



Caol & Lochyside Flood Prevention Scheme



Community Liaison Meeting
20th May 2021



Project Manager : Steve Scott BEng CEng MICE



Project Summary –

- Construction of approximately 2000 metres of flood defence which will protect 300 properties in the Caol and Lochyside from the risk of flooding up to a 1:200 year event.
- **Design**
- 1200 metres of embankment with footpath and access to the shore
- 800 metres of flood wall with footpath and 3 nr flood gates
- 3 attenuation tanks
- 1 pumping station
- Improved access onto the Caledonian Canal
- New childrens play park
- Extensive drainage installation



Project – Materials

- Fill Material – 100,000 tonnes
- Armour Material – 50,000 tonnes
- Concrete – 6,500 tonnes
- Steel – 300 tonne
- Drainage Pipes & Precast - 500 tonnes
- Removal of materials from site – 25,000 tonne

Taking into consideration plant movements, fuel and incidental deliveries there will be over 10,000 HGV movements to the site.



Project Phasing – Erracht Drive Phase 1 (June – September 21)

Erracht Drive - Phase 1 – Site Establishment, clearance and drainage outfalls



Activity	Key	Mitigation
Compound and Site Establishment		Dedicated access points, one way system on Erracht Drive in operation
Service diversions		Signal Controlled single lane working (where required)
Japanese knotweed removal		Works contained within site. Refinement of material on site reducing vehicle required for disposal
Drainage outfall installation		Works contained within site. Use of precast headwall where possible to minimise material deliveries
Site Access Points		Designated access points to control traffic movements. Use of one way system along Erracht Drive
Site Access Route		Access route with site boundary minimising traffic on Erracht Drive

Project Mitigation Measures

- Use of vehicular one way system eastward for site traffic along Erracht Drive shore front to site compound.
- Access to Site compound.
- Site construction extents from southern kerb of Erracht Drive for majority of works maintaining unrestricted traffic flow for as much of the project as possible
- Pedestrian access maintained along north footway of Erracht Drive
- Designated crossing points where cycle routes, footways, Great Glen way cross the works with Access maintained throughout.
- Footway at base of canal and towpath maintained throughout with localised diversion during direct tie in works
- Internal site track along frontage providing site access and removing traffic from public road
- Dedicated site access points ensuring safe access and egress
- Access maintained to canal parks, shinty club and residential properties.
- Public and businesses kept up to date with liaison groups and notice boards.





Project Phasing – Erracht Drive Phase 2 (August – October 21)

Erracht Drive - Phase 2 – Drainage Installation and Embankment Construction



Activity	Key	Mitigation
Drainage installation		Works contained within site. Use of just in time deliveries direct to work front to minimise handling and transportation of materials.
Storm cell installation		Works contained within site. Use of just in time deliveries direct to work front to minimise handling and transportation of materials.
Site access route		Access route within site boundary minimising traffic on Erracht Drive

Typical Site Signage To Coordinate Operatives and Public





Project Phasing – Erracht Drive Phase 3 (October 21 – July 22)

Erracht Drive - Phase 3 – Embankment Construction, kerbing and footways



Activity	Key	Mitigation
Embankment Construction		Construction working east and northwards to maintain usable delivery areas for vehicles access site
Kerbing and footways		Signal controlled single lane working where required for carriageway crossing installations
Gully and tail crossing		Signal controlled single lane working. Localised alternative temporary parking provision on grass frontage
Site access route		Access route within site boundary maintained across new footways continuing to minimise traffic on Erracht Drive

Project Mitigation Measures

- Internal site track between Erracht Road and Kilmallie Drive providing dedicated access to work fronts. Stoned access points and wheel washing facilities as required to prevent debris being deposited on public road.
- Access maintained to Great Glen Way and NCR throughout.





Project Phasing – Erracht Drive Phase 4 (July 22 – September 22)

Erracht Drive - Phase 4 – Kerbing and footways, Canal tie in



Activity	Key	Mitigation
Embankment Construction		Completion of embankment works with access via east end of Erracht Drive
Kerbing and footways		Kerbing and footways installed along east end of embankment
Site access route		Access route to embankment due to safety concerns of vehicles utilising Kilmallie Drive access through private residence
Canal Tie in Works		Canal tie in works near end of construction to maintain site compound working area and ensure permits and approvals are in place for works on historic monument.
Canal Drainage Install		Bund, embankment formed and precast culvert installed under footpath.

Project Mitigation Measures

- Dedicated staff managing design, public utility interactions, third party approvals, traffic management sub contractors ensure optimised construction methodologies.
- Silt Mitigation measures.





Project Phasing – Erracht Drive Phase 5 (July 22 – Oct 22)

Erracht Drive - Phase 5 – Landscaping, reinstatement and demobilisation



Activity	Key	Mitigation
Landscaping	■	Landscaping and reinstatement works following installation of street furniture and surfacing works





Project Phasing – Killmallie Road Phase 1 (June – August 21)

Killmallie Road - Phase 1 – Northern gully and tail connections



Activity	Key	Mitigation
Japanese knotweed removal	★	Works contained within site. Refinement of material on site reducing vehicle required for disposal.

Project Mitigation Measures

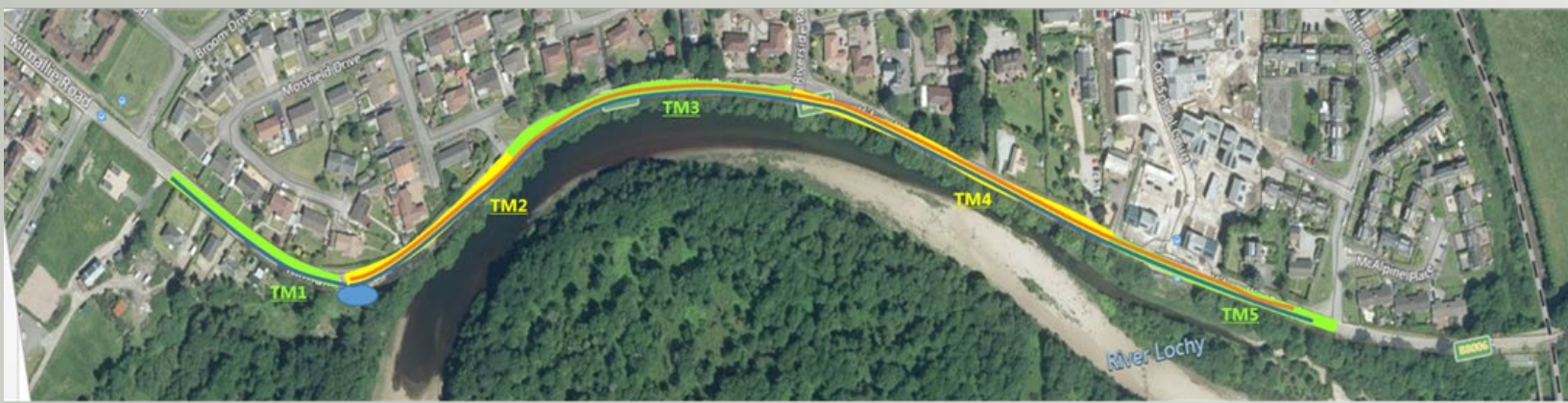
- Pedestrian and cycle access maintained along north footway of Killmallie Drive
- Designated crossing points where cycle routes, footways, Great Glen way cross the works
- Traffic flow maintained along Killmallie Drive through phased construction of work fronts





Project Phasing – Killmallee Road Phase 2 (August – November 21)

Killmallee Road - Phase 2 – Pump Station, Drainage Network and Service Diversions



Activity	Key	Mitigation
Pump Station installation		"Off line" construction of pump station minimising public interaction
Drainage network installation		Signal controlled single lane working to install mainline drainage system and tie in gully tails maintain traffic flow along Killmallee Road.
Service diversions		Water main installed in same trench as drainage network minimising construction/Traffic Management duration.
TMP		Traffic Management Phases for signal controlled single lane working. Deployment of 2 way lights between junctions to minimise the need for 3 way lights and the associated delays between green cycles.

Project Mitigation Measures

- Protection of existing southern kerb line to maintain integrity during construction
- Phased Traffic Management installations using 2 way working to reduce waiting times.
- Liaison with bus operating company to ensure alternative bus stops agreed and provide where necessary maintaining timetable timings
- Localised refinement of drainage network to ensure installation while maintaining required live traffic lane width. Isolated use of convoy working and reduced lane (with Project Manager Consent) for manhole installation where refinement not possible. Consideration of night working in conjunction with resident consultation.





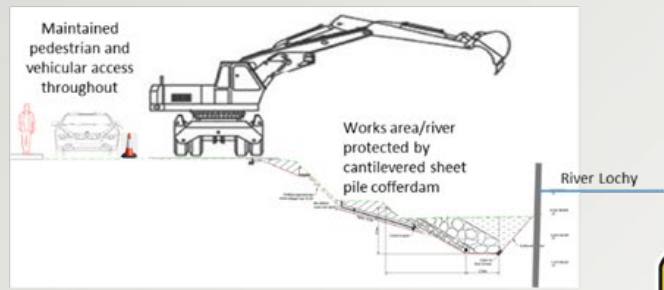
Project Phasing – Killmallee Road Phase 3 (September 21 – August 22)

Killmallee Road - Phase 3 – Floodwall Construction



Activity	Key	Mitigation
Japanese knotweed removal	★	Works contained within site and removed following installation of sheet pile cofferdam to mitigate contamination of River Lochy. Refinement of material on site reducing vehicle required for disposal.
Flood wall construction	▬	Phased earthworks and flood wall construction using signal control single lane working. Construction of drainage outfalls as they are encountered working north eastwards. Operating Lengths of circa 195m to provide 3 work fronts, namely; earthworks, floodwall and reinstatement working in recurring pattern. This provides a "standard" construction approach for the duration of the works while maintain traffic flows in both directions. The layout assists in expectation management creating a "routine" for the general public negating continual change and uncertainty.

Working Front Cross Section







Project Phasing – Killmallie Road Phase 4 (August 22 – December 22)

Killmallie Road - Phase 4 – Resurfacing and landscaping

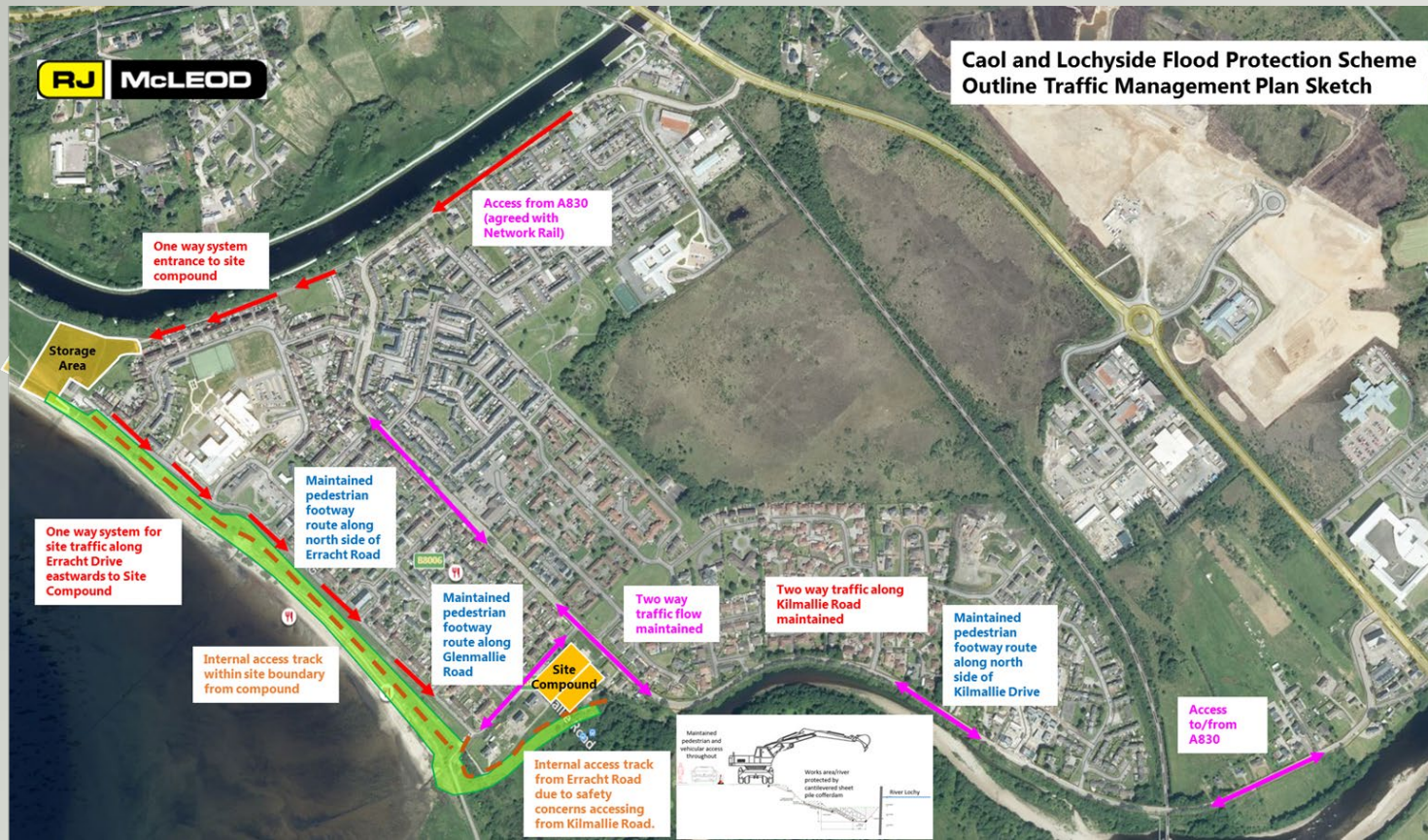


Activity	Key	Mitigation
Surfacing Works		Re-surfacing of Killmallie Road using signal controlled single lane working similar to those used in Phase 3
Landscaping		Landscaping and reinstatement works following installation of street furniture and surfacing works





Traffic Management





Public Liaison

- Press Releases at key stages of the project
- Monthly updates on progress and planned works on Highland Council Website, Community facebook and Community noticeboards and copies left at library / lunch club
- CLG meetings with presentation on progress
- Liaison with stakeholders
- Project information board
- Project drop in (suspended due to Covid)



Community Benefit

- Small workforce who stay in the Lochaber area
- Supplemented with employment of local personnel
- Contracting with local firms and supply chain
- Engagement with schools and colleges regarding site visits, presentations, training, work experience and placements
- Engaging with the job centre regarding future positions



Planned Works for next 4 weeks

- **Complete Site Establishment – services and access**
- **Heras Fencing to work areas**
- **Turf Cutting Ceremony**
- **Service Diversions & Removal of Old Services**
- **Removal of Japanese Knotweed**
- **Site Clearance**
- **Satellite compound near shinty club house**
- **Design Work**



Any Questions?