Aberdeen Western Peripheral Route/Balmedie to Tipperty

project update Isue 10



Message from Aberdeen Roads Limited



Malcolm Findlay, General Manager, Aberdeen Roads Limited

Thank you once again for taking the time to read our latest Project Update. Works have continued at full pace during the first half of the year, and on 27 June 2018 our second phase of the AWPR/B-T project, between Parkhill and Blackdog opened to traffic. We are pleased to hear the road has been well received by the local community, cutting down journey times, and reducing congestion and pollution on the existing road network.

The latest project photographs showing this, as well as the progress that has been made across the project, are included in this issue. We are sure you can also now see how the project has progressed for yourselves travelling around Aberdeen and Aberdeenshire.

As well as the community initiatives undertaken by the team during the construction phase, to celebrate the imminent opening of the new road, a Community Event is being organised for the weekend of 8 and 9 September 2018, where a number of people will be able to visit the new road around the Milltimber area, including the new River Dee bridge and down to the Cleanhill Junction. Further details on the event can be found on the website www.awprgonortheast.co.uk.

As always, we thank you for your patience throughout the duration of these works and congratulations to everyone who has worked on the AWPR/B-T project, and completing the latest phase we did it!



Traffic running on the opened section near Cranfield.

BLACKDOG TO PARKHILL SECTION OPENS TO TRAFFIC

A key section of the AWPR/B-T, between Blackdog and Parkhill, has been completed and recently opened to road users.

The 6km stretch of road links the existing A90 at Blackdog to the realigned A947 Aberdeen to Banff Road at Parkhill as well as connecting new sections of the B977 Echt-Balmedie Road.

Substantial works were required on this section which included constructing 12 new bridges and three roundabouts. The largest roundabout at Blackdog Junction is a grade separated junction consisting of two steel bridges constructed from six pairs of beams, 46m and 43m long, weighing up to 87 tonnes per pair.

As well as connecting the AWPR with the existing A90, this junction also links the road to the Blackdog Industrial Estate, Blackdog village, Potterton and Belhelvie. The two other roundabouts are at East Goval, which links the B977 and the southbound on-off slip roads for the AWPR and at West Goval, which links the northbound AWPR on-off slip roads to the realigned A947.

continued overleaf

this issue features...

Cleanhill Junction Progress Balmedie-Tipperty Milestone Wild side of the AWPR Community Benefits Round-up



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Aberdeen Western Peripheral Route/Balmedie to Tipperty



The Blackdog Junction with the AWPR heading west towards the B999 Aberdeen to Tarves Road Overbridge.

The permanent realignment of the A947 was a considerable undertaking with a phased plan to allow the majority of the works to be carried out during less busy periods and away from the existing roads to help maintain traffic flow. The new alignment on the A947 was opened to road users in October 2017.

Three of the new bridges carry the realigned section of the A947 over the Buchan and Formartine Way, the Goval Burn and the AWPR. Two of the other new bridges in this section carry key commuter routes over the AWPR: the B977 Overbridge at Parkhill and the B999 Aberdeen to Tarves Road Overbridge at Cranfield.

As for most of the project, the section of the AWPR between Blackdog and Parkhill was constructed away from the road network, which allowed the earthworks to proceed and road users to continue using local roads as much as possible. Around two million cubic metres of earth was moved during this part of the operation – enough to fill 800 Olympic-sized swimming pools. This also allowed the main carriageway to be laid in good time following the completion of the earthworks foundations. Substantial quantities of Cement Bound Granular Material (CBGM) formed the base layer followed by the Continuously Reinforced Concrete Pavement (CRCP) on top of that and finally a bitumen-based thin surface course over the CRCP, which formed the final road surface for traffic.

Further works were required to complete the lining of the road, install signage throughout the section and lighting at the three roundabouts. Traffic signals were also installed on the A947 to allow traffic to access and exit the West Goval on-off slip roads.

Before this section of the AWPR was opened, a full Road Safety Audit was carried out by a team of qualified auditors and stakeholders including the Aberdeenshire Council and Police Scotland. The opening of this part of the road will help bring major improvements for road users in one of the busiest areas of the North-east road network.



The AWPR looking west towards the B977 Echt to Balmedie East Overbridge.



Goval Junction with the A947 Aberdeen-Banff Road crossing the AWPR.



The AWPR looking east towards the Blackdog Junction.

BALMEDIE-TIPPERTY GETS READY TO OPEN AS WORKS NEAR COMPLETION



AWPR and B9000 at Tipperty.

Finishing works are being completed on the Balmedie-Tipperty section of the project in what has been a complex, challenging and phased operation.

This 12km stretch of road has 11 new structures along the route and some of the works had to be carried out in close proximity to live traffic on the A90 Aberdeen-Fraserburgh Trunk Road, while also allowing access to properties and businesses along the A90.

Among the other challenges facing the construction team were the large number of water courses across the site, which were continually monitored by the project's environmental staff.

During these works a total of 650,000m³ of earth has been moved, which is enough to fill 260 Olympic-sized swimming pools. This section has also laid 112,000 tonnes of road surfacing, which is equivalent to 5,600 lorry loads.

Traffic began to use one lane each way on the southbound carriageway of the new road between Fountainbleau and Foveran in September 2017 and later switched to one lane each way on the first section of the new AWPR/B-T road.

A key moment was the completion and opening of the new Balmedie South Junction in April 2018, which provided vehicles with unrestricted access to and from Balmedie off the A90 via an underpass. The B977 Echt-Balmedie Road was also realigned with a new 1.5km section constructed from Victoria Hall to the junction. That allowed the closure of the former Balmedie North Junction at Old Aberdeen Road and for works to begin to tie in the new Balmedie-Tipperty section with the existing A90. In May 2018, traffic was switched on to one lane each way on the northbound carriageway of the new road between Balmedie and Tipperty.

Old Aberdeen Road was also tied in with the existing A90 to create the Balmedie Link Road, allowing access to local properties and businesses, the A975 Newburgh Road Junction and the new Foveran Junction.

Other major works included the realignment of the B9000 Pitmedden-Newburgh Road with a new junction and slip roads providing access on and off the Balmedie-Tipperty road and to Foveran. Those works also included a realignment of Tarty Road.

Among the final works being undertaken is the construction of a new access road from the B9000 West to properties in Bridgend at Tipperty. The new mainline here has also been tied into the existing A90 dual carriageway.

All of these works have involved a considerable amount of traffic management measures including lane changes, contraflows and temporary closures. These were necessary to ensure the safety of road users and work operatives. The patience of road users during these works has been greatly appreciated.

Making a difference at A90 Stonehaven and Charleston Junctions

Works on two of the major AWPR junctions on the A90 at Stonehaven and Charleston are being completed, bringing major benefits to drivers.

Both new junctions saw significant works which included the demolition and replacement of existing bridges, the construction of realigned and new slip roads, the creation of new signalised junctions and the widening of the A90 to three lanes northbound and southbound between Charleston and Findon.

At Stonehaven, the bridge carrying the A90 over the B979 Netherley Road was demolished and replaced in two sections, with A90 traffic in contraflow allowing two lanes northbound and one lane southbound during those works.

A new roundabout was also constructed to link the AVVPR with the A90 and the B979. In addition the B979 was widened and new southbound diverge and merge slip roads created for the A90. The early opening of the southbound merge meant traffic on the B979 no longer had to travel through Stonehaven to join the A90.

Charleston saw the construction of a new bridge over the A90 followed by the demolition of the old bridge along with the realignment of the A956 Wellington Road and creation of new slip roads. A new signalised junction was also installed.

Average speed cameras were installed at both junctions for the safety of works operatives and the local community and these have now been removed as part of the completion programme.

A considerable amount of planned traffic management measures were implemented including periodic temporary road closures during demolition of the bridges. All the traffic management measures were drawn up to allow works to be completed while enabling road users to continue their journeys with the least amount of impact possible.



Stonehaven Junction looking north up the Fastlink.



Charleston Junction with the AWPR crossing the A90 Aberdeen to Dundee Trunk Road towards Cleanhill.

Cleanhill Junction has key role in connecting AWPR to Fastlink



Cleanhill Junction looking north towards the River Dee.

Finishing works have just been completed on the Cleanhill Junction, which connects the Fastlink section of the AWPR to the South leg of the new road.

This roundabout is a key junction on the project as it will give drivers access to and from the new Charleston Junction on the southern edge of Aberdeen, north through Kingcausie towards the Dee Crossing or south towards Stonehaven.

The junction also includes the third largest structure to be constructed on the project, the Blaikiewell Burn Underbridge, which carries the main line over the U63K Kirkton of Maryculter Road and the Blaikiewell Burn.

Works commenced in April 2015 with 171,000m³ of earth, enough to fill 68 Olympic-sized swimming pools, being moved to allow the construction of the roundabout island and approaches.

A total of 1.8km of pipework was also installed to connect the junction's drainage network to adjoining Sustainable Urban Drainage System (SUDS) ponds, which clean surface water from the roadway before returning it to local water courses and burns.

The location of this junction is fairly remote from well-established roads in the area, which aided construction although works were planned to cause the minimum amount of disruption to local residents and properties.

A total of 47 lighting columns will illuminate the roundabout island and approaches while 27,413 shrubs and plants will be planted upon it during the 2018/19 planting season, after the road has opened.

Continuing drive to deliver community benefits across the project



Pupils from Elrick Primary School visit the Milltimber Brae Overbridge carrying the Deeside Way over the AWPR.

The AWPR/B-T Community Liaison Team (CLT) are continuing to engage with local groups, schools and universities as the project progresses towards completion.

Team members have participated in a variety of presentations to a diverse range of groups ranging from Scouts, history societies, Rotary clubs, and church groups to primary and secondary schools along with colleges and universities.

These talks highlight the latest progress on the project through aerial and ground level photography and provide an opportunity for audiences to ask questions or highlight potential issues. As well as raising awareness of the project, the schools presentations also outline the career opportunities available in construction and civil engineering.

CLT members have engaged with nearly 13,000 pupils across the North-east as part of the schools programme and a small number of those pupils have gone on to take part in work experience or taster opportunities on the project or have been successful in gaining apprenticeship places.

Schools and groups have also benefited from practical assistance through donations of surplus materials from the project. Northfield Academy in Aberdeen was recently given three tonnes of wood which is being used in the construction of a community garden in the school grounds.

The Better Balmedie group was given surplus post and rail fencing along with 250 trees for its own community garden project. Another 250 trees were donated to Balmedie Scouts for various planting projects.

With works progressing towards completion, AWPR staff and site offices are being demobilised. As a result, surplus office furniture and equipment has been donated to a number of different community groups.

There will be more opportunities for groups to obtain surplus materials before the project is completed and interested parties should contact the CLT in the first instance at community@awprcjv.com

The wild side of the AWPR as special bridges take shape



The wildlife bridge at Kirkhill near Dyce.

Around 400 tonnes of topsoil has already been placed on the Kirkhill Overbridge deck then landscaped to add varying depths and sown with a species-rich grass mix to replicate a natural habitat and offer a variety of potential routes over the structure for wildlife.

Further works will be carried out later this year during the autumn planting season to plant around 700 scrub trees on and around this structure, including hawthorn, birch and willow. Mammal proof boundary fencing will help guide and encourage wildlife to the bridge entrances.

Work will begin shortly to place topsoil on the Kingcausie Overbridge, which will have similar landscaping and sowing. Around 950 scrub trees will be planted on and around this structure during the autumn planting season.

When works are completed, the bridges will provide access for wildlife such as deer, foxes, badgers, hares and rabbits along with squirrels. The bridges have been designed in such a way as to discourage pedestrians from using them.

A second bridge at Kirkhill has been constructed with a width of 11.2m and will have one half of that crossing landscaped for wildlife and equestrian use, while the other half will be used by vehicles to access forestry and remote properties.

In addition to the bridges, a rope crossing has been installed near Goval at Dyce for red squirrels. A total of 17 dedicated mammal underpasses have also been installed along the route offering safe access to wildlife.

A total of 80 box culverts and underpasses have been placed below the new road and all have mammal ledges in them for species such as otters, which gives them safe access without being at risk from road users.

Works coming soon

The focus of upcoming efforts will be finishing works on the remaining sections of the mainline to bring them to substantial completion.

These include the finishing touches on structures, completing the installation of street lighting at junctions, commissioning the electronic information systems, ensuring the roadside boundary fencing is completed and landscaping during the planting season.

In the South Section, major works are completed on the mainline and the finishing works are well under way.

In the Centre Section, works are progressing on the stretch of the mainline between the A96 at Craibstone and the new River Don Crossing. Some surfacing works have still to be completed in this area while works are progressing on the Don Crossing where the final segment will be constructed, followed by the waterproofing, kerbing and surfacing of the bridge deck.

The North Section will see the completion of works on the Balmedie-Tipperty section which will allow traffic to use both lanes each way on the carriageway.Works will also be completed to tie-in the new road to the existing dual carriageway at Tipperty.

Once the mainline works are completed, works will be continuing across the entire project to complete outstanding tasks on the side roads and access tracks.

Contact Us

Should you wish to know more about the project please visit our project website at www.transport.gov.scot/awpr-bt, where you can sign up for the Ezine, Route Ahead, as well as project-related alerts. Alternatively, call us on 0800 058 8350 or email enquiries@aberdeenroads.com.

The two special wildlife

bridges over the AWPR route have been constructed

and work is underway to

requirements for these.

complete the environmental

The green bridges at Kirkhill

near Dyce and Kingcausie in

their kind to be built over a

major road in Scotland and

will provide safe crossing points for wildlife between

habitats and colonies.

Maryculter are the first of







