

EASTERN BAY LINK, CARDIFF - TF EXPANSION JOINT SUPPLY & INSTALLATION



Project Brief

Manufacture, supply and installation of TF2000, TF1300 and TF900 expansion joints.

Project Team

Client: Welsh Government
Main Contractor: Dawnus Ferrovia Agroman JV
Sub Contractor: USL Ekspan

Background Information

The Eastern Bay Link (EBL) project involved the construction of a new 1.2km long elevated dual carriageway to extend the A4232 around the southern perimeter of Cardiff, with the purpose of providing greater access, links and improving journey times to Cardiff City and the Cardiff Bay/Dockland's surrounding regions. This was part of the Welsh Government's £57.3 million road improvement scheme and delivered by Dawnus Ferrovia Agroman JV as a two-stage Early Contractor Involvement (ECI) contract.

The new link road predominantly transverses as a continuous viaduct consisting of a 657m long bridge, incorporating 21 spans between two approach viaducts and embankments. A foot path and cycle lane are also incorporated along its length to encourage more healthy modes of travel.

USL Ekspan's Workscope

USL Ekspan were contracted by Dawnus Ferrovia Agroman JV to supply and install 3 no. USL Ekspan TF expansion joints of varying lengths and sizes on the Eastern Bay Link. Both the TF2000 and the TF1300 joints measured a length of 24.6m and the TF900 measured 31.2m. The project also involved installing secondary seals to each of the joint's underside; design and fitting cover plates to the TF2000 joint, and design and installing of the kerb kick-ups where the TF900 joint had been installed.

The works on this included: manufacture and delivery of the joints to site; measuring and marking-up expansion joint dimensions; saw-cutting and removal of asphalt surface; prepping area and installation of screed; drilling of joint fixing locations; installation of secondary seal and clamp strips; installation of TF expansion joint; installation of nosing mortar transition strips and final completion with application of antiskid.

USL Ekspan's joint installations were successfully completed alongside external sub-contractors also working on site. Despite encountering a number of technical challenges, the Eastern Bay Link project had gained recognition as an excellent example of collaborative working, resulting in Dawnus Ferrovia Agroman JV winning the 2017 NEC Contractor of the Year award.



Installing of leveling screed onto concrete bed before lifting the TF joint planks into position



Bolting of TF expansion joint planks along the carriageway



New installed TF expansion joint

Head Office

Kingston House, 3 Walton Road, Pattinson North, Washington, Tyne & Wear, NE38 8QA, UK
t: +44 (0) 191 416 1530 e: info@uslekspan.com www.uslekspan.com