

LIFT STATION OPERATION, MAINTENANCE AND REPLACEMENT AGREEMENT

THIS AGREEMENT is made and entered into this _____, 2018, by and between the Norman Utilities Authority (hereinafter referred to as the "Authority") and 48th and Alameda, 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 (or 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 The Barn at Terra Verde School for the purpose of delivering wastewater from the newly platted subdivision into the Authority's wastewater system and that said monthly fee be billed each lot or customer 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. 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: _____
Lynne Miller, Chairman

Secretary

APPROVED as to form and legality this _____ day of _____, ____

City Attorney

48th & Alameda , L.L.C.

By: Pete Wilson
[Signature], Manager

Subscribed and sworn to before me this 14TH day of May, 2018

[Signature]
Notary Public #17001543

My Commission Expires:

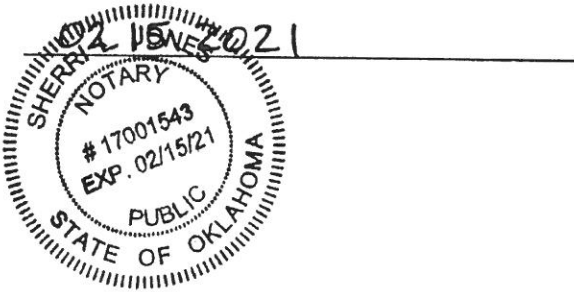


Exhibit A
Lift Station Operation, Maintenance Replacement Cost Estimate
for East Ridge Lift Station Serving
Siena Springs, Stone Lake and Terra Verde School Gym

The Engineering Report provided by the developer provided information to allow calculation the approximate cost to operate, maintain and replace capital equipment for the life of the proposed lift station.

Proposed Lift Station Sewer Service Area: The table below includes the expected number of residential units as well as the number of acres of commercial, institutional and industrial. Based on this data, the estimated population equivalent to be served by the lift station is calculated. The estimated average daily wastewater flow (ADF) in gallons per day (GPD) and peak hourly flow in GPD then calculated utilizing standards for per capita ADF acceptable to the City of Norman.

Note:	Siena Springs	Stone Lake	Terra Verde	Eastridge	Eastridge	Eastridge	
	Residential	Residential	Gym	Duplex	Residential	Future	
	<u>Lots</u>	<u>Lots</u>	<u>Students</u>	<u>Lots</u>	<u>Lots</u>	<u>Acres</u>	<u>Total</u>
	50	42	156	45	532	0	
Population Equivalent Per Category*	2.55	2.55	0.10	5.1	2.55	9.29	
Estimated Population	128	107	16	230	1,357	-	1,838
Per Capita average daily wastewater flow (ADF)	100	100	100	100	100	100	
Estimated ADF in gallons per day	12,800	10,700	1,600	23,000	135,700	-	183,800
Estimated peak hourly flow in GPD	51,200	42,800	6,400	92,000	542,800	-	735,200
Peaking Factor	4.0						
	*2010 Census data						

The engineering drawings provided the location of the lift station and force main to allow the approximate pumping head to be determined.

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.

	<u>GPM</u>	<u>TDH</u>	<u>Efficiency</u>	<u>HP</u>			
	800	49	60%	16.50			

Estimate average annual electrical cost

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

	<u>ADF</u>	<u>Pumping Capacity</u>	<u>Pumping Hours/day</u>				
	183,800	800	3.83				

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

	<u>HP</u>	<u>Pumping Hours/Day</u>	<u>Kwh Per Day</u>	<u>Kwh Per Year</u>			
	16.50	3.83	47.13	17,202			

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

	<u>Kwh Per Year</u>	<u>Cost per Kwh</u>	<u>Cost per Year</u>				
	17,202	\$0.08	\$1,376.15				

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

	<u>Lift Station Cost</u>	<u>Force Main Length</u>	<u>Force Main Per Foot</u>	<u>Force Main Cost (8-inch)</u>	<u>Total Cost</u>	<u>Annual Cost</u>	
	\$330,000	850	\$40	\$34,000	\$364,000	\$18,200	

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

	<u>Electrical Cost</u>	<u>OM&R Cost</u>	<u>Total Annual Cost</u>	<u>Total Monthly Cost</u>			
	\$1,376	\$18,200	\$19,576	\$1,631			

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.

	<u>Total Annual Cost</u>	<u>Monthly Cost Per Person</u>	<u>Monthly Cost Per Household</u>				
	\$1,631.35	\$0.89	\$2.27				
Terra Verde School Gym =		\$14.24					