

Hot Tub at Centuria Urban Village developed a leak. The Hot Tub was immediately closed and below is a summary as well as the latest findings as we have worked on a fix. A summary of events in a timeline format is presented below.

Timeline Summary:

January 16, 2025	- Hot Tub Leak Identified
April 2, 2025	- Leak Seal Applied
October 9, 2025	- KO Engineer Contracted
November 28, 2025	- Drawings Obtained City of Kelowna
February 18, 2026	- Pilot Hole Drilled Top Hot Tub
March 26, 2026	- Precision Scanned & Pilot Hole
April 27, 2026	- Whole Cut in Top of Hot Tub
May 12, 2026	- Precision Scanned Area of Leak
May 28, 2026	- Precision Cut Slab Open
June 4, 2026	- Pipe Repair Made and Filled
June 8, 2026	- Hot Tub Filled & Another Leak
July 2, 2026	- Precision Cut Opposite Side of Step
July 7, 2026	- Precision Radar Scanned Hot Tub
July 8, 2026	- Camera Scan Again
July 14, 2026	- Precision Cut Another Area

HOT TUB REPAIR

09-Jul-26

Structural Engineer	KO Engineer	\$3,531
Scan Deck	Precision Radar	\$609
Pool Contractor	Ron the Poolman	\$3,686
Cut Wall & Slab	Preceision Coring	\$2,231
Scan Deck Again	Precision Radar	\$609
		\$10,666

January 16, 2025

A leak was identified in early winter of 2025, and an initial investigation revealed a leak when the hot tub jets when they were turned on. Our pool contractor (Ron) used a camera to further investigate and identified cracks in several jets due to Teflon tape used in the past which expands and can crack fittings.

Additional leaks were identified in the drain, and our pool contractor was able to fix some leaks and stated he would use a stop leak (a commercial product) that he has used with success in the past.

As this process can only be done was done when the temperature is above freezing meant this process would likely be in the spring.

April 2, 2025

After the leak seal product was applied and adequate time to setup the jets were re-tested, but a large leak persisted near the pool deck as shown above (red arrow).

It was recommended that the top of the concrete area above the jets be cut open to investigate. Issues with getting the location of the leak pinpointed and what is required to repair were as follows:

1. For the coring contractor to cut into the hot tub walls, the contractor is requesting sign off from a structural engineer before they will do any cutting.
 - a. The reason for this is to confirm the wall can safely handle the opening
 - b. Ensure the cut won't cause additional leaks or failure
 - c. Specify the exact size, location and method of the core hole or cut
 - d. Recommend and reinforcement if needed
 - e. Limit Liability for the contractor doing the work
2. This was further complicated as Centuria did not have the full set of structural blueprints on site showing the location and elevations of the beams, structural suspended slab detail around the tub, or how the walls are constructed.
3. The original engineering firm declined to have construction documentation and strata called a number of local structural engineering companies to see if they would take the work on including a site review of the issues, and provide input was not easy as this is a small job and many were not going to waste time on this as the bigger jobs are taking up their man-hours.



October 9, 2025

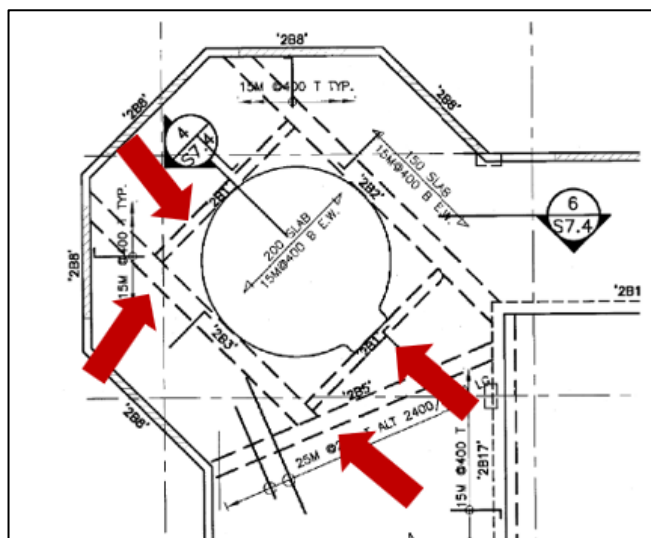
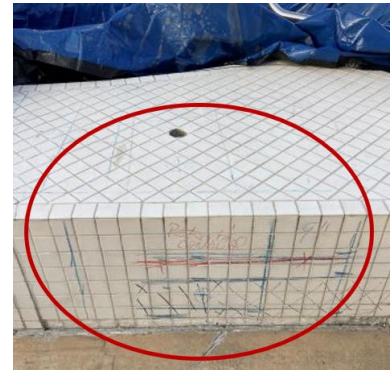
Centuria was able to contact a local engineer (KO Structural Engineering) that agreed to provide us with their service; however, they required structural drawings which there were none at Centuria. The engineering firm recommended that we contact the city Building Department, and they were able to provide a pdf package which after strata investigated further the file contained complete architectural and structural drawings.

Structural drawings were copied and sent to KO Structural for their review and did a site visit. KO Structural Engineers issues a report as to what concrete could and could not be cut.

March 26, 2026

Precision Cutting and Coring provided a hole in the top of the hot tub to provide some visual inside the cavity. Our pool contractor laid out the likely location of pipes.

Once KO Structural reviewed the drawings and another site visit they required a scan report to be done to determine where the support beams were and the size of the beams, and rebar in the concrete as shown in the diagram below.



April 27, 2026

In the meantime, our pool contractor was able to get a radar scan (Precision Cutting and Coring) done on the upright hot tub wall and we opened the top section of the double wall up to see if we could find a leak or check to see how the lines were run, or how the walls were constructed.



Our pool contractor with the top section open has located two lines, one line is the scrubber line which when tested did not leak. There was also one jet line in the cavity, but it was concrete, and when the jets are turned on it sprays water out the side of the hot tub bottom step (but not from the visible line).



Our pool contractor cut the jet line and used a scope camera to try locating the leak with the amount of cable he ran out it appears the cracked line may be slightly below the structural suspended concrete deck which the structural engineer will not allow cuts in the deck. A further challenge is the bottom of our hot tub is concealed in the ceiling of a commercial tenant and not visible.

On the advice of KO Structural Engineer, our pool contractor is currently working to get a more in-depth radar scan done to accurately locate the structural beams supporting the hot tub.

The structural engineer will review and guide strata on the next steps as to how we can access the problematic pipe that is below the structural slab somewhere to the left of the red arrow.



May 12, 2026

Precision Radar Scan was on site and scanned the area that our engineer (KO Structural Engineer) and our pool contractor (Poolman - All Service Properties) requested. As Poolman used a scope camera and noted the pipe with the leak is 4 ½" below the pool deck.

Precision Radar scan revealed there is a 6" reinforced slab with welded wire mesh about 5 ½" below the slab. This concrete rests directly on the 10" reinforced 2-way suspended slab supported by concrete beams. A scan report was received from Precision Radar Scanning, and he made notes directly on the slab near the leak as shown below.



Our pool contractor (Poolman) has been contacted to connect with Precision to cut open the slab area to expose the leak.

May 28, 2026

After the structural engineer sign-off the concrete slab was cut open by Precision Cutting and Coring. Ron the Poolman identified the leak on the right side of the cut.

**June 4, 2026**

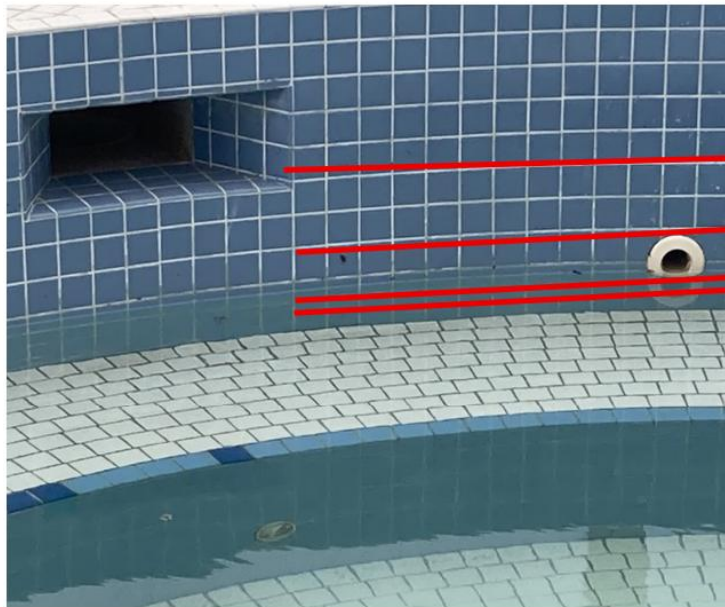
After the leak was identified the damaged piece was removed and a plumbing repair made.



Ron our pool contractor repaired the pipe and after the repair had time to set, the hot tub was filled with water and the system was evaluated. The jets were turned-on briefly, and no leaks were visible in the repaired section. Water levels were monitored and it was noted that water was leaking from other areas (see levels over 3 days) indicating a leak

June 8, 2026

Hot Tub was filled with water, and levels were monitored and it was noted that water was leaking from other areas (see levels over 3 days) indicating a leak



DAY 1: 4 ½" LOST

DAY 2: 2 ½" LOST

DAY 3: ¼-1/2" LOST

The fixed plumbing area had to be opened up, and camera was used to investigate another possible leak.



Another leak was identified on other side of steps to hot tub.

July 2, 2026

Our pool contractor (Ron the Poolman) arranged for Precision Cutting and Coring to cut open another around to the right of the hot tub stairs to expose pipes. The area identified was cut open.



As the jet supply pipe was not located additional investigation with camera was undertaken and strategy generated.

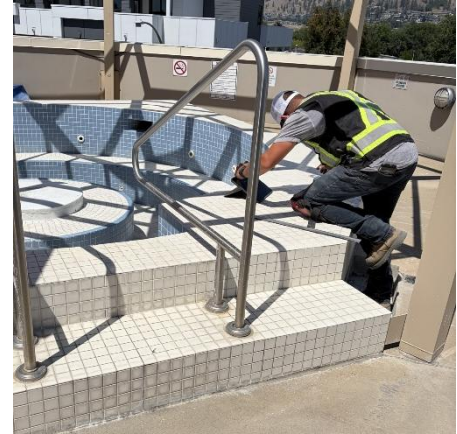
Additional camera scope work identified a crack near the end of the hot tub stair, and it was decided to cut open the top of the hot tub and if need be when area was exposed stair may have to be cut.



July 7, 2027

Jason from Precision Scanning was on site scanning the top of the Hot Tub as well as the perimeter to locate jet line.

The top of the Hot Tub outlined the concrete walls below and the location of the electrical box and conduit. Electrical appeared not to be in the way of the cut outlined at the top of the Hot Tub.



The perimeter was scanned for future use if additional leaks happened.

North Sid



West Side



South Side



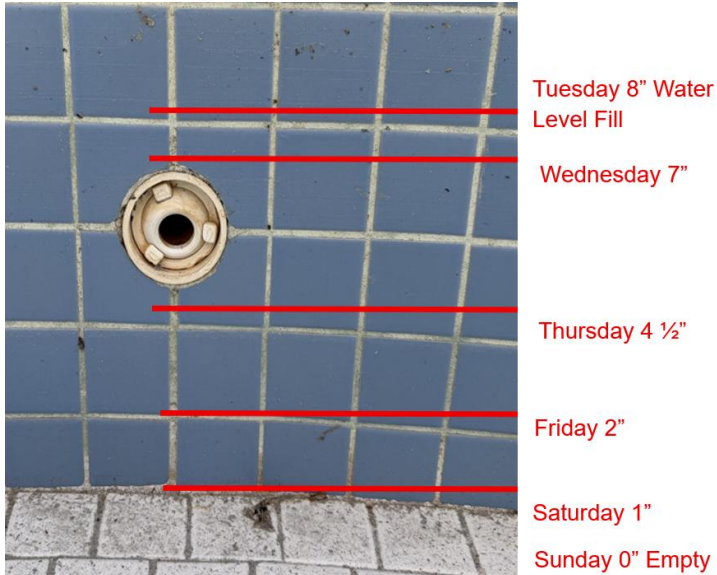
East Side



Before leaving our pool contractor Ron filled the Hot Tub with 8" of water and this will be checked tomorrow to see if any additional water leaked. Ron noted before filling Hot Tub there was water in the bottom drains.



Water level in the Hot Tub was monitored over 5 day with the following results.



July 14, 2026

Precision Cutting and Coring with Ron (Poolman) were on site to cut 2 areas of the Hot Tub.