People Are Dying to Get in, but Israeli Cemeteries Are Running Out of Space

By Michele Chabin

All photos by Debbie Hill, taken at the construction site of Har Hamenuchot Cemetery, May 8, 2018.



Courtesy of Arik Glazer, Rolzur

Renderings show how the underground Har Hamenuchot Cemetery, now under construction in Jerusalem, will look upon completion.

s the general manager of Kehilat Yerushalayim, Jerusalem's largest Jewish burial society, Hananya Shachor has a lot on his professional plate.

Every year the society, one of more than a dozen in the city, inters about 1,800 people, a job that requires not only a deep knowledge of Jewish law and Israeli burial practices but also strong administrative skills.

Kehilat Yerushalayim performs several funerals a day at the sprawling, multi-level Har Hamenuchot cemetery, built into the side of a mountain, and at two other cemeteries in Jerusalem. It also allocates or sells interment space to local residents and Diaspora Jews wishing to be buried in the holy city.

But graves and other interment spaces are in short supply in Jerusalem, where close to 4,000 people are interred every year. The Har Hamenuchot, Sanhedria and ancient Mount of Olives cemeteries are nearly full and hemmed in on all sides. Har Herzl, the city's military cemetery, provides burial to a limited number of Israeli dignitaries and soldiers killed while serving in the Israel Defense Forces.

Anxiety over the decreasing supply of land to bury the dead used to keep Shachor awake at night. That began to change four years ago, when Arik Glazer, an Israeli tunnel engineer, asked Shachor, for a meeting.

Glazer, managing director of Rolzur Tunneling, an Israeli company that plans and builds infrastructure like tunnels and bridges,



Rendering of a visitor entrance to the underground Har Hamenuchot Cemetery, under construction. Courtesy of Arik Glazer, Rolzur.

had an idea. He proposed building the world's first modern-day subterranean cemetery below the existing Har Hamenuchot cemetery.

Interment Infrastructure

The project called for the construction of a half-mile long underground cemetery 164 feet deep, the height of a 15-story building.

The \$50 million project, which is being funded solely by the burial society with financing from Rolzur, will provide space for

People Are Dying to Get in, but Israeli Cemeteries Are Running Out of Space

22,000 in-ground and other interment spaces when completed in five years or so. Some spaces are expected to be ready next year.

The burial society hopes to recoup the money through the sales of spaces to Diaspora Jews wishing to be interred in Jerusalem. Such funerals — not including interment, which is free to Israelis typically cost \$15,000 to \$25,000, Shachor said.

These 22,000 spaces should meet the burial society's needs for at least a dozen years because many Israelis and Diaspora Jews have already purchased places — either graves or in "pre-cast" structures — in an existing cemetery, often next to loved ones, and will be buried in them when the time comes.

The project, well underway, required Rolzur to burrow a huge tunnel or cavern from solid rock. Three elevators, each with the capacity to convey 90 people, will bring mourners to the cemetery's three levels.

The lowest level will provide in-ground graves as well as a new concept: niche spaces burrowed into the cemetery's rock walls. A third option will provide interment in pre-cast boxes, one stacked on top of the other, faced in stone. In the latter two cases, a layer of soil from the cemetery will be placed in the spaces before the deceased is placed inside.

Unlike Jerusalem's above-ground cemeteries, this one will be accessible to people with disabilities, and anyone with mobility problems can be transported by golf cart. The space will be air-conditioned, so mourners will not have to contend with Israel's fierce summer heat.

There will also be a small museum that explains the long history of underground Jewish burial.

Glazer came up with the idea for a subterranean cemetery while driving from his office in Petach Tikvah, a city east of Tel Aviv, to Jerusalem for a construction project. "I was coming to Jerusalem to work every day and the first thing I saw on the outskirts of the city was a cemetery, Har Hamenuchot."

"I thought, 'This is Israel's capital. The first view of Jerusalem shouldn't be a cemetery.' It really bothered me," Glazer said, pointing to building plans and architectural illustrations pegged to the walls of his dusty prefab office at the underground cemetery's entrance.

When Glazer began to research subterranean cemeteries, he found many references to Jewish, Roman and other rock-cut tombs or catacombs dating back as far as 2,000 years. The only contemporary reference was to a 1992 research paper by a Technion profes-



Arik Glazer, managing director of Rolzur, stands outside one of the tunnel entrances to the underground cemetery project.



Arik Glazer, managing director of Rolzur, explains blueprints and artist renderings in an office trailer at the underground cemetery project in the Har Hamenuhot Cemetery in Jerusalem.

sor that mostly explored the logistics of creating an underground cemetery from a Jewish law perspective.

Once Glazer learned, after consulting several prominent rabbis, that an underground cemetery could be considered "kosher," he assembled a team of engineers and an architect to draw up a plan. When the plan was completed, he searched for the appropriate government official. He couldn't find one.

PAGE 26

People Are Dying to Get in, but Israeli Cemeteries Are Running Out of Space

Burying the Issue

"When it comes to building roads, tunnels or railroads, it's a government issue. But cemetery expansion is considered a business and not an issue for the government," he said.

Shachor concurs.

"There is no one taking charge of this problem. Not the Ministry of Religion and not the Ministry of Infrastructure. No one wants to speak about the future of cemeteries."

Eventually Glazer heard that Kehilat Yerushalayim was searching for ways to create more space, and he contacted Shachor.

"When we met, Hananya asked me, 'Where were you? I was expecting you years ago!"

"Arik came to me with a very, very good business model," Shachor recalled. "It was as if someone had brought ice cream when everyone else brought sour milk."

The plan resonated right away, "because this way of burying has been part of Jewish tradition from Second Temple times," Shachor said. "The only graves that exist from ancient times are the ones that were built in caves and tunnels."

The Urban Space Crunch

While Jerusalem, a city of more than 850,000 with a booming birth rate, may be feeling the land crunch more acutely than some other municipalities, the shortage of land for burial afflicts many cities around the world.

"There's definitely an urban cemetery space crunch," Florida State University Professor of Urban and Regional Planning Christopher Coutts told the publication, Forbes. "Space is at the highest premium in urban centers."

Urban cemeteries, which serve large numbers of people, run out of space sooner and charge more for their services than their rural counterparts. On average, a burial in the United States costs \$7,000 to \$10,000. That is one reason more than half of American funerals in 2016 involved cremation, according to the National Funeral Directors Association.

Although cremation is available in Israel, almost no Jews choose this option because Jewish law forbids it, and because the country's National Insurance Institute, Israel's Social Security agency, won't pay for it.

All Israelis are entitled to free funerals and burials within their respective municipalities, but some, like those being interred at the existing Har Hamenuchot cemetery, are entombed, not buried in the ground.

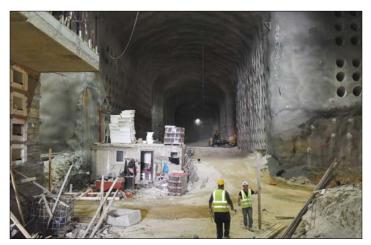
Rabbi Jay Karzen, chairman of the bereavement and cemetery committee at the Association of Americans and Canadians in Israel (AACI), believes the construction of a subterranean cemetery is "a wonderful, creative idea."



A worker carries material under burial niches in the wall, where bodies will be buried, in the underground cemetery project under construction.



A worker walks on top of precast graves under construction in the cemetery project.



Workers carry materials in the tunnels where the underground cemetery project is being built.

PAGE 27

People Are Dying to Get in, but Israeli Cemeteries Are Running Out of Space



Construction is in progress to build the underground addition to Har Hamenuchot Cemetery, which is a half-mile long and 164 feet deep, the height of a 15-story building.

Har Hamenuchot is "a very big cemetery, but the population of Jerusalem is growing, thank God, and they need more space, and they are already building up vertically," Karzen said, referring to the pre-cast spaces that various burial societies have built there in recent years.

"This is a way of handling the overflow," Karzen said.

Karzen acknowledged that "not everyone is happy" with the pre-casts in the existing cemetery, which some mourners have likened to stackable shelving or beehives. It remains to be seen whether the pre-casts or stone wall niches will be any more popular below ground.

"Most of the underground cemetery's graves will be wall graves," Karzen said. "Halachically it's okay and kosher, but there are many people who would prefer to be buried in the ground and not in a wall."

Jerusalem residents can arrange to be buried in ground-only cemeteries elsewhere, but that burial will cost thousands of dollars, Karzen said.

Despite some hesitations, others believe the subterranean cemetery idea is a great idea, and yet others have no opinion. Says Sarah Kaye, a technical writer, "When I'm dead, I'm dead. I don't care where I'm buried."

Another Israeli woman, who declined to be named, called the concept of building a subterranean cemetery "a terrible idea." "What an ordeal mourners would have to go through just to get to the burial site. It's not about the deceased at that point, it's about their living loved ones and their comfort," she said.

Shachor insisted that, once completed, all sections of the cemetery below and above ground will be dignified places of burial. While sympathetic to criticism, he said Jerusalem's burial societies have run out of options.

"There is open space in Israel for cemeteries, but I can't see building one in the Negev desert" in the south, "because it would require Jerusalem families to drive hours each way. It would be a burden on the mourners."

Throughout history, Shachor said, communities have built their cemeteries very close to home, and creating cemeteries underground will enable them to continue this practice.

The unchecked expansion of cemeteries on valuable land within and adjacent to urban areas must stop, he said. "This land must be used for the living. If we don't do something our grandchildren won't have a place to live."

Other municipalities around the world are beginning to show interest in Rolzur's concept, which was one of three finalists in the 2015 International Tunneling and Underground Space Association competition in the innovation category.

Lack of burial space is a worldwide problem, but it's also about the role religion, tradition, culture and respect play in how we wish to be interred. Respecting their wishes is the last thing we can do for people," Glazer said.