



MEETING MINUTES

Re: **Boggus Stadium/13 Street Master Plan**

Meeting Date: June 29, 2011

From: David Monreal, AIA
dmonreal@gignac-associates.com

Cc: Oscar Tapia, Raymond Gignac, Rolando Garza

The following reflects comments / discussions about the HCISD Boggus Stadium /13 Street Master Plan with the Committee. The main focus of the meeting was to discuss programming for Aquatic Center.

If any of the information contained herein is contrary to your understanding or would like to add additional comments, please contact me and I will make revisions/additions and re-distribute to the group.

Comments

- Aquatic Consultant, Counsilman Hunsaker, presented a power point presentation on pool facilities and items to consider during the programming stage of the project. Size of pool and construction of pool shell were discussed. Attached are Aquatic Consultants meeting minutes and a few slides from the presentation.
- HCISD Aquatic Center currently programmed to be similar in size and scope to the Weslaco Natatorium.

End of Meeting Notes.



Meeting Notes

Reference: Harlingen CISD Natatorium
Subject: Aquatics Program Discussion
By: Darren Bevard
Date of Meetings: June 29, 2011

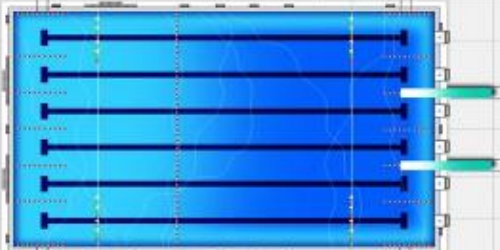
The following are notes and observations from the above referenced meeting, and represent the author's recollections of the activities and discussions that took place. Please provide any additions or corrections within a reasonable period of time.

Aquatics Program Discussion - Notes:

1. Current aquatics program is to include an 8-lane 25-yard competition pool, and a separate warm-down/fitness pool of approximately 2,500 SF. Fitness pool to include 3-4 lap lanes at intermediate depth for program versatility, and both stair and ramp entry.
2. Alternative competition pool configurations were discussed. There is a desire for a 25-yard by 25-meter configuration, or possibly a 10-lane 25-yard configuration at 75 feet wide. This would allow more versatility with simultaneous program usage such as ROTC and high school swim team. Owner to provide further direction with guidance from design team related to budget considerations.
3. Desire is for an all deep depth profile in the competition pool, with a 13'-6" deep diving well at one end to accommodate 3M springboard diving, and a 7'-0" depth at the opposite end for competition starts from blocks.
4. Current program is to include 450 spectator seats in the natatorium.
5. Extensive discussion took place regarding comparison between traditional concrete pool construction and prefabricated stainless steel panel wall pool construction. C-H provided information related to both construction methods for consideration. This will be further discussed as design progresses.
6. Various gutter configurations were discussed and example images shared. Intent at this time is for a rollout gutter with parapets at the end walls for the competition pool, and a

deck level gutter for the fitness pool. This will be revisited and confirmed as the design progresses.

7. Various pool finish options were discussed briefly; this will be revisited as the design progresses.
8. There is a desire by the Owner to consider on-site chlorine generation for this facility. Options for sanitation systems will be discussed in detail and confirmed as the design progresses.

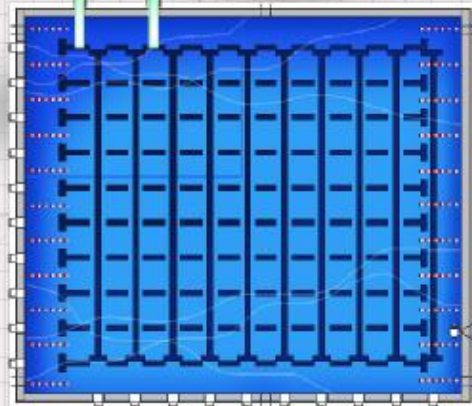


25 - Yard

6 25-Yard Lanes **3,375 Sq. Ft.**



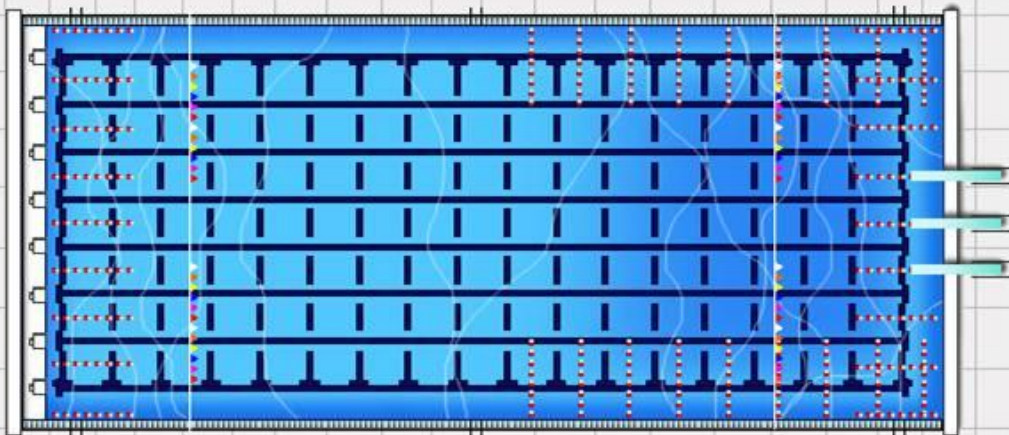
8 25-Yard Lanes **4,500 Sq. Ft.**



25-Yard By 25-Meter

10 25-Yard Lanes **6,150 Sq. Ft.**

10 25-Meter Lanes



50-Meter by 25-Yard

8 or 10 (50-Meter Lanes)

17-22 (Cross Course
25-Yard Lanes)

12,600 Sq. Ft.

Cast-In-Place VS. Pneumatically Applied Construction Methods



- Cast-In-Place Concrete (CIP) or Shotcrete
- Both are methods of concrete placement
- No significant changes in design for either (Thickness and reinforcing are unaffected)
- Base of wall details differ significantly
- Base of wall detail for both methods included in construction documents
- Typical project detailing based on CIP methods

Pre-Engineered Pools



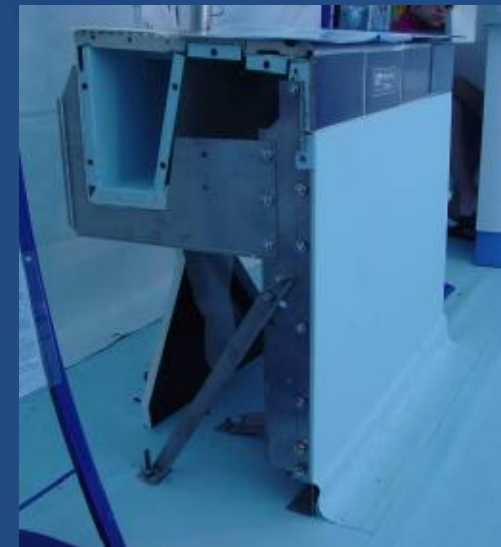
- Stainless Steel Panel Wall System
- Providers
 - Myrtha (Italy)
 - Astral (Spain)
 - Natara Uniwall
- Primarily used for rectilinear pool configurations (i.e. competition pools), but can be custom shaped to allow for curved sections of pool walls.



Pre-Engineered Pools



- Has been seen in the market as a viable short term installation as well as long range solution
 - Can be used at high-capacity venues for competitions
 - Olympic Trials – Long Beach, CA and Omaha, NE
 - US Nationals – Indianapolis, IN
 - World Championships – Barcelona
- Cost can vary widely and may be dependent upon the Contractor and manufacturer
- Typical Warranty is 15 years
- May help provide an expedited construction schedule



Pre-Engineered Pool Construction



- 1-meter x 1-meter stainless steel panels
- Panels are heated and the metal becomes plasticized
- Polyurethane is layered over the steel
- As it cools, the polyurethane bonds with the steel creating “lined steel”
- Pool walls panels are heat welded at seams using a PVC strip.
- PVC melts together with the lined steel to form a seamless, watertight bond with the panels.



Pre-Engineered Pool Construction



- Pools need to be over-excavated (up to 10 feet) on each side to allow for construction of the wall buttress system.
- A concrete floor slab is poured to form the floor of the pool to create a contact point for the steel walls to join the bottom of the pool.
- Joists located on approximately 3 ft spacing around the pool perimeter.



Pre-Engineered Pool Construction



- PVC floor liner is heat welded to wall panel at base of wall
- Floor markings and wall targets:
 - PVC
 - Tile



Pool Design

Geotechnical Considerations



- Soil conditions can dramatically alter the design solutions
 - Expansive soil
 - Sandy soil
 - Rock
 - Groundwater location
- Soils conditions may warrant design solutions that require significant first dollar investments
 - Piers
 - Helical piles
 - Carton forms
 - Over-excavation and replacement with select material
 - Pool under drainage systems



Weslaco ISD - Weslaco, TX



Aquatic Elements

- 4,600 sq. ft. eight lane, 25-yard competition pool
- Two 1-meter diving stands
- 1,800 sq. ft. instructional pool with grand staircase and ramp entry
- Spectator seating for 200 spectators
- Project Cost: \$5,600,000
- Aquatics Cost: \$1,300,000
- Date Completed: May 2009

