

CITY OF RAPID CITY RAPID CITY, SOUTH DAKOTA 57701

Public Works Department

300 Sixth Street Telephone: (605) 394-4165 FAX: (605) 355-3083 Web: www.rcgov.org

MEMORANDUM

TO: Public Works Committee, Mayor Kooiker and City Council

FROM: Terry Wolterstorff PE, Public Works Director

DATE: August 20, 2012

RE: Investigation of Irrigation Water Source for Soccer Complex, Project No. 13-2098 / CIP No. 50963

Public Works Department staff have reviewed the Study Report completed by CETEC Engineering Services Inc., for the Investigation of Irrigation Water Source for Soccer Complex. The Study compared the use of onsite raw water verses the use of potable treated City water for the purpose of irrigation of the site. The Study provided capital and life cycle cost analysis to compare the use of City water with a Madison well, a Minnelusa well, an Inyan Kara well, and a shallow Box Elder Creek Alluvium source. The Study reported that there was no alternative source of irrigation supply for the proposed sports complex which is clearly technically viable and economically justified over a 20 year period. The Study reported that there were serious technical issues associated with all of the potential groundwater sources considered. Technical issues include risk of loss due to uncertainty, and water rights and water quality issues which have a significant impact on feasibility. The use of City potable water was the least expensive most reliable option over 20 years.

Staff recommends that the use of onsite water for irrigation not be pursued at this location at this time based on the findings of this report.

