

**FINAL MINUTES**

**FLOOD CONTROL BOARD  
JULY 12, 2010  
CORTE MADERA COUNCIL CHAMBERS**

Boardmembers Acting Chair Sanford Zeller  
Present: Stephanie Bennett  
Vaso Medigovich  
Bill Carlson (new appointment to Board)

Boardmembers Chair Robert Bundy  
Absent: Barry Trailer

Staff Present: Public Works Director/Town Engineer Dan Ring

1. Call to Order

Acting Chair Zeller opened the meeting at 7:35 p.m.

2. Open Forum for Public Expression

There were no comments.

3. Approval of Meeting Minutes (May 3, 2010)

M/s, Medigovich-Bennett to approve the May 3, 2010 minutes as submitted.

Ayes: All Absent: Chair Bundy, Boardmember Trailer

4. Old Business

A. Discussion of flood control capital improvement projects for 2010-11 budget year

Public Works Director Ring presented a staff report and briefly discussed the following projects: 1) Emergency Storm Drainage Repairs; 2) Corrugated Metal Pipe Replacements; 3) Marquart Lagoon Pump Station Improvements; 4) Golden Hind at Ebbtide Gate/Drainage Improvements; 5) High Canal Storm Drain Outlet Repairs; 6) Golden Hind at Cay Passage Pump Station; 7) Flood Control Infrastructure Management- GIS; 8) Raise/Repair Town Levees; 9) Marina Village Pump Station Upgrades; 10) High Canal Pump Station Upgrades; 11) Flood Hazard Mailer.

Public Works Director Ring referred to project #1, Emergency Storm Drainage Repairs, and stated staff increased the allocation from \$50,000 to \$75,000.

Public Works Director Ring referred to project #2, Corrugated Metal Pipe Replacements, and stated staff kept the allocation at \$75,000. These repairs are done on an as-needed basis.

Public Works Director Ring referred to project #3, Marquart Lagoon Pump Station Improvements, and stated he would go over the status of the conceptual study later in the meeting. This project has been on the books for quite a while. The anticipated costs have been reduced.

Public Works Director Ring referred to project #4, Golden Hind at Ebbtide Gate/Drainage Improvements, and stated this was a pilot project that would provide a "maintenance friendly" one-way valve in the

existing drainage system to prevent high tides from backing up and flooding the streets. He noted the valves would be placed in a vault making them more accessible. He noted staff would like to complete this project before the winter.

Public Works Director Ring referred to project #5, High Canal Outlet Repairs, and noted there was some money left over to take care of some small items that needed to be finished up in that area. Boardmember Medigovich stated the banks and concrete pipes have eroded.

Public Works Director Ring referred to project #6, Golden Hind at Cay Passage Pump Station, and stated this would be the first pilot project for this area. It involves removing sections of curb and gutter and replacing them with a trench drain. The water would be diverted to a spot where it would be discharged to the bay. The project is out to bid and approximately 15 to 20 contractors have picked up the bid packages. Staff has delayed the bid opening to the third week of August. The Town has up to 90 days to award the bid. He noted they might have to delay the start of construction for this project until November due to the unexpected expenditures associated with the repair of the San Clemente Pump Station discharge manifold.

Public Works Director Ring referred to project #7, Flood Control Infrastructure Management- GIS, and stated this was a new category. This is an ongoing project that would provide the ability to easily store and readily retrieve information about the Town's infrastructure assets in a digitized, map-based format.

Public Works Director Ring referred to project #8, Raise/Repair Town Levees, and noted staff increased the allocation from \$10,000 to \$25,000. They need to discuss exactly what this project would entail.

Public Works Director Ring referred to projects #9 and #10, Marina Village Pump Station Upgrades, and High Canal Pump Station Upgrades, and stated these projects are intended to enhance the performance and longevity of these stations.

Public Works Director Ring referred to project #11), Flood Hazard Mailer, and stated this annual publication is a requirement for membership in the Community Rating System through the National Flood Insurance Program. The flyer has been redesigned and could be augmented next year.

Acting Chair Zeller referred to project #3, Marquart Lagoon Pump Station Improvements, and stated the budget show a request for \$175,000 for Fiscal Year 2010-11 but the options discussed in the staff report for New Business Item B are more than that amount. Public Works Director Ring stated the consultants have been very conservative on their concepts because they have not completed the final designs. They are still at the concept level. Public Works Director Ring noted the Town Council has already approved the budget but midyear adjustments could be made.

Mr. Harry Schriebman had questions about the bid process for the Golden Hind and Cay Passage Pump Station Project. Acting Chair Zeller asked if \$650,000 was a good price for this project. Public Works Director Ring stated he had the breakdown of costs and he noted there was a significant amount of street work involved. Mr. Schriebman asked for a copy of the AN West Report and the list of priority projects.

B. Discussion of revisions/updates to Chapter 16.10 of the Corte Madera Municipal Code (Flood Damage Prevention)

Public Works Director Ring presented a brief staff report. He noted the draft was being reviewed by the Town Attorney and would be reviewed by the Town Council in the fall.

Acting Chair Zeller referred to page 15, and noted the second line of (B), (ii), should read, "All LOMR's for flood control projects are approved prior to the *issuance*.....".

Acting Chair Zeller referred to page 20, (1) (iii) and noted the dash in the last line should be a comma.

Acting Chair Zeller referred to page 23, (g), (1), and noted the second line should read, "The pile...foundation and structure attached thereto *shall be* anchored....."

Public Works Director Ring stated the Town Attorney was reviewing the issue regarding police powers. He referred to page 4, Definitions, (10), Base Flood Elevation (BFE), and stated staff decided to include the notation that the BFE is 9.0 NAVD within this definition to avoid confusion later in the chapter. This was not previously included in the Definitions Section. Acting Chair Zeller asked if the number was derived from elevation 6 plus 2.7 and then rounded up to 9. Public Works Director Ring stated “yes”. Boardmember Medigovich asked if it was equal to 6 NGVD. Public Works Director Ring stated it was very close and it was off by about three inches due to the datum conversion.

Public Works Director Ring referred to the Definitions Section, item (12), Breakaway Walls, and stated they were included in the document because it could apply to a section of the Town in the VE Zone (Coastal Hazard Zone).

Public Works Director Ring referred to page 17 and noted this section sets the elevations for construction. Residential construction occurring in Zone AE should be raised to one foot above base flood elevation (9 NAVD + 1 foot). Boardmember Medigovich asked if this would be approximately equal to elevation 7 NGVD. Public Works Director Ring stated “yes”. Construction in the VE zone would be raised three feet above the base flood elevation (9 NAVD + 3 feet). He stated staff felt that linking the elevation requirements to a zone was more efficient. Boardmember Medigovich stated they should be reflecting on what it means to be one foot above the base flood elevation. He thought they should eliminate that one-foot and go back to elevation 6 NGVD. He stated Marin Montessori built their buildings high but he was not sure how high (perhaps 9 NGVD). Public Works Director Ring stated he could check the building permit file. Acting Chair Zeller noted the ordinance also requires anticipation of settlement. He could support Boardmember Medigovich’s suggestion of elevation 6 NGVD, which would be rounded to elevation 9 NAVD. Public Works Director Ring stated the wording would be as follows: ...”elevated to a height equal to the base flood elevation...”. He noted that the Town is not required to go above the base flood elevation but receive get extra credit in terms of CRS points. They want to avoid the possibility of increased insurance rates. Boardmember Medigovich asked about the extra points obtained for raising the dikes. Public Works Director Ring stated he would find out.

Acting Chair Zeller referred to page 12, (e), Interpretation, and noted the last sentence should make reference to County and regional statutes. Public Works Director Ring stated he would bring that change to the attention of the Town Attorney.

Public Works Director Ring referred to page 19, (ii), Detached garages and accessory structures, and noted this section allows staff to some discretion and flexibility with respect to accessory structures.

Public Works Director Ring referred to page 23, (g) Coastal High Hazard Areas, and noted they wanted to keep the reference to the VE zone in the ordinance.

M/s, Medigovich-Bennett to recommend approval of the revisions/updates to Chapter 16.10 of the Corte Madera Municipal Code (Flood Damage Prevention) with the edits noted by Acting Chair Zeller and the following change to the wording in Section 16.10.080, Provisions for flood hazard reduction, (3) (A) (i), “In zones AE, elevated to a height equal to *the base flood elevation.....*”.

Ayes: All    Absent: Chair Bundy, Boardmember Trailer

5.        New Business
  - A.    Repair of San Clemente Pump Station discharge manifold

Public Works Director Ring presented a brief staff report. He noted that a small sinkhole had formed in a landscaped area adjacent to the San Clemente Pump Station. The location was excavated, and it was determined that several corrosion holes had formed within the discharge manifold for the station. A camera was placed inside the pipe manifold to determine the extent of the damage. The exterior of the pipe was in good condition, but the interior showed signs of corrosion at numerous locations. Rather than attempt to repair the existing manifold, it was decided that it would be less expensive to build a new manifold. Several pipe materials were evaluated including HDPE (high density polyethylene), stainless steel, and

fiberglass. It was decided to stick with steel but use a newer type of anti-corrosion coating. An updated cathodic protection system was also included in the design to prevent corrosion. The anodes for this system will be located within the pump station property to aid in future monitoring and maintenance. The total cost of the manifold replacement will be approximately \$200,000. The pipe itself cost about \$100,000. This was an unanticipated and expensive repair.

Acting Chair Zeller asked who maintains this pump station. Public Works Director Ring stated the Town. Acting Chair Zeller asked if there were inlet screens. Public Works Director Ring stated there was a trash rack on the inlet side but it does not screen small materials. There is a wet well that accumulates sediment that is shoveled out every year.

Boardmember Medigovich asked if staff considered an access hole on the manifold. Public Works Director Ring stated “no”. However, he stated they could use the air valve connection points as a means to insert cameras if needed.

Boardmember Medigovich asked if there was much settlement. Public Works Director Ring said that there was evidence of some where the pipes exit the pump station building, but that it is accommodated by “dresser” couplings at this location and by a flexible coupling at the end of the manifold.

Boardmember Bennett asked how far underground the manifold would be. Public Works Director Ring stated it would be about 10 feet to the bottom. The excavation itself is quite large and adjacent to the street. Fortunately, the road is in good shape.

Boardmember Medigovich asked if there were any stress issues on the flanges given the amount of settlement. Public Works Director Ring stated a flexible coupling at the interface of the steel manifold and concrete discharge pipe accounts for that.

Acting Chair Zeller stated whoever prepared the design did a great job.

#### B. Update on conceptual designs for the Marquart Lagoon Pump Station

Public Works Director Ring presented a staff report. He stated there is a pump station located on the High Canal that is used to take water from the Marquart Lagoon and discharge it to High Canal (if gravity alone is not sufficient). It is used during large or multiple storms. In addition, turning on the pump augments draining of the lagoon. The existing pump is in poor condition and undersized. A project has been proposed for quite some time to rebuild the pump station in its current location. The project plans are complete, but Public Works has had discussions about the effectiveness of this station and its current location. It was suggested that perhaps the pump station should be moved to the Marquart Lagoon side instead in order to allow staff to pump down the lagoon even further to provide a bigger safety margin. The cost of installing the pump on that side could be less expensive, since the High Canal side would require more structural work. AN West has begun an evaluation of various concepts for placing the pump station at Marquart Lagoon. The evaluation is continuing, but Public Works Director Ring referred to “Concept B1” and “Concept B3” which both include propeller pumps placed horizontally in a vault. These are less expensive but present a challenge in terms of the amount of water needed to sit over the pump. The structure needs to be built a bit deeper which could require dredging the lagoon in that area to create the vault. One concept is to place the box at the edge of the lagoon. The pump is placed horizontally into it while dredging the lagoon so water would get into the box. The other concept places the box on the landside with a ditch or canal that would take the water into the box. AN West will be finalizing the concept soon. Staff is looking for the most efficient and economical option.

Acting Chair Zeller asked Public Works Director Ring if he had an estimate for “Concept B3”. Public Works Director Ring stated “not yet”.

Boardmember Medigovich asked about the size of the box. Public Works Director Ring stated it would not be very large, probably about 4' X 4', or 3' X 3'. Boardmember Medigovich asked if it would have a 6” wall. Public Works Director Ring stated “yes”. The unknown soil conditions are a concern and AN West

is concerned about the weight of the box. Boardmember Medigovich referenced a retaining wall structure along the lagoon that has thick concrete walls, and is holding up well. Public Works Director Ring stated the vault could possibly be made out of lightweight material. He noted AN West is taking a very conservative approach. He felt the facility could be built for less than the \$200,000 budgeted amount. He noted the estimate for rebuilding the facility on the High Canal side was more because they would be buying a pump, new piping, and replacing the support structure. The infrastructure that maintains the pump is quite expensive.

Acting Chair Zeller stated the Port of San Francisco uses centrifugal pumps which need a flat bottom on the vault. This is not needed for the horizontal propeller pump. He asked if there would be a cone-shaped screen on the inlet. Public Works Director Ring stated he was not sure.

Public Works Director Ring stated AN West would be submitting the final concepts in several weeks.

Non-Agenda Item

Public Works Director Ring introduced Mr. Bill Carlson, newly appointed Boardmember.

The Board discussed the need for more public outreach regarding Flood Control Board issues. Public Works Director Ring stated he would come up with ideas on how to contact the various homeowner associations, postings on the City Website, etc.

6. Adjournment

Acting Chair Zeller stated the next meeting would be held on Monday, August 2, 2010.

The meeting was adjourned at 9:10 p.m.