

**MINUTES OF THE ENGINEERING COMMITTEE MEETING  
OF THE RAINBOW MUNICIPAL WATER DISTRICT  
JANUARY 8, 2008**

1. **CALL TO ORDER** - The Engineering Committee Meeting of the Rainbow Municipal Water District on January 8, 2008 was called to order by Steve Brannon at 1:32 p.m. in the Board Room of the District, 3707 Old Highway 395, Fallbrook, CA 92028. Mr. Brannon, Chairperson, presiding.
2. **ROLL CALL:** Committee Members present: Gerald Walson, Jack Griffiths, Helene Brazier, Karl Fekete, Philip Astrolio and Vice-Chairperson Dave Vornberger. Also present were alternates Tom Taufer and Richard Titus. District staff present were Dave Seymour, District General Manager, Brian Lee, District Engineer, Chuck Sneed, Operations Manager, Finance and Budget Committee Chairperson Larry Pearce and Communications Committee Chairperson Tim O'Leary were also in attendance. Alternates Arthur Beckington and Sheri Rumble were absent (both unexcused) Public attendees were Rua Petty and Maureen Rhyne.
3. **PUBLIC COMMENT RELATING TO ITEMS ON THE AGENDA**

Chairperson Steve Brannon asked if there were any comments relating to items on the agenda. Rua Petty addressed the committee concerning Lift Station No. 2. He referenced statements made by Board member Jack Griffiths approximately two years ago, that Lift Station No. 2 could continue to be operable for at least another two years. Rua stated the station has continued to operate for those additional two years, however, with the recent sewer spill, his visit to the site and his observations of the operations of the station, his opinion is that the District needs to replace the existing lift station. His reasoning for the replacement of the lift station is: 1) it has surpassed its useful life; 2) inadequate storage capacity and 3) inefficiencies in operations at the station, mainly 3 or more workers are required to be present at the site when one person is doing work in the dry well. Rua stated he would pursue replacement at the Board meeting with or without Engineering Committee recommendation.

Jack Griffiths countered Rua's remarks stating the station has not gone beyond its useful life. He stated he has been in opposition to replacement since it was initially reported to cost \$800,000 and now that estimate has increased to \$2,000,000 for a "feel good" need to replace the station. He added that two years ago he submitted a report to rehabilitate the station by changing out the pumps and discharge line and relining the wet well.

Helene Brazier commented that the current discussion was going beyond public comment. Steve Brannon suggested reviewing this item at the next committee meeting.

Steve also commended District staff for their quick response in reacting to the spill stating that this action prevented a major catastrophe.

Steve asked if there were any other comments.

Jerry Walson asked Chuck Sneed about the total flow through the station. Chuck answered that the District was currently seeing flows between 800,000 to 900,000 gallons per day with peaks up to 1.4 million gallons per day during wet weather. Jerry asked about a problem with Lift Station No. 1. Helene mentioned this item was being taken out of agenda order. Dave Vornberger asked if the committee could take this item out of order at this time. It was agreed to discuss this item out of order after the completion of public comment.

(\* ) - Asterisk indicates a report is attached.

Tim O'Leary added that he thought the District's response to the recent sewage spill and staff's comments to the public were handled in a professional manner.

## 7. BRIEF UPDATE ON SEWAGE SPILL

Chuck continued with the problems with Lift Station No. 1, reporting that there is at least a plug in one of the pumps at least once a week. The cause of this is usually rags in the sewage flow that clogs the pump. Jerry asked if there was a filter in the station. Chuck replied no, a filter would cause backups in the sewer line. Jack and Steve asked if there was a grinder (Muffin Monster) prior to the wet well that would grind up the debris prior to the pumps. Again, Chuck responded no. Discussion continued about ways to prevent clogging of the pumps. Jack opined that the station has worked rather well for over thirty years. Dave Seymour agreed. Dave explained that the major item causing these blockages were the Hand-i-wipe type of rags. Chuck added that most of these were from the commercial areas in the Bonsall area. Letters to the businesses generally helps for a short time. Chuck opined that a proactive approach, talking to the business owners and site managers, may help but he does not have the staff to pursue this approach.

Jerry asked if there was anything to report on the Horse Ranch Creek sewage spill. Dave answered that the report had been submitted to the Regional Board, but he does not expect a reply for several months. Jerry asked if all the manholes have been located. Dave and Chuck responded that all but one manhole has been located. The rootball, that caused the overflow, still has not been removed. Discussion continued about the spill and staff's efforts to locate the missing manhole, remove the rootball, repair that section of sewer line under Old Highway 395 and the final disposition of the soil stockpiled from the overflow area. In response to a question asked by Jack, Brian explained he is attempting to coordinate a meeting with the Regional Board, Fish and Game, Fish and Wildlife and Army Corps of Engineers to obtain a permit to grade the District's right-of-way so the District can access its facilities. Additional discussion ensued concerning the removal the rootball with Chuck reporting that it should be removed during the next week and will be saved as requested by Jerry and Jack for plant identification.

Brian distributed pictures of the pump that caused the overflow at Lift Station No. 2.

Brian asked for the committee to make a recommendation to the Board to start the process to replace Lift Station No. 2. There was further discussion on the pump failure and staff's repair. Dave added that during the shutdown, six valves were also replaced along with the failed pump, which were going to be replaced this summer. This saved approximately \$80,000 for a second shutdown.

Dave Vornberger asked about the report that was to be prepared by Don Butts (Water 3) regarding replacement or repair of Lift Station No. 2. Brian reported that Don recently visited the site and is presently preparing this report. Dave asked what the committee could do since the report will be submitted to the Board at their next meeting. Brian responded that a previous report recommended replacement of the station and he would like to proceed on the basis of that report. Brian stated that he believes there is sufficient justification for the committee to proceed with a recommendation to the Board to replace this lift station and he was confident that the Water 3 (Don Butts) report will support his position even though Jack opines that this is a waste of District funds.

Steve asked about the storage capacity within the wet well and referred to a brief analysis prepared by Dave Seymour indicating only eleven minutes of reserved capacity at ultimate flow. He opined that this alone was justification for the replacement of the lift station. Steve made a motion to recommend to the Board of Directors to proceed with the design and construction of Lift Station No. 2 at an estimated cost of \$2 million. Dave Seymour interjected that since this was not on the agenda a vote by the committee would be needed to include it on the agenda as an emergency add-on item.

(\*) - Asterisk indicates a report is attached.

Helene made a motion to amend the Engineering Committee agenda to include the replacement of Lift Station No. 2 as an agenda item. Seconded by Karl Fekete. Jack responded that he thought it is totally irresponsible to approve \$2.0 million to replace this facility. Helene interjected that this motion is only for adding this item to the agenda and that upon approval discussion could take place. Chairperson Brannon called for the vote.

**Action:**

**Moved by Helene Brazier to amend the Engineering Committee agenda to include the replacement of Lift Station No. 2 as an emergency agenda item. Seconded by Karl Fekete. Ayes: Vornberger, Brazier, Brannon, Astrolio and Fekete. Noes: Griffiths and Walson. Motion carried (5/2/0).**

Steve Brannon made a motion to recommend to the Board of Directors to direct staff to proceed with the design and construction for the replacement of Lift Station No. 2 at a cost not-to-exceed \$2.0 million. Dave Vornberger added that the motion should not include a dollar amount until the consultant's report is reviewed. The motion was seconded by Helene Brazier. Discussion of the motion ensued. Jerry added that he thought it was inappropriate to consider this item without review of the consultant's report.

Dick Titus added that this item has been around for years and the costs have been known. He said the really important issue is timing for the replacement of the station. This station has failed before and will fail again and the longer the District delays the chances for another failure increases. He pointed out that the cost, whether \$200,000 or \$2.0 million, is not as critical as the Committee getting on record that this item needs to be addressed by the Board in a timely manner. He added that the \$2.0 million cost is the amount in the Sewer Master Plan report and he feels that this amount is a good number until it can be proved otherwise and that the schedule should be the driving force to proceed with this project since it will be two years before the new station is operational.

Dave Vornberger asked Brian if the report was to include options and the cost of those options. Brian responded that the consultant's task was to assess the repair of station and the replacement of the station and provide the estimated cost of each. Dave added that he agreed with Jerry and that it may be premature to send this item to the Board prior to the review of the consultant's report.

Helene added that this item has been reviewed many times already and to delay it any further for the review of the report would put this item off for two more Board meetings. Dave said he did not intend to delay the recommendation but to delay the preferred option until the report could be reviewed.

Jack responded to the discussion stating that currently we have only opinions that the station should be replaced. He stated that he has studied the problem and that pump replacement and other minor changes would suffice. He added that to spend \$2.0 million as a "feel good" solution is irresponsible and he would fight the approval of the project.

Discussion continued between Jack, Brian and Steve concerning this project. Rua added that the Board, upon review of the report, will choose the appropriate remedy. He stated that he agreed with Jack's assessment that the station would be sufficient for two more years, two years ago, but if the Board had proceeded with the replacement at that time, we would dedicating a new station today and the recent spill may have been avoided. He also added that if we had started construction two years ago we would have constructed at those prices and to keep delaying, adds to the cost. Rua continued stating he thinks the District is spending monies on a facility that is beyond its useful life, puts District employees at risk and has a potential for discharging into the river if another failure occurs. He added that he opposes Jack's position and will defend his position against Jack's posturing.

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There was discussion between Dave Vornberger, Jerry and Brian concerning revising the current motion to recommending to the Board that it proceed with the project based upon the consultant's and District Engineer's recommendations. There was disagreement to this since the committee had not seen the report, therefore, it could not give a recommendation. Larry Pearce stated the committee should either back the recommendation of the District Engineer or disagree with his position and then provide him guidance. Brian asked for the Committee to make a decision to either support his recommendation to replace Lift Station No. 2 or not support it and he would proceed to the Board with the Committee's results and his recommendation and the consultant's recommendation for Board review. He would also provide a cost estimate to the Board at that time.

Helene Brazier made a substitute motion that the Committee support the District Engineer's recommendation to replace Lift Station No. 2 at a cost of \$2.0 million. Seconded by Steve Brannon. Discussion - Jerry stated that he thought is irresponsible for the Committee to make a recommendation prior to the review of the consultant's report. Karl and Helene disagreed with Jerry stating that the District has a qualified Engineer, who is capable of making this recommendation.

Steve asked Philip Astrolio if he had any comments. Philip said he also had concern about the capacity of the wet well. He added that no matter how many pumps there are, you are still limited by the wet well capacity. Jack added that his proposed rehabilitation only replaces the pumps with slightly larger units and that the replacement of the entire lift station for a "feel good" feeling is a waste of money.

Steve added that this item has been under review by the Board for many years and to keep putting it off only costs more and more money. Steve asked if there were any more comments, if not he called for the committee's vote.

**Action:**

**Moved by Helene Brazier to support the District Engineer's recommendation to replace Lift Station No. 2 at a cost of \$2.0 million. Seconded by Steve Brannon. Chairman Brannon asked for a voice vote. Ayes: Brazier, Brannon, Astrolio and Fekete. Noes: Vornberger, Griffiths and Walson. Motion carried (4/3/0).**

Larry Pearce asked the three dissenting committee members why they were so vehemently opposed to recommending this project. Jerry responded that Jack has told the committee how we could upgrade the pumps to handle the pumping capacity issue and Jerry's concern is that we hired a consultant to study the issue of replacement versus rehabilitation and we haven't seen that report. Dave added that he didn't want to add a dollar amount until he saw the report. Helene added that the committee wasn't encouraging action but was recommending that the Board consider action. Larry opined that the Board needs to have an estimate of the cost. He also added that the Finance Committee needs to have an estimate to determine if sufficient funds are available. It is Brian's job to prepare those estimates based on his recommendation as the District's Engineer.

Steve asked Dave Seymour, that with his broad experience, what would be his recommendation. Dave responded that he sees both sides of the argument, Jack's and Brian's. But he agrees with Steve that the real limiting factor is the wet well capacity. There is only 10 minutes of storage capacity and to just replace the wet well will cost as much as replacing the whole station.

**4. VALLECITOS PUMP STATION PRELIMINARY DESIGN REPORT**

Steve started the discussion stating the committee members have had a chance to review the consultant's report and visit the site. Steve asked Brian proceed with this topic. Brian responded that after the last meeting, he was tasked with bringing back to the committee a more complete cost

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estimate for the project. Brian handed out a sheet delineating the estimate to construct this facility. There were two estimates, with and without a building. At Jerry's request he described the difference between the two estimates. The first estimate included a concrete block enclosure with a gable roof and the other estimate basically had rain type cover with open sides. The cost difference between the two facilities is \$132,000.

Karl asked about installing a sheet metal type of enclosure, "Butler Building", instead of a concrete block structure. Brian said that could be an alternative. There was discussion on the differences between the two types of enclosures as to maintenance of the building itself. Steve asked if there were any issues with the Butler type building as to heat issues with the enclosed equipment. Dave Seymour responded that the building would have to be insulated, not only for heat concerns but also for noise concerns since they seem to vibrate with the pumps running. He also added that they are not as secure and it was determined the site will also have to be fenced. Brian responded to Jerry's question about cost. Brian said the Butler Building would cost \$40,000 to \$60,000.

Responding to Helene's question, Brian said he is requesting that the Committee recommend to the Board of Directors to approve Alternative No. 3 with a building enclosure at an estimated cost of \$750,000. The type of building would be determined by staff during the design process.

Jack asked what was going inside the building. Brian responded that there would be 2 pumps and associated electrical, piping and telemetry gear. Jack agreed with Dave Seymour that he also believes a block building is better suited since it can't corrode and maintains sound better.

Jerry asked how the building cost was determined (\$132,000). Brian deferred to Jeff Heden who answered that his structural engineers estimated the cost of the building. Jeff added that the similar type pump stations his firm is currently designing are within block type building structures. There were other questions concerning design issues that both Brian and Dave said would be determined during the actual project design. Jerry was still concerned with the cost of the building. Dave responded that a similar building built by an individual would be cheaper, however, the District must pay prevailing wage which drives the costs up.

Jerry asked if this pump station will be a standard for future stations. Brian replied yes, this would set the District's standards for future facilities. He added that some of the existing pump stations already are enclosed in block buildings, if the building is structurally sound, we wouldn't demolish but would upgrade the equipment (pumps, motors, mechanical and electrical) inside the building to meet current District standards. Dave added that at the last meeting the committee approved the project and requested staff to return with cost estimates for constructing a building. Dave also added that a lot of today's comments and concerns will be answered during the design phase of the project.

Dave Vornberger asked about the cost spreadsheet that Brian handed out. Steve responded that the costs shown at the last meeting were construction only and Steve had asked Brian to include all costs associated to the project (PDR report, design, construction, project management, inspection, surveying, soils testing costs, etc.), so the committee and ultimately the Board would approve the total cost of the facility. Dave asked questions about the project management and inspection of the project. Steve pointed out where those costs were on Brian's spreadsheet and opined that the District's inspection staff was inexperienced in this type of construction and therefore outside inspection services would be required. Discussion continued concerning the total estimated costs involved with this project with Brian addressing each of the various cost factors shown on his spreadsheet. Brian reported the total estimated cost of this project is \$752,950.

There was discussion concerning the future operational conditions of the pump station. Brian then referred to the last two sheets of his handout. These sheets indicate an 18 month time frame to design and construct this facility. Brian went over the time sheet in detail. There was discussion on how to speed up the process, one suggestion was financial incentives to the project designer and contractor.

There was discussion concerning engineering costs and timing. Brian explained each of these.

Steve made a motion to recommend to the Board of Directors to construct the Vallecitos Pump Station, with a building, at a cost of \$750,000. Helene seconded the motion. Steve asked if there were any more questions. Hearing none, Steve called for the vote.

**Action:**

**Moved by Steve Brannon to recommend to The Board of Directors to construct the Vallecitos Pump Station, with a building, at a cost of \$750,000. Seconded by Helene Brazier. Ayes: Walson, Vornberger, Brazier, Brannon, Astrolio and Fekete. Noes: None Abstentions: Griffiths. Motion carried (6/0/1).**

**5. DICK TITUS PRESENTATION ON PRIORITIZATION OF CIP**

Brian initiated the discussion by mentioning that Dick, Steve and he had met prior to the meeting to go over the parameters of the methods Dick has come up with for determining the prioritization of projects within the Capital Improvement Program. Brian added that he has not had sufficient time to review and understand Dick's methodology. Referring to Agenda Item No. 8, Brian stated the ad-hoc committee is developing a short list of projects to be constructed during the next two years while staff and the committee are developing the CIP priority list. Brian said the ad-hoc committee's recommendations will give him breathing room to fully review and understand Dick's prioritization method.

Dave Seymour added this time delay will also give the District time to develop a financial plan on how to fund the CIP projects not only for the present but also 20 years into the future. Brian added to this by stating staff will be able to incrementally go through this process to determine individual project cost, priority and construction scheduling. Dick added these are the basis for his methodology.

Jerry added there are three components to the scheduling, a 20 year plan, a 5 year plan and a 2 year design/construct schedule. Dick agreed with Jerry on structuring and short term and long term planning. Steve added the planning includes all District facilities not only the CIP projects. Jerry added that these are living documents, able to change as conditions or needs change. Dave Seymour agreed.

**6. REVIEW OF SEWER CAPACITY**

Steve started this discussion by stating Philip Astrolio had mentioned that he thought this item was going to be discussed after the meeting one or two months ago when the committee voted to table the discussion. Steve stated that he was concerned that the District was nearing the end of its ability to accept additional sewer connections. He thought now is the time to plan for additional capacity since the District is ready to proceed with facilities upgrade that could incrementally be sized for future capacity beyond the District's current maximum capacity of 1.5 MGD or 6,000 EDU contracted capacity. Steve acknowledged that the Board ran on the position of no additional connections beyond the current capacity. Jerry added that this was Board policy.

(\*) - Asterisk indicates a report is attached.

There was discussion if this item had to be voted on by the committee prior to its discussion. It was determined that the Committee could discuss this as it was properly agendaed.

Steve voiced concern that the District is nearing the end of its allotted sewer capacity and with several projects (Palomar College, the proposed Bonsall High School and others) potentially coming to fruition and the District getting ready to begin major system improvements to increase capacity to meet existing commitments, he thought it should be discussed in detail by the Committee and sent to the Board if so determined. Steve added that if the Committee or Board determines to do nothing, he would drop the issue and let someone else "fight the bull".

Dick Titus asked how many of the Committee members had actually read the Sewer Master Plan. There was a show of hands. Dick stated that if you look at the numbers from the report and current flow, and also take into consideration inflow and infiltration, the District has almost met or is close to exceeding the contracted capacity at Oceanside. Jerry added that if you look at the current Oceanside contract, once flows meet 95% of contracted amounts, the District must terminate sewer connections. Dick added, if that is the case then the District is close to exceeding that limit.

Discussion continued about how inflow and infiltration needs to be addressed initially by the Committee and ultimately by the Board. Dave Seymour concluded that if the remaining unconnected sewer users hooked up to the system, the District would exceed contracted capacity. Jack added that all participants in the discussion are correct. He added that many years ago the District contracted for 1.0 MGD and the facilities, because of good engineering, could handle that capacity. Since then, an additional 0.5 MGD has been contracted for and that is where the problem starts. His contention is the District should start at the tail end of the system and begin with the line replacement from the Stallion Road metering manhole, east towards Lift Station No. 2. Jack indicated that to increase the line capacity we could either replace the existing line with a larger line or parallel the existing line with a smaller line. Whichever is cheaper Jack indicated that we need to have actual field measurements. We know we have to increase capacity by at least 50%. Since we have sold these extra connections, we have the monies to increase the capacity the extra 50% or whatever is needed to meet the contracted EDU's.

Steve stated the reason he wanted to discuss this issue is what happens when customer 6,001 comes in and wants a sewer connection. Jerry responded that each Board member has said they would not accept any connections beyond 6,000 EDU's and this is District policy. There was heated discussion concerning this issue. Eventually, Steve asked for a motion. After several attempts, Jerry made a motion that the Engineering Committee not make any motions that do not comply with District policy. The motion was seconded by Karl. Helene asked if we cannot discuss anything that does not go along with District policy, we should disband the committee. Jerry said that was his motion and Jack and Karl agreed with Jerry. Steve called for the vote and Jerry asked for a voice vote.

**Action:**

**Moved by Jerry Walson, that the Engineering Committee will not make any motions that do not comply with District policy. Seconded by Karl Fekete. Ayes: Walson, Fekete and Griffiths. Noes: Brazier, Vornberger, Astrolio and Brannon. Motion failed (3/4/0).**

Steve asked, where do we go from here? Dave Vornberger answered there is still discussion that there is a problem with existing policy and with existing development coming online that ties into the item the Committee approved earlier, Lift Station No.2. Brian responded that the next project is the upsizing of the sewer line from Lift Station No. 2 to Stallion Road. Both of these projects would be done in tandem and would be completed at the same time. Jerry asked if the total capacity would be 1.5 MGD. Brian responded yes that would be the design capacity. Dave Seymour commented that during the design phase it may be determined that capacity above the 1.5 MGD may be practical or

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essential. Upon that determination staff would report those findings to the Committee for their input and recommendation or denial. Dave said it may be necessary to upsize since a normal pipe size is not always available to meet the exact flow being designed for. Jerry and Dave argued the point of installing over capacity. Dave pointed out that staff would make these sizing options available and the Board and Committee could review them on a case by case basis. There was additional discussion regarding over sizing. There was a consensus by the Committee that the controlling factor for the design is the 1.5 MGD contracted capacity not the 6,000 EDU factor. This contracted number could equate to more or less than the 6,000 EDU based on individual connection flow rates and inflow and infiltration amounts.

Steve requested to move on to the next agenda item.

## **8. AD-HOC COMMITTEE RECOMMENDATIONS**

Steve asked Brian to provide a brief overview of the ad-hoc committee meeting held the day before. Brian started out by stating staff had gone through the list of existing projects that were in some form of design, study or construction and to that list, added 5 projects that staff had determined were of operational importance. Brian provided a list of projects that in some form of review or design and this list also includes these 5 operational needed projects. Jerry added that at the ad-hoc meeting, the committee had reviewed the list of projects that are in the process of review and some form of construction (mainly from the CIP program), however there are other essential projects that need to be addressed.

Dave passed out a project scheduling and job costing spreadsheet that could be used and modified to meet the needs of the Engineering and Finance Committees and the Board. There was discussion concerning Dave's spreadsheet and modifications to it. Discussion of the spreadsheet included showing committed amounts, actual costs to date, the scheduling of each of the project's activities and so forth.

Dave Vornberger left the meeting at 4:00 pm.

Steve asked the Committee to approve and recommend to the Board the following list of 5 additional projects.

1. Connection No. 7 upgrade
2. Modular office facilities
3. Magee tank management program
4. Pump station transfer switches
5. Afton Farms line extension

The motion was seconded by Helene. Minor discussion ensued. Steve called for the vote.

### **Action:**

**Moved by Steve Brannon, that the Engineering Committee recommend to the Board of Directors the addition of the following projects (1. Connection No. 7 upgrade, 2. Modular office space, 3. Magee tank management program, 4. Pump station transfer switches and 5. Afton Farms line extension) to the list of CIP projects. Seconded by Helene Brazier. Ayes: Walson, Fekete, Brazier, Astrolio and Brannon. Noes: None. Abstention: Griffiths. Motion passed (5/0/1).**

(\*) - Asterisk indicates a report is attached.

**9. LIST OF SUGGESTED AGENDA ITEMS FOR THE NEXT SCHEDULED ENGINEERING COMMITTEE MEETING**

No items were discussed.

**10. ADJOURNMENT – To Tuesday, February 5, 2008 at 1:30 p.m.**

**The meeting was adjourned with a motion made by Steve Brannon and seconded by Karl Fekete to a regular meeting on February 5, 2008 at 1:30 p.m.**

The meeting was adjourned at 4:15 p.m.

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**Steve Brannon, Committee Chairperson**

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**Dawn M. Washburn, Board Secretary**