

MINUTES OF THE SPECIAL WORK SESSION MEETING OF THE CITY COUNCIL OF THE CITY OF JERSEY VILLAGE, TEXAS, HELD ON DECEMBER 18, 2017 AT 5:30 P.M IN THE CIVIC CENTER MEETING ROOM AT 16327 LAKEVIE DRIVE, JERSEY VILLAGE, TEXAS 77040.

**A. The meeting was called to order by Mayor Ray at 5:30 p.m. with the following present:**

Mayor, Justin Ray	City Manager, Austin Bless
Council Member, Andrew Mitcham	City Secretary, Lorri Coody
Council Member, Greg Holden	
Council Member, Bobby Warren	
Council Member, Sheri Sheppard	
Council Member, Gary Wubbenhorst	

Staff in attendance: Mark Bitz, Fire Chief; Kevin T. Hagerich, Director of Public Works; Isabel Kato, Director of Finance; Matt Jones, Jersey Meadow Golf Course Golf Pro; and Sonya Smith, Administrative Assistant to the Chief of Police. Eric Foerster, Chief of Police, was not present at this meeting.

**B. Discuss and take appropriate action concerning the scope of services and selection of an engineering service provider for the implementation of the following Long-Term Flood Recovery Plan projects: 1) the Jersey Meadow Golf Course Mitigation Analysis & Design Project; and 2) the Castlebridge Wastewater Treatment Plant Tertiary Treatment Facility Project.**

City Manager, Austin Bless, introduced the item. Background information is as follows: This item is to discuss the Golf Course Berm Project and the Gray Water Project. These are two separate projects that have been somewhat tied together, but by no means have to be completed at the same time.

**Berm Project:** The Berm Project was recommended in the Long Term Flood Recovery Plan. The berm, at an elevation of 107.3, and an average elevation of 103.8, would provide for 6,641,390 cubic feet of space. (The berm was proposed at 108 feet to allow for the necessary freeboard, the water would be at 107.3 feet). That equates to approximately 49.7 million gallons of water. The Berm Project would lower the water surface elevation (WSE) of the bayou at Lakeview Drive by 0.05 inches in a 100-year storm. In a 100 year storm it would prevent 7 homes from being flooded.

The full flow summary, WSE comparisons, Structural Inventory Damages Summary, and flooded homes summary, as presented in the study were included in the meeting packet.

The 2003 study from Brooks and Sparks recommended a berm with a top elevation of approximately 111.5 ft. It also recommended a minimum slop of 4:1 on the exterior side, and a 5:1 slope on the interior side.

The first thing that would need to be done before the Berm Project could begin would be to have a survey of the golf course done to ensure we know all of the elevations. That is necessary to know how high the berm would have to be at any given spot and how much water would be retained on the golf course.

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The Golf Course Berm Project is necessary in order to accommodate the increased flow into the bayou system that would occur because of the increased drainage in the Wall Street Neighborhood. We cannot put more water into the bayou without retaining water somewhere else.

We should also ask the question of whether or not building to the 100-year storm is enough protection. The Houston area has seen a 500-year flood event each of the past three years. NOAA is considering adding up to 5 inches of rain to the typical 100-year storm classification. They will issue their final report in May.

The Berm Project was proposed to retain water to allow the water to be discharged from the Wall Street Neighborhood into the bayou system faster. One potential alternative would be to increase drainage in the Wall Street Neighborhood, but limit the flow from the drainage to the bayou. It would mean the storm water pipes would essentially be acting like an underground retention basin. Another possible thing to look at would be increasing storm water pipes along Rio Grand on the golf course side. If we put the pipes in the grassy area between the street and the golf course fence it would be cheaper than putting them under the street itself.

A berm doesn't necessarily have to be an earthen berm. It could be a concrete wall or levy. Or it could be a combination of the two.

Any berm should be built to protect the maintenance shop that is on the golf course. We do not want to build a berm that would increase damages to the maintenance shop. There is no design yet for the berm. The map that was in the Long Term Flood Recovery Plan is largely based on the one from the Brooks and Sparks report.

Right now we simply do not have enough information to give a firm design of what the berm should look like and what exact path it should take. Having a survey done is the first step in that process. Once we know the exact topographical conditions of the golf course we could move to the design stage. A survey is something that we could get done on our own, or we could have it done as part of the engineering of the project. But without the survey we do not know where the berm really needs to go, how high it needs to be, or how much water it would retain.

Staff recommends that Council allow us to work with the City Engineer, Brooks and Sparks, to get a cost estimate and engineering proposal for the Berm Project that protects the maintenance barn at the Golf Course. The proposal is to include an alternative of a concrete wall instead of an earthen berm along Rio Grande Street, and an alternative for increased storm water pipes along Rio Grande.

**Gray Water Project**

This project seems to be over engineered. It also appears this project has been increased from what we had originally thought it would be.

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One point of discussion is for Council clarification on whether we want to build the project to handle the gray water load that we have today, or to build it for the gray water capacity levels that would be reached when the other side of 290 is fully built out.

Staff recommends Council authorize us to work with the City Engineer, Brooks and Sparks, to get a cost estimate and engineering proposal for the Gray Water Project.

In completing the City Manager’s introduction, the general concerns of the Council for these two projects included:

1. The projects were over-engineered;
2. The increased costs of the projects;
3. The estimate of \$5.4 million for street repair work does not include sewer or decorative lighting;
4. The cost of the berm is estimated at \$1 million with only \$750,000 being budgeted; and
5. The need and order in which to complete the projects in order to mitigate flooding.

Council engaged in discussion about the status of the grant funding application for flood mitigation. City Manager Bleess explained that the application was filed and we are still waiting to hear the results.

The height of the berm was discussed. There was concern about how effective the berm will be at mitigating street flooding even though the flood report states it will address same. It was pointed out that the berm, as currently configured, will not affect bayou flooding.

Some members were concerned that building the berm will impact double to triple the amount of homes on the golf course in order to prevent flooding of seven (7) homes elsewhere in the City. However, others felt that this is not necessarily the case should the flooding occur more frequently than a 100 year flood as pointed out in the following table:

**Table 7.1E – Golf Course Alternative Structural Inventory: Flooded Homes**

	Number of Homes Flooded During Each Storm Event		Difference in Number of Homes Inundated
	Revised Existing Conditions	Golf Course With Berm	
10-yr	0	0	0
25-yr	26	18	8
50-yr	103	88	15
100-yr	163	156	7
500-yr	429	391	38

Some felt the impact of the golf course homes versus the seven (7) homes elsewhere in the City is more of an “apples to oranges” comparison. In this discussion, it was noted that the actual height and size of the berm needs to be established in order to see and understand the

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impact to those homes along the golf course. Given the terrain of the course, the berm would be at varying heights/elevations depending upon its location throughout the course. This prompted discussion about the elevation survey process.

There was concern about water breaching the berm and/or the berm breaks. It was agreed that maintenance would be an on-going activity once the berm is constructed. Council felt that more information was needed concerning the impact of a 500 year flood event.

Council also discussed the aesthetics of the berm and its impact upon homes along the south boundary and the homes located along the golf course. This is something that will need to be discussed in greater detail before the actual scope and design of the project is approved.

Council discussed the maintenance barn which is located on the property where the berm will be constructed. Some felt that the actual barn itself is not a concern; rather it is the contents of the barn that is important. In connection with this discussion, some felt that the elevation survey will help to understand the extent of flooding and the impact to facilities. With this information in hand, there may be no need to place much emphasis on the flooding of maintenance buildings. It was the consensus of Council that the elevation survey needs to be performed. It will give the information needed that will lead to the next step in the process.

Council discussed the issues with Dannenbaum Consulting. Since there are many decision points in the Berm Project, City Council needs to be involved in making these decisions. Accordingly, a step by step process was favored with a hands on approach by City Council.

Council discussed the \$300,000 set aside for Golf Course rehab in the Dannenbaum proposal. Much of these costs are centered on using existing soil to construct the berm. Some felt these costs could be reduced by bringing soil in from the outside rather than using existing soil. These costs were discussed in detail and it was the consensus that this is something that needs to be looked at in greater detail when this step is reached in the process.

Council briefly discussed golf course hole #5 and the concerns with locating the green and t-box in connection with construction of the berm. There was discussion about the qualifications of Brooks and Sparks to conduct the elevation survey. Since we will need to get the Harris County Flood Control District (HCFCD) involved, some were concerned about their experience with this organization. Others felt that the project will speak for itself with HCFCD. It was noted that a Professional Engineer will have to certify flow to the HCFCD for the Wall Street improvements. Council discussed that in completing the project, work must satisfy the flood study; take into account the impact of flooding on homes; and consider the playability of the golf course.

In accomplishing these goals, some felt that an RFQ was in order for the design of the berm. Others felt this has already been done by Dannenbaum. Dannenbaum was chosen for these two projects because they have experience with golf courses. It was the consensus of Council that Council needs to be involved with the design details, thoroughly reviewing any design work before approving same. It was noted that should the City use Brooks and Sparks, an

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RFQ is not needed as we have a working relationship with them. Some members felt very confident in the abilities of Brooks and Sparks to handle this project.

Council again discussed the step by step approach for this project and noted that a step by step approach gives the opportunity to cost correct as we go so that we are not blindsided by increased costs.

The topographical survey was discussed. It was the consensus of council that we need to move forward with having Brooks and Sparks complete this survey, and work toward having the results of same for City Council to review by the February City Council Meeting. It is important to keep the project moving forward, but Council must also ensure the project is fiscally responsible and meets the design demands of the community.

Council discussed what steps would be taken in connection with the survey results. It was noted that the survey information will provide information on the fluctuating height of the berm throughout the course. Additionally, this information may be helpful in making decisions concerning the best material to use in constructing the berm (earthen, concrete, or both).

In completing their discussion about the berm, Council focused next on the Golf Course Gray Water Project. All agreed that this project was over-engineered by Dannenbaum. The main topic for discussion concerned the scope of the project and whether to build the project to handle the gray water load that we have today, or to build it for the gray water capacity levels that would be reached when the other side of 290 is fully built out. \$800,000 has been allocated in the 2017-2018 budget for this project at the current capacity of 230 to 250 gallons per day. However, the plant has the capacity to handle 480,000 gallons per day.

The current plan for the project is to pump water into existing ponds on the golf course to be used to water the course. Currently, we use about 150 gallons on the course. However, the decision to increase the capacity of the project is not related to water use on the course, rather, it is related to the future plans to develop the land on the south side of US Highway 290. The \$800,000 budgeted for this fiscal year will cover the increased capacity for future use. Another advantage of increasing the capacity will be better water quality. With this in mind, it was the consensus of Council to move forward with the project at the increased capacity in order to prepare for future growth.

**C. ADJOURN**

With no further discussion, the meeting was adjourned at 6:25 p.m.

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Lorri Coody, City Secretary