



# CITY OF CLOVIS MEMORANDUM

**TO:** Mayor and City Council Members

**FROM:** Planning and Development Services Department

**DATE:** April 5, 2004

**SUBJECT:** Consider Approval – Site Selection of Preferred Site “E” for the Sewage Treatment – Water Reuse Facility (ST-WRF)

## ***Recommendation***

1. Approval – Site Selection of preferred area “E” for the Sewage Treatment-Water Reuse Facility (ST-WRF); and
2. Authorize – City Manager to commence property acquisition negotiations for the siting of the Sewage Treatment- Water Reuse Facility (ST-WRF) in area “E”; and related sewer pump stations subject to CEQA compliance; and
3. Authorize – City Engineer to update the approved Sewer Master Plan to include an Implementation Plan considering City Council actions specific to site selection; and
4. Provide Policy Direction - on the specific landscape buffer set back adjacent to the site. City Engineer to incorporate the set back into the Design Build Operate procurement document specifications.

## ***Summary***

With the expansion of Clovis' Sphere of Influence in 2000 and the planned growth of the city into new urban centers, it is necessary to construct additional sewer collection and treatment facilities. Because of the historic overdraft of ground water in this area, it is also essential the City utilize best available technology to treat wastewater for beneficial reuse and reclamation.

When properly treated, reclaimed water can be used without restriction for public open space irrigation, agricultural irrigation, recreation and many commercial/industrial applications. For every gallon of reclaimed water put to beneficial use within the City of

Clovis General Plan Area, there is a corresponding reduction of a gallon of water that would otherwise be pumped from the groundwater aquifer or surface water sources. The proposed Sewage Treatment-Water Reuse Facility (ST-WRF) is anticipated to ultimately treat about 8.4 Million Gallons a Day (MGD) of effluent.

Since the proposed ST-WRF will be a significant public infrastructure element for decades to come, the City of Clovis committed to soliciting extensive participation in the development of the project. The initial step in this process was selection of a suitable site. In order to do this, the City identified appropriate site selection criteria to be utilized in evaluation of all potential sites.

The issues presented in this report summarize the application and refinement of the approved Tentative Site Selection Criteria (dated June 3, 2002), the criteria's ability to identify potential properties located within three quarter sections and one fifty-acre parcel (dated July 22, 2002). Subsequently, the City Council directed staff to further analyze the three quarter sections and fifty-acre parcel considering best available process treatment technology currently available, and to prepare a Design Build Operate (DBO) Request for Qualifications for the plant (dated September 2, 2003). The City Council then directed staff to further refine the site selection process and conduct a Wastewater System Infrastructure Cost Comparison Analysis between sites "SC," "SE," and "E" (dated December 1, 2003).

This report recommends a preferred site or area from three ten-acre sites analyzed. This recommendation is based upon the detailed Cost Comparison Analysis completed by Blair Church and Flynn (BCF) for each of the three sites.

This report also provides a discussion of land use issues relative to each of the sites and presents information-supporting staff's recommendation that area "E" will allow for the best implementation of the development of the Southeast Urban Center.

Staff has included discussions in this report updating key elements for treatment technologies, summary updates of the Reclaimed Water Master Plan, status of the Environmental Impact Report preparation, and the DBO procurement method of project delivery.

### ***Discussion***

On June 3, 2002, Clovis City Council approved eleven Site Selection Criteria to be utilized for the identification of potential sites within the boundaries of the 1440-acre study area. The Site Selection Criteria for the ST-WRF established the basic protocol for the land area needed to address the concerns expressed throughout the Council meetings, public hearings, and development of the Good Neighbor Policy report.

Based on these criteria, on July 22, 2002, the City Council approved an area to be analyzed for further study. This area is mostly controlled by the McFarlane Partnership and two additional property owners, and is approximately 530 acres in size, comprised

of three quarter sections and a fifty-acre property. Within this area are two additional property owners at the northeast corner of Highland and Ashlan on approximately twenty acres. Council directed staff to evaluate potential sites in the subject area using a ST-WRF area template of seventy-five acres. This area included twelve acres for the physical plant and approximately sixty-three acres for an open space buffer element surrounding the plant. The need for the seventy-five acres was based entirely on the type of treatment technology then being considered, an "Oxidation Ditch," and the belief that a substantial setback buffer would be required to prevent any objectionable odors from impacting adjacent properties.

On September 2, 2003, the City Council authorized staff to continue analysis on the subject area utilizing a significantly smaller ST-WRF area template that incorporated best available treatment technology. At this meeting, Council also authorized staff to prepare a DBO Request for Qualifications for the ST-WRF.

An important development of the project, the alternative best available treatment technologies (see next section), would not require the same seventy-five acres to site and buffer the facility. The footprint of the physical plant for the process treatment technologies currently being evaluated is quite small at two to five acres with an additional five to eight acres included for the buffer element. The total requirement for the ST-WRF was therefore reduced to ten acres for the Cost Comparison Analysis at the December 1, 2003, Council hearing.

Staff has been working with the project team of consultants to develop a preliminary layout for the ST-WRF on the ten acres. This layout will be presented to Council in staff's presentation. The DBO teams will submit the final site plan as an integral aspect of each proposal.

This is an important element that relates directly to ultimate project cost. Several problems were identified with defining a final site plan to the DBO teams. Primarily, these revolve around issues of developing a cost for the proposal. Each DBO team is expected to propose a particular type of treatment process based on a range of treatment processes, vendors, construction type, etc. Staff believes that if a high degree of site design flexibility is provided by simply providing the DBO teams with general site design parameters (such as buffering, appearance, and location of facilities on the site), there will be a corresponding (and competitive) cost-efficiency with each proposal.

Staff is requesting Council direction to reduce the buffer surrounding the ST-WRF physical plant given the introduction of alternate process treatment technology. As noted, previous discussion of a three hundred foot buffer was based on Oxidation Ditch technology. The facilities staff has visited have had buffers between one hundred (100) to five hundred (500) feet. Each facility is different, staff recommends between one hundred and one hundred fifty (100–150) feet. The treatment technology being proposed and the fact the facility is proposed to be fully air scrubbed is the basis for the recommendation of a reduced buffer area.

### ***Alternate Process Treatment Technology***

The ST-WRF is proposed to be an advanced tertiary wastewater treatment plant utilizing the activated sludge process. The activated sludge process is a continuous-flow, aerobic biological process with a proven record for wastewater treatment. There are several alternative process methods which all fall within the category of activated sludge processing. Staff has visited several facilities utilizing the activated sludge process and narrowed the treatment processes to be considered to Sequence Batch Reactors (SBR) and Membrane Bio Reactors (MBR). The preparation of the procurement documents for the DBO component of the project will incorporate performance specifications considering both treatment methods. Detailed information specific to these treatment processes was provided to Council at the December 1, 2003, Council hearing in Section 1 of the binder.

### ***Design Build Operate (DBO)- Procurement Consultant***

At the December 1, 2003, Council hearing Council authorized the City Manager to execute an Engineering Service Agreement (ESA) contract with Red Oak, a subsidiary of Malcolm Pirnie for the development of the DBO procurement documents. This ESA contract has been executed with Red Oak and the DBO procurement documents are being developed. Staff and the project consultant teams have met in several one and two day procurement strategy workshop sessions to develop and refine the DBO procurement contract language. The schedule for release of the Request for Qualifications (RFQ) phase is the week of April 26, 2004. The request for qualifications evaluation will narrow the field of DBO teams to four. These four DBO teams will then be allowed to respond to the August 2004 Request for Proposals (RFP). The RFP will be due in November 2004 for staff evaluation. Red Oak will assist staff with the evaluation of the DBO submittals. Staff will then submit a report of recommendation for Council consideration and approval in January 2005. This is a very aggressive schedule; the RFQ document alone will be fifty pages in length and the RFP procurement contract documents into the hundreds. To date staff has received fourteen submittals from interested DBO project teams for the project. This is a very sensitive issue relating to release of information specific to the project. Staff has been fielding questions and has attended several presentations presented by DBO project teams. To avoid any of the potential for conflict of interest, all queries and information from this point forward will be routed through Red Oak.

### ***Reclaimed Water Master Plan – “Purple Pipe”***

The City of Clovis Water Master Plan utilizes water reuse as a key component in meeting the projected water balance in the future. In the approved 2003-04 Capital Improvement Program budget the development of a reclaimed water master plan was scheduled. Blair Church and Flynn in conjunction with the ST-WRF project team is in the process of developing the reclaimed water master plan. Several key elements of the reclaimed water master plan have been completed, most notably the identification of land areas that will be available at community build out where reclaimed water may be

applied to meet irrigation needs, together with estimates of annual irrigation water demand on a monthly basis for these areas. The analysis indicated there would be enough area at build out to apply the reclaimed water during the months of March through October when irrigation demand is high, with a significant deficit of available land area during November through February when irrigation demand is very low. A key component of the City's master plan for the reclaimed water usage will be determining an acceptable method of reclaimed water disposal during the wet season, November through February each year. The ST-WRF project team is evaluating what options will provide the most flexibility to the City to resolve this issue. The reclaimed water master plan will become the most significant issue to be addressed as the ST-WRF project moves forward in the process. The ability for the City to establish the method, manner, location and usage demand for the reclaimed water is critical to permitting the ST-WRF with both the State Regional Water Quality Control Board (RWQCB) and Department of Health Services (DHS).

### ***ST-WRF Project Management***

For the ST-WRF project to be effectively managed, a detailed project budget and schedule will need to be developed and maintained. Key milestone dates are essential to keeping the ST-WRF on track and on schedule. The ST-WRF project team will continue to refine the project delivery schedule for the ST-WRF project. Staff will provide Council with regular updates in the form of a ST-WRF monthly staff report. The monthly status report will allow Council and the City's senior management to quickly determine the status of the project. An updated ST-WRF project schedule is attached to this report for review.

### ***Site Selection Study – Report of Findings***

The City of Clovis Council approved on December 1, 2003, the preparation of a detailed Wastewater System Infrastructure Cost Comparison Analysis between sites "SC", "SE" and "E". The analysis considered the following issues;

- The precise locations for each of the three sites.
- The logical location for the influent pump station for each alternate plant (terminus of trunk sewer system) with respect to the ten-acre site boundary.
- The Draft Collection System Master Plan was modified as required to provide for the precise location for each of the three alternative sites.
- For each alternative, a conceptual plan was developed for providing potential interim service to the Southeast Service Area prior to completion of the ST-WRF, and also for diverting some flow from the Fowler Trunk Sewer to the plant at startup.
- The report presented a cost comparison analysis for trunk sewers, pump stations and force mains at each alternate site.
- The report identifies system implementation and operational differences between the sites that may not lend themselves to workable economic comparison.

- The report discussed analysis methodology and identified estimated cost differentials.

By considering these issues the final report summarizes the difference in cost between Alternatives "SC" and "E" at 1.8% or \$1.642 million with a present worth analysis considered over the twenty-six year life. This additional cost, in staff's opinion, can be considered neutral, meaning the costs utilized in developing the analysis was either historical construction cost or from the project consulting teams similar projects throughout the country. The typical approach for the development of construction project cost to turn to similar projects or as in this case, projects in design by Malcolm Pirnie for another municipality. The construction costs are all relative when comparing the costs between the three sites. This is a key issue, Council's direction was to determine the cost differential between site "SC" construction costs and the cost to construct site "SE" and "E". This cost differential is therefore a relative comparison of cost. The actual contract construction amount for the project will be considered when the DBO teams submit their proposals later this year.

### ***Environmental Impact Report (EIR)***

Jones & Stokes Associates (JSA) is currently under contract with the City to provide analyses and direction for compliance with the California Environmental Quality Act (CEQA) prior to the actual start of the Environmental Impact Report (EIR).

In brief, CEQA requires public agencies to analyze and consider the potential environmental ramifications of their projects that would result in a physical change in the environment before they take action to approve such projects. A "project" is defined as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment..." (CEQA Guidelines Section 15378)

Section 15004 of the CEQA Guidelines explains that choosing the precise time for CEQA compliance involves a balancing of competing factors. CEQA documents must be prepared "as early as feasible in the planning process to enable environmental considerations to influence project program and design and yet late enough to provide meaningful information for environmental assessment."

Section 15004(b) goes on to set out the following principles:

- (1) With public projects, at the earliest feasible time, project sponsors shall incorporate environmental considerations into project conceptualization, design, and planning. CEQA compliance should be completed prior to acquisition of a site for a public project.
- (2) To implement the above principles, public agencies shall not undertake actions concerning the proposed public project that would have a significant adverse effect or limit the choice of alternatives or mitigation measures, before completion of CEQA compliance. For example, agencies shall not:

(A) Formally make a decision to proceed with the use of a site for facilities which would require CEQA review, regardless of whether the agency has made any final purchase of the site for these facilities, except that agencies may designate a preferred site for CEQA review and may enter into land acquisition agreements when the agency has conditioned the agency's future use of the site on CEQA compliance.

(B) Otherwise take any action which gives impetus to a planned or foreseeable project in a manner that forecloses alternatives or mitigation measures that would ordinarily be part of CEQA review of that public project.”

JSA and Clovis are currently in the beginning stages of preparing an EIR for the proposed ST-WRF. Although the project description is not fully completed, the general location and operational principles of the ST-WRF are known. Two immediate issues are discussed in this report in the context of CEQA compliance, DBO contract and site selection.

### ***DBO Contract***

Clovis is interested in entering into a DBO contract for the ST-WRF prior to completion and consideration of the EIR for the project. In order to avoid taking an action that would approve the project, presuppose the selection of an alternative, or restrict possible mitigation measures before the EIR has been approved/certified, the City must not effectively “approve” the project, by entering into a contract with the DBO firm, before disclosing and considering its environmental impacts.

In general, entering into a DBO contract for the ST-WRF falls within CEQA's definition of a project. Since this is a project subject to CEQA, the next question is whether it has reached a point where sufficient information is available to support a CEQA analysis and the related disclosure of potential environmental effects.

Accordingly, in order to proceed with selecting the DBO while complying with CEQA, the contract with the DBO firm must be made contingent upon the following occurrences: (1) certification of a Final EIR for the project and the adoption of required findings and statement of overriding considerations; (2) final selection of a preferred alternative site and technical approach; and, (3) compliance with all pertinent mitigation measures that are adopted as part of the project approval. Also, the contract could be structured in a way so that the "design" stage, the "build" stage, and the "operate" stage approvals of the DBO work contract could be finalized based on key CEQA/other permit approval milestones.

### ***Identification of a Preferred ST-WRF Site***

In accordance with CEQA Section 15126.6 (a), the EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. The EIR must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation.

As noted previously, the City must not effectively “approve” the project, by approving a final ST-WRF site, before disclosing and considering the ST-WRF’s environmental impacts in the EIR. For the purposes of compliance with CEQA’s, Council’s actions on the staff recommendations should be characterized as identification of a *preferred*, not *exclusive* site for the ST-WRF.

### ***Land Use Consideration***

Medium and Medium-High Density Residential land uses dominates the Residential Planned Community. This land use is proposed to be complemented with neighborhood-serving commercial uses and open space features such as paseos, parks, and water features. The latter provide an opportunity for use of reclaimed water from the ST-WRF.

The planned Business Campus lies in the 389-acre Eastern Village Master Planned Community. The Business Campus provides for the development of professional offices, research and development, corporate headquarters, light assembly, and warehousing uses. Limited commercial retail uses are also permitted that primarily serves the needs of surrounding employees.

Staff is of the opinion that although the ST-WRF can be designed to integrate into any land use, when comparing a Business Campus environment to a residential setting, Area “E” presents a logical location for an operation that, however buffered, is largely industrial in nature. It will be significantly different to fit a project of the scale being considered into a single-family residential setting than it will be to incorporate it into the planned business campus. The ST-WRF can easily be made to fit, both in scale and architecturally, with adjacent business campus development. It is close enough to the future Residential Planned Community and other planned water features that differences in piping costs for distribution of reclaimed water are not a substantial factor.

The collection system developed for area “E” will also allow for the best implementation of the development of the Southeast Urban Center. Pump stations and force mains needed for Site “E” are significantly different from those needed for Sites “SC” and “SE” and offer significantly more flexibility in the long term for the City’s management of wastewater.

### ***Implementation Plan***

The implementation strategy will vary depending upon which alternative Council approves. Approval of the recommended area "E" will provide the highest degree of flexibility with how the City of Clovis authorizes entitlement processing within the Southeast Urban Center. Though site "E" is 1.8% higher in cost than site "SE" and "SC", determined by a present worth cost analysis, staff believes the additional development cost can be considered neutral over the life of the project. Staff recommends Council approve area "E" as the preferred site location and authorize staff to bring a detailed sewer master plan update back to Council for consideration in May 2004. The Sewer Master Plan update will consider development throughout the City as well as provide a detailed implementation plan for the Southeast Area considering both cost to implement and schedule for entitlement action approval.


### ***Reasons for Recommendation***

The City of Clovis must take steps to provide for sewage collection and treatment facilities to serve the planned growth areas identified in the 1993 General Plan and approved 2000 Sphere of Influence. Clovis has devoted over two and one-half years to the public outreach component of the ST-WRF project to inform the public and to encourage discussions. During this period of time, staff has met and discussed the ST-WRF project with the public, neighborhood interest groups, public agencies, consultants and the regulatory community. Throughout these meetings and discussions, the City of Clovis has maintained its advocacy for the project. The concerns, design alternatives, and most importantly the input from the public have been integrated into the project. It is from that level of input that staff recommends to Council the selection of area "E" as the preferred site. The engineering component, enhanced land use capability and the flexibility area "E" provides the City with the development of the Southeast Urban Center Specific Plan, through a detailed implementation program, all support staff's recommendation for area "E" as the preferred site alternative.

### ***Steps Following Approval***

- Staff will continue to work with the ST-WRF Project team in the preparation of the DBO Procurement contract for the Sewage Treatment-Water Reuse Facility.
- Staff will begin the discussions with the property owners located within the designated area "E" vicinity.
- Staff will work with Blair Church and Flynn in the development of an update to the Sewer Master Plan considering the Council action and direction of April 5, 2004. The Sewer Master Plan will develop an implementation plan for the Southeast Urban Center as a key component of the update. The implementation plan will be submitted to Council for review and approval on May 17, 2004 or as near to that date as practical.

Submitted by:

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Steven E White, City Engineer

Recommended by:

Handwritten initials 'JW' in black ink, with a small dot above the 'W'.

Jeff Witte, Assistant City Manager