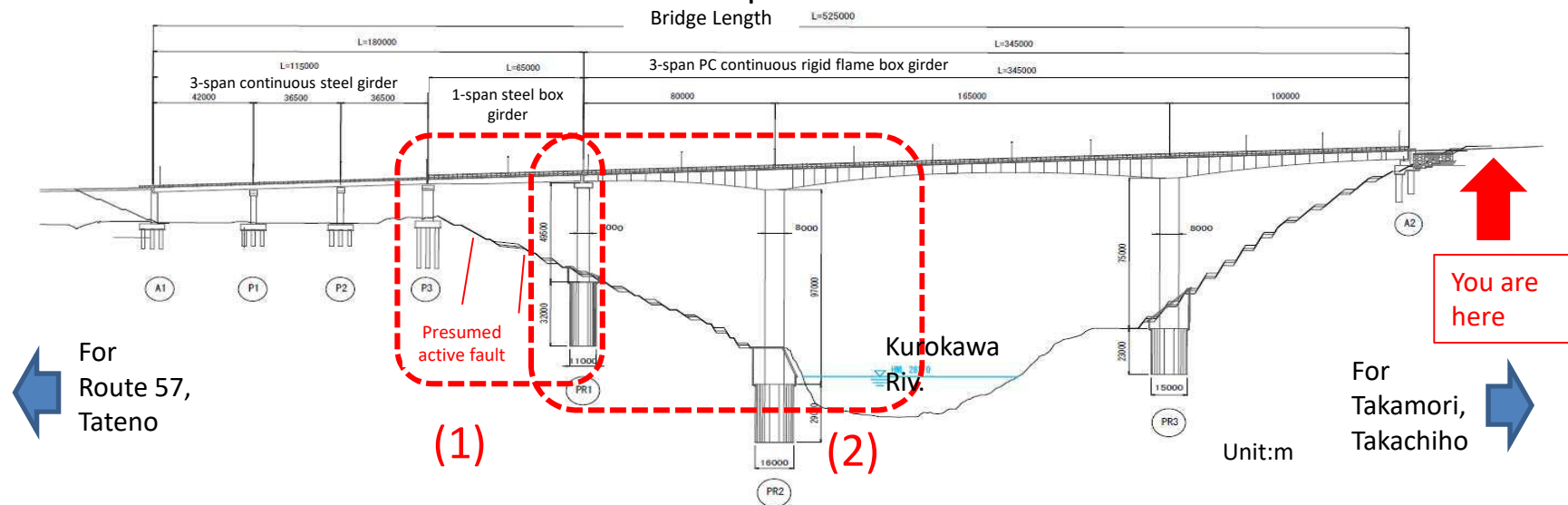


Shin-Aso Ohashi Bridge

The Shin-Aso Ohashi Bridge (New Aso Ohashi Bridge) was built at this location on the Kurokawa River, about 600m downstream from the original Aso Ohashi Bridge. It was built as a replacement for the original bridge, which collapsed due to the Kumamoto Earthquake on April 16, 2016.

This bridge crosses over a deep valley and a presumed active earthquake fault. It was constructed based on the lessons learned from the Kumamoto Earthquake so as to minimize the damage and impact on local activities in the event of a major earthquake in the future.

The construction of this bridge began in March 2017 and was completed in March 2021, thanks to the introduction of advanced construction techniques and to 24-hour construction work.



(1) Characteristics of the structure of the section crossing the presumed active fault

In the section that crosses the presumed active fault where lateral displacement is expected, it is assumed that the bridge piers will be moved in different directions when the ground moves due to fault activity.

The bridge was designed with wide bridge piers to prevent the bridge girder from falling off in the event of strong shaking.

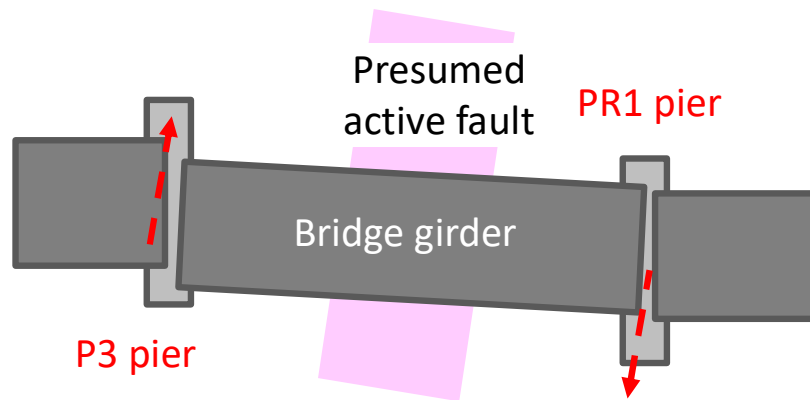
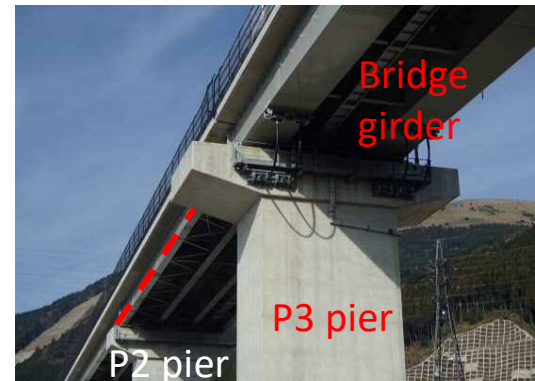


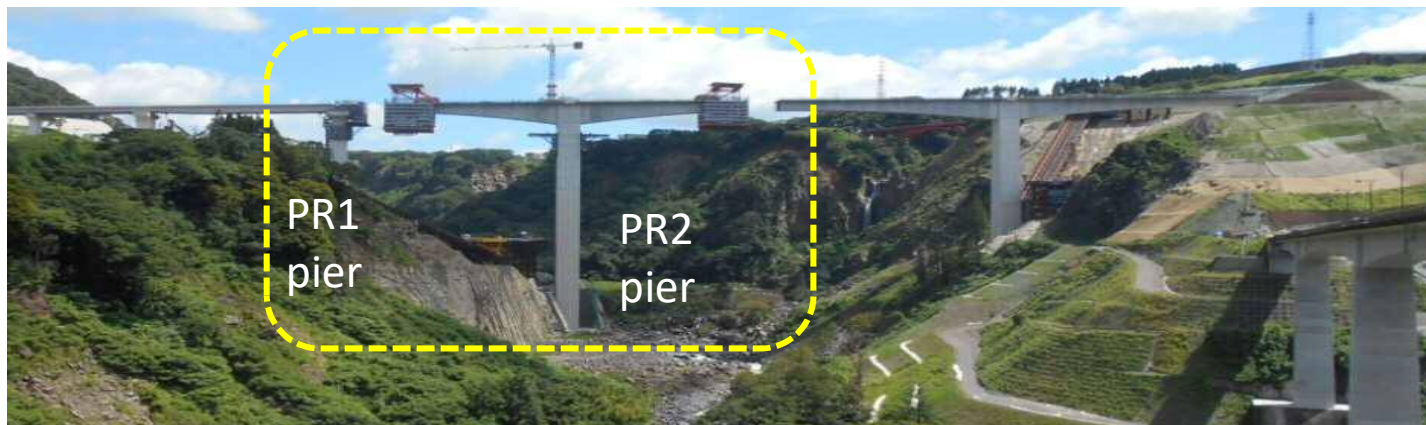
Image of the bridge movement when the ground shakes due to fault activity



The piers are wider at the top to prevent the bridge girders from falling even when an earthquake occurs

(2) Characteristics of the structure of the section crossing the deep valley

The bridge girders of the section crossing the deep valley were constructed to stretch symmetrically from the piers in a balanced manner. The structure of this bridge is designed to prevent the bridge girders from falling even if the piers at the end of the stretched girders move due to ground movement caused by fault displacement.



The Shin-Aso Ohashi Bridge, which was constructed using the overhanging erection method, in which bridge girders are stretched symmetrically from the bridge piers.

Installed by:
Kumamoto Prefecture



Kumamoto Reconstruction Project Office, Kyushu Development Bureau, MLIT
Kumamoto Earthquake Recovery Division, National Institute for Land and
Infrastructure Management, MLIT

2021.7