



MEMO

To: Terry Wolterstorff, Public Works Director

From: John Wagner, Water Superintendent

Date: August 14, 2013

Re: Lighted Star on the Skyline Storage Reservoir

Terry,

Listed below are my concerns with the operation and maintenance of the star mounted on top of the Skyline water storage reservoir. I am looking for direction for either continued or discontinued use of the star (structure).

- There are several safety issues involved with climbing the structure to string the lights or replace bulbs. Maintenance staff must climb up a small ladder mounted on the structure and tie off with climbing equipment. They must then reach/crawl out to each point on the structure, while being tied off, to properly string the lights. The top of the structure is approximately 15' from the top of the storage tank. The top of the storage tank is 170' from the ground elevation. Staff safety is my foremost concern with maintenance of the star.
- If it is decided that illuminating the structure is to be continued, the structure needs to be redesigned so staff can change the strings of lights while standing on the top of the storage reservoir, within the guard rail. This would entail a redesign which would enable the structure to be lowered and then rotated while standing on firm ground. I do not believe there is enough space within the guard rail to accomplish this. Further investigation and design would be warranted, which of course would be an added cost.
- With safety issues involved with climbing the structure, the stringed lights are not installed and then removed during the Christmas season. Consequently, weather takes a toll on the wiring and bulbs. Yearly maintenance must be done to insure all of the lights are working.
- The current lights that are used are not clearly visible from a distance. If it is decided that illuminating the star should be continued, new lights need to be purchased that have better illumination.
- There were operational communications issues encountered with the structure when Water Reclamation migrated to radio telemetry communications for their SCADA system. The contractor had to switch out the specified antennae in order for the communications to work properly. Future radio communications issues are anticipated to be encountered if there are other requests to use the Skyline tank for communications.
- With additional infrastructure continually being added to our system, staff time to maintain the structure is also a concern.

Please advise.

Thank you,
John Wagner
Water Superintendent of Public Works