References

Uponor soil drainage system big profile pipes in Skavsta Airport, Nyköping

Uponor involvement

1000

Uponor soil drainage system big profile pipes in Skavsta Airport, Nyköping

When Stockholm Skavsta Airport grows out to a real international centre in Swedish civil aviation, Uponor is one the suppliers laying the ground.

Project Facts:

Location
Nyköping, Sweden

Completion
2011

Building Type
Industrial buildings

Product systems
Sewer Municipal

Address
Skavsta flygplats

Project Type
Renovation

Partners

End user
Luftfartsverket

Investor
Luftfartsverket

Contractor
Skanska

On gates and paths the system for handling of surplus water and of dangerous fluids are of vital importance. Uponor soil drainage system with big profile pipes 800 and 600 is a part of the solution.

Background

Today Stockholm Skavsta Airport is one of Sweden's most frequently used airports, but gates and taxi paths have not always kept up with the rapid growth. There are still many traces from the time as military airport and the improvements which have been made when needed as a gigantic patchwork here and there. Now there will be a change. The whole area will be done up and not at least on the ground there will happen things. The Board of Civil Aviation has projected; Skanska is the contractor och Uponor contributes with soil drainage system for surface water handling. The work will be advanced by stages as the airport will be kept going during the whole project. In the first half year 2011 the project will be ready. The project in question with soil drainage system to the gates will be ready at the latest in March 2010. There are many factors which are weighed in when a big water and drainage project will be carried through, but in October the last pipe was on place and the nearby houses could be connected to the municipal surface water system.

Solution

From a soil and water perspective the gates on an airport are a real challenge. It is not only volumes of water which need to be taking care of. In winter time glycol from the de-icer of the airplanes must be handled. In the middle of the gate there goes long and narrow channels with wells equally distributed. The glycol which is not soaked direct flows down to channels and can then be pumped up. When it is not a glycol season, the water flows in the other direction and is finally collected in a pond, where other harmful substances, if any, are separated before the water goes to Nyköpingsån. The used pipes are Uponor's big profile pipes 800 and 600. Totally Skanska will lay about one kilometer pipes in this stage.

''We laid 48 m in one day. It had never been possible with concrete pipes''.

Result

When the Board of Civil Aviation projected the job, first they had specified concrete pipes for the soil drainage system but after discussions with Skanska, the final choice was modern plastic pipes. Lower price and considerably simpler handling were the main reasons for the decision. Hans-Göran Haglund of Skanska gives an example: ''Today we laid eight pipes. It is 48 m in one day, certainly under good conditions but it had never been possible with concrete pipes''. With pipes of this kind of size it should be needed ten to eleven wells for this length. And concrete wells are enormously big and heavy. ''We asked if it was necessary with sand traps and it was not. Instead we could lay a bend and complete with an ascending pipe. We had the same function but simpler and at a lower price'', Haglund explains. Besides a lower price and weight, the fixed rubber rings at the joint are an advantage which speaks for Uponor's plastic pipe. You are spared from the extra moment to draw rings and it goes easy to push together the pipes. Stockholm Skavsta Airport is going to be a real international airport - all the way from the ground. There Uponor's system solutions together with Skanska's contract play a vital importance. So think on the soil next time you take a flight to new places from Skavsta.

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