

November 21, 2023

**VIA EMAIL**

**Re: Locker Room design at new Moana Springs Pool**

Dear City of Reno Staff:

We are grateful that the City of Reno is investing in and proceeding with the completion of the Moana Springs Community Aquatics and Fitness Center (“Moana”). The upgrade of the original main pool *dream* from the minimum 35-meter length as required by the Pennington Grant to what will soon be a first for Reno. A new indoor 50-meter, Olympic size pool is a huge improvement for City residents that we all greatly appreciate.

The current Moana design provides minimal bench seating in the non-publicly viewable locker room spaces for the expected user group size. Private bench seating has been sacrificed to provide numerous lockers located in a public viewable space next to the front desk entry. We are told this is to increase locker security. Many of us do not use existing lockers and often experience a shortage of bench space and clothing/bag hooks in current City aquatic facility locker rooms. Furthermore, we wonder how so many of these public viewable lockers can be practically used by swimmers changing into and out of their swimsuits. Swimmers go from pool to locker area dripping wet, then proceed to put their stuff where? Where will mothers change their youngsters?

This minimal bench seating provided in the current Moana locker room design is evident when comparing Moana’s locker room capacity to other facilities as summarized below (please see column “G” percentages):

Locker Room Comparison		A	B	C	D	E	F	G
			= A / 2.5			= D * 1.25		= B / (C + D)
<u>Venue Locker Rooms</u>	<b>Lockers Total Facility</b>	<b>Change Benches Total Facility (ft)</b>	Total Persons Bench Seating	Expected Surge Capacity exclude 50-M	Maximum Swim Meet Swimmers per Session	Maximum Swim Meet Support / Parents	Adjusted Expected Person Capacity incl Swim Meet	<b>Bench Space / Surge Capacity per Athlete</b>
Idlewild Pool	42	102	41		250	313	563	16%
Carson City Aquatic	144	118	47	49	250	313	612	16%
Northwest Pool	42	32	13		200	250	450	7%
Moana In Locker Rooms	56	24	10	115	250	313	678	3%
Moana Public View	188	n/a for comparison						

Assumptions made in the above chart are noted in an attached **Addendum**. According to management at the Carson Aquatic Facility, less than 72 (50%) of its lockers are used when that facility is at full capacity. These lockers are all located in the Carson locker rooms. The current design for Moana only has 56 lockers accessible inside the locker rooms.

## Locker Rooms at new Moana Springs Pool

In our experience, there is a surge of locker room use in current aquatic facilities in the mornings and after school. The short course lane count at Moana will be more than double other year-round City aquatic facilities likely further increasing the surge of users in the mornings and afternoon times. We expect user groups such as ours to grow with the addition of pool capacity (due partly to population growth, and partial alleviation of lack of pool space which has been constraining demand).

Our recommendations for changes in locker room design are motivated by two principal considerations. First, as noted above and in the addendum, the new Moana pool will have many more simultaneous users than other City operated aquatic facilities and locker room space must be able to accommodate the expected number of users. Second, because the minimal proposed bench/clothes changing space is located in the shower area where the floor will become rapidly soaked with water, we are concerned for the safety of users attempting to dress on a slippery floor.

While we acknowledge that we are not architects or experienced in building facilities, some of our membership and fellow citizens of Reno have such expertise and have rendered opinions to us on this matter. Sierra Nevada Community Aquatics (SNCA), a major initiator and longtime contributor to the success of this facility, has previously proposed a few locker room conceptual designs that would address the concerns we have described above. SNCA's conceptual design options are attached. We strongly support and recommend a change in locker room design that will provide a significant increase in bench/clothing changing space and move lockers into the expanded private area of the locker rooms.

It is our greatest hope that Moana will long be viewed as a flagship facility, in every regard, one that is worthy of this region's rich, robust, and hard-earned aquatic legacy. A celebration of that, in fact. Conversely, it is our greatest fear that Moana might be dubbed "the dream facility that fell just short." Legacies are forged in the details, painstaking, openly debated details. Optimal locker room design is one of those details. Let's work through this, assess the wealth of empirical insight available, and arrive at a simple, efficient, common-sense design solution that meets the very real needs of those who will utilize this new, one-of-a-kind community asset.

Sincerely,

Lakeridge Swim Team

Northern Nevada Aquatics

Reno Aquatic Club  
Board of Directors

Sierra Nevada Community Aquatics  
Board of Directors

Sierra Nevada Masters Swimming  
Board of Directors

Sierra Nevada Water Polo  
Board of Directors

## Locker Room Comparison Addendum

Small lockers were calculated as half lockers with a 3:1 ratio for comparison purposes.

Private bench space in enclosed shower stalls at Moana and Carson are not included in the overall bench seating comparison as deemed not practically usable when there is a surge of users. The benches will be wet.

Carson Aquatic Facility has slightly different design elements in the women’s locker room due to building layout and gender preferences. We have accounted for these differences.

In order to calculate **Estimated Total Persons Bench Seating**, we have assumed that each person sitting on a bench will require 30 inches (2.5 feet) of bench space. For example, if Moana retained its planned 24 feet of locker room bench seating,  $24' / 2.5' = 9.6$  people which was rounded to 10 people in the chart. In practicality, when benches are used without sufficient hooks or lockers immediately close by, users tend to pile their clothing/bags on the bench further diminishing available seating space.

We have much experience using large aquatic facilities around the country and personally have experienced how a surge of users, either due to confluence of user groups or large events, can impact locker room features or highlight a lack sufficient capacity. For double width benches to be truly used as such, they need to have a divider between them. We have not added person bench seating count to the Moana center bench if it was intended to be wider than normal due to a lack of a divider and the likelihood that clothing/bags will end up on the bench.

### Expected User Capacity during large Swim Meets

The City Application for Site Plan Review regarding trip generation (traffic) states that “Swim meets (competitions) would also be scheduled with an estimate of up to 500 people in attendance at one time.” When Carson City Aquatic Center holds the Nevada State Meet for USA Swimming youth teams there are “typically 700-750 swimmers entered with about 350-400 for its largest session putting the total number of persons [in attendance] at an estimated 900 at a high point.” In Carson City’s and our local swim meet experience, for every swimmer (depending on type of meet) there can be up to 1.25 additional non athlete attendees, such as parents, officials, coaches, siblings, volunteers for hospitality, snack bar, meet marshals, etc. We would like to hold this very Nevada State Meet at the new Moana facility someday. If that were to occur the bench space as a percentage of athletic users would be further reduced:

<b>Locker Room Comparison</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
		= A / 2.5			= D * 1.25		= B / (C + D)
	<b>Change Benches Total Facility</b>	<b>Total Facility (ft)</b>	<b>Expected Surge Capacity exclude 50-M Seating</b>	<b>Maximum Swim Meet Swimmers per Session</b>	<b>Maximum Swim Meet Support / Parents</b>	<b>Adjusted Expected Person Capacity incl Swim Meet</b>	<b>Bench Space / Surge Capacity per Athlete</b>
<b>Venue Locker Rooms</b>							
Carson City Aquatic	144	118	47	49	400	500	949
Moana In Locker Rooms	56	24	10	115	400	500	1,015
Moana Public View	188	n/a for comparison					

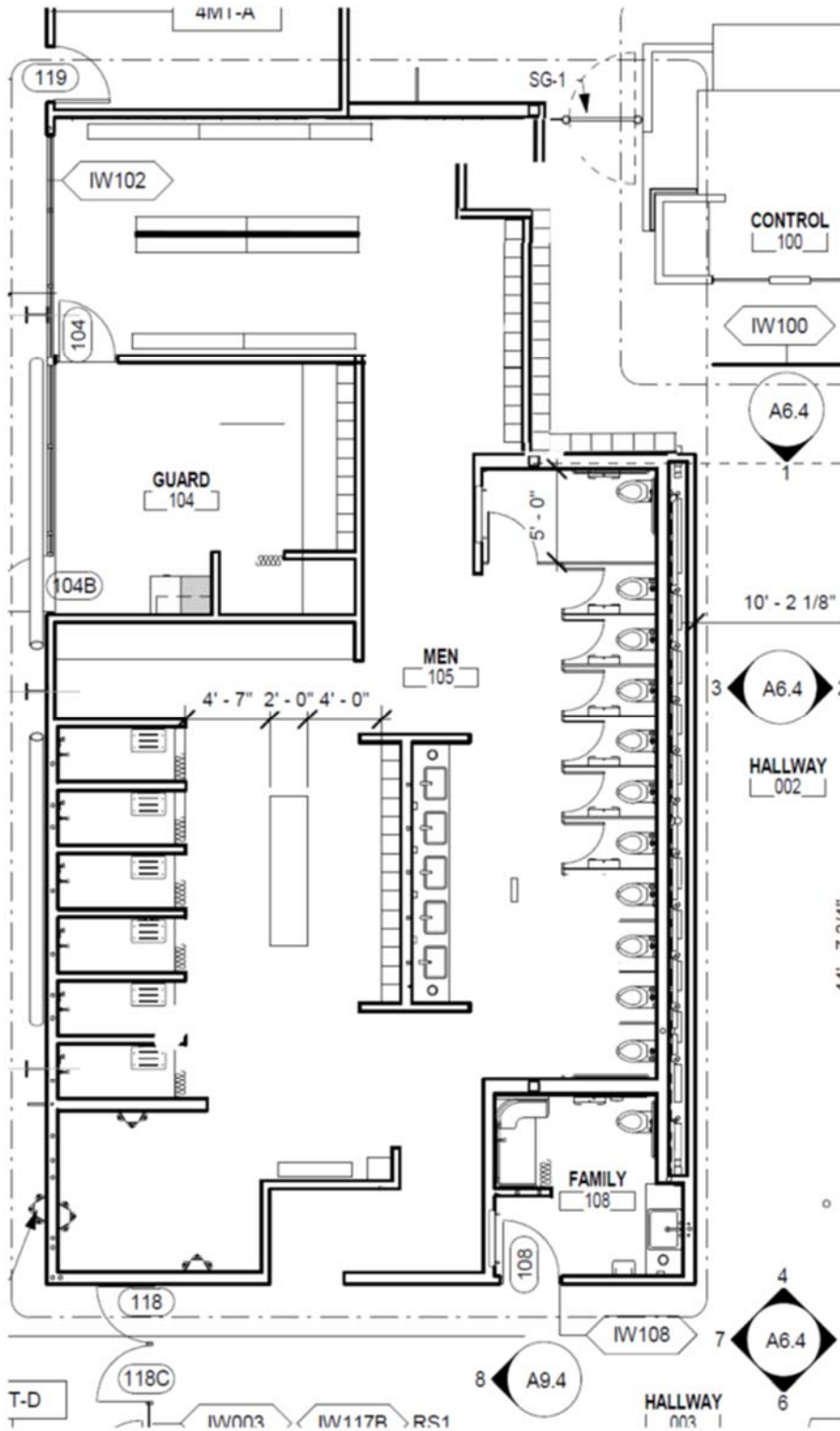
## **Locker Rooms at new Moana Springs Pool**

**Side Note on Urinals:** All other facility locker rooms have urinals for men. The Moana design currently does not have urinals for men as it appears to favor a universal design. As more male users learn of this, a clamor is growing to change the Moana design to add urinals. Besides using less water, the addition of urinals will allow for faster turnover use of the men's locker room and less mess on the toilet seats. Accordingly, adding urinals to the men's locker room is a practical solution that we highly recommend be added now at lower cost prior to opening rather than later after demand to do so surges.

# Locker Rooms at new Moana Springs Pool

## SNCA Conceptual Option A – No shift in guard room, lockers in hallway.

Locker Room Design Option proposed by SNCA 10/3/2023 (men's locker room version, women's to mirror except for urinals as added by SNCA)

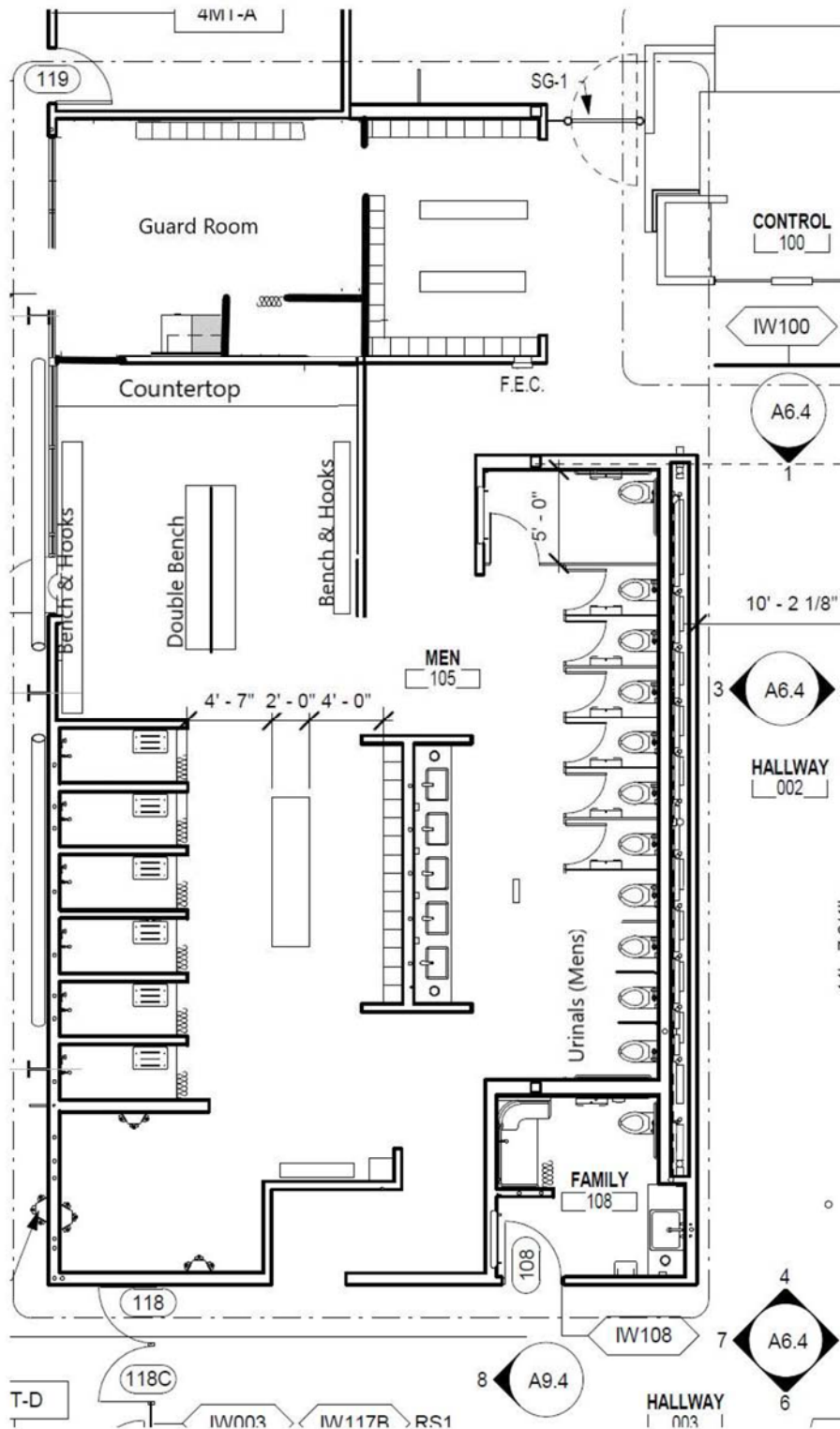


Concept drawings only (not to scale - not prepared by architect/engineer)

# Locker Rooms at new Moana Springs Pool

## SNCA Conceptual Option B – Full shift in guard room.

Locker Room Design Option proposed by SNCA 10/3/2023 (men's locker room version)

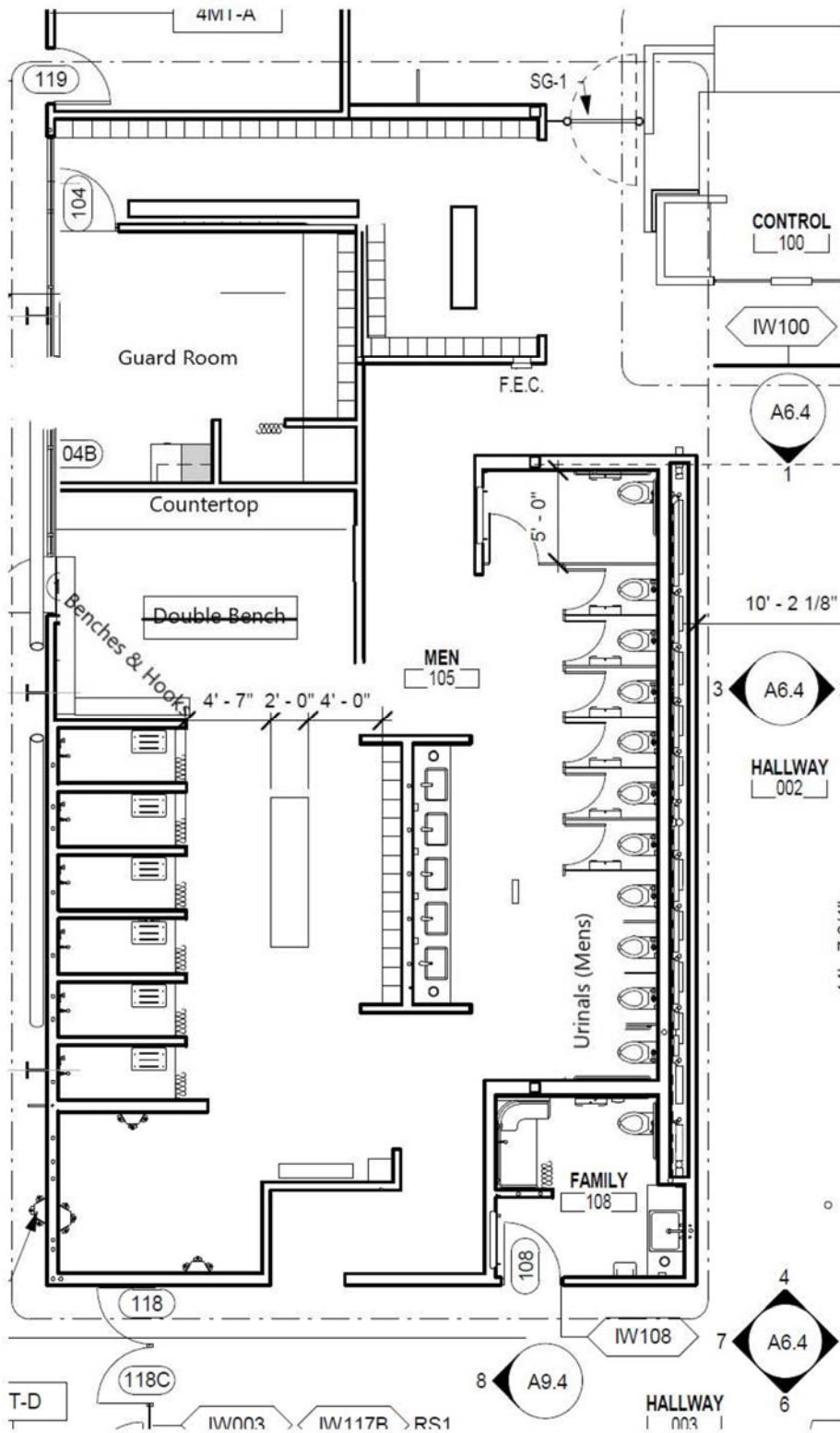


Concept drawings only (not to scale - not prepared by architect/engineer)

# Locker Rooms at new Moana Springs Pool

## SNCA Conceptual Option C – Partial shift in guard room.

Locker Room Design Option proposed by SNCA 10/3/2023 (men's locker room version)

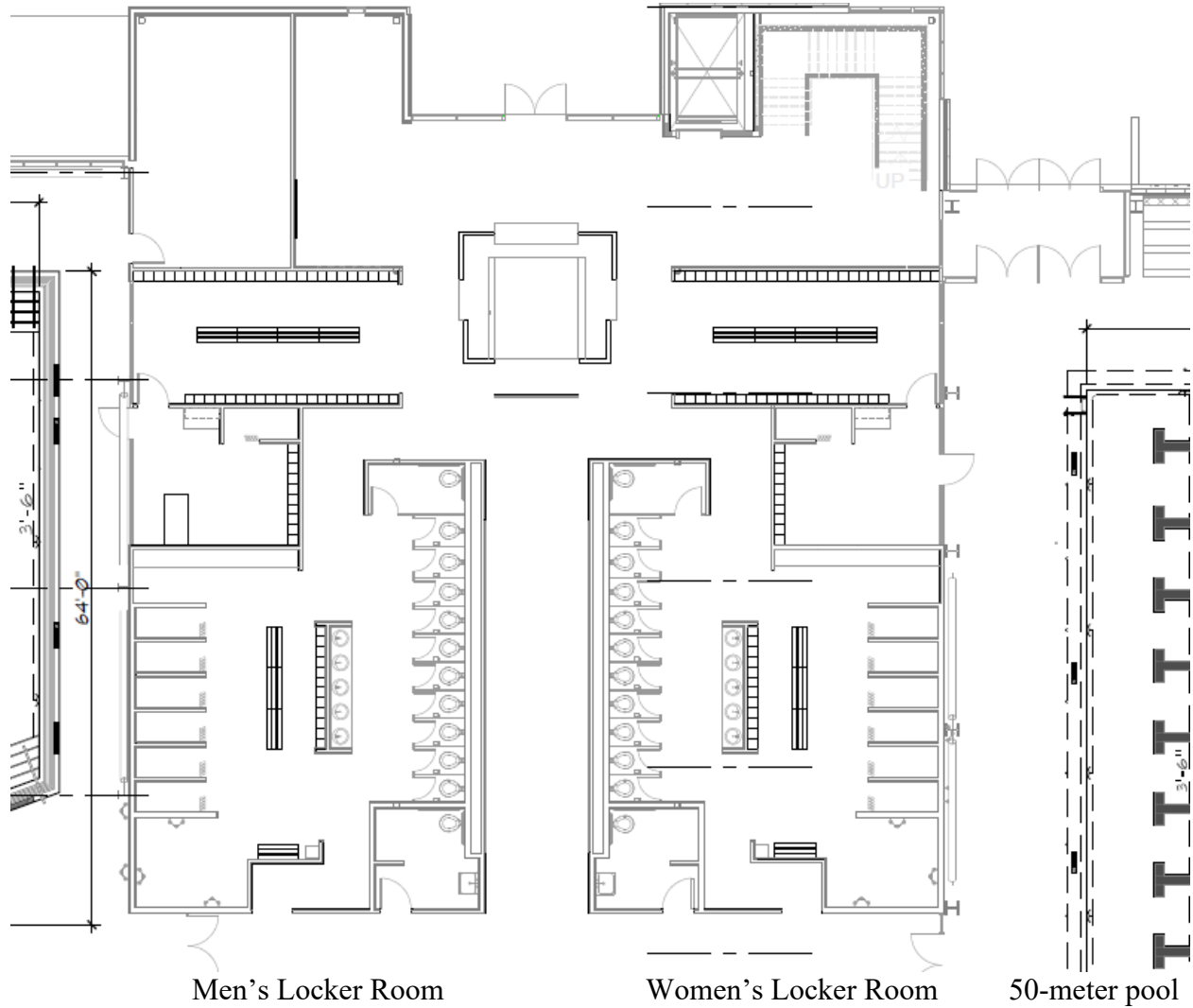


Concept drawings only (not to scale - not prepared by architect/engineer)

## Locker Rooms at new Moana Springs Pool

**City of Reno Updated Locker Room Design** after SNCA recommended revision to change 2-3 private stall showers in each locker room to add 9 gang showers as shown in lower left/right corners (plan page CP-0 dated **July 6, 2022**)

North Main Entry



Note: Showers increased from 9 to 15 per locker room. Hair drying / shaving counter located in each locker room is shown below each lifeguard south room wall. Suit spinner located near the lower (south) entry location. With this design water closets increased from 8 to 11 per locker room. The locker rooms remain “mirrors” of each other in all respects.