

Caol & Lochyside Flood Prevention Scheme



Traffic Management Plan Rev A



Site Deliveries

To Construct the Caol and Lochyside Flood Prevention Scheme there is a requirement to import a large volume of construction materials, which will take the form of aggregates, rock armour, reinforcing steel, concrete and drainage materials. There will also be a requirement to export any excess material and waste from the site. The import and export of materials will result in a large number of HGV movements which we estimate to be in the region of 10,000.

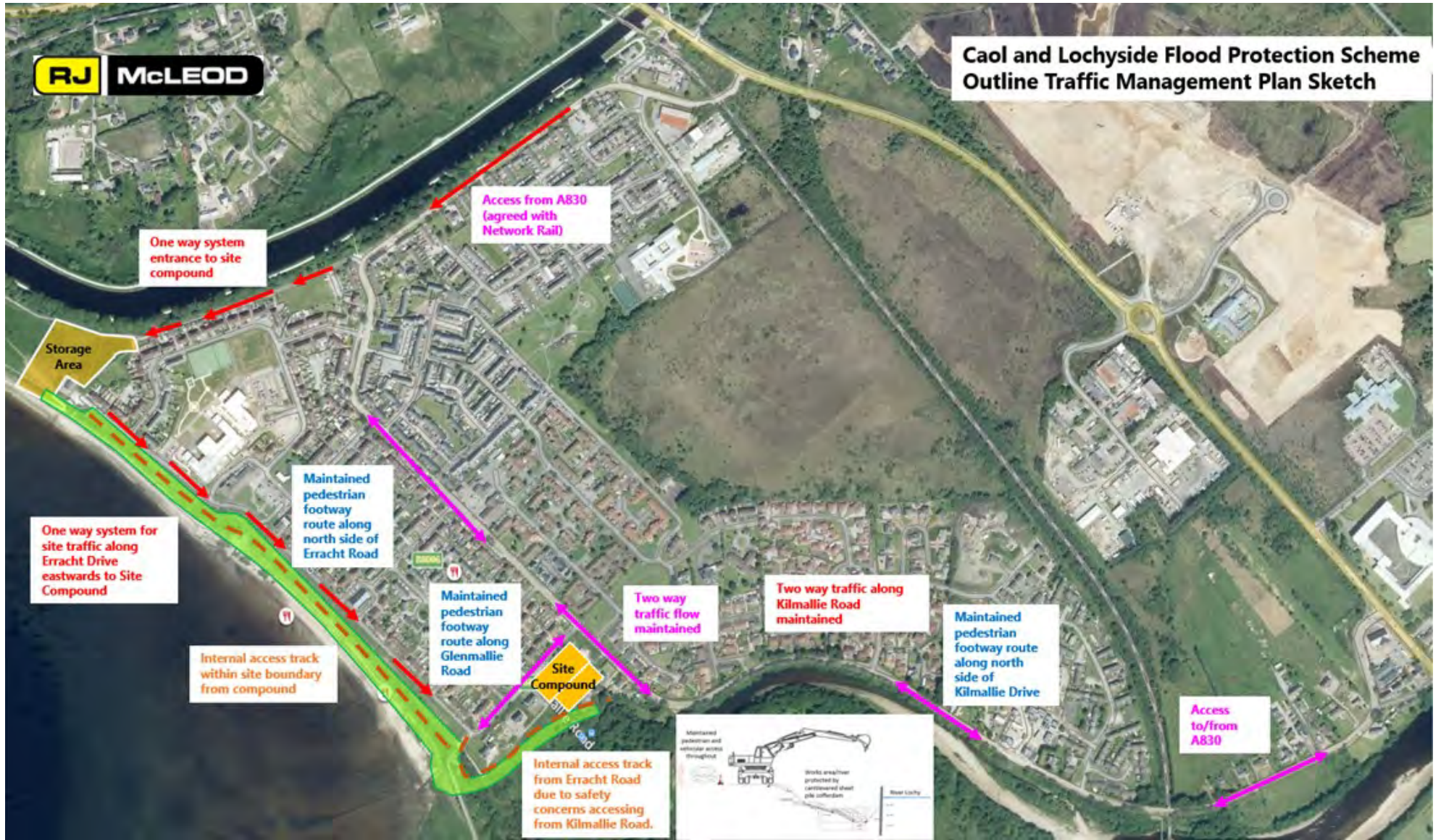
Accessing the site

Lorries will access the site off the A830 onto Kilmallie Road from either the East or the West depending on the supplier, quarry or port being utilised. There are 2 accesses off the A830 the first is a signalised junction opposite the Lochaber High School and the other a junction near the Banavie Swing bridge which crosses a signalised level crossing.

The project is made up of 2 elements. The works along the shore of Loch Linnhe comprising of a 1.2km embankment and the works along the River Lochy comprising an 800m embankment with concrete flood wall.

We would propose that all vehicles delivering materials to the embankment along the shore adopt a one way system. The route would take them onto Kilmallie Road at the signalised level crossing proceeding approximately 0.4miles and turning right onto a single track access road to the Shinty Clubhouse. A haul road would be constructed along the front of the shore for access and deliveries. Lorries would leave the site at the access to the Caol Spit where they would join Glenmallie Road turning right on to Kilmallie road and proceeding along to the signalised junction on the A830. We believe this route to be the safest option when crossing the level crossing, when turning off and on to the A830 and reduces the movements through the local residential streets.

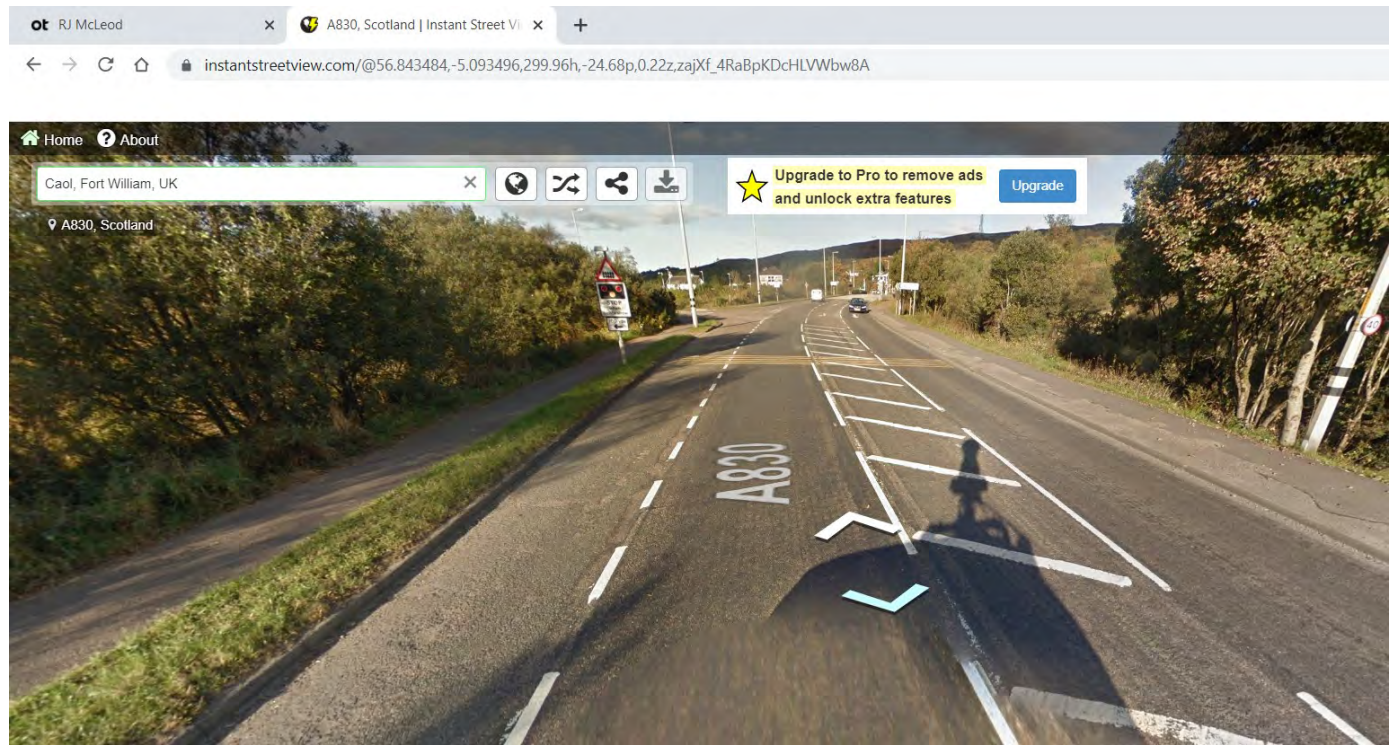




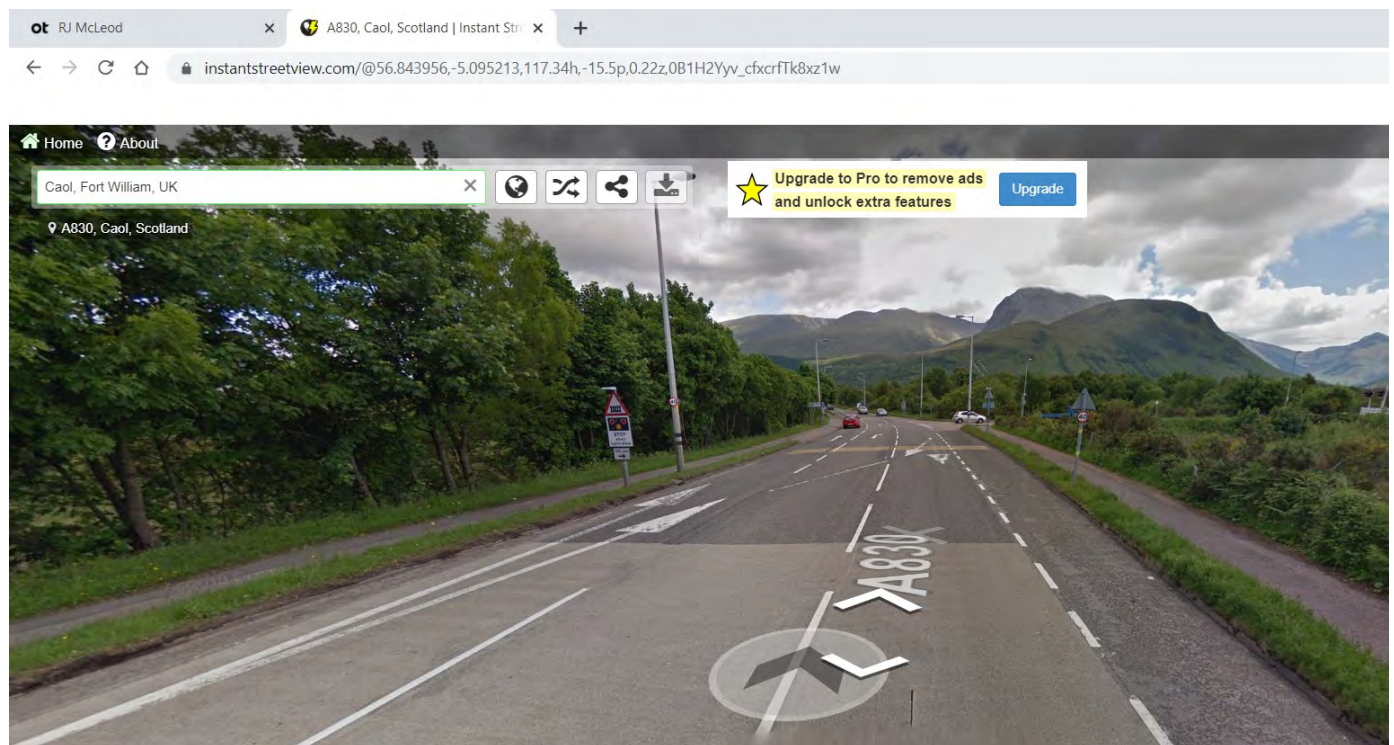


Traffic Management Schematics– the slides below illustrate how we propose to deliver materials to the site.

Access to Flood Embankment

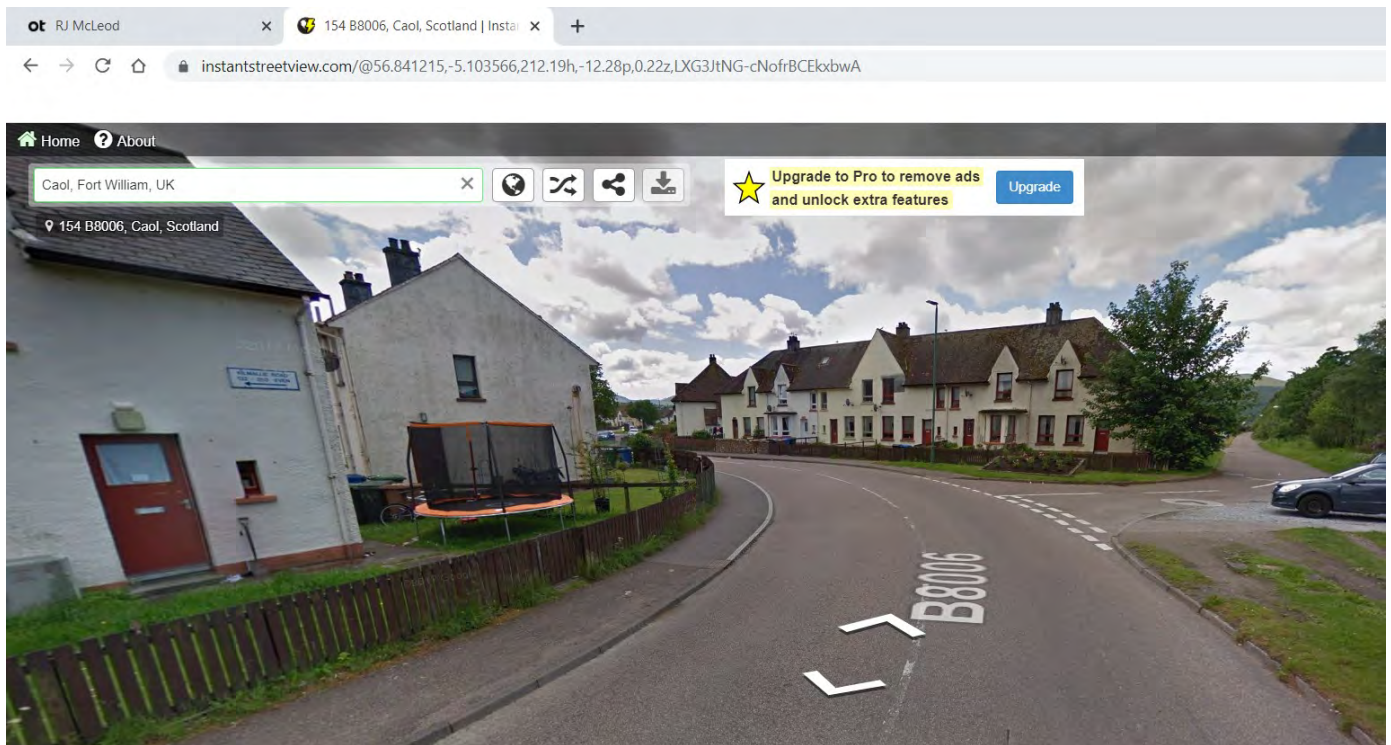


Access for Flood Embankment – Heading West on A830 turn left onto Kilmallie Road



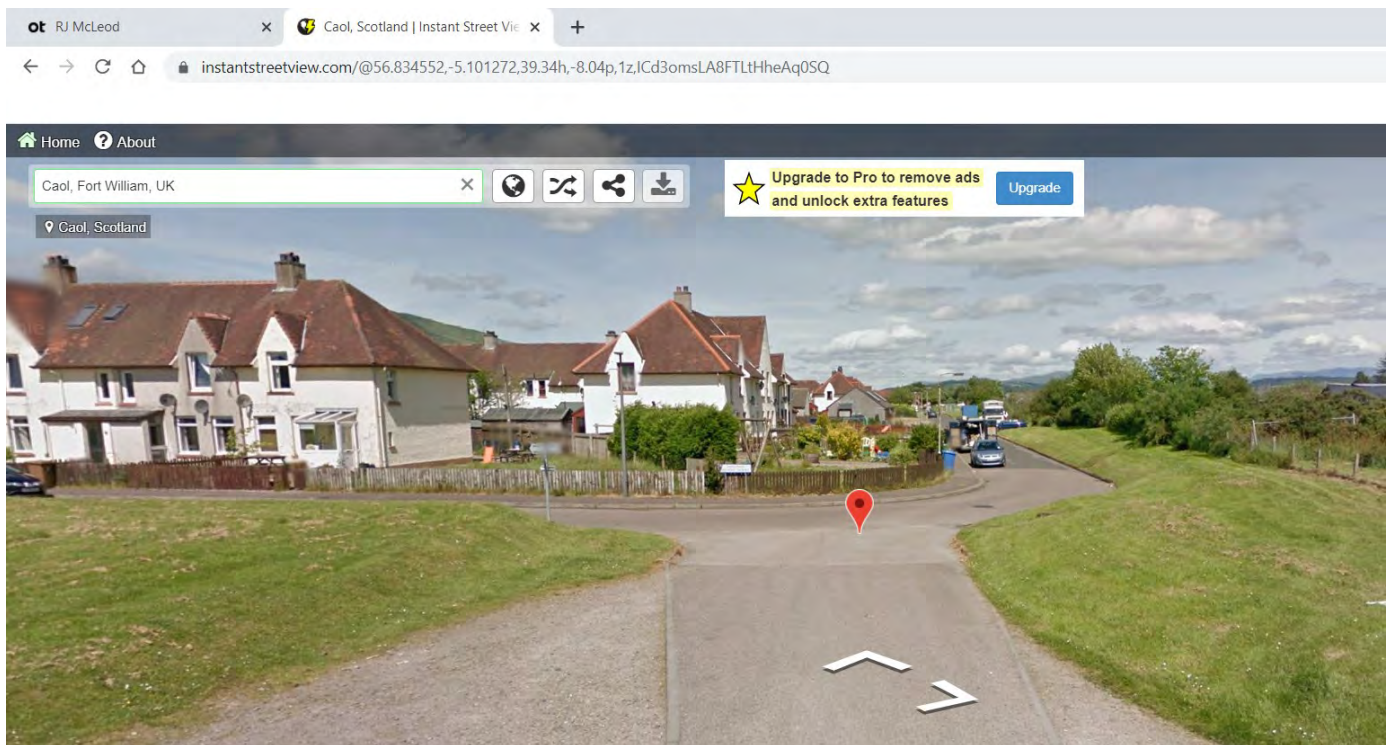
Access for Flood Embankment – Heading East on A830 turn right onto Kilmallie Road



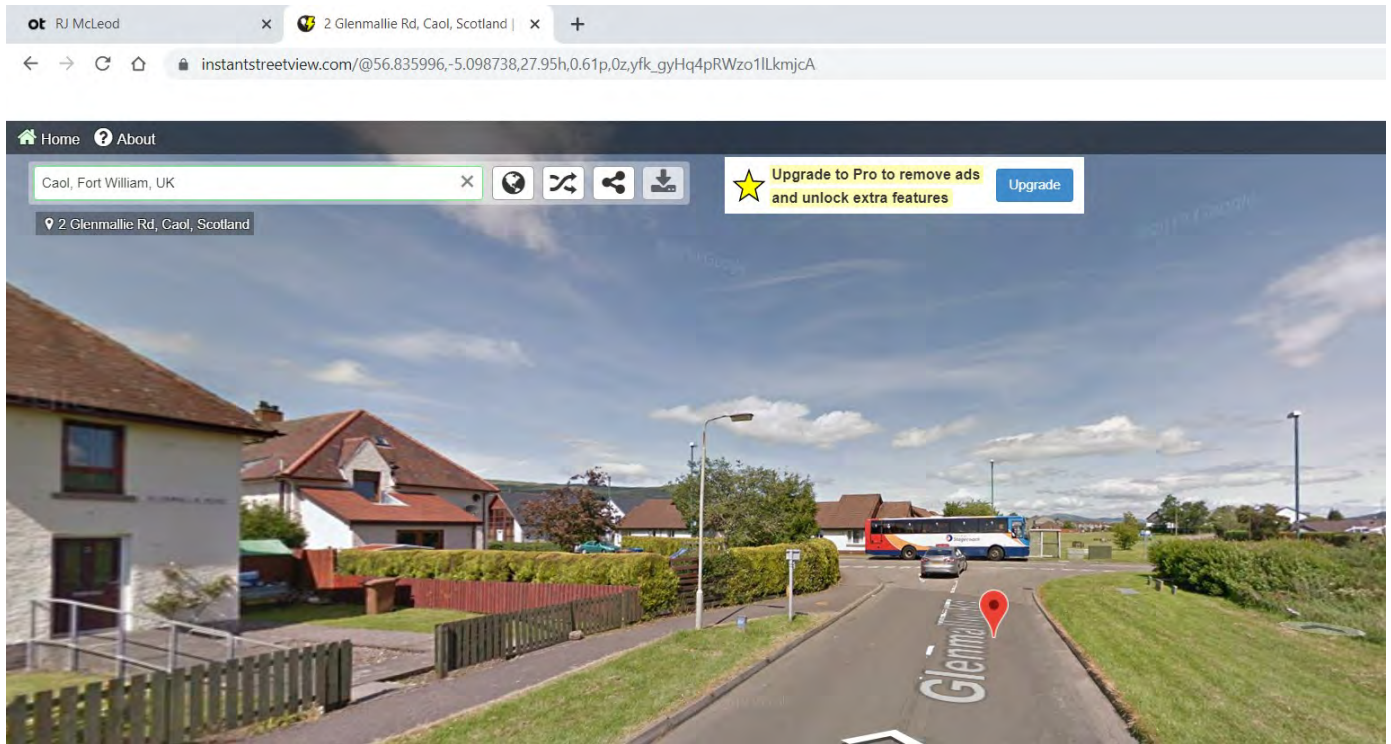


Access for Flood Embankment – Turn right off Kilmallie Road onto local access road to Shinty fields

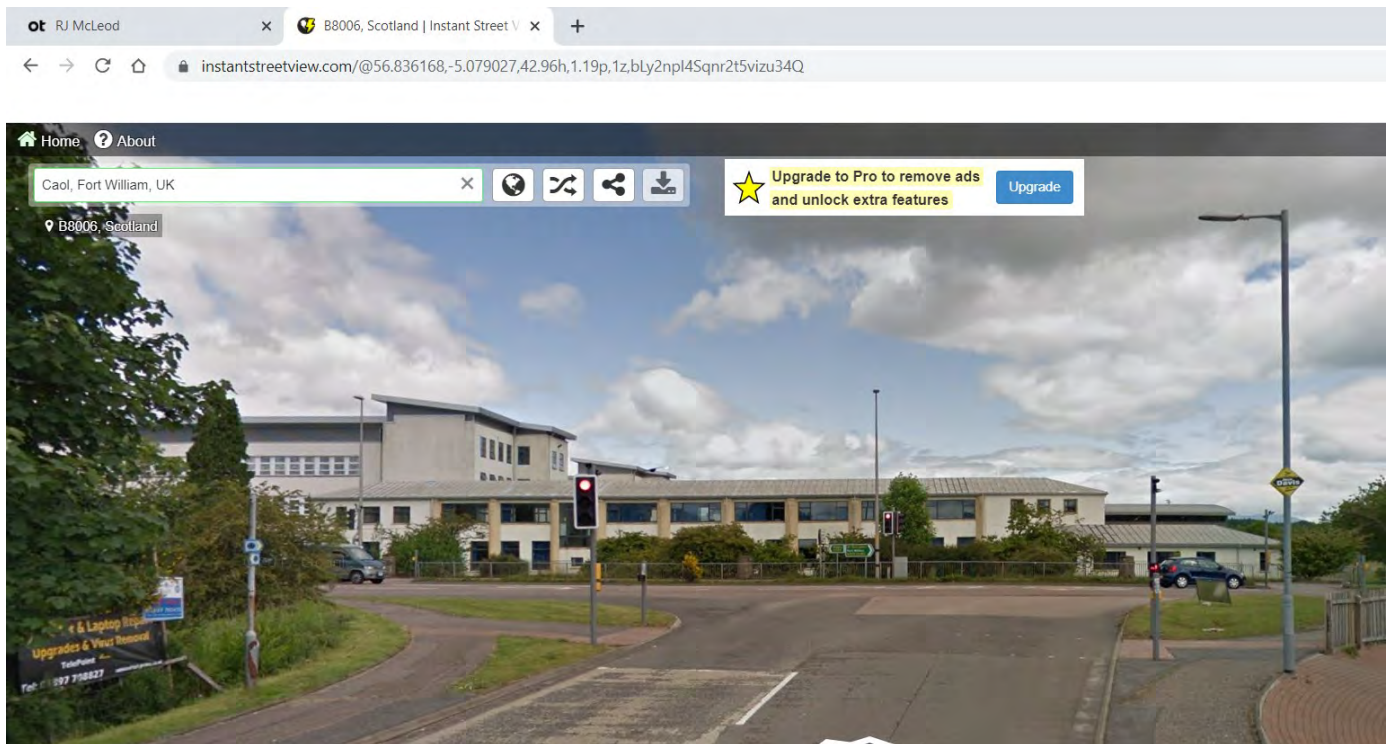
Egress from Flood Embankment



Egress from Flood Embankment – Turn right on Glenmallie Road from Caol Spit Access



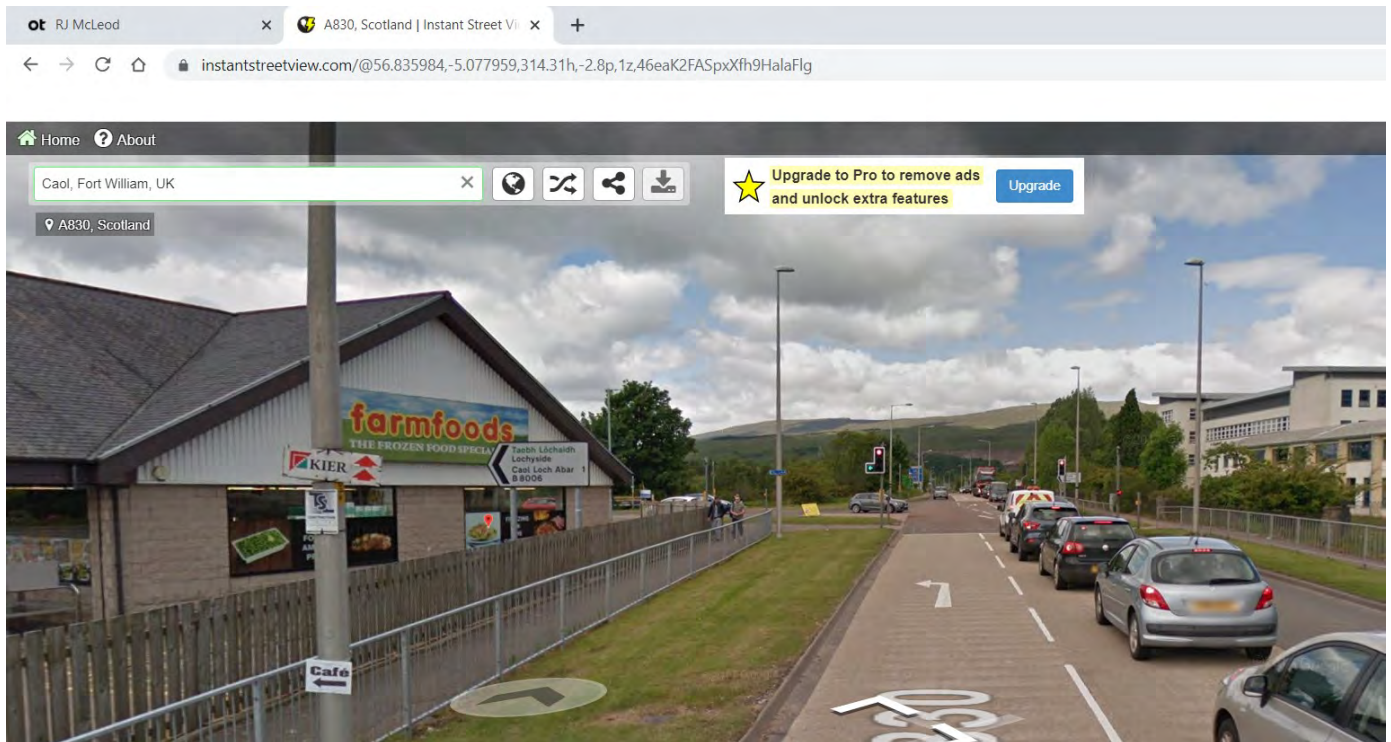
Egress from Flood Embankment – Turn right on Kilmallie Road from Glenmallie Road



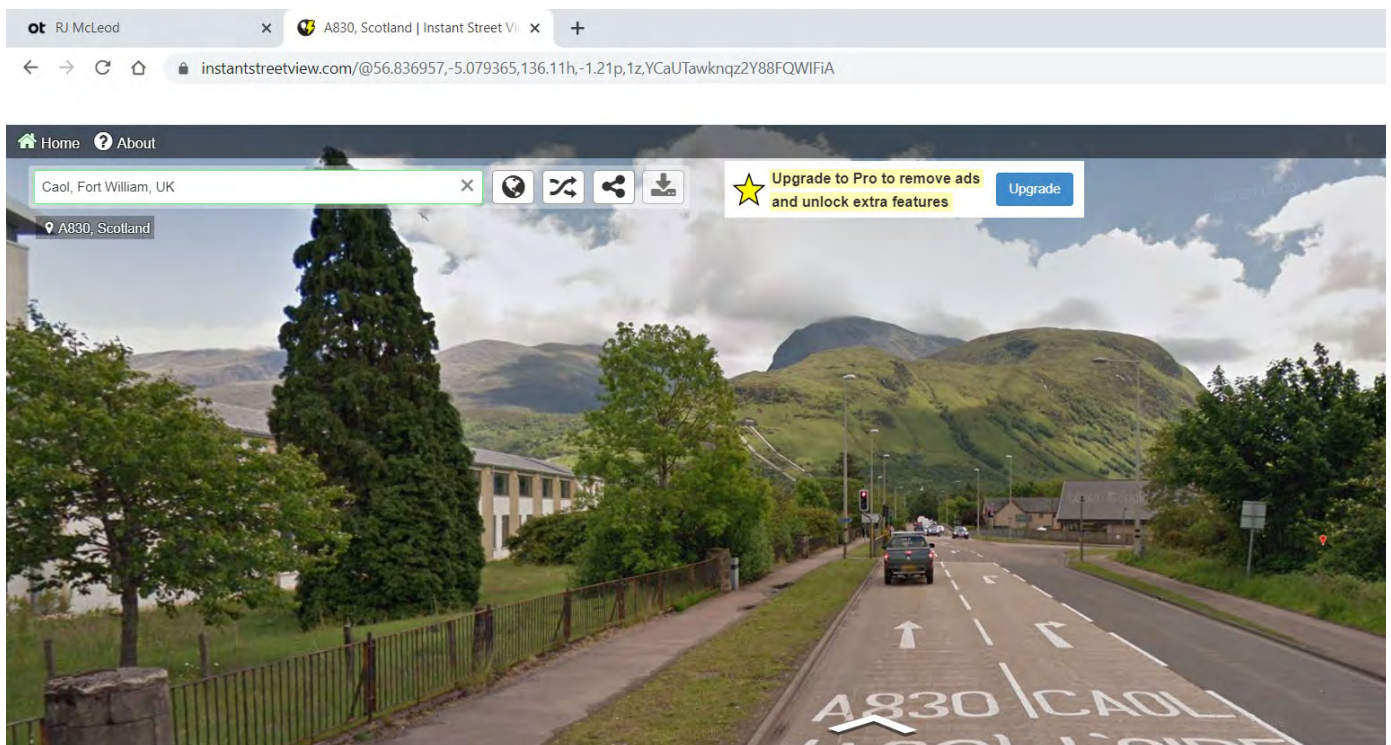
Egress for all deliveries to the site – Left or Right onto A830 from Kilmallie Road



Vehicles delivering materials to the River Lochy embankment and flood wall would access and egress using Kilmallie Road at the signalised junction adjacent to the Lochaber High School.



Access for River Lochy Embankment – Heading West on A830 turn left onto Kilmallie Road



Access for River Lochy Embankment – Heading East on A830 turn right onto Kilmallie Road



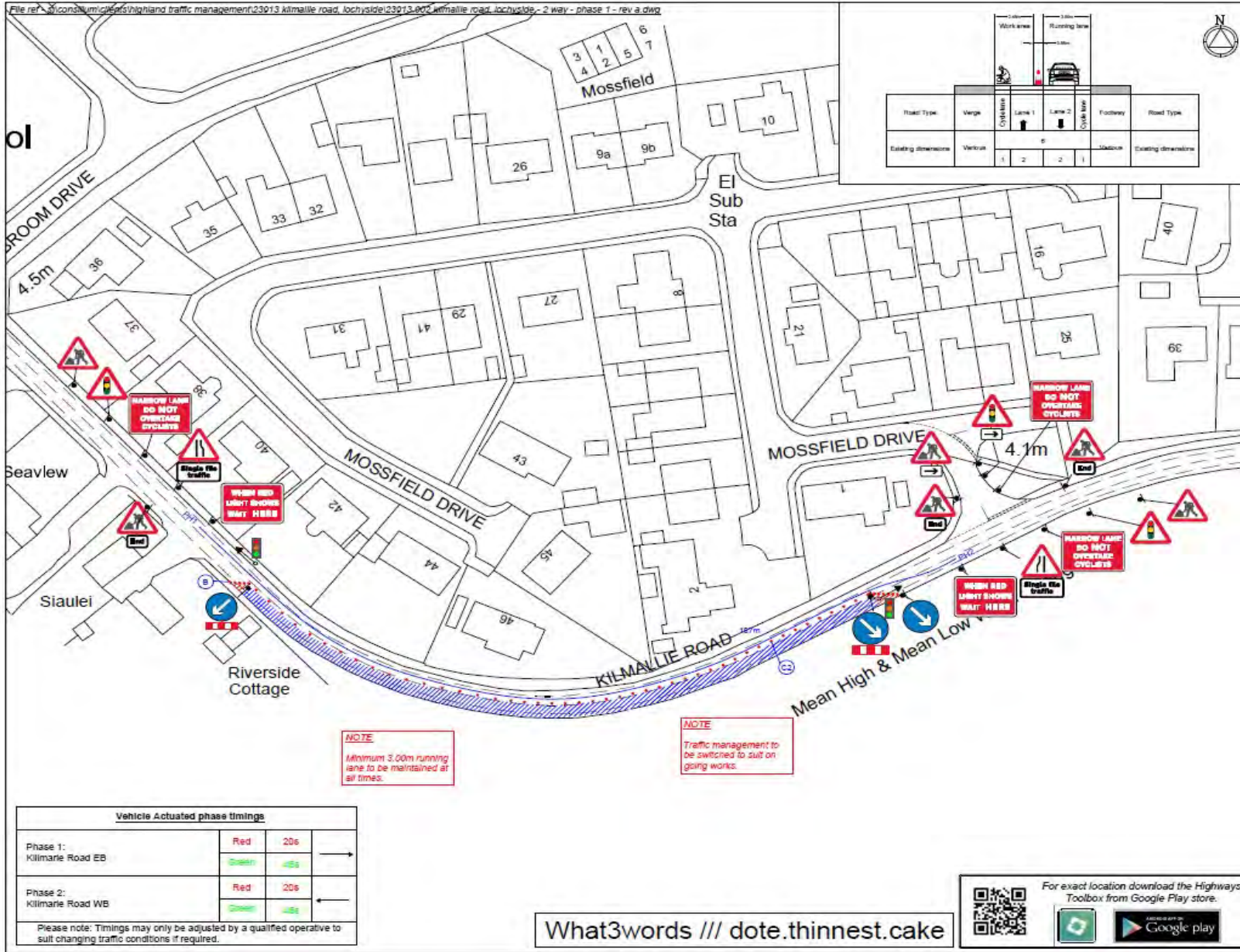
Traffic Management – Kilmallie Road

There will be extensive works along Kilmallie Road from Glenmallie Road to Soldiers Bridge. This comprises water main diversions, deep drainage, construction of a pumping station, widening of the embankment with rock armour and the construction of a reinforced concrete flood wall with adjacent footpath. Due to the limited working space and the requirement to install services and drainage in the carriageway there will be the requirement to restrict access over a single lane which will be controlled by traffic lights. The traffic lights will be required for at least a 12 month period. To reduce the disruption we would use 2 way set where possible but would resort to a 3 way set where the following roads join Kilmallie Road – Castle Drive, Old School Court, Riverside Park and Mossfield Park.

The sections under traffic lights are detailed in the following drawings which have been designed and optimised by our traffic management contractor Highland Traffic Management (HTMJ). They have designed the sections to ensure the minimum disruption to the local residents and community that regularly travel along this section of road. They will use a new type of traffic light system that are more efficient and that can adapt to traffic volumes and alter the sequence to accommodate variations in traffic flows throughout the day.



File ref: \\condon\clients\highland\traffic management\23913 kilmallie road_lochside\23913-002 kilmallie road_lochside_2 way - phase 1 - rev a.dwg



KEY

- Cone
- Sign
- Traffic light head
- Work area
- Closed area
- Traffic light phase

DETAIL B

DETAIL C

NOTE

Traffic light timing to be risk assessed on site. Additional time may be required to cater for cyclists.

NOTE

Site access will be agreed with engineer at time of installation.

A	Closure extended west, note added & phasing adjusted	LS	SP	23/06/21
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Client: **RJ McLEOD** The Highland Council / Comhairle na Gàidhealtachd

Project: Killmallie Road Lochside, Grid Ref: 211282, 775804

Title: Temporary 2 Way Traffic Lights

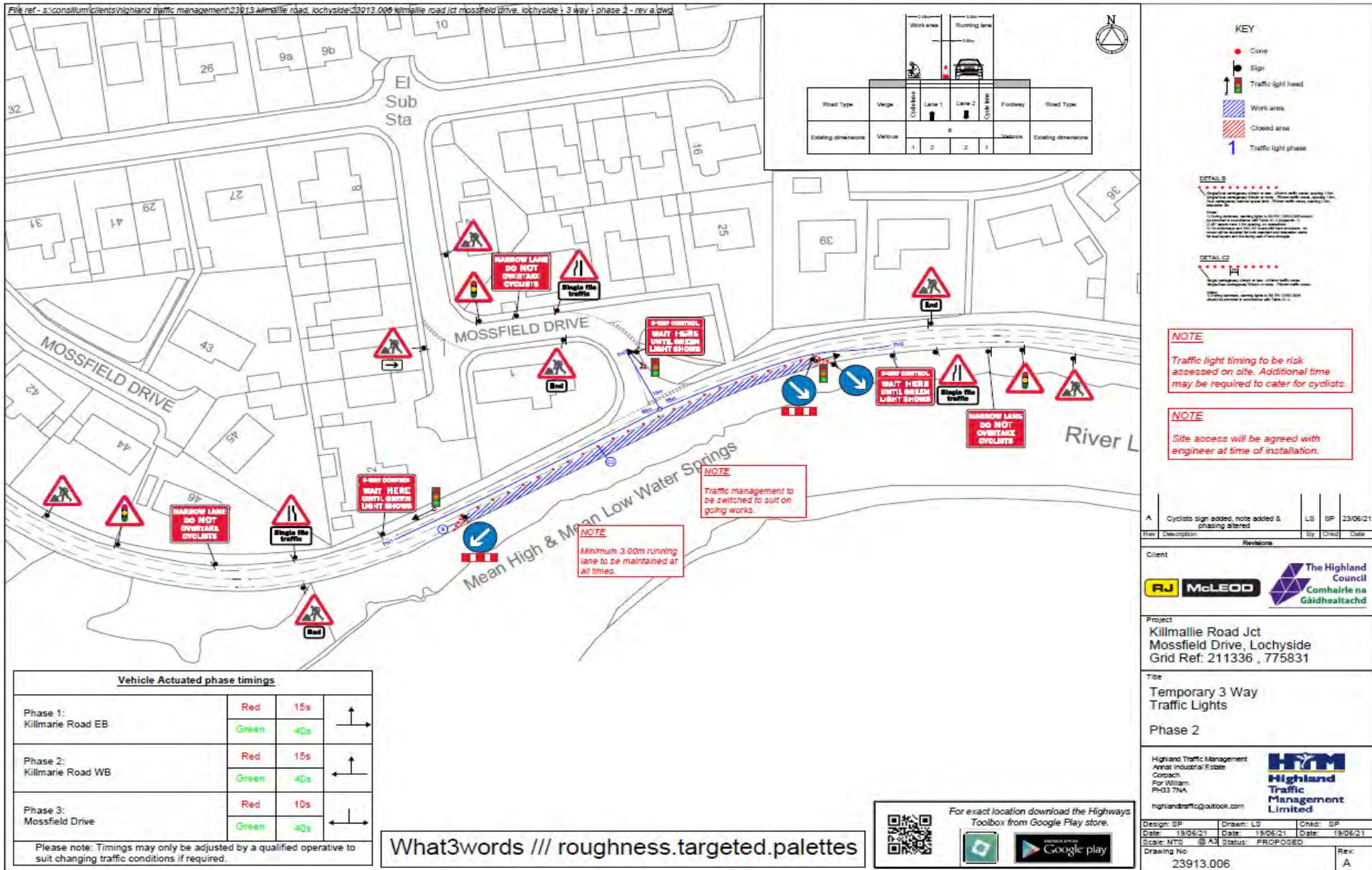
Phase 1

Highland Traffic Management, Annan Industrial Estate, Corrach, For William, PE63 7WA

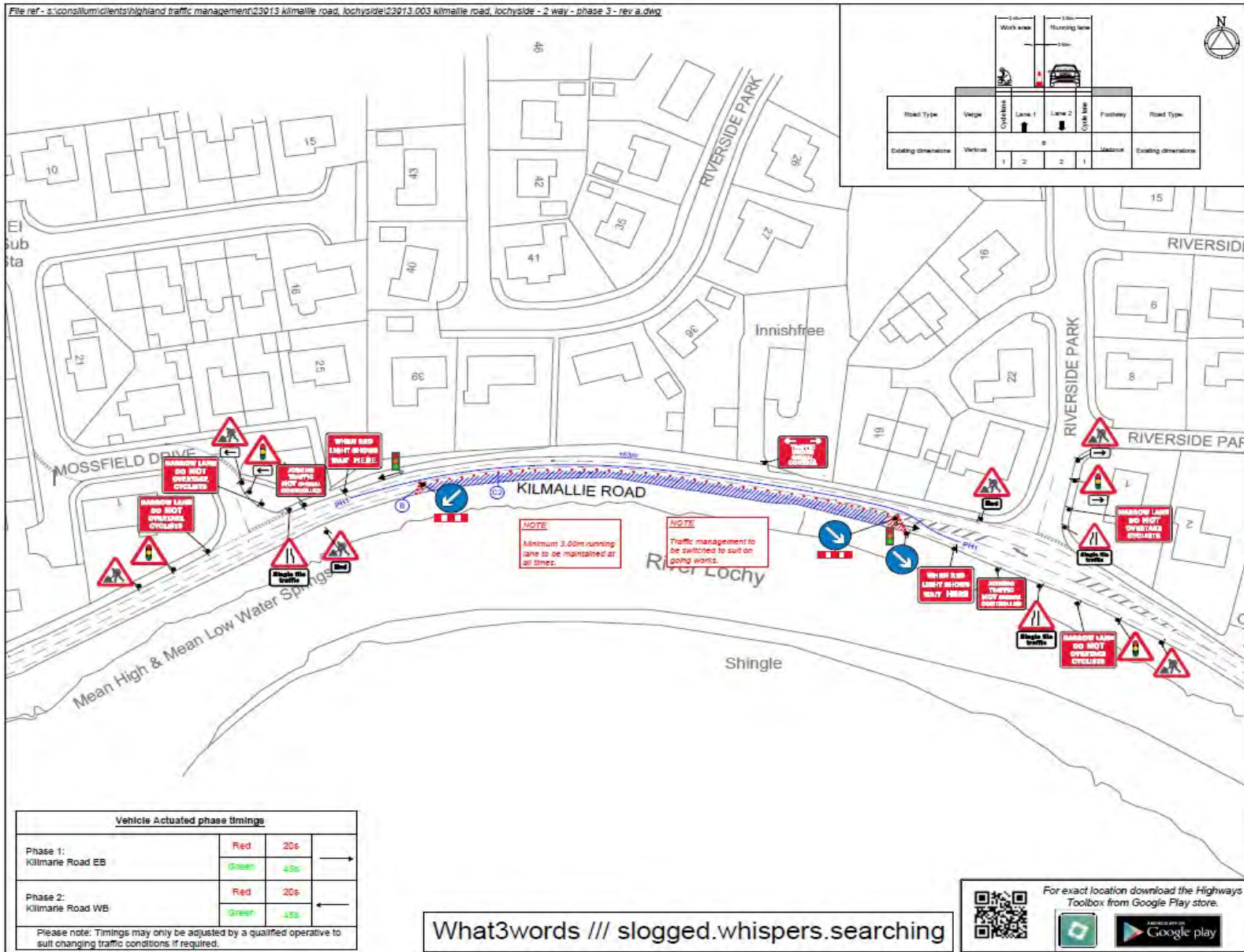
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Date: 19/06/21	Date: 19/06/21	Date: 19/06/21
Scale: NTS @ A3	Status: PROPOSED	

Drawing No: 23913.002 Rev: A





File ref - s:\constitumclients\highland traffic management\23013.kilmallie.road_lochside\23013.003.kilmallie.road_lochside - 2 way - phase 3 - rev a.dwg



KEY

- Cone
- Sign
- Traffic light head
- Work area
- Closed area
- Traffic light phase

DETAILS

DETAILS

NOTE
Traffic light timing to be risk assessed on site. Additional time may be required to cater for cyclists.

NOTE
Site access will be agreed with engineer at time of installation.

Rev	Description	Revisions	By	Chkd	Date
A	Note added, TUSC added to driveways		LS	SP	23/06/21

Client

RJ McLEOD **The Highland Council**
Comhairle na Gàidhealtachd

Project
Kilmallie Road
Lochside
Grid Ref: 211418 , 775850

Title
Temporary 2 Way
Traffic Lights
Phase 3

Highland Traffic Management
Annual Industrial Estate
Cospach
For Milligan
PH33 7NA
highlandtraffic@outlook.com

HMM
Highland Traffic Management Limited

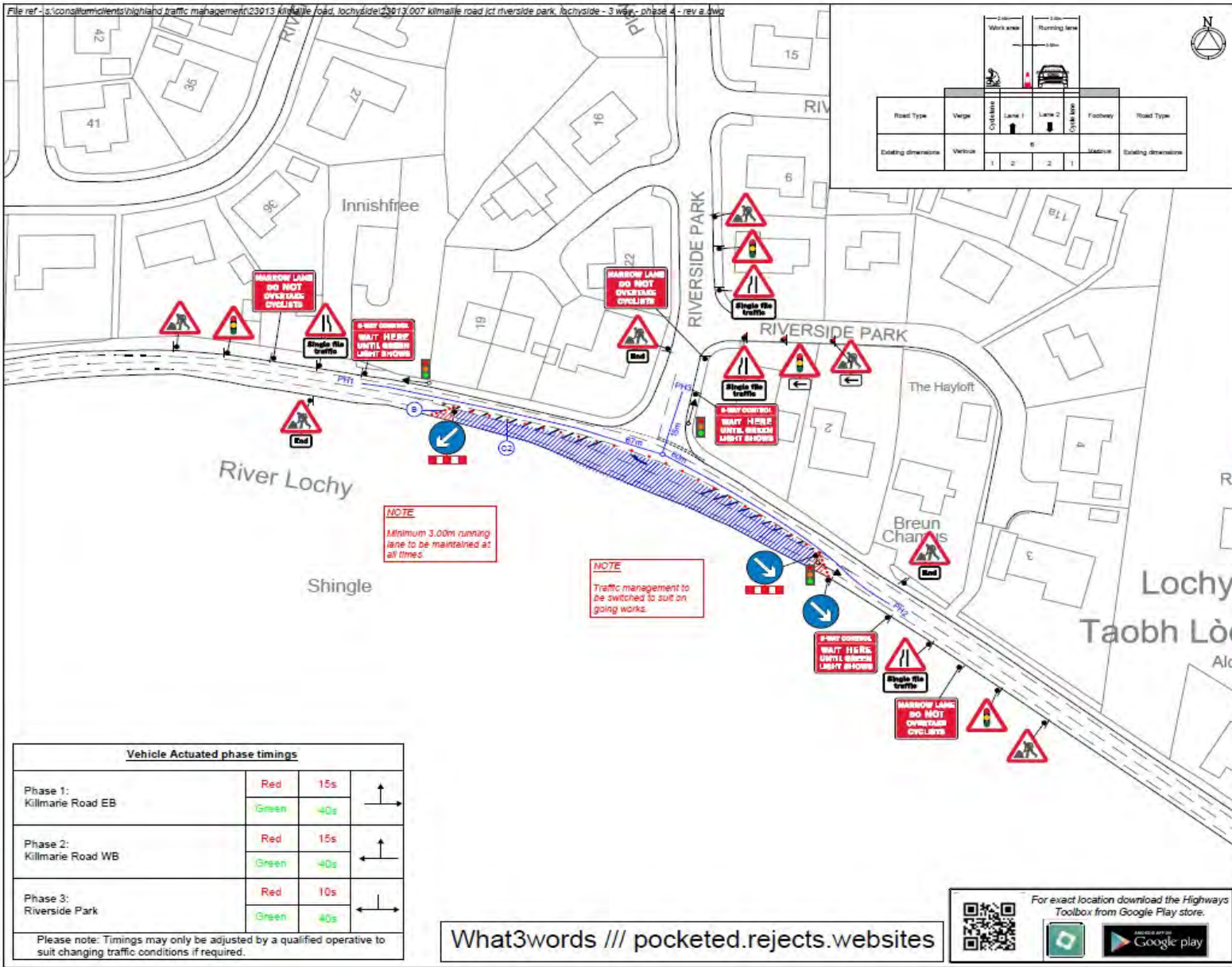
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Date: 19/06/21	Date: 19/06/21	Date: 19/06/21
Scale: NTS	Sheet: A3	Status: PROPOSED
Drawing No: 23913.003		Rev: A

What3words /// slogged.whispers.searching

For exact location download the Highways Toolbox from Google Play store.



File ref - s:\conat\m01\ents\highland\traffic management\23913\killmalle road, lochside\23913\007 killmalle road jct riverside park, lochside - 3 way - phase 4 - rev a.dwg



KEY

- Core
- Sign
- ↑ Traffic light head
- ▨ Work area
- ▨ Closed area
- 1 Traffic light phase

DETAILS

DETAILS

NOTE
Traffic light timing to be risk assessed on site. Additional time may be required to cater for cyclists.

NOTE
Site access will be agreed with engineer at time of installation.

Rev	Description	By	Chkd	Date
A	Cyclists sign added, note added & phasing altered	LS	SP	23/06/21

Client: The Highland Council / Comhairle na Gàidhealtachd

Project: Killmalle Road Jct Riverside Park, Lochside Gnd Ref: 211524 , 775827

Title: Temporary 3 Way Traffic Lights Phase 4

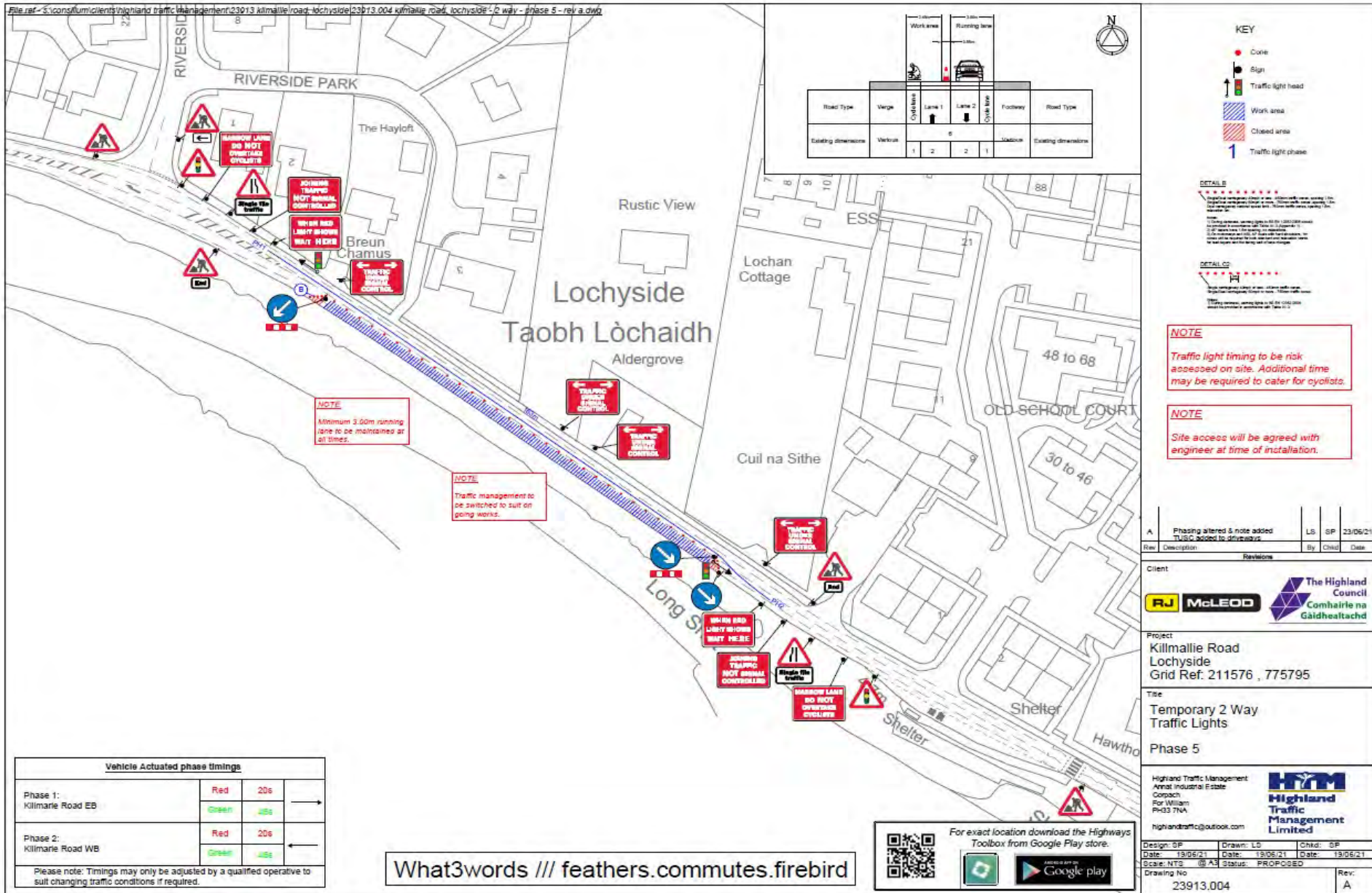
Highland Traffic Management / Annt Industrial Estate / Comach For William / PH23 7HX / highlandtraffic@outlook.com

Design: SP / Drawn: LS / Chkd: SP / Date: 19/06/21 / Date: 19/06/21 / Date: 19/06/21 / Scale: NTS / Status: PROPOSED / Drawing No: 23913.007 / Rev: A

For exact location download the Highways Toolbox from Google Play store.



File ref - 5:\consult\clients\highland traffic management\23013 killmalie\road_lochside\23013.004 killmalie_road_lochside-2 way - phase 5 - rev a.dwg



Road Type	Verge	Overline	Lane 1	Lane 2	Footway	Road Type
Existing dimensions	Metres	6	2	2	1	Existing dimensions

- KEY**
- Cone
 - Sign
 - ▲ Traffic light head
 - ▨ Work area
 - ▩ Closed area
 - 1 Traffic light phase

DETAIL B
 Traffic light timing to be risk assessed on site. Additional time may be required to cater for cyclists.

DETAIL C
 Site access will be agreed with engineer at time of installation.

Phase 1: Killmalie Road EB	Red	20s	→
	Green	45s	→
Phase 2: Killmalie Road WB	Red	20s	←
	Green	45s	←

Please note: Timings may only be adjusted by a qualified operative to suit changing traffic conditions if required.

What3words /// feathers.commutes.firebird

For exact location download the Highways Toolbox from Google Play store.

Rev	Description	By	Check	Date
A	Phasing altered & note added TUSC added to driveway	LB	SP	23/05/21

Client: **RJ McLEOD** The Highland Council / Comhairle na Gàidhealtachd

Project: Killmalie Road Lochside Grid Ref: 211576, 775795

Title: Temporary 2 Way Traffic Lights Phase 5

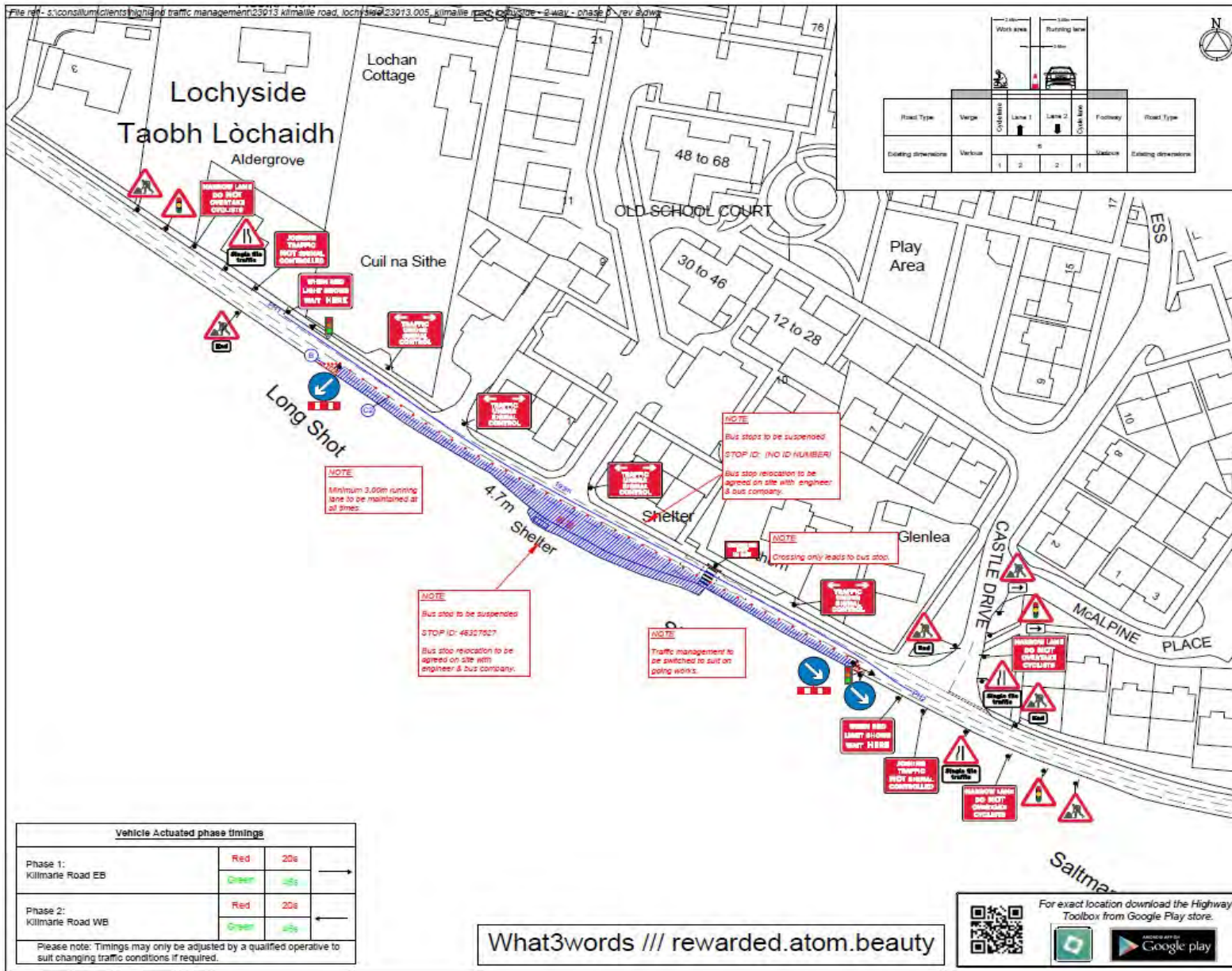
Highland Traffic Management: Annet Industrial Estate, Corpach, For William, PH33 7NA, highlandtraf@outlook.com

Highland Traffic Management Limited

Design: SP	Drawn: LB	Check: SP
Date: 19/06/21	Date: 19/06/21	Date: 19/06/21
Scale: NTS	Status: PROPOSED	

Drawing No: 23913.004 Rev: A





KEY

- Cone
- Sign
- Traffic light head
- Work area
- Closed area
- Traffic light phase

DETAILS

NOTE
Traffic light timing to be risk assessed on site. Additional time may be required to cater for cyclists.

NOTE
Site access will be agreed with engineer at time of installation.

Rev	Description	By	Class	Date
A	Phasing altered & note added TUSC added to driveways	LS	SP	23/06/21

Client: **RJ McLEOD** The Highland Council Comhairle na Gàidhealtachd

Project: Killmarie Road Lochyside Grid Ref: 211721, 775689

Title: Temporary 2 Way Traffic Lights Phase 6

Highland Traffic Management
Agnat Industrial Estate
Gorochan
For William
PH33 7NA
highlandtraffic@outlook.com

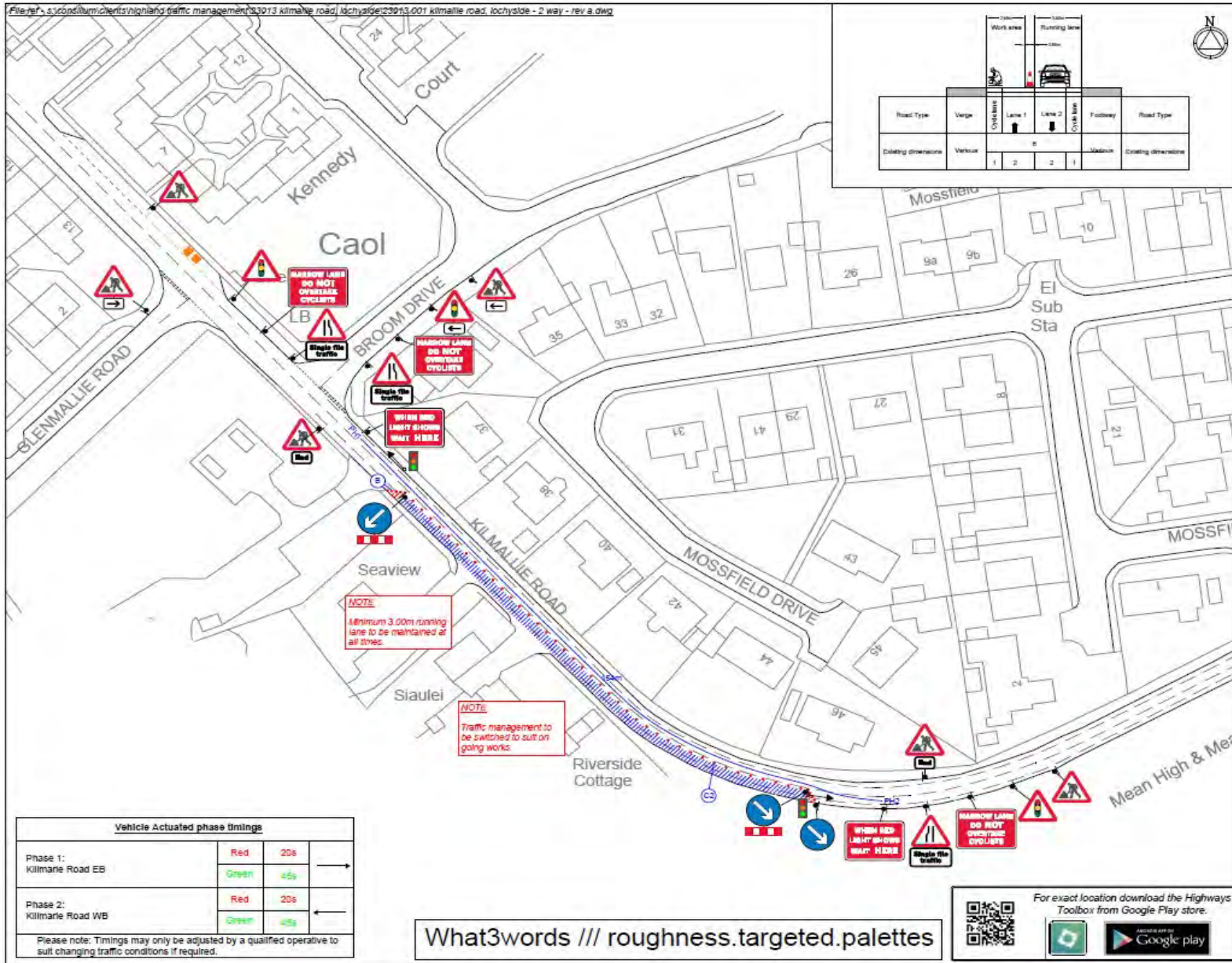
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Scale: NTS @ A3 Status: PROPOSED
Drawing No: 23913.005 Rev: A

What3words /// rewarded.atom.beauty

For exact location download the Highways Toolbox from Google Play store.



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Road Type	Verge	On-Side	Lane 1	Lane 2	Footway	Road Type	
Dilating dimensions		Verge		Midblock		Coating dimensions	
	1	2	2	1			

KEY

- Cone
- ▲ Sign
- ⬇ Traffic light head
- ▨ Work area
- ▨ Closed area
- 1 Traffic light phase

DETAIL B

DETAIL C

NOTE

Traffic light timing to be risk assessed on site. Additional time may be required to cater for cyclists.

NOTE

Site access will be agreed with engineer at time of installation.

Rev	Description	Revisions	By	Chkd	Date
A	Phasing altered & note added		LS	SP	23/06/21

Client: **RJ McLEOD** The Highland Council Comhairle na Gàidhealtachd

Project: Killmalie Road Lochside Grid Ref: 211190 , 775804

Title: Temporary 2 Way Traffic Lights Phase 7

Highland Traffic Management
Annis Industrial Estate
Comach
For William
PH33 7NA
highlandtraffic@outlook.com

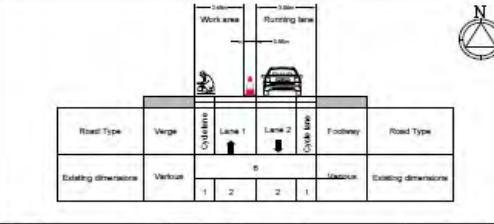
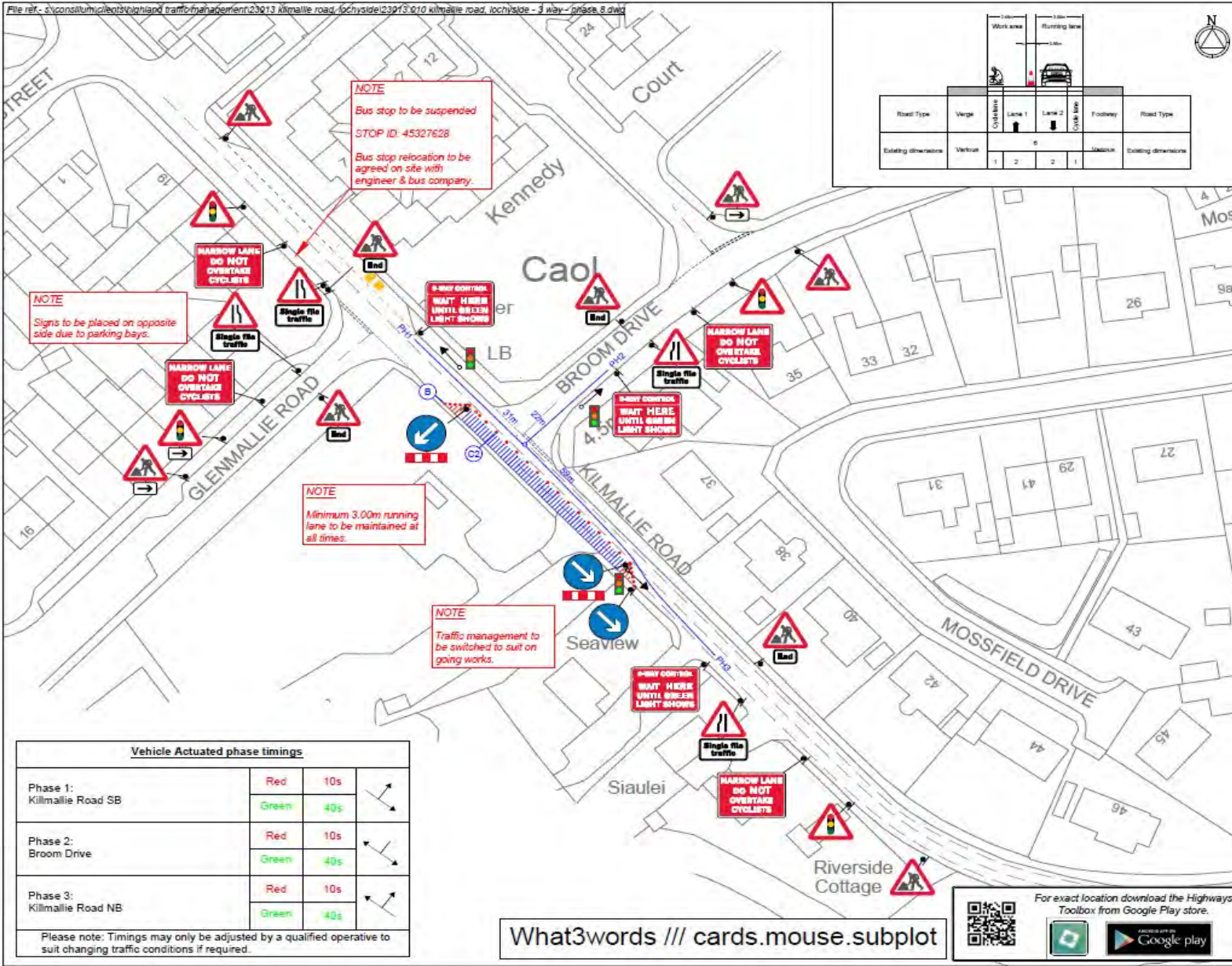
Highland Traffic Management Limited

Design: SP	Drawn: LS	Chkd: SP
Date: 19/06/21	Date: 19/06/21	Date: 19/06/21
Scale: NTS	Status: PROPOSED	

Drawing No: 23913.001 Rev: A



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KEY

- Cone
- Sign
- ⬆ Traffic light head
- ▨ Work area
- ▩ Closed area
- ⬇ Traffic light phase

DETAILS

DETAILS

NOTE
Traffic light timing to be risk assessed on site. Additional time may be required to cater for cyclists.

NOTE
Site access will be agreed with engineer at time of installation.

Rev	Description	Revisions	By	Checked	Date

Client

Project
Killmallee Road
Lochside
Grid Ref: 211115 , 775877

Title
Temporary 3 Way
Traffic Lights
Phase 8

Highland Traffic Management
Annat Industrial Estate
Compass
For William
PH33 7NA
highlandtraffic@outlook.com

Design: SP	Drawn: LB	Checked: SP
Date: 23/06/21	Date: 23/06/21	Date: 23/06/21
Scale: NTS @ A3	Status: PROPOSED	
Drawing No: 23913.010		Rev:

Vehicle Actuated phase timings

Phase 1: Killmallee Road SB	Red	10s	↗
	Green	40s	
Phase 2: Broom Drive	Red	10s	↘
	Green	40s	
Phase 3: Killmallee Road NB	Red	10s	↖
	Green	40s	

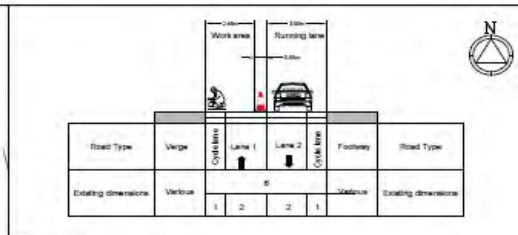
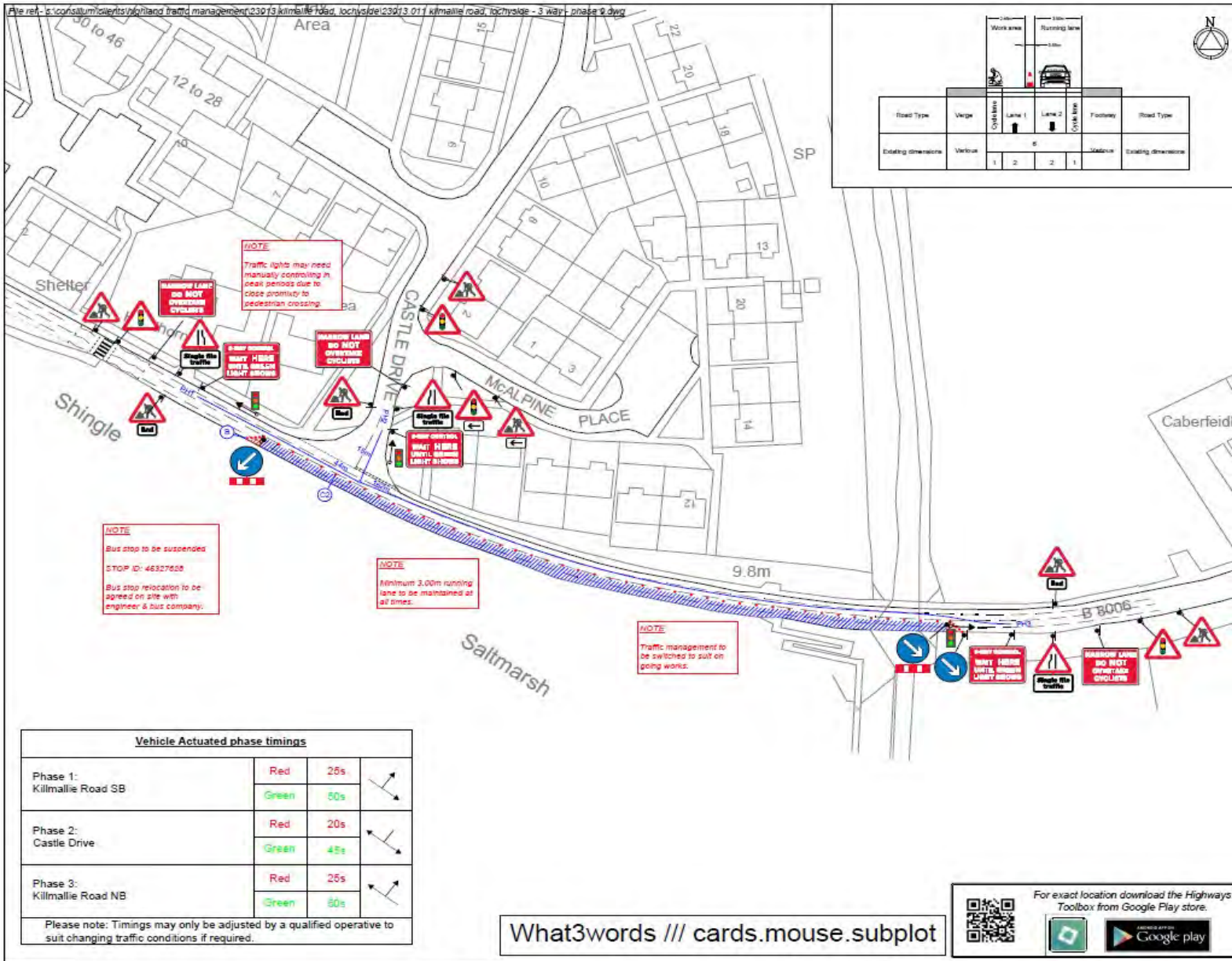
Please note: Timings may only be adjusted by a qualified operative to suit changing traffic conditions if required.

What3words /// cards.mouse.subplot

For exact location download the Highways Toolbox from Google Play store.



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KEY

- Cone
- Sign
- ↑ Traffic light head
- ▨ Work area
- ▨ Closed area
- 1 Traffic light phase

DETAILS

NOTE
Traffic light timing to be risk assessed on site. Additional time may be required to cater for cyclists.

NOTE
Site access will be agreed with engineer at time of installation.

Rev	Description	By	Chkd	Date

Client: **RJ McLEOD** The Highland Council Comhairle na Gàidhealtachd

Project: Killmallie Road Lochyside Grid Ref: 211847 , 775623

Title: Temporary 3 Way Traffic Lights Phase 9

Highland Traffic Management
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PH23 7NA
highlandtraffic@outlook.com

Design: SP | Drawn: LS | Chkd: SP
Date: 23/06/21 | Date: 23/06/21 | Date: 23/06/21
Scale: NTS @ A3 | Status: PROPOSED
Drawing No: 23913.011 | Rev:

What3words /// cards.mouse.subplot

For exact location download the Highways Toolbox from Google Play store.

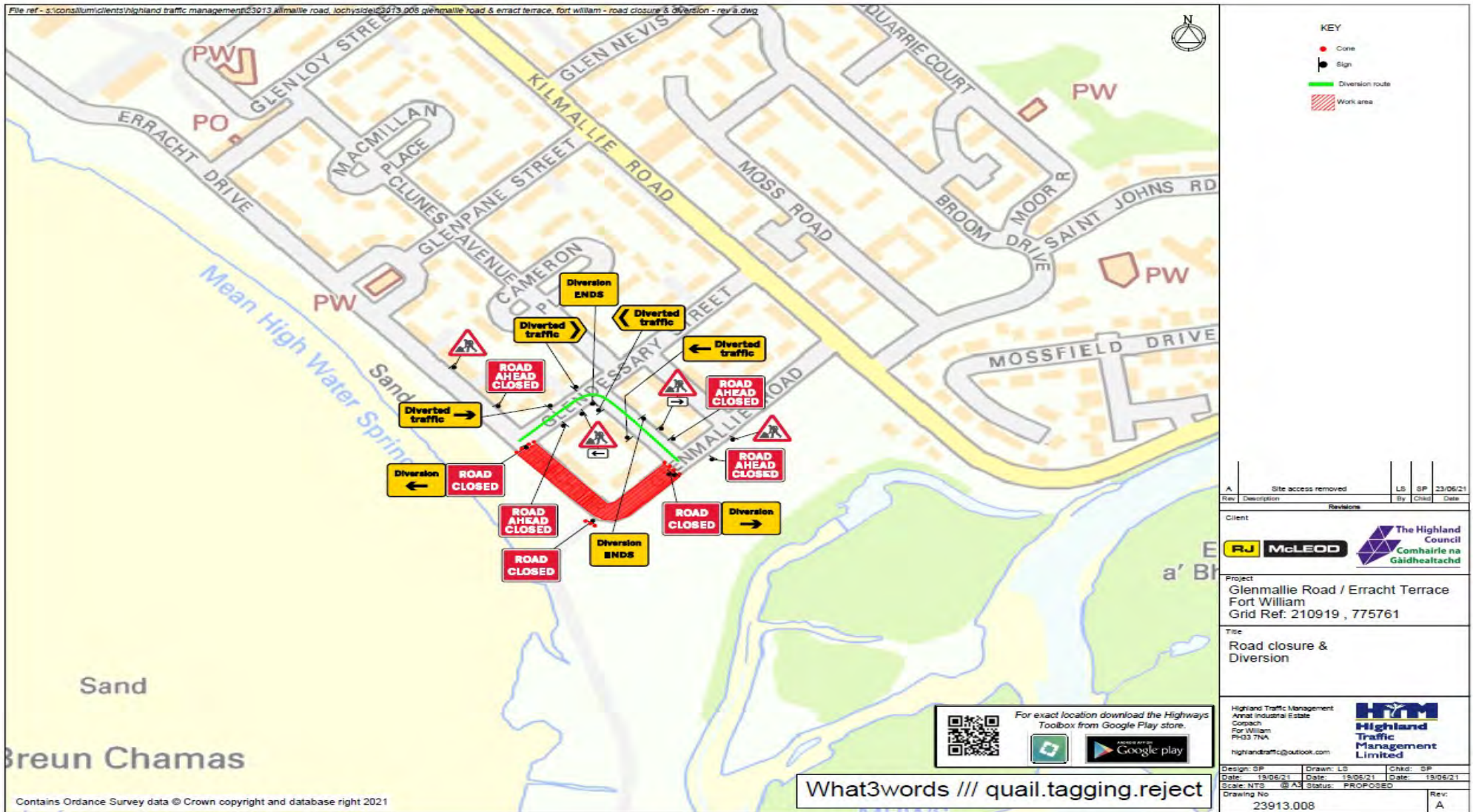


Traffic Management – Erracht Drive & Glenmallie Road

There are a number of service crossings, gully connections, drainage and kerbing along Erracht Drive & Glenmallie Road. Due to the light traffic on these particular sections we would propose using a diversion route or if visibility allows priority traffic signs and monitor for effectiveness. Where the works restrict on-street parking alternative parking will be made available.



Traffic Management – Erracht Drive & Glenmallie Road



General

Further to the access routes to minimise disruption, we intend to reduce the potential for delays through the following measures.

- Management and coordination of deliveries:
 - Detailed delivery instructions sent in advance to all companies delivering to the site.
 - Development of a delivery drivers code of conduct covering speed limits, access routes, school times, site opening times.
 - Discussions held with Network rail to manage delivery timeframe across level crossing.
 - Deliveries where possible scheduled out with School Intake/recess.
 - Use of pre arrival driver inductions to mitigate driver un-certainty.
 - Just in time deliveries to work areas.
 - Coordination of material delivery and disposal off site where feasible to negate empty vehicles movement to and from site to minimise traffic flows.
 - Dust management plan developed to control potential dust flares during dry weather.
 - Use of shared transport for operatives and staff (Covid restrictions dependent) to minimise number of journeys to and from site.
 - Promoting cycling for to and from the site and around the site.
 - Appointment of local skip supplier for the efficient removal of waste / recycling from the site.
 - Monitoring of road conditions and use of a road brush as required to ensure that road is kept clean and free of debris.

- Traffic Management
 - Appointment of a local traffic management contractor with a presence in the local community.
 - Clear demarcation and site signage ensuring separation of works activities.
 - Effective signing of private roads and accesses to ensure no use by construction traffic.
 - Regular inspections of signs and lights.
 - Use of battery powered traffic lights that can monitor the traffic levels and adjust the signals accordingly.
 - Consideration of work front lighting to ensure that it does not disturb the local community.
 - Close liaison with churches and funeral directors to ensure cessation of works during these times.
 - Creation and maintenance of events register to ensure events are accommodated during the works.
 - TM proposals shared on community noticeboards, websites and the Community Council Facebook page.
 - Reduction in the speed limit to 20mph or less depending on location.



Erracht Drive

- Construction of a site haul route parallel to Erracht drive to remove/reduce vehicle movements on the residential streets.
- Use of alternative temporary parking on the grass front to mitigate impact during drainage, services and gully installation within the carriageway.
- Close liaison with The Highland Council Community services to ensure maintenance of services during construction works – bins, school buses, grass cutting, etc.
- Maintenance of footway traffic. Use of localised footway diversions around key tie in areas. Provision of temporary access paths through site to beach to ensure access maintained at all times.
- Development of stoned access points to mitigate dirt and debris being transferred to public road. Use of wheel cleaning facilities to reduce dust and ensure that the road is kept clean.
- Priority signs for traffic management.

Glenmallie Road

- Use of alternative temporary parking.
- Close liaison with The Highland Council Community services to ensure maintenance of services during construction works – bins, school buses, grass cutting, etc.
- Using appropriately sized construction plant for the construction activity being undertaken in conjunction with the environment it is operating in.
- Priority signs for traffic management.

Kilmallie Road

- Phased construction using single lane working to maximise two way traffic signals.
- Installation of water main and drainage network prior to flood wall works to maximise space.
- Temporary relocation of bus stops in co-ordination with bus operating company.
- Continued use of Northern footway throughout works operations.
- Use of sheet pile cofferdam to isolate work fronts and permit single lane traffic flow while ensuring environmental mitigation.
- Undertaking works in a sequential manner to provide continuity of public “user” experience as they pass by the works
- Close liaison with The Highland Council Community services to ensure maintenance of services during construction works – bins, school buses, grass cutting, etc.

Local Businesses

- Liaison with local businesses on the proposed works and any access duration and timings of planned works.



Pedestrians

- Liaison with local access groups, area access officer to discuss proposed diversions routes.
- Use of drop ramps at footway diversions and temporary bus stops to ensure access for prams / pushchairs and wheelchairs
- Use of cone and rope or pedestrian barrier to ensure provision of safe pedestrian/cyclist corridor where there is space
- Clear effective signage to ensure unambiguous routing. Minimised number of layouts to build public awareness and avoid confusion.
- Regular inspection regime to ensure compliance with approved layouts and working methodologies.
- Maintenance of access to the Caol shore through specified safe access points.
- Clear signing of the Great Glen Walking Trail.

Private Residences

- Pre commencement interaction to advise of planned works and associated timings.
- Dedicated contact number/email to manage any concerns efficiently.
- Maintenance of access routes to/from properties.

Network Rail

- Integration with Statutory body coordinator to co-ordinate access over level crossing from A830

Veolia

- Working alongside Veolia during service diversions to coordinate installation and commissioning.
- Maintaining access to Water treatment plant at all times.

Cyclists

- Maintenance of the National Cycle Route 78. Notification provided to Sustrans for any localised diversion to be advertised on their website and communicated to users.
- Reduced construction traffic along Erracht Road through adoption of one way system and site haul route for site traffic providing safer environment for cyclists.

Scottish Canals

- Liaise with Scottish Canals and Historic Scotland regarding the steps and access ramp onto the canal towpath.

Shinty Club

- Close liaison with Shinty club and canal park users to ensure training, games, events are catered for.

Education Establishments

- Liaison with school for bus timings to ensure clear and safe passage.



Public Bus Routes

- Close liaison with bus operating company to assist in minimising any disruption with the bus timetable during times of traffic management deployment
- Agreement of alternative bus stops along Kilmallie Road and subsequent communication to users.
- Provision of a monthly community newsletter advising of works progress, up and coming works, delivery of community benefit, highlighting project opportunities for local businesses, people, students etc.
- Deployment of central Information board where up to date information on the project can be obtained.

