MEETING MEMORANDUM

MULLER ENGINEERING COMPANY, INC.

CONSULTING ENGINEERS 777 SOUTH WADSWORTH BLVD., SUITE 4-100 LAKEWOOD, COLORADO 80226 (303) 988-4939

Project

Newlin Gulch MDP

Sponsors

UDFCD / Douglas County / Town of Parker

Meeting Location

UDFCD

Attendees

Shea Thomas, UDFCD
Bill DeGroot, UDFCD
Fred Koch, Douglas County
Brad Robenstein, Douglas County
Tom Williams, Town of Parker
Jacob James, Town of Parker
Derek Johns, Muller Engineering Company
Jim Wulliman, Muller Engineering Company

Meeting Date

May 15, 2013

Issue Date

June 21, 2013

MEC Project No.

12-050.01

Minutes Prepared By

Derek Johns

Routing

ASP / DDJ / JTW

Purpose

Newlin Gulch MDP – Progress Meeting #3

Muller Action Items:

- 1. Muller will prepare a memorandum that summarizes the hydrologic evaluation of Rueter-Hess Reservoir and the flood control benefits associated with reservoir.
- 2. Muller will start preparing portions of the Draft Hydrology Report but will hold-off on finishing/publishing the report until PWSD Board approves the concept of officially recognizing the flood control benefits of Rueter-Hess Reservoir.
- 3. Muller will prepare a fee for a new FHAD study on Newlin Gulch.

UDFCD Action Items:

1. Shea will send an example "adequate assurances" agreement to Douglas County and Parker.

Douglas County and Town of Parker Action Items:

- Douglas County and Parker will take the lead on coordinating with PWSD and working out the details for an adequate assurances agreement to officially recognize the flood control benefits of Rueter-Hess Reservoir.
- **2.** Douglas County and Parker will pull out information from the Rueter-Hess memorandum and provide this to PWSD staff for their presentation to their Board.

Discussion

THE FOLLOWING IS OUR UNDERSTANDING OF THE SUBJECT MATTER COVERED IN THIS CONFERENCE. IF THIS DIFFERS WITH YOUR UNDERSTANDING, PLEASE NOTIFY US IMMEDIATELY.

1. MEETING WITH PWSD

Tom (Parker) and Fred (Douglas County) summarized the outcome of the meeting that the Town of Parker and Douglas County had with Parker Water and Sanitation District (PWSD). They met with Ron Redd/PWSD and it went well. PWSD is open to considering an agreement that would allow the flood control benefits of Rueter-Hess Reservoir to be officially recognized. PWSD sees this as an opportunity to show some of the other benefits of the reservoir. Specifics of the routing assumptions were not discussed, but Tom said that we should proceed with the option of routing through the auxiliary spillway. Tom said that in past conversations, Jim Nichol/PWSD has mentioned that PWSD would like to have the flexibility to possibly store more water in the future within the 1.6-foot zone between the service spillway and the auxiliary spillway.

2. RUETER-HESS RESERVOIR INFORMATION

Derek said that the hydrologic modeling of Rueter-Hess Reservoir was based on storage and discharge rating curves provided on as-built drawing. Muller does not have as-built drawings of the spillway dimensions. The group decided that the as-built drawing of the rating curves is sufficient documentation. Fred said that this as-built drawing should be included as part of the "adequate assurances" agreement with PWSD (the document that would be used to officially recognize the flood control benefits of Rueter-Hess Reservoir).

3. ADEQUATE ASSURANCES AGREEMENT

Bill and Shea said that UDFCD has an example "adequate assurances" agreement to start from and will send it to Fred. The agreement with PWSD will include Parker, Douglas County, and UDFCD. Parker and Douglas County will take the lead on this effort.

4. INFORMATION FOR PWSD BOARD MEETING

Tom said that the PWSD Board meets every two weeks. The group asked Muller to prepare a technical memorandum that summarizes the hydrologic evaluation and explains the flood control benefits of Rueter-Hess Reservoir. Parker and Douglas County will pull information from the memorandum and provide this to PWSD staff for their presentation to the Board. Fred said that Wendy Holmes (Douglas County) can help write/format this information which PWSD staff can use for their presentation to the Board and also as a press release.

The technical memorandum should include a summary of the hydrologic evaluation of Rueter-Hess Reservoir and document the flood control benefits. Specific items that were suggested to include in the memo are as follows:

- a. Tom and Jacob suggested to state that storm flows would have increased with new development and list the percent increases.
- b. Derek suggested showing an exhibit of the current floodplain in Stonegate Village and how it is currently close to residential properties. This exhibit would help to show that any significant increases in storm flows could result in properties being in the floodplain.
- c. Tom said to mention flooding issues at Recreation Drive and how being able to recognize flood control benefits of Rueter-Hess Reservoir will allow improvements at this location to be accomplished more cost effectively.
- d. Tom said to mention that the lower flows will also allow new bridges (i.e., Jordan Road) to be constructed more cost effectively.

The group requested that the memorandum be prepared as soon as possible (next week). Shea said that UDFCD will cover the cost for preparing the memo and Fred said that Douglas County could pay for any "extra" figures and graphics needed for marketing and/or press releases.

5. FHAD

Tom said that Parker would like to pursue doing a new Flood Hazard Area Delineation (FHAD) study that recognizes the lower peak flows from Rueter-Hess Reservoir. Tom thought that a new FHAD would be beneficial for the following reasons.

- a. Recreation Drive flooding issue. A new bridge or culvert crossing is needed at this location that could at least convey small storms (i.e., 5-year event). A few years ago, Parker looked at putting in a new bridge at this location but there were floodplain issues along the adjacent commercial property. Recognizing lower flows from Rueter-Hess would allow for a more cost effective solution at this location.
- b. <u>Jordan Road Bridge.</u> Tom said that Parker has a project underway to widen Jordan Road and add a turn lane where it crosses Newlin Gulch. To do this, the existing bridge will need to be widened but the hydraulic evaluations are indicating that there would be a rise in the floodplain which would cause problems at this location. To resolve the floodplain issue, they would have to tear out the existing bridges and build a new bridge with a longer span. Tom said that if flows are truly lower as a result of Rueter-Hess Reservoir, then it makes sense to officially recognize this. The lower flows would allow for a more cost effective solution at this location.
- c. Tom added that any other new bridges or channel structures will be more cost effective by recognizing the lower flows in a new FHAD.
- d. Fred mentioned some concern with developing a new FHAD using the lower flows because he does not want to constrict the existing floodplain. Tom does want to constrict the floodplain either. Tom said that the entire Newlin Gulch floodplain corridor downstream of Rueter-Hess has been dedicated as open space to Stonegate Village and the Town of Parker, so no new development can occur that would constrict the floodplain.
- e. As an idea to provide more floodplain buffer, Jim mentioned the idea of adding the 590 cfs emergency flow release from Rueter-Hess Reservoir to peak storm flows. Tom thought this would be a little too conservative and not necessary.

f. The group decided to proceed with a new FHAD study. Bill and Shea did not originally plan on a new FHAD but said that they can find the funding for this. Shea asked Muller to provide a fee for a new FHAD.

6. DRAFT HYDROLOGY REPORT

Tom felt that we should hold-off on publishing the Draft Hydrology Report until the PWSD Board approves the concept of officially recognizing the flood control benefits of Rueter-Hess Reservoir. Shea said that Muller could start working on portions of the report but agreed with Tom that we should hold-off on finishing it until we get PWSD's response. Shea said to not include all the sections in the draft report that are specified in the checklist. Some sections are not necessary at this phase of the project. Shea said to refer to the Coal Creek/Rock Creek draft hydrology report as a good example of sections that should be included.

END OF MINUTES