

EXHIBIT “A”
SCOPE OF SERVICES - CITY OF GRAND PRAIRIE
WEST JOE POOL LAKE WASTEWATER SERVICE PLAN

ARTICLE 1
PREPARATION OF WEST JOE POOL LAKE WASTEWATER SERVICE PLAN

- A. **BASIC SERVICES** : Gresham Smith (GS) shall render the following professional services in connection with development of the PROJECT.

The PROJECT will establish a phased Wastewater Infrastructure Service Plan for areas of the City of Grand Prairie (CITY) lying along the west and northwest sides of Joe Pool Lake, inclusive of areas within Loyd and Lynn Creek Parks including the Oasis restaurant and marina, areas immediately outside of and adjacent to the parks including areas along Ragland Road, Arlington Webb Road, Lynn Creek Parkway, and Lake Ridge Parkway, and nearby areas east of SH 360, as shown on Attachment A. The need for this service plan arises from the following precedent conditions:

1. The CITY parks within the limits of the PROJECT include CITY operated park facilities and improvements and an existing restaurant and marina which collectively receive CITY wastewater service through a network of temporary storage facilities, wastewater gravity pipelines, force mains and lift stations, most of which were built in the 1980s as part of the original construction for Joe Pool Lake. While some of these facilities have since been improved by the CITY in response to increasing demands, these facilities were significantly impacted following multiple recent extended periods of federal activation of the flood storage component of the lake, flooding the PROJECT area, and resulting in submergence of these facilities resulting in impacts to the operational users of these facilities; and
2. Immediately outside of the parks are areas of undeveloped land which ultimately are expected to be developed in their entirety. Initial developments including the CITY’s fire station along Lake Ridge Parkway have installed isolated wastewater facilities to address their individual needs. Proper planning will evaluate the extent future planned individual wastewater facilities can be reduced, particularly additional lift stations, and reduced impacts during federal use of flood storage within the project area in order to improve CITY operational efficiency through orderly planning of fewer facilities that serve greater areas at a reduced cost.

Gresham Smith (GS) will complete the project through a process of evaluating the existing infrastructure within the service limits for the PROJECT, establishing demands from future growth, evaluating the most efficient alternatives for existing and future wastewater service, evaluating the areas subject to flooding during the impoundment of flood storage within this service area, identifying improvements needed to provide wastewater service in the most efficient manner for the City’s operation and maintenance and developing multiple development scenarios for CITY’s implementation of recommended improvements. These recommendations will be summarized in the West Joe Pool Lake 2019 Wastewater Service Plan, the PROJECT.

GS will undertake the following tasks to complete the PROJECT:

- 1.01- **PROJECT Team Kickoff:** GS will attend a meeting with CITY to obtain CITY preferences for project protocols for GS' performance of project tasks inclusive of defining City requirements for accessing CITY resources and personnel, for managing and reporting project progress, for addressing change management, and for soliciting CITY guidance on CITY procedures that relate to GS' performance of the project. Upon completion of this meeting, GS will produce a meeting summary to be provided to CITY for comments prior to GS finalizing the summary accounting for the meeting.
- 1.02- **Conduct field review of PROJECT service area and Oasis development for existing conditions and service area understanding:** GS will undertake a field review of the PROJECT service area to confirm the development state of all areas within the service area, existing adjacency of all transportation networks, and proximity of existing development to developed areas outside of the service area. GS' field review will include a field review of the conditions for Oasis operation with the existing infrastructure and the operational planning underway for future improvements at the development. GS will prepare a summary of this information for use in subsequent meetings with multiple CITY departments and identifying input on future planning options.
- 1.03- **Meet with City Planning:** GS will meet with the CITY Planning Department to obtain current planning criteria, population, and zoning, for base map. GS will additionally secure identification and locations for known or anticipated planning for new development or changes being considered for future development criteria. Upon completion of this meeting, GS will produce a meeting summary to be provided to CITY for comments prior to GS finalizing the summary accounting for the meeting.
- 1.04- **Meet with City Parks and Recreation:** GS will meet with CITY Parks and Recreation Department and those with knowledge of Oasis future planning to obtain current and proposed recreational planning for areas within the PROJECT service area, inclusive of prior and current recreational planning for Lynn Creek and Loyd Park, updates to plan, and updates to Lynn Creek Marina and Oasis existing and future planning. GS will segregate elements relating to the timing and changing of wastewater demands through current planning for intervals of improvements representing current uses, uses expected within the next five years, and uses being considered in subsequent time periods or through ultimate development within the service area. For each element of current or future uses, a location will be established along with anticipated visitation, and any planned or identified changes to infrastructure. Upon completion of this meeting, GS will produce a meeting summary to be provided to CITY for comments prior to GS finalizing the summary accounting for the meeting.
- 1.05- **Create planning area mapping for period planning:** GS will document spatial planning of current, five year, and longer term planning locations on base mapping for options analysis.
- 1.06- **Develop criteria for wastewater flow :** GS will research accepted industry design criteria for multiple types of development including recreational and commercial development of all types in use or projected to be in use by the CITY. GS will structure

this criteria to be phased in accordance with both CITY Planning and Parks projections using planning intervals of development in current, five year, and ultimate development and GS will identify project wastewater flow volumes and the locations of these flows for each scenario.

- 1.07- **Integrate existing infrastructure to areas within service area :** GS will utilize CITY calibrated hydraulic wastewater model ICM SE (vers.8.5) to establish new service areas options for additional planned wastewater service within the service area from development planned on base maps for each scenario. Additionally, GS will develop wastewater criteria from adjacent land uses for undeveloped areas within service area and identify projected wastewater flows for these areas as well.
- 1.08- **Define existing capacity:** GS will evaluate capacity of existing wastewater infrastructure extracted from City calibrated wastewater model for each utility line and facility adjacent to each existing and future planned use on each base map scenario, identify and define characteristics and deficiencies for handling additional wastewater flows from future uses, and identify and define improvements to accommodate three planning intervals for the service area.
- 1.09- **Meet with City Utilities Operations** GS will meet with the CITY Utilities Operations Department to present City infrastructure under consideration for capacity assessment for current or future development. GS will additionally obtain operational input on CITY updated equipment and utility pipelines as well as input on needed improvements for existing or planned utility improvements not yet addressed in City's wastewater model, within the service area. GS will prepare an inventory of facilities for which there are known changes or improvements. Upon completion of this meeting, GS will produce a meeting summary to be provided to CITY for comments prior to GS finalizing the summary accounting for the meeting.
- 1.10- **Perform onsite review of existing lift stations:** GS will coordinate with CITY Utilities Operations to secure access to the existing lift stations serving areas of the CITY within the service area. Field review of infrastructure is intended to include portions of wastewater infrastructure subject to impoundment during federal operation of Joe Pool Lake. Upon completion of this meeting, GS will produce a meeting summary to be provided to CITY for comments prior to GS finalizing the summary accounting for the meeting.
- 1.11- **Analyze and develop opportunities for infrastructure improvements:** GS will review the service with CITY Public Works, and identify six development scenarios in which wastewater infrastructure investment will be required to provide needed capacity. These are anticipated to include no development, five year development , ultimate development and combinations of up to three types of development (restaurant, commercial, recreational, or other) to identify trigger conditions for each scenario and the conditions for optimizing City utility investments within the service area to address capacity, and operational improvement needs for each planning scenario. GS will propose the three planning scenarios to the CITY in advance of initiating the analysis for each, allowing CITY to accept recommended scenarios or to propose alternative options for GS consideration. Once a consensus has been reached, GS will complete the analysis

for each scenario, identifying the scope for any improvements required for wastewater infrastructure.

- 1.12- **Define improvements for three planning scenarios:** GS will identify the improvement needed, the locations of the improvements, the conditions driving the need for the improvements, and the OPCC for each improvement in present day dollars.
- 1.13- **Prepare Technical Memorandum:** GS will prepare a Technical Memorandum (TM) defining the existing and future planned utility improvements necessary to support City planning and optimal utility operation and maintenance. The TM will include the conditions that require implementation of the proposed improvement.
- 1.14- **Perform QAQC on final TM :** GS will secure an internal review of the TM in accordance with GS QAQC standards for receiving review of project deliverables for which recommended changes will be considered prior to external delivery of project deliverables.
- 1.15- **Present TM to City staff:** GS will submit TM serving as the basis for the intended report, for City advance review, prior to scheduling a workshop styled meeting with CITY for detailed discussion and receipt of comments. Following the meeting, GS will prepare meeting summary and comment log of CITY comments and proposed responses to comments to CITY.
- 1.16- **Prepare final report** GS will incorporate agreed CITY comments into final report and issue ten copies of final report and one electronic copy of report to CITY. The final report will include three planning scenarios for utility improvements, electronic files supporting the development scenarios for use in updating CITY GIS Resources, and projects costs for implementing improvements.

ARTICLE 2 COMPENSATION

Compensation to Gresham Smith for performance of services outlined in ARTICLE 1 shall be paid by CITY proportionately on the basis of Gresham Smith's progress to complete these services with the full lump sum amount equating to Forty-Nine Thousand, Six Hundred Sixty Dollars (\$49,660), for all of the services in ARTICLE 1.

ARTICLE 3 SCHEDULE

Gresham Smith commits to complete the services as outlined in ARTICLE 1 within a period of one hundred twenty (120) days following CITY's authorization to proceed. Gresham Smith's completion of services within this period of time is conditioned upon the assumption of two

week reviews for the reports and for reasonable access to CITY departments for meetings required in the performance of the project.