

## Schedule A

RFP0002-2024 Hopkins Park Pool Renovation

February 2, 2024

**Stated by SCDHEC, following pre-bid meeting on January 25, 2024:**

Good Afternoon,

Thank you for allowing me to come on site and discuss SCDHEC Requirements with the builders you all brought in to put in bids for the work, I appreciated the opportunity to make sure they were going to give you all options that would be in compliance for bring the pool up to operational standards. As discussed today the pool was originally approved for construction in 1972. Sadly I did a review for the original plans and we do not have copies on file due to the age of the pool. Since the pool was built in 1972 it was constructed with a 8 hour turn over time, current regulations require a 6 hour turn over time. As the facility will be modifying the pool shell, pool deck, and pool equipment room the Department will be requiring compliance with current regulations for all aspects of the pool. I have attached a copy of the current SCDHEC regulation 61-51 governing public swimming pools in SC.

Looking at existing facility infostructure today during the meeting I did see that in the pump room you all had 2 sand filters and 2 pumps leading into those pumps and filters where six 2 inch skimmer lines all tapping up into a single 2 inch pipe leading to the pump and a 3 inch main drain line tapping up into the pump and a 3 inch line leading from the pool filters back to the returns. The current volume of the pool is 105,047 Gallons. As I see it there seems to be 3 good options for compliance on site when the pool is renovated.

1. Address current size piping on site to be able to achieve a 6 hour turn over time and keep current pool volume and depth. This would mean bring the pool up to a 292 GPM flow rate at a minimum ( $\text{Current Volume} = ((105,047 \div (6 \text{ hours})) \div 60 \text{ mins}))$ ). This in turn would then impact the piping size, as is not large enough to accommodate the needed flow on either the Pressure or Suction side of piping as the below section of the regulation sets the below limits for piping flow:

Pipe size (inches)	Suction at 6-ft/100-ft (flow in gpm)	Pressure at 12-ft/100-ft (flow in gpm)
1 ½	27	39
2	57	83
2 ½	105	150
3	165	245
4	355	510
5	640	925
6	1000	1500

The Department does require for the system to be sized so that 100% of the flow can come through either the main drain lines or the skimmer lines with the understanding that when operating 50% will be taken through both sides. This is required to ensure that if someone does start throwing valves in the pump room the facility will not be able to break the system. The current 2 inch pipes could still be used as is for the skimmer action as each one of those pipes does have a flow rate of 57 GPM and between all 6 you have the ability to meet the required flow of 292 GPM (each line taking 49 GPM) although the place where they come together will need to be upgraded to a 4 inch line to accept flow from all 6 skimmers at once. The Piping size for the returns will need to be upgrades for the system as well as the main drain line. You will also need to select a pump, filter, and other necessary equipment that can meet these flow rates.

- Address current pool volume on site to bring it down to a volume that is acceptable for 3 inch lines. This would mean reducing your volume from the current 105,047 gallons to 59,400 gallons (165 GPM x 360). Even if you where to choose this option and scale down the volume the skimmer lines where they all join would need to be brought up to a 3 inch line to accept their combined flow. You may also need to look at the ability of your pumps and filters to meet this turn over time.
- Build a Pool inside of the current pool shell you have. This is another good option and maybe the most viable option depending on if you do a pressure test on current piping on site and find that is not holding up and has leaks. This would take a submission as a new project and would be subject to review times and review fees though it might be more viable in the long run.

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In any of these options it will take the time and review of a registered Architect or Engineer as we will require plans stamped by a registered engineer or architect showing the new piping configuration and size, or the new pool profile, or submission of new plans for a public swimming pool. In either option 1 or 2 this would be considered work of a change order request form and applicable plans. In option 3 it would be submission of an application to construct, plans, and the permit review fee. Please keep in mind that if you expand your pool shell in any way it will be required to submit as a new project. Depending on which option you choose will also impact the disinfection system need for the system as you will need a system that can produce 1 pound of Chlorine Per 10,000 gallons of water on site. Also as discussed please be aware we will be reviewing the project submission to make sure the pool has a compliant method for entry and exiting the pool and we do expect that with the pool plaster work being done that the steps must have no height greater than 11 inches and must have minimum tread of 12 inches. You should currently have enough exit points on the pool to be in compliance as if I remember correctly you all had at least 2 sets of steps and 2 ladders provided for your 220 linear feet of perimeter. Also please remember you will need a foot rinse shower within 20 feet of the corresponding entry point.

Another requirement I neglected to discuss on site will be the requirement to install an additional skimmer on the system as you have a Surface area of 2,625 Square Feet and our current regulations require 1 per 400 square feet of surface area or major fraction and the man breaks down to 6.5 when divided and I counted only 6 on site today. Another one I should have looked at today when discussing with the contactors is the number and spacing of returns for the pool. Current regulations require that they can not be over 15 feet apart in distance on a pool of this size. Finally one other requirement I did not discuss would be an Emergency Cut Off Switch installed on the deck with applicable signage that stops all pumps in the pump room from operation when triggered.

I hope this information helps you all in making a choice on how to move forward with this project. Please let me know if you have any questions or concerns or would like to discuss any part of this in further detail. Our goal is to help you all when putting this out to bid so that you get bids that will cover the scope of the work expected.

Thanks,

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