She is a true GEM and I want to personally thank her for all her cooperation and assistance. Sincerely submitted, " Captain Terry Durnin.

Mr. Hassinger presented a Certificate of Commendation to Ms. Purcello for her exemplary service and commitment to the FPA.

OPENING COMMENTS BY PRESIDENT AND COMMISSIONERS:

Mr. Luettich expressed his appreciation for the FPA's employees' newsletter.

PUBLIC COMMENTS:

Evelyn Riehm stated that mulching, composting and tree dumping are not permitted uses on the Harahan batture under Harahan Ordinance 1333. Line 6 of the ordinance states that no manufacturing shall be done on site. Wood Materials (Wood) chose to break the Harahan batture law and to sue the City of Harahan because Mayor Tina Miceli cited Wood for illegal composting two years ago. Wood also totally ignored its LA Department of Agriculture and Forestry B&P permit requirement that requires the facility to comply with all applicable Federal, State and local regulations and/or ordinances. In 2012, the former Mayor of Harahan informed Pierce Wood of the Harahan batture law. Ms. Riehm advised that the new court date for Wood Materials vs. the City of Harahan is Tuesday, April 24, 2018, and invited Board members to attend. She added that Wood could move its facility to one of its four other locations where the operation would be legal, but instead choses to fight for the present location, which is adjacent to a large Harahan residential community and protected by the Harahan batture law.

John Riehm commented that all State agencies should be required to contact their local governments in order to be informed about current laws so that a permit is not given for an activity that is illegal in a particular area. He stated that Wood's new concrete haul road along the river is completed. Wood is only using the haul road along the levee for the illegal compost facility and for front end loaders and 50 and 60 ton excavators. He asked, when would Wood stop using the old haul road and only use the concrete road?

Derek Boese, Chief Administrative Officer (CAO), advised that he received a notice yesterday from Wood informing him that Wood will be moving the remainder of its facility next week and anticipated completion by May 1st. Wood anticipated that only the new haul road would be used after May 1st. Wood also advised that they will be holding an open house for the general public during the first part of May.

PRESENTATION: None.

COMMITTEE REPORTS:

Finance Committee: Mr. Morgan reported that the Finance Committee met prior to the Board meeting and considered the following items:

- The Lake Borgne Basin Levee District's (LBBLD) budget/financial problems were discussed. Some of the issues are being explored. The Committee anticipated having additional information at the May Board and Finance Committee meetings, which will be held in St. Bernard.
- Recertification of the East Jefferson Levee District's (EJLD) current millage rate.
- Permanent Canal Closures and Pumps (PCCP) property and boiler/machinery coverage If the FPA determines that the PCCP should be insured for its current

value (\$130 million), the estimated premium is \$390,000 (30 cents per \$100 of coverage). The FPA is evaluating for further action the amount of coverage that is necessary and practical, deductibles and partial self-insurance options.

• The Committee discussed and recommended approval of the assignment of an oil, gas and mineral lease.

Operations Committee: Mr. Miller reported that the Operations Committee met prior to the Board meeting and considered the following items:

- The Committee recommended that the Board award the contract for the NASA Levee Repairs to the low bidder, Southern Delta Construction. The bid submitted by Southern Delta Construction was substantially lower than the other bids. It was noted that Southern Delta Construction had not previously performed work for the FPA; however, its bid was in order.
- The Committee deferred discussion of the proposed increase to the not to exceed cost of the levee lift portion of the LPV 109.01a and 111.01 Armoring/Levee Lift Projects since the USACE had not yet provided the amount of the increase.
- The Committee recommended approval of the proposed contract modification for the construction of the EJLD Safe Room and Consolidated Facility for additional waterline and stormwater line work.
- The Committee participated in an extensive discussion and received a detailed presentation on the seepage that is occurring at Bellaire Drive. The FPA's consultant, staff and USACE representatives participated in the discussion. Mr. Miller explained that the Committee's discussion led to his earlier motion to amend the agenda to include a motion to express the FPA's concern and encourage the USACE to install the trench drain for the seepage.

Coastal Advisory Committee: Mr. Kemp advised that the Coastal Advisory Committee did not meet during the past month.

REPORT BY CHIEF ADMINISTRATIVE OFFICER: Derek Boese, CAO, reviewed the highlights of his report:

- Regionalization efforts are continuing. The Hurricane Season All-Hands Meeting is tentatively scheduled for May 17th, which will coincide with the I-Storm Peer Review. A standard numbering system for floodgates has been implemented across the FPA. The Orleans floodgate crew is being transitioned to take over the smaller floodgates in East Jefferson and St. Bernard. Standard FPA decals will be placed on all Authority vehicles. Signage is being developed for safety purposes and to identify FPA maintenance crews.
- Goals/Culture Initiative Documents were disseminated in the November/December timeframe on the culture change initiative and organizational goals. The documents are being reviewed on a quarterly basis. Senior staff and the Culture Change Group met separately in April to discuss the status of the initiative and goals. An addendum will be issued for each document and circulated.

- Emergency Operations The Emergency Operations Manual is currently being updated. An item will be placed on the May Board agenda for approval of the manual. The manual will be a consolidated regional document and will include lessons learned from Hurricane Nate. The Franklin facility safehouse conference room is being upgraded to serve a more functional role in emergency operations. The Port of New Orleans has agreed to handle all contacts for its tenants. The Non-Flood Protection Asset Management Authority (NFA) will have a dedicated seat/phone line and representative in the FPA's Emergency Operations Center (EOC) and will handle all of its tenant coordination. Previously, FPA staff handled tenant notifications/coordination activities for the two entities. FPA staff met with St. Bernard Parish President McInnes and his staff to provide an update on the Hurricane and Storm Damage Risk Reduction System (HSDRRS) and pump station readiness for the storm season. FPA staff will reach out to leadership for Orleans and Jefferson Parishes to offer the same briefing.
- High river The Mississippi River level is currently at +14.5-ft. at the Carrollton Gage. At this time FPA technical staff is inspecting the levee three times per week and levee district police are performing daily patrols. To date no significant issues have been discovered. The high river level also increased the workload for FPA staff with regards to permit monitoring and waivers granted by the USACE.
- PCCP The USACE could turn the PCCP over to the FPA as early as April 20th. Punch list items are currently being finalized. FPA staff will continue to work any remaining issues after the USACE issues the Notification of Contract Completion (NCC). Two remaining issues are the fire suppression system (dry versus wet) and automation for louvers. Seven of the eight PCCP staffing positions are filled or will be filled by May 1st, which includes two internal promotions/details. The FPA's comments on the draft Operations and Maintenance and Water Control Manuals were submitted to the USACE and Coastal Protection and Restoration Authority (CPRA). The USACE agreed to provide post-turnover support for the PCCP. A USACE construction site staffer and a contractor's representative will be available on site for three months post turnover and off site support will be provided for six months. The FPA requested that the six month duration be extended through November 30 (the end of hurricane season).
- Engineering/Operations The Security Assessment is still in progress. The access control plan and equipment have been standardized. The EJLD Safe Room and Consolidated Facility and Orleans Levee District (O.L.D.) Police Complex, which are currently under construction, will be modified to accommodate the standardized plan and equipment. A single card will be issued for access throughout the FPA with permissions managed by the Information Technology (IT) Department. The USACE's annual inspection is on-going due to weather delays. To date no significant issues have been found. The Semi-Annual Report was submitted on schedule to the CPRA on April 16th. Third party inspections by the FPA's consultant are on-going. The consultant's inspection will take place along the Mississippi River Levee in Orleans Parish.

- The status of the FPA's Requests to the USACE for Technical Assistance on the following items were reviewed:
 - LPV 149 Caernarvon Sector Gate: Hydraulic Oil Tanks and Cover: USACE PM reviewing deficiency memo
 - LPV 149 Caernarvon Sector Gate: Vibrations in upstream sector gate, dive inspection scheduled week of April 23rd
 - LPV 146 Monolith Rotation: USACE awaiting AE response on pile analysis during design
 - IHNC 01 Seabrook fender paint system: USACE PM reviewing deficiency memo
 - IHNC 02 Bypass Barge Gate chain: USACE PM working with USACE Counsel on reimbursement
 - IHNC 01 Hydraulic cylinders vibration: USACE PM working with USACE Counsel on reimbursement
 - o LPV 145/146 Monolith Movement: USACE Engineering analyzing settlement
- Armoring The following update was provided:
 - EJLD Lakefront: In progress
 - Reach 1 (Duncan): Red Zone March 21. Anticipate completion mid/late summer.
 - Reach 2/3 (Suburban-Duncan): Working Elmwood-Williams. Erlanger Ramp complete.
 - Reach 4/5 (Bucktown-Suburban): Working vicinity Causeway for ramps and High Performance Turf Reinforcement Matting (HPTRM). Lake Villa and Severn ramps complete.
 - New Orleans East: In progress
 - LPV 109/109 west of I-10: Contractor working punch list items
 - LPV 109.02: USACE advertisement in progress. 690 day duration
 - LPV 111: USACE opens bid for levee lift on April 23rd. 620 day duration.
- Finance The Legislative Auditor approved separate audits for the FPA and NFA. All employees are enrolled in the ADP timeclocks and training is underway. Implementation will occur over the next two payroll cycles. The Finance Department is taking over the cash management of police details and the implementation process is in progress. The vendor consolidation analysis has been completed. Use of vendors will be evaluated to achieve cost savings and produce efficiencies. The FPA's Grants Manager is drafting a Request for Proposals for security cameras to be funded by a Homeland Security Grant received by the O.L.D. and EJLD.
- Information Technology (IT) Kiosk work stations will be set up by May 1st at all locations in order to provide computer access for all employees. A pilot program will

commence next month on the use of Board Room tablets in order to reduce paper. IT is working with other FPA departments on the EOC upgrades, SCADA system for the PCCP and ADP timekeeping. The IT Department will take the lead for security, sensors, gages and system integration across the FPA.

- New Facilities The O.L.D. Police Complex is on schedule for completion in August, 2018. The EJLD Safe Room and Consolidated Facility construction has been delayed due to the high river level and is currently estimated to be completed in December, 2018.
- I-Storm Peer Review I-Storm members will be in New Orleans from May 12 21, 2018. The I-Storm team will peer review the IHNC Surge Barrier Sector and Barge Gates, Bayou Bienvenue Vertical Lift Gate and Seabrook Complex. As of today, eleven European members have confirmed attendance. Two USACE staff members and FPA staff will participate in the process. I-Storm has completed its agenda. I-Storm team members will provide a report on the peer review process at the May 17th Board meeting and present the final report on May 21st at the Franklin Facility. The I-Storm exercise will provide a thorough external review of the aforementioned major structures, as well as their operations and maintenance.
- Human Resources Shannon Fazande advised that the Fazande Consulting team (Fazande) is ahead of schedule on several HR initiatives. She provided an update on the following initiatives:
 - Fazande is ahead of schedule on the ADP Workforce Now implementation (a system that allows automation of certain on-boarding features and speaks to payroll).
 - The structure for HR has been expedited by about three weeks in terms of a point of contact for each function of the organization.
 - Fazande is on task with its on-boarding and orientation revisions and has begun improving the recruiting function of the organization.
 - Fazande has started work and is ahead of schedule on the handbook and policy analysis.
 - Fazande has evaluated all of the new hire documents and is putting together the on-boarding packets for new hires.
 - Fazande implemented meetings with HR staff and department heads to ensure synergy and communications between the departments and to determine how HR can better serve the departments.
 - Fazande is gearing up for emergency preparedness season, planning for the performance evaluation season, and gearing up for the planning of open enrollment in October.
 - Fazande started implementing training specific to the HR team. The HR team members are being provided with laptops for mobility and to allow the HR team members to meet with different groups in different locations.

Mr. Luettich asked where in the process is the hiring of a HR Director. Ms. Fazande responded that the process of hiring a new HR Director will probably

begin in the second month of Phase 2 (in about three months). She recommended that some of the systems be built and put in place first, and then used as training for the incoming HR Director. She also advised that she participated in a ride along with maintenance staff. Fazande will begin implementing ride alongs for HR team members and shadowing the departments that they will support in order to understand the dynamics of the organization and provide better support from recruiting to off-boarding.

NEW BUSINESS:

RESOLUTION NO. 04-19-18-02 – EJLD MILLAGE CERTIFICATION

Mr. Hassinger read aloud the resolution in its entirety. Kelli Chandler, Regional Finance Director, advised that the resolution provides for a recertification of the EJLD's current millage rate. Mr. Kemp conducted a roll call vote on the resolution.

On the motion of Mr. Luettich,

Seconded by Mr. Morgan, the following resolution was offered:

BE IT RESOLVED, that the following millage(s) are hereby levied on the 2018 tax roll on all property subject to taxation by the Southeast Louisiana Flood Protection Authority-East on behalf of the East Jefferson Levee District:

MILLAGE

East Jefferson Levee District 4.01 mills

BE IT FURTHER RESOLVED that the proper administrative officials of the Parish of Jefferson, State of Louisiana, be and they are hereby empowered, authorized, and directed to spread said taxes, as hereinabove set forth, upon the assessment roll of said Parish for the year 2018, and to make the collection of the taxes imposed for and on behalf of the taxing authority, according to law, and that the taxes herein levied shall become a permanent lien and privilege on all property subject to taxation as herein set forth, and collection thereof shall be enforceable in the manner provided by law.

The foregoing resolution was read in full, the roll was called on the adoption thereof, and the resolution was adopted by the following votes:

 YEAS: Mr. Cosse, Mr. Dastugue, Mr. Englande, Mr. Kemp, Mr. Luettich, Mr. Miller and Mr. Morgan
 NAYS: None
 ABSTAINED: None
 ABSENT: Mr. Latiolais

RESOLUTION NO. 04-19-18-03 - AUTHORIZING THE ASSIGNMENT OF BOPCO, LLC AND TBP HOLDINGS, LLC MINERAL LEASES TO TIME ENERGY, ET AL

Mr. Morgan advised that the Finance Committee reviewed the requested assignment and recommended Board approval.

On the motion of Mr. Morgan,

Seconded by Mr. Luettich, the following resolution was offered:

WHEREAS, BOPCO, LLC and TBP Holdings, LLC (collectively "BOPCO") currently hold leases for oil, gas and other liquid or gaseous minerals (State Agency Lease No. 3650-A) on property owned by the Orleans Levee District; and

WHEREAS, BOPCO wishes to assign State Agency Lease No. 3650-A to Time Energy, et al ("Time").

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the Chief Administrative Officer to execute any and all necessary documents regarding BOPCO's request for Consent to Assign State Agency Lease No. 3650-A.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Cosse, Mr. Dastugue, Mr. Englande, Mr. Kemp Mr. Luettich, Mr. Miller and Mr. Morgan NAYS: None ABSENT: Mr. Latiolais

RESOLUTION NO. 04-19-18-04 - NASA LEVEE REPAIRS OLD PROJECT NO. 21113

Mr. Miller advised that the Operations Committee reviewed the proposed award of a contract to the low bidder for the NASA Levee Repairs. Southern Delta Construction, LLC was the low bidder by about \$80,000. The bid was reviewed by the technical and legal staffs and all of the bid documents were in order. The low bid was below the estimated engineering budget. The Committee recommended that the Board approve the award of the contract to Southern Delta Construction, LLC.

On the motion of Mr. Luettich,

Seconded by Mr. Miller, the following resolution was offered:

WHEREAS, a portion of the NASA Levee (LPV 113) has degraded because of poor grass growth caused by poor levee material; and

WHEREAS, the NASA Levee Repair Project was advertised, and eight bids were opened and read at the Orleans Levee District on Tuesday, April 10, 2018, as follows:

Bidding Contractors	Total Base Bid Price
Southern Delta Construction, LLC	\$354,140.00
Magee Excavation and Development, LLC	\$434,000.00

Cycle Construction Company, LLC	\$473,022.50
River Road Construction, Inc.	\$485,760.00
TKTMJ, Inc.	\$499,485.00
Brown Industrial Construction, LLC	\$507,274.50
Wallace C. Drennan, Inc.	\$529,200.00
Keiland Construction, LLC	\$547,801.00

WHEREAS, funds for this project are available from the approved FY 2018 Budget.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority – East (FPA) approves the award of a contract in the amount of \$354,140.00 to Southern Delta Construction, LLC for the NASA Levee Repair Project, and authorizes the FPA Chief Administrative Officer to execute said contract and any and all other documents necessary to accomplish the above.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Cosse, Mr. Dastugue, Mr. Englande, Mr. Kemp Mr. Luettich, Mr. Miller and Mr. Morgan NAYS: None ABSENT: Mr. Latiolais

Motion to approve an increase to the not to exceed cost of the levee lift portion of the LPV 109.01a and 111.01 Armoring/Levee Lift Projects, to authorize payment of said increase to the U.S. Army Corps of Engineers and to authorize the Chief Administrative Officer to execute any and all necessary documents.

Mr. Miller advised that the Operations Committee recommended that the motion be deferred.

RESOLUTION NO. 04-19-18-05 - EJLD SAFE ROOM AND CONSOLIDATED FACILITY CONTRACT MODIFICATION

Mr. Miller explained that the Operations Committee reviewed the modification to the EJLD Safe Room and Consolidated Facility contract. The City of Kenner and Jefferson Parish Water Department revised its requirements with respect to drainage after their initial approval of the project. The asbestos water lines currently in place must be replaced with non-asbestos water lines (approximately 800-ft). The FPA's consultant negotiated a substantial reduction of about \$300,000 from the contractor's original estimate for the additional work. The reduction was the result of the contractor's change of subcontractors in order to obtain a better price. The project has been delayed due to the high level of the Mississippi River. The river level has dropped and staff obtained a waiver from the USACE to proceed with the project with the river at its current level. The Committee recommended that the Board approve the modification.

On the motion of Mr. Luettich,

Seconded by Mr. Morgan, the following resolution was offered:

WHEREAS, by Resolution No. 05-18-17-12, the Southeast Louisiana Flood Protection Authority-East (FPA) authorized the award of the contract for the construction of the East Jefferson Levee District (EJLD) Safe Room and Consolidated Facility to Lamar Contractors, LLC for the Base Bid and Alternate No. 1 for a total contract amount of \$10,532,525; and

WHEREAS, a modification is needed to the contract for additional waterline and stormwater line work at a cost of \$528,009.31.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority – East approves the modification to the contract with Lamar Contractors, LLC for additional waterline and stormwater line work at a cost of \$528,009.31 for the construction of the EJLD Safe Room and Consolidated Facility, and authorizes the FPA President or Chief Administrative Officer to execute a change order to the aforementioned contract to implement said modification, and any and all documents necessary to carry out the above.

The foregoing was submitted to a vote, the vote thereon was as follows:
YEAS: Mr. Cosse, Mr. Englande, Mr. Kemp Mr. Luettich, Mr. Miller and Mr. Morgan
NAYS: Mr. Dastugue
ABSENT: Mr. Latiolais

RESOLUTION NO. 04-19-18-06 - REQUESTING THAT THE U.S. ARMY CORPS OF ENGINEERS CONSIDER THE INSTALLATION OF A TRENCH DRAIN AT THE 17TH STREET CANAL AT BELLAIRE DRIVE

Mr. Boese advised that the FPA's external expert Ray Martin, Ph.D. P.E., D.GE, provided a detailed presentation at the Operations Committee meeting that included information and findings from 2009, as well as his and Robert Bachus', Ph.D., P.E., D.GE, work over the past week, on the Bellaire Drive seepage issue. The issue was also extensively discussed in the Committee meeting. USACE representatives and Dr. Martin were present at the Board meeting to answer any questions. He recommended that Dr. Martin present his recommendations on a path forward to the Board.

Mr. Hassinger explained that the FPA is responsible for and must be responsive to the citizens living within its jurisdiction. Concern has been expressed that the seepage at the 17th Street Canal is a problem or risk that could potentially result in a failure of the floodwall during a storm event. He asked was this a safety issue, and, if not, that Dr. Martin speak to the reasons that the FPA should not be concerned.

Dr. Martin responded, no, regarding the safety concern. He explained that he and Dr. Bachus looked at the new T-Wall with water to the top of the wall during the 2009 study, and from a global stability standpoint, it is absolutely safe and there is not a problem with the T-Wall. The T-Wall is very robust and much more robust than the I-Wall that previously stood in that location.

Dr. Martin further explained that the reason for the seepage at this particular site is due to the fact that there is granular material on the protected side and on the canal side of

the sheet pile wall. There is some form of seepage in the sheet pile wall, over the top of the wall or around the ends of the wall; however, this has absolutely nothing to do with the stability of the wall. The wall is perfectly safe and well designed. The seepage is not an issue and is not going to cause an issue with the wall in the future.

Mr. Luettich asked the reason for the seepage at this location and not along the rest of the floodwall.

Dr. Martin responded that the seepage is occurring at this particular location simply because of the way it was designed with a granular material on the outside and on the inside of the cutoff wall. He stated that cutoff walls definitely will leak. He explained that a sheet pile wall leaks and that when a seepage analysis is performed it is always assumed that there will be leakage. However, when an evaluation is done on the pressures on walls, it is assumed that they don't leak because these are the two critical conditions that provide the worst case. He reiterated that there is not an issue with safety at this site.

Mr. Luettich asked about the materials adjacent to the walls along the rest of the canals, and was that material less granular or composed of more silt and clay.

Dr. Martin replied that, first of all, it is natural material. He explained that he could not speak to a specific location because it depended on the geology at the location. However, granular material was placed at this particular site after the failure of the wall, and this is the reason for the occurring seepage. The granular material is more stable than anything else that could have been placed at the site. However, the granular material has higher permeability. Therefore, water on the outside of the sheet pile will find a way to the protected side.

Dr. Martin reviewed the work that he and Dr. Bachus performed during the past week, which included the review of the 2009 preliminary report, the USACE's statement of work and the contract drawings developed by the USACE. He pointed out that the safe water elevation, which is now known to be elevation +8-ft., was not known in 2008 and 2009. Should the water level in the canal rise above the safe water elevation, the head on the outside would increase resulting in more leakage coming through the wall. He stated that the only issue that he and Dr. Bachus had was that there could be an issue or problem with uplift stability of the present ground surface or with a clay cap (non-granular fill) being placed on top, which is the USACE's suggested plan. Seepage could come through with the clay cap resulting in the current problem. If the lots are going to be utilized or sold, the owners or users will not want water coming to the surface.

Dr. Martin explained that he and Dr. Bachus suggest that in order to solve the seepage problem that, in addition to the clay cap, a trench drain be placed along (parallel) the toe of the levee to collect the seepage. The trench drain would have a higher permeability; therefore, water would flow into it cutting off most of the surface water. There are drop inlets located along Bellaire Drive; therefore, a system is in place where the water can be put into a storm sewer. He stated that this seems to be the best solution for solving the water problem. He reiterated that there is no problem with the wall whatsoever. He

advised that he and Dr. Bachus did not have any comments on the USACE's statement of work or the contract plans that they have seen to date. He pointed out that the design is in an iterative process and has not yet been finalized; therefore, it will need to be reviewed when finalized. Additional seepage analysis will be performed and the stability of the uplift conditions will be reviewed.

Mr. Miller noted that the USACE is currently designing the work that will be performed at the site and that there is no guarantee at this point that a trench drain will be included. He clarified that the resolution that he proposed encourages the USACE to give serious consideration to the inclusion of a trench drain. He clarified that he was not recommending that the Board dictate to the USACE, the design engineers of the project, what must be done. However, should the USACE not include the trench drain in the proposed work, it would owe the Board an explanation as to the reason it was not included.

Mr. Hassinger commented that his personal view is that having water above ground adjacent to the levee is not acceptable because the property, which is currently being used by the USACE, is owned by the FPA. In addition, the current condition of the property is not fair to the adjacent property owners, potential future purchasers of the property and the local community.

Mr. Dastugue asked would the possible uplift make the sheet pile any less structurally sound.

Chris Dunn, Assistant Chief of the USACE New Orleans District Engineering Division, replied, no; not the mechanisms described by Dr. Martin. Dr. Martin clarified that he did not infer that there was any uplift at all on the sheet pile. The potential uplift would be on the clay cap.

Mr. Boese advised that the FPA would probably maintain the trench drain should it be installed.

Mr. Dunn explained that at this point, the USACE has the design for and is moving forward with the clay berm. The USACE is in dialogue with Mr. Boese and his team, as well as Dr. Martin, and a very productive meeting was held yesterday. The USACE received some information from Dr. Martin late yesterday that will be evaluated by its geotechnical engineers and plugged into the USACE's seepage software to determine exactly where the USACE is with respect to Dr. Martin's analysis as to whether or not there is an issue that affects the wall. At this point the USACE is moving forward with the clay embankment; however, it will continue to have an open dialogue and share its analysis with the CPRA and FPA as they continue to move forward. He pointed out that the construction of the clay berm does not preclude doing something else later, and that, in fact, it was one of the recommendations that Dr. Martin had made in 2009 as one of the steps towards getting a better solution. He added that the contractor was placing grade stakes at the site yesterday while their site visit was taking place and that work should commence next week.

Mr. Boese expressed his appreciation for the USACE's responsiveness on this issue.

Mr. Hassinger reiterated that the public needs assurance that a safety issue does not exist and that the people who live in the area need the issue of water ponding on the property from the seepage resolved. He expressed appreciation for the USACE moving quickly on this issue, and added that he would appreciate the USACE's consideration of Mr. Miller's and the FPA's request to consider the trench drain.

Brett Herr, USACE Project Manager, stated that he wanted to make sure that everyone understood what was occurring at the site. The wall was breached during Hurricane Katrina and was rebuilt assuming it would again experience a storm surge to the top of the wall. However, the wall should never again experience a storm surge to the top of the wall since the USACE constructed the Permanent Canal Closures and Pumps, which will stop all surge from coming up the canal. The maximum safe water elevation in the canal is +8-ft. Therefore, from a safety standpoint, there is absolutely no concern with the wall. The T-wall was overbuilt for what it will experience in the future.

Mr. Miller commented that the FPA is also concerned about the aesthetics and the effect of the ponding water on the neighboring community. He asked that the USACE consider the trench drain.

Mr. Herr responded that the USACE believes that the clay berm will address the issue. However, the USACE is continuing its analysis and working with the FPA. If the analysis shows otherwise, the USACE will take further action.

Mr. Kemp pointed out the experience with the Duncan Canal where the upset probably could have been reduced by putting subsurface drainage in place earlier.

Mr. Hassinger asked if the PCCP had not been constructed, would the condition be of concern from a safety perspective.

Mr. Herr replied, no; the T-wall was designed to handle water to the top of the wall (+14ft.) with a factor of safety. The safe water elevation in the canal is +8-ft.; therefore, the wall should never experience water above that elevation.

Mr. Dastugue asked whether the seepage presented any type of structural issue.

Mr. Herr responded, absolutely not. He explained that the USACE is currently monitoring hundreds of seepage spots along the Mississippi River levee. He clarified that the monitoring is not from a structural issue. He commented that he would have no problem with building a home on one of the lots and that he had no concern about the site.

On the motion of Mr. Miller,

Seconded by Mr. Luettich, the following resolution was offered:

WHEREAS, the Southeast Louisiana Flood Protection Authority-East ("Flood Protection Authority") is responsible for flood protection in Orleans, East Jefferson and St. Bernard Parishes; and

WHEREAS, seepage on the 17th Street Outfall Canal at Bellaire Drive has been brought to the attention of the Flood Protection Authority and staff; and

WHEREAS, the Flood Protection Authority encourages the U.S. Army Corps of Engineers to give serious consideration to the installation of a trench drain to collect and transport offsite any seepage through the levee as part of the design solution for the seepage on the 17th Street Canal at Bellaire Drive.

BE IT HEREBY RESOLVED, the Flood Protection Authority encourages the U.S. Army Corps of Engineers to give serious consideration to the installation of a trench drain to collect and transport offsite any seepage through the levee as part of the design solution for the seepage on the 17th Street Canal at Bellaire Drive.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Cosse, Mr. Dastugue, Mr. Englande, Mr. Kemp Mr. Luettich, Mr. Miller and Mr. Morgan NAYS: None ABSENT: Mr. Latiolais

DISCUSSION OF PERMANENT CANAL CLOSURES AND PUMPS (PCCP).

Mr. Boese advised that the intent for placing this item on the agenda was to provide a full update on the turnover of the PCCP to the FPA. However, the turnover has not yet occurred. The Board will be notified as soon as the FPA receives the official NCC from the USACE.

The next regular monthly Board meeting will be held on May 17, 2018 and hosted by the LBBLD.

There was no further business; therefore, the meeting was adjourned at 12:25 p.m.