



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 = 1 meter 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, CO		
SITE: Southeast of Highway 287 and Nicholson Street Berthoud, CO					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 40.3212° Longitude: -105.0960°	DEPTH	ELEVATION (ft.)	DEPTH (ft.)
1		VEGETATIVE LAYER approximately 18 inches thick	5086.5 +/-	5088 +/-	WATER LEVEL OBSERVATIONS
2		LEAN CLAY WITH SAND, fine grained, subrounded, light brown, very stiff, with white organics	8.0	5079 +/-	SAMPLE TYPE
3		WEATHERED CLAYSTONE, with sand, fine grained, olive brown with gray, very stiff, medium, trace FeOx	19.0	5069 +/-	FIELD TEST RESULTS
4		CLAYSTONE with sand, fine grained, olive brown with gray, moderately hard, trace FeOx	20.0	5068 +/-	SWELL/CONSOL
<i>Boring Terminated at 20 Feet</i>			20	49/12"	UNCONFINED COMPRESSIVE STRENGTH (psi)
			9.8	115	WATER CONTENT (%)
			13.4		DRY UNIT WEIGHT (pcf)
			14.1	132	ATTERBERG LIMITS
					LL-PL-PI
					PERCENT FINES
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 Exploration and Testing Procedures 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 Supporting Information for explanation of symbols and abbreviations.			
Elevations were interpolated from a topographic site plan.					
WATER LEVEL OBSERVATIONS			Boring Started: 10-21-2022		Boring Completed: 10-21-2022
no free water observed			Drill Rig: CME 75		Driller: Terracon FC
			Project No.: 20225038		

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT GEO SMART LOG-NO. WELL 20225038 RICHARDSON PARK GP1 TERRACON DATA TEMPLATE GDT 11/20/22

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 Exploration Plan Latitude: 40.3213° Longitude: -105.0952°	DEPTH (ft)	WATER LEVEL OBSERVATIONS	FIELD TEST RESULTS
		Approximate Surface Elev.: 5088 (ft) +/- ELEVATION (ft)			
1		VEGETATIVE LAYER , approximately 18 inches thick	1.5	5086.5 +/-	7-7-8 N=15
2		SANDY LEAN CLAY , fine grained, subrounded, stiff	9.0	5079 +/-	8-9 17/12"
3		WEATHERED CLAYSTONE , with sand, fine grained, olive brown, medium, FeOx	15.0		12-15-15 N=30
4		CLAYSTONE , with sand, fine grained, olive brown, moderately hard, FeOx	24.0	5064 +/-	12-14 26/12"
			25.0	5063 +/-	10-12-17 N=29
					20-30 50/5"
<p><i>Boring Terminated at 25 Feet</i></p> <p>Stratification lines are approximate. In-situ, the transition may be gradual.</p> <p>Hammer Type: Automatic</p>					
Advancement Method: 4-inch diameter, solid-stem, continuous-flight auger		See Exploration and Testing Procedures 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 Supporting Information for explanation of symbols and abbreviations.			
WATER LEVEL OBSERVATIONS <i>no free water observed</i>		 1901 Sharp Point Dr Ste C Fort Collins, CO		Boring Started: 10-21-2022	Boring Completed: 10-21-2022
		Drill Rig: CME 75		Driller: Terracon FC	
		Project No.: 20225038			

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