



> geosynthetics

Project	South West Inverness Flood Prevention Scheme
Project Duration	October 2011 - October 2012
Client	Highland Council
Design	AECOM
Contractor	R J McLeod Contractors
Works Value	£5.7 million

The South West Inverness Flood Prevention Scheme has been a four phase, multi-million pound project.

The final phase of the £16 million south west Inverness flood relief channel lies between Oldtown of Leys and the Alt na Skiah Burn to the south of Fairways golf course. The scheme intercepts four watercourses; Lochardil Burn, Slackbuie Channel, Slackbuie Springs and Alt na Skiah Burn and channels the waters into the River Ness, via the Holm Burn.

Phase 4 spanned a length of 1.6km, comprised of 50% open channel and 50% closed box culvert. The scheme diverts water from the south of the town, around the local community housing and into the River Ness.

The works were designed by AECOM based in Leeds and supervised by Highland Council.

Don & Low provided Lotrak® 200, a mechanically bonded (needlepunched) nonwoven geotextile and Lotrak® 70R, a woven reinforcing geotextile.

The function of Lotrak® 200 was to protect the geosynthetic clay liner (GCL) during the installation of Type 6U stone and to provide stabilisation. Lotrak® 70R was installed for separation and reinforcement of rock armour, while offering protection to the lower layers of the installation.





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The main contractor RJ McLeod faced a number of key issues including:

- Deep excavations, including some in poor ground conditions
- Extensive service/public utility works, including a high pressure water main diversion and several service crossings
- Working in and alongside existing watercourses including ecological and archaeological constraints

(source www.rjmcleod.co.uk)

Don & Low supplied Lotrak® geosynthetics for two different applications in the flood channel.

- Lotrak® 200, a medium-weight mechanically bonded (needlepunched) nonwoven geotextile, with increased strength and filtration properties, was positioned between the Class 6U confinement layer and the geosynthetic clay liner (GCL)
- Lotrak® 70R, a high-strength woven reinforcing geotextile, was used to separate the heavyweight rock armour from the Class 6U confinement layer

