



## **RICHARDSON PARK/MOUNTAIN VISTA PARK (MVP)**

### **Aquatics Center Data Summary - 12/22/2025**

#### **Aquatics Water Bodies Program summary:**

##### **1.) Main Pool:**

- a. Competition lap pool with attached Zero entry free swim pool body
  - i. 7,964sf water surface
  - ii. 245,188 gals. Water
- b. Competition Lap Pool portion
  - i. 8 lanes @ 7' wide per lane with 7'-6" wide edge lanes. 58'-0" wide overall dimension.
  - ii. 25 yard length. 75'-1" min. overall length for touch pad allowance
  - iii. 3'-6" depth shallow end, 6'-0" dive/start block end, 10:1 sloped pool floor section in transition zone to preserve larger 3'-6" depth area.
  - iv. Stair entry on SW corner and several recessed stair/ladder exits throughout in key locations.
  - v. Can multi-configure for recreation use with fitness lap lanes turned opposite direction can fit (3) 8' widths in middle of pool
- c. Zero Entry Leisure pool section
  - i. 0'-0" depth sloping to a depth of 3'-6"
  - ii. Submerged pool seats at north Wall
  - iii. Central stair entry on North side, and zero entry on East for 2 points of entry
- d. Dive Well Pool section
  - i. Recreational dive well with single springboard.
  - ii. Class VIII pool = 1meter tall Spring Board, 14' max board length w/ 4'-0" overhang into pool zone
  - iii. Dive Well Pool dimensions. 32'L x 24'-6"W x 12'-0" max depth zone with slope out transition up to 6'-0" lap pool depth adjacent

##### **2.) Lazy River Pool:**

- a. Lazy River Style pool feature
  - i. 422' Linear feet length

- ii. 5,048sf water surface
- iii. 132,166 gals. water
- iv. Mid-Speed Laminar jet and intake propelled
- v. 3'-6" Pool depth, PFD/Life Jacket floatation and free swim use. No Inner Tubes.
- vi. Central calm waters alcove with integrated submerged wall bench seating

### 3.) **Splash Pad + Aquatic play structure:**

- a. Wet deck with Underground Water storage/circulation tank
- b. Young Children splash pad (South Side)
  - i. 18 months to 5 year old age user range
  - ii. Spray jets, spray fans, bubblers, interactive spray characters, activity water tables, and overhead spray sculpture components
  - iii. Located adjacent to younger child focused section of the aquatic play structure
  - iv. Supplier = Vortex International
- c. All Age Splash Zone (North side)
  - i. 4 year + age user range
  - ii. Larger overhead features with interactive and spray effects
  - iii. Several Ground level and fan spray jets
  - iv. Splash Zone for dump bucket of structure adjacent.
  - v. Supplier = Vortex International
- d. All age Aquatics Play Structure
  - i. 3 water slide flumes for all ages of users
  - ii. Spray deck platforms with interactives and water cannons and shade overhead
  - iii. Ground level interactives and overhead spray curtains and jets
  - iv. Large dump bucket splash feature
  - v. Custom Elevation series structure by Vortex International

### 4.) **Water Slide Hill:**

- a. Wet Deck slide run-outs with Underground Water storage/circulation tank
- b. 3 Slide flumes
  - i. 1 - Open flume slower speed, longer travel slide element
  - ii. 1 - Closed flume Faster speed slide element
  - iii. 1 - Open flume speed/drop slide, high thrill
- c. Supplier = Vortex International

## **Park Capacities:**

### 1.) Park Capacity

- a. 650 max. capacity peak-in-park.
- b. 750 max. peak-in-park capacity stretch goal
- c. *\*All code items are generated from these numbers. Cannot exceed capacity numbers without growing other program to support, like restrooms and showers.*
- d. Daily attendance will be determined by duration of operations and turn-over rate of users. Hard to predict, but we can assume a 30% turnover rate for planning = roughly a 850+/- max daily guest attendance.

### 2.) Seating Capacity

- a. Chaise Loungers: (259) = 259 seats
- b. Upright Lounger Chairs: (57) = 57 seats
- c. 4 top Table, Chairs, Umbrella: (37) x 4 seats each = 148 seats
- d. Benches: (4) x 2 seats each = 8 seats
- e. Rental Cabanas: (9) x 4 seats each = 36 seats
- f. Total fixed seats with furniture: 508 seats = 78% of peak-in-park capacity with a seat.
- g. Grassy lawn areas will yield another 200+/- locations for seating.

## **Aquatics Area Geotech review notes for consideration:**

1.) Boring #2 and #3 are most relevant for locations affecting the majority of the pool excavations. Boring #2 being closest to the new dive well location.

- a. Boring #2: 20' drilled depth, no water encountered
- b. Boring #3: 25' drilled depth, no water encountered

2.) Proposed pool deck finished grade elevation: 5092.50 +/-

3.) Existing Grade: 5090' at entry, 5088' at midway (Dive Well), 5085' Further South

4.) Lake High Water surface elevation: 5074' +/-

- a. 12' pool depth proposed
- b. Assume 1' of shell/structure thickness
- c. Assume an additional 2' of excavation for pool basin drain and underdrain system
- d. Overall 15'+/- excavation depth
- e. 5077' USGS elevation of excavation depth = 11' +/- from existing grade of 5088'

## BORING LOG NO. B-02

Page 1 of 1

PROJECT: Richardson Park

CLIENT: Town of Berthoud  
Berthoud, COSITE: Southeast of Highway 287 and Nicholson Street  
Berthoud, CO

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL. 20225038 RICHARDSON PARK.GPJ TERRACON\_DATA TEMPLATE.GDT 11/20/22

MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 40.3212° Longitude: -105.0960° Approximate Surface Elev.: 5088 (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	SWELL/CONSOL	UNCONFINED COMPRESSIVE STRENGTH (psf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
1		<b>VEGETATIVE LAYER</b> approximately 18 inches thick	1.5									
2		<b>LEAN CLAY WITH SAND</b> , fine grained, subrounded, light brown, very stiff, with white organics	5.0			9-11 20/12"		10.0	105			
						8-8-9 N=17					45-19-26	74
3		<b>WEATHERED CLAYSTONE</b> , with sand, fine grained, olive brown with gray, very stiff, medium, trace FeOx	10.0			16-18 34/12"		9.8	115			
						15-23-24 N=47		13.4				
4		<b>CLAYSTONE</b> , with sand, fine grained, olive brown with gray, moderately hard, trace FeOx	19.0			18-31 49/12"		14.1	132			
		<b>Boring Terminated at 20 Feet</b>	20.0									
Stratification lines are approximate. In-situ, the transition may be gradual.												
Hammer Type: Automatic												
Advancement Method: 4-inch diameter, solid-stem, continuous-flight auger			See <a href="#">Exploration and Testing Procedures</a> for a description of field and laboratory procedures used and additional data (if any).				Notes:					
Abandonment Method: Boring backfilled with auger cuttings upon completion.			See <a href="#">Supporting Information</a> for explanation of symbols and abbreviations. Elevations were interpolated from a topographic site plan.									
<b>WATER LEVEL OBSERVATIONS</b>			 1901 Sharp Point Dr Ste C Fort Collins, CO				Boring Started: 10-21-2022		Boring Completed: 10-21-2022			
no free water observed							Drill Rig: CME 75		Driller: Terracon FC			
							Project No.: 20225038					

BORING LOG NO. B-03												Page 1 of 1	
PROJECT: Richardson Park						CLIENT: Town of Berthoud Berthoud, CO							
SITE: Southeast of Highway 287 and Nicholson Street Berthoud, CO													
MODEL LAYER	GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 40.3213° Longitude: -105.0952° Approximate Surface Elev.: 5088 (FL) +/-	DEPTH (FL)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	SWELL/CONSOL	UNCONFINED COMPRESSIVE STRENGTH (psf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES	
1		<b>VEGETATIVE LAYER</b> , approximately 18 inches thick 5086.5+/-	1.5										
2		<b>SANDY LEAN CLAY</b> , fine grained, subrounded, stiff 5079+/-	5	X	7-7-8 N=15		0.5/500		11.3	97			
			10	X	12-15-15 N=30				14.9				
3		<b>WEATHERED CLAYSTONE</b> , with sand, fine grained, olive brown, medium, FeOx 5064+/-	15	X	12-14 26/12"			6760	16.7	113			
			20	X	10-12-17 N=29				17.2				
4		<b>CLAYSTONE</b> , with sand, fine grained, olive brown, moderately hard, FeOx 5063+/-	25	X	20-30 50/5"				13.0	119			
		<b>Boring Terminated at 25 Feet</b>											
Stratification lines are approximate. In-situ, the transition may be gradual.												Hammer Type: Automatic	
Advancement Method: 4-inch diameter, solid-stem, continuous-flight auger				See <a href="#">Exploration and Testing Procedures</a> for a description of field and laboratory procedures used and additional data (if any).				Notes:					
Abandonment Method: Boring backfilled with auger cuttings upon completion.				See <a href="#">Supporting Information</a> for explanation of symbols and abbreviations. Elevations were interpolated from a topographic site plan.									
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