

## **INTER-OFFICE MEMO**

### **DEPARTMENT OF DRAINAGE**

DATE: December 1, 2007

TO: Timothy A. Whitmer, CAA

FROM: Kazem Alikhani, Director, Department of Drainage

SUBJECT: **Drainage Projects Status Report December 1, 2007**

#### **Interim Backflow**

- The COE has stated they will not implement the interim backflow project; reason being - the bids received were technically unacceptable. The COE is in the process of designing the permanent fronting protection (permanent backflow) at each of the pump stations on both the East and West Banks of Jefferson Parish. The permanent backflow project should start in the spring of 08. If the COE had decided to implement the interim backflow project, by the time that project would have been completed, the permanent backflow project would have started and the interim backflow would have to be removed to allow for construction of the permanent project.
- The Parish submitted a list of improvements/enhancements in lieu of interim backflow projects:
  - Phase I – Enhancement of the current air suppression system. This calls for new electric motors of the vacuum pumps at applicable pump stations, installation of valves and actuators on all vertical pumps and automation from safe rooms
  - Phase II – Installation of a number of climber screens at a series of pump station throughout the ParishThe COE will review the list; evaluate and inform the Parish of their decision

#### **Additional Safe Rooms and Automation for Drainage Pump Stations**

- The COE commissioned Stanley Group to study and make recommendations to storm proof (hardening) all Jefferson Parish pump stations. The study is essentially completed. The COE has received comments and is in the process of incorporating the comments into the final report. The final report will prioritize work at each pump station
- As part of storm proofing of Jefferson Parish Pump Stations, the COE has targeted the construction of additional safe rooms and automation of the pumps at various manned drainage pump stations on the East and West Bank of Jefferson Parish
- Under storm proofing, safe rooms will be constructed at five (5) additional pump stations (Cataouatche, Westwego II, Estelle II, Hero, and Planters) with capability of remotely controlling all these pumps from these safe rooms

- To expedite implementing this project, the Parish, through its own funding, has selected engineers that previously designed and constructed Safe Rooms and remote operation of the pumps to prepare plans and specifications for the five (5) additional safe rooms and related automation to remotely control pumps from these safe rooms. The designs have been given to the COE for construction
- Jefferson Parish has authorized Shaw Group to design remote operation of the remaining vertical pumps and other ancillary equipment at the pump stations with existing remote operation capability of the horizontal pumps. Also included in this project and scope is to remotely control Westminster pump station, on the West Bank, from Ames pump station and Parish Line pump station, on the East Bank, from Duncan pump station. 90% submittal of plans and specifications has been given to the COE for review and comment. Upon completion of the plans and specifications the COE will contract for the project. Construction duration should be approximately one (1) year

### **Hoey's SELA PAC Projects**

In 2000, Linfield, Hunter, and Junius, Inc. was retained to evaluate Hoey's Basin with the intent of acquiring funding from the Corps of Engineers, under the SELA program, for projects in the area. At that time, LHJ completed a report which requested approximately \$40M in improvements. This report has been submitted to the COE for review. The COE has been unable to review this report due to lack of finding from SELA. The projects identified by this study are the following:

- Hoey's Cut - completed
- Widening of the 17<sup>th</sup> Street Canal between Hoey's and Airline Hwy.
- New bridge at Airline Hwy.
- Transition structure at Hoey's and Monticello Canals
- Hoey's By-Pass Canal – funding in place through Statewide Flood Control, Phase I completed; Phase II construction to begin 4<sup>th</sup> quarter of 2007
- Weir structure in Geisenheimer Canal – the Parish needs the cooperation of the Metairie Golf Club Garden for construction of this project since the proposed location is at the far southeast corner of the golf course
- Geisenheimer Box culvert - constructed
- Railroad penetrations of Southern Railroad – there are three (3) new crossings proposed under the railroad tracks – one is under design and the other two will be phased in. In conjunction with these crossings, downstream drainage needs to be improved. Phase I of downstream drainage improvements is currently under design
- Replacement of two (2) railroad culvert spurs in Hoey's Canal – this is part of Hoey's Canal Phase II & III improvements which have been funded under Statewide Flood Control Project and will be constructed within the next few years

At the 3/14/07 Council Meeting, the Council passed a resolution of intent pledging \$1,400,000 of Drainage CDL (Community Disaster Loan) funds if pay back is forgiven by the Federal government as Jefferson Parish's share of the 17<sup>th</sup> Street Canal improvement - Airline Drive to the Hoey's Gate. President Broussard has sent a letter to

Mayor Nagin asking him to work with the Sewerage and Water Board to fund their share of this project. President Broussard has offered, in this letter, to finance the project and pay the yearly debt service for New Orleans share from the operational dollars that Jefferson Parish pays New Orleans yearly. We are currently waiting on response from the Mayor.

As it relates to the bridge under Airline Drive and the transition structure for Hoey's Bypass, Jefferson Parish officials will be working with the State delegation to, hopefully, include these projects in the 07/08 State Capital Outlay Program.

### **Pump to the River**

The Parish has requested the COE to fund a 2,500 CFS pump to the river project for Hoey's Basin. This will provide an independent pumping system of Orleans Parish drainage system for Hoey's Basin and also will provide operation flexibility for both Orleans and Jefferson. Parish officials are actively lobbying the COE and Congress to fund this critical project.

At the 6/6/07 Council meeting, the Council selected the firm of N-Y Associates, Inc. for design of this project according to Corps of Engineers standards. In the same meeting, the Council passed a resolution creating the Hoey's Basin "Pump to the River" Task Force to promote and coordinate the proposed "Pump to the River" project for the Hoey's Basin area of Jefferson Parish.

N-Y Associates has prepared a report for an alternative drainage outlet to the Mississippi River for the Hoey's Basin. The report has been forwarded to the COE for their consideration.

At the 4/25/07 Council meeting, the Council passed a resolution of intent to allocate \$5.5M of drainage funding for design of this station contingent upon Jefferson Parish being refunded funds previously spent to build safe rooms, retention ponds, etc.

### **Woodland West Retention Pond Project**

The Woodland West Retention Pond project will consist of incorporating the Woodland West subdivision subsurface drainage system into a series of retention ponds within the old Woodland West golf course area. It will provide the overland flow of storm water, within the subdivision, to pond in an area of one of the lowest areas in Harvey.

Phase I of the project, which includes the excavation of dry ponds in the former Woodland West golf course, has begun. The pond excavation and slope grading on Parcel B-1 (Pond #4), which is between North Von Braun and N. Friendship is 100% complete. Connecting existing pipes to Pond #4 is complete. Some additional work for Pond #4 is required around the outfall pipe. This shall include re-grading the property to deter overflow water from draining toward Parcel C on the southwest corner near Vulcan. The pond excavation on Parcel F (Pond #1) from Colombo to S. Friendship is in progress. Pond #1 is 85% complete. Connecting existing pipes to Pond #1 is complete. The pond

excavation on Parcel E-2 (Pond #2) from Saturn to the Murphy Canal is in progress. Pond #2 is 80% complete. Connecting existing pipes to Pond #2 is underway. Stockpiling of the material on the site for future berm is also being done. These ponds will collect excess water that would normally pool in the streets of the subdivision until the drainage system could relieve them. The Phase I ponds will normally be dry as the bottoms of these ponds will be above the normal water surface of the Murphy Canal, to which they will drain. Completion of Phase I is expected in Mid December 2007.

Phase II of the project will include the deepening of the ponds. Walking paths and fountains will be added to the pond area to allow for green space between storm events. Aerators will be installed in the ponds to keep the water free of algae.

Phase III will include the installation of two (2) pumps as well as a small berm surrounding the neighborhood. Streets will be raised at key locations to help channel water to the newly improved system of ponds and pumps.

### **Status of Pump Stations**

- Every Thursday all pump equipment including associated components is exercised and reports are distributed to your office, EOC, SCADA, and Department of Drainage. In this report, any equipment breakdown and their repair status is noted
- The pumping equipment in those stations with the remote capabilities is also exercised on a weekly basis either from the safe room panel vision or from the pump station operation office. Any malfunction is communicated to the contractor until all aspects of remote operation is satisfactorily completed and accepted

KA: mc

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