

**LIFT STATION OPERATION, MAINTENANCE AND REPLACEMENT AGREEMENT**

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, by and between the Norman Utilities Authority (hereinafter referred to as the "Authority") and \_\_\_\_\_ Shay Development \_\_\_\_\_, an Oklahoma \_\_\_\_\_ limited liability company \_\_\_\_\_ (hereinafter referred to as the "Developer").

1. WHEREAS, the Developer applying for the approval of developing and subdividing their property which would otherwise be served by septic tanks or sewage lagoons maintained privately desire that their property be served by lift stations which would pump wastewater into the Authority's wastewater system; and
2. WHEREAS, this alternative, if approved by the Authority, would require additional operation, maintenance, and replacement costs which are unique to the lift station being utilized; and
3. WHEREAS, the Developer of the proposed subdivision requests that the subdivision be provided wastewater service through the existing \_\_\_\_\_ Eastridge Lift Station \_\_\_\_\_ pumping into the Authority's wastewater system; and
4. WHEREAS, the Developer requests that this alternative be approved as part of the platting process and that an administrative fee be established for each lot (dwelling unit) in the subdivision (development) to provide for the operation, maintenance, and replacement of said lift station serving said subdivision; and
5. WHEREAS, the servicing of new subdivision (development) by an existing lift station will be of great advantage to the property owners within the subdivision by reducing their costs for the installation, operation and maintenance of septic systems or privately maintained sewage lagoons or new lift station, or in the alternative, the value of their property would be reduced significantly.

**BE IT THEREFORE AGREED BY AND BETWEEN THE PARTIES HERETO:**

1. THAT the parties do establish an operation, maintenance, and replacement fee for the \_\_\_\_\_ Eastridge Lift Station \_\_\_\_\_ which can be utilized by the \_\_\_\_\_ Stone Lake Addition \_\_\_\_\_ for the purpose of pumping wastewater from the newly platted subdivision into the Authority's wastewater system and that said monthly fee be billed each lot in the new subdivision served by the lift station by the City of Norman through the utility billing process. Said provision shall be included in the restrictive covenants covering said subdivision.
2. THAT the procedure for establishing said operation, maintenance, and replacement fee for each individual subdivision shall be as follows:
  - a. The Developer shall cause a professional engineer registered in Oklahoma to prepare an Engineering Report for the proposed sanitary sewer lift station and submit said report to the Authority together with the preliminary plat where it is first contemplated. Prior to Council consideration of the preliminary plat, the Utilities Engineer, or his authorized representative, shall estimate the annual administrative fee (the Lift Station Fee) necessary to provide for the proper

operation, maintenance and replacement (OM&R) of the lift station, force main and associated appurtenances.

- b. The Authority shall levy the Lift Station Fee upon all new development within the lift station service area and this determination shall be made a condition of Council's preliminary plat approval.
- c. Prior to Council consideration of the final plat which utilizes the lift station and force main, the Utilities Engineer or his authorized representative, shall finalize the Lift Station Fee utilizing the construction record drawings and final certified construction cost. The Lift Station Fee shall be filed of record as a restrictive covenant with said final plat and all future final plats within the lift station service area.
- d. The Lift Station Fee will be adjusted annually to account for inflation based on the rate of change in the United States Department of Labor's Consumer Price Index for All Urban Consumers for the month most recently published, as compared to the same month in the previous year, and may otherwise be adjusted if the Authority determines that changes to the lift station's service area boundaries necessitate said adjustment.
- e. In the event a new lift station enlarges the service area of the proposed lift station and replaces said lift station, the Lift Station Fee applicable to all existing final plats (if any) may not increase as a result of new calculation. However, the Lift Station Fee applicable to all existing final plats (if any) may decrease to the amount of new Lift Station Fee calculation.
- f. In the event the lift station is taken out of service and its wastewater subsequently flows by gravity to the wastewater treatment facility site, any applicable Lift Station Fee shall be discontinued upon filing of a notice by the Authority.
- g. The Lift Station Fee shall be made a part of the City of Norman Utility bill for collection monthly and accounted for in the Wastewater Fund.
- h. The estimated Lift Station Fee has been calculated and is attached hereto as Exhibit "A" and made a part hereof.
- i. The proposed enlargement of the Eastridge Lift Station service area is shown on Exhibit "B" attached hereto and made a part hereof, as initialed on each page by the undersigned and Authority.

IN WITNESS WHEREOF, the Authority and Developer have executed this Agreement.

Norman Utilities Authority

ATTEST:

By: \_\_\_\_\_  
Cindy Rosenthal, Chairman

\_\_\_\_\_  
Secretary

APPROVED as to form and legality this \_\_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_  
City Attorney

Shay Development, L.L.C.

By: 

Saeed Farzaneh, Manager

Subscribed and sworn to before me this 9<sup>th</sup> day of April, 2015



Notary Public



# Lift Station Operation, Maintenance Replacement Cost Estimate

## Exhibit A

East Ridge Lift Station also serving Stone Lake Addition

The Engineering Report provided by the developer will include sufficient information to allow the City of Norman to calculate the approximate cost to operate, maintain and replace capital equipment for the life of the proposed lift station. This information shall include the following at a minimum: Proposed Lift Station Sewer Service Area including expected number and type of residential units as well as the number of acres of other zoning classifications such as commercial, institutional, industrial, etc. If applicable, a phasing plan shall be submitted. Calculate estimated population equivalent to be served by the lift station (include total population and full buildout by phases, if applicable). Estimated average daily wastewater flow (ADF) in gallons per day (GPD) and peak hourly flow in GPD utilizing generally accepted standards for per capita ADF or other data acceptable to the City of Norman.

	Eastridge Lots	Eastridge Duplex	Sienna Springs Lots	Stone Lake Lots	Eastridge Residential Acres	Eastridge Commercial Acres	Total
Population Equivalent Per Category	441	90	0	48	27.6	2.21	
Estimated Population	2.58	2.58	2.58	2.58	9.29	5	1.761
Estimated average daily wastewater flow (ADF) in gallons per day	1138	232	-	124	256	11	1761
Estimated peak hourly flow in GPD	142,223	29,025	-	15,480	32,051	1,381	220,159
Peaking Factor	568,890	116,100	-	61,920	128,202	5,525	880,637
	4.0						

Drawings showing the location of the proposed lift station, force main and access roadways include sufficient data to allow the pump static head to be determined).

The Engineering Report provided by the developer will include sufficient information to allow the City of Norman to calculate the approximate cost to operate, maintain and replace capital equipment for the life of the proposed lift station. This information shall include the following at a minimum:

HP = ((GPM) x (TDH)) / ((3960) x (0.50)) where pump efficiency is assumed to be 50% (unless otherwise approved). Check if pump of estimated GPM and TDH is available; adjust HP as required

GPM	TDH	Efficiency	HP
430	45	60%	7.58

Estimate average annual electrical cost

1. Pump time (hours per day) = ((ADF in GPD) x 24) / (1440 x (Pump Capacity in GPM))

ADF	Pumping Capacity	Pumping Hours/day
220,159	400	9.17

2. kilowatt-hours (kWh) = (HP) x 0.746 x (pump time in hours per day) x 365

HP	Pumping Hours/Day	Kwh Per Day	Kwh Per Year
7.58	9.17	51.84	18,923

3. Annual Electrical Cost = kWh per year x \$0.08 kWh

kwh Per Year	Cost per Kwh	Cost per Year
18,923	0.1	\$1,892

Estimate annual lift station and force main OM&R cost. Provide approximate cost for lift station and appurtenances. Include wetwell, pumps, discharge piping and valves, electrical controls, flow metering, force main quick-connect coupling, valve vault fittings and valves, fencing, all weather access road, force main air release valves and vaults, etc. Assume annual replacement cost is 5% of original construction cost

Annual OM&R Cost = 0.05 x Capital Cost

Lift Station Cost	8" Force Main Length	Force Main Per Foot Cost	Force Main Cost	Total Cost	Annual Cost
\$330,000	850	\$40	\$34,000	\$364,000	\$18,200

Note: Actual costs from 03/28/04 bid inserted

Calculate Total Monthly OM&R Cost: Monthly OM&R Cost = (Annual Electrical Cost + Annual CM&R Cost) : 12

Electrical Cost	OM&R Cost	Total Annual Cost	Total Monthly Cost
\$1,892	\$18,200	\$20,092	\$1,674

Calculate Lift Station Fee. The fee will be calculated on a residential lot basis as well as a per capita basis to accommodate other zoning classifications such as commercial, institutional, industrial, etc.

Monthly Per Capita Fee = ((Monthly OM&R Cost) x Per Capita ADF) / ((ADF) x 30.417 days per month)

Monthly Residential Fee = where the number of persons per household is the same as was assumed in the Engineering Report.

Total Annual Monthly Cost	Monthly Cost Per Person	Monthly Cost Per Household
\$1,674	\$0.951	\$2,453

