

Amsterdam Bijlmer ArenA Station

Hans ten VOORDE

Senior Engineer
ARCADIS Bouw BV
Amersfoort, The
Netherlands
h.voorde@arcadis.nl

Hans van WEELDEN

Senior Engineer
ARCADIS Infra BV
Amersfoort, The
Netherlands
a.j.weelden@arcadis.nl

Harry BEERTSEN

Senior Engineer
ARCADIS Infra BV
Amersfoort, The
Netherlands
h.m.f.beertsen@arcadis.nl

Summary

The old Amsterdam Bijlmer station was built in the early seventies and has two metro lines and two railway lines. As a result of the track doubling between Amsterdam and Utrecht, an additional four railway tracks need to be accommodated at this station. The capacity of the old station will then no longer be adequate to deal with the increasing number of passengers. The character of the new station needs to encompass the style and ambitions of the ArenA area in Amsterdam Zuidoost. This has been realized by combining a specific design with the most suitable materials and by integrating different functions. A prerequisite for the design is that the station has to be constructed while the trains continue to run and the passengers must be able to reach the trains in safety and with a minimum of inconvenience. As a result, it was decided to maximise the size of the prefab elements and minimize auxiliary structures for both the concrete and the steel structures.

Keywords: Station, architecture, prestressed concrete, steel structures.

1. Introduction

As a result of the increasing number of passengers in the Netherlands, the railway line between Amsterdam and Utrecht needs to be doubled. In 1992, the client ProRail (Dutch Railways) decided to double the tracks. The old Bijlmer station, which was built in the early seventies and has two metro and two railway lines, is located on this railway line. The capacity of the old station will not be adequate for the future growth in the number of passengers, which is being driven by the development of an ambitious central district in Amsterdam Zuidoost near the Amsterdam ArenA football stadium. The new Amsterdam Bijlmer ArenA station has a substantial capacity with six railway tracks and two metro tracks and as a result a total of eight tracks and platforms have been included in the station building. The increase in the number of railway tracks also includes a connection to the nearby, new flyover to Schiphol Airport.

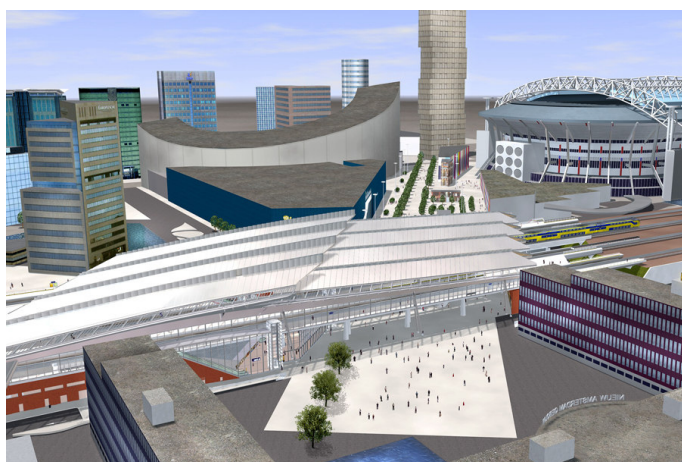


Fig. 1 Artist Impression of the new station

per day, with a peak load of 25,000 people in 90 minutes. This will make Amsterdam Bijlmer ArenA one of the largest stations in the Netherlands.

The new station is not only an impressive station building. The integration of the extended ArenA Boulevard into the station has created an optimal connection between the existing office and shopping centre, the Amsterdamse Poort, on the east side of the railway line and the new business and entertainment area near the Amsterdam ArenA station on the west side.

The new station has been designed by the architects Jan van Belkum of ARCADIS Architecten in the Netherlands and Neven Sidor of Nicholas Grimshaw & Partners in Great Britain. With its extra long and wide platforms, the station will soon be able to deal with approximately 60,000 passengers