PRORINGO. STATISON

## **APPENDIX 12.1**

# RECORDED ARCHAEOLOGICAL MONUMENTS

PREPARED BY CRDS

Recorded Archaeological Monuments located within c. 500m of the proposed development route are listed below (source Record of Monuments and Places, D. PARALLA DES https://archaeology.ie; https://heritagemaps.ie)

MA022-029----SMR No

County MAYO

**MULLAFARRY** Townland ITM 519363, 828178 Class Ritual site - holv well

Description In pasture, in a thicket of hawthorn and brambles, located at the base of

natural rock outcropping on a N-facing slope.

This well is named 'Tobercashleen' on the 1838 and 1929 OS 6-inch maps. It is mentioned in the 1838 OS Letters, but is not described as a holy well: '..there is a well in Mullafarry called Tobar Caislín (Tobarcashleen).'

(O'Flanagan 1927, 176-7 (93-4)).

A spring emerging from two small clefts at the base of a rock face. The water merges into a small stream that flows to W for a few meters, before changing

course downslope to N.

Compiled by Jane O'Shaughnessy

Date of upload 25 April 2019

SMR No MA022-030----

County MAYO

**MULLAFARRY** Townland Class **Enclosure** 

ITM 519720, 828265

In pasture, at the junction of two field boundaries, located on a slight rise with Description

ground rising gently and gradually to S.

This monument is shown on the 1838 and 1929 OS 6-inch maps as a subcircular enclosure (diam. c. 20m), incorporated into an E-W field boundary on its N side, and with a N-S field boundary immediately adjacent on the E side. It has been levelled. The E-W field boundary is extant and may incorporate remnants of the original N arc of the enclosing bank, but otherwise there is no visible trace of the enclosure at ground level. According to local

information, it was enclosed by an earthen bank.

Compiled by Jane O'Shaughnessy

Date of upload 25 April 2019

SMR No MA022-031----

**MAYO** County

Townland **MULLAFARRY** Class **Enclosure** ITM 519769, 828074

Description In average pasture, located on a slight rise with extensive views to N and NE.

> This possible enclosure is not shown on the 1838 OS 6-inch map; it is shown on the 1929 edition as a semi-circular area (c. 25m N-S; c. 15m E-W) bordered on the straight side to W by a N-S field boundary. On the map the semicircle is depicted with hachuring which are oriented to represent a

sunken interior.

There are no remains visible that correspond to the feature depicted on the OS map. According to local information, there was a small, roughly circular mound, 'about 5 feet high [c. 1.5m]' with a narrow top, at this location. A slight rise (diam. c. 12-14m N-S) in ground level is evident adjacent to the N-S field boundary, but no other trace of a mound. A farm track now skirts the W edge

of the location.

Compiled by Jane O'Shaughnessy

Date of upload 25 April 2019 SMR No MA022-032----

County MAYO

Description

Townland **MULLAFARRY** Class Ringfort - rath 519629, 827588 ITM

In undulating average pasture, located on a slight rise. Views are extensive

to W and N, but restricted somewhat by rising ground to S.

Slightly raised circular area (29.3m N–S; 28.8m E–W) defined by an earthen bank with an external fosse, outside which at SE-WNW are remnants of a second bank. The inner bank (Wth 4m at NE, 4.5m at WSW; int. H 1m at NE; 0.5m at WSW; ext. H 1.6m at NE, 1.5m at WSW) is compact and well defined, with small areas of erosion at S and N. The fosse (Wth 4.5-4.8m; D 0.2m) survives as a broad, very shallow depression, most clearly traced at W, and marked by a growth of rushes. Traces of the levelled outer bank are evident only as a broad, flat band (Wth c. 3-4m) of hard, rough ground, very slightly raised at W, distinguished by differential vegetation growth. There are a number of narrow eroded gaps (Wth 0.6-1.4m) and low areas in inner bank at NW and at S.

The inner bank is ringed with hawthorn, gorse and brambles, with grasses and rushes in the interior.

Compiled by Jane O'Shaughnessy

Date of upload 25 April 2019

SMR No MA022-033----

County MAYO

Townland TAWNAGHMORE LOWER

Class Ringfort - rath ITM 520150, 828021

Description In pasture, located on slight N-facing slope, on top of a broad ridge, with

extensive views E to Killala Bay. A factory complex is located 70m to E.

Slightly raised, circular area (27.5m N-S; 27m E-W) defined by an earthen bank (Wth 3m; int. H 0.7-0.9m; ext. H 1.3m). At SE-SW the bank is incorporated into a later field fence which respects the curve of the enclosure. There are ephemeral traces of cultivation ridges, on a N-S axis, in the level interior. There is an eroded gap (Wth c. 3m) at NE, but it is unclear if this

represents an original entrance.

The bank is rather low and degraded in parts, with area of erosion by farm stock. It is ringed with gorse and brambles, with blackthorn at SW. The interior

is grassy.

Compiled by Jane O'Shaughnessy

Date of upload 25 April 2019

SMR No MA022-035----

County MAYO

Townland TAWNAGHMORE LOWER

Class Enclosure ITM 520480, 828180

Description In pasture, located on the broad, level top of an E-W ridge. There is a

industrial complex 80m to S.

This possible enclosure is not shown on the 1838 OS 6-inch map; it is shown on the 1929 edition map as an oval hachured area (c. 50m E-W; c. 30m N-S). When inspected prior to a land reclamation project in 1961, it was recorded as an 'earthen embankment' which was deemed to be of no archaeological significance (SMR file OPW field notes, 1961). There is no

visible trace at ground level.

Compiled by Jane O'Shaughnessy

30 April 2019 Date of upload

SMR No MA022-036----

County MAYO

Townland TAWNAGHMORE LOWER

Class Earthwork ITM 520731, 828251

Description In pasture, located on the broad, level top of an E-W ridge. An industrial

complex is located 100m to S.

This earthwork is not shown on the 1838 and 1929 OS 6-inch maps it was recorded as an 'earthen embankment' when the location was inspected in 1961 prior to a land reclamation project, and was deemed to be of archaeological significance (SMR file OPW field notes, 1961). There is no

visible trace at ground level.

Compiled by Jane O'Shaughnessy

Date of upload 30 April 2019

SMR No MA022-043001-

County MAYO

Townland CROSSPATRICK

Class Church

ITM 521544, 828314

Description Located on elevated ground, within a graveyard (MA022-043002-).

This church is depicted on the 1838 and 1929 OS 6-inch maps as a rectangular building (7-8m ENE-WSW; 5-6m NW-SE); it is annotated 'site of Church' on the 1838 map and 'Church (in Ruins)' on the 1929 edition.

The outline of the church can no longer be traced. A remnant of a masonry wall (L 5-6m; H 2m; T c. 0.6-0.7m), on a ENE–WSW axis, may be a fragment of the church, possibly part of the S wall. A thick covering of ivy makes it difficult to examine, but it appears to be constructed of rectangular or square stone blocks, of roughly equal size. A rectangular grave plot (9m N-S; 5.4m E-W) outlined by a low mortared stone wall (Wth 0.45m; H 0.4m) is appended to the N side of the possible church wall, and encloses a 19th-century table

tomb.

Compiled by Jane O'Shaughnessy

Date of upload 1 May 2019

SMR No MA022-043002-

County MAYO

Townland CROSSPATRICK

Class Graveyard ITM 521546, 828309

Description Located on low N-S ridge, in an area of undulating pasture.

This graveyard is named 'Crosspatrick Grave yd.' on the 1838 OS 6-inch map where it is shown as a roughly square enclosure (c. 30-35m max dim.) with a church (MA022-043001-) slightly to N of centre. The modern extent of the graveyard indicates that it has been extended since that date, principally to N and S, so that it now encloses an elongated sub-rectangular area (c. 130m N–S; 40-50m E–W) with the church located slightly to S of centre. It is enclosed by a mortared stone wall of relatively recent date, bordered at S and W by roads. Access is via a wrought iron gate in the W wall, with a stile-type arrangement of stone steps set in the wall immediately to S of the gate.

The graveyard utilises a low narrow ridge or elevation, which extends N–S and has a gentle slope down on the E side and a steeper slope on the W side. The oldest part of the graveyard encompasses a narrow central spine of elevated ground (c. 25m N-S; 12m E-W). This is where the ruined church is located, and where the greatest concentration of graves is to be found. The ground surface here is very uneven, there are surface clusters of loose stones, low stones protruding from the ground, and several hawthorn trees and dense clumps of overgrowth. Headstones dating to the19th century predominate in the S half of the graveyard. They are interspersed with many small, low uninscribed stone grave markers, some in N-S rows; two are

unusual in form, consisting of broad, thin rectangular slabs (Wth 0.8-0.9m; T 0.06-0.08m; H 0.45-0.65m), each with a small central perforation (diam. 4-5 cm). In the SW quadrant, there is another unusual gravemarker, consisting of a stone statue, a self-portrait carved by the sculptor Thomas Mulloy, which stands on an elaborately carved plinth, dated 1880. In the N half of the graveyard 20th century headstones and grave plots predominate.

There are a cross-inscribed stone (MA022-044001-), known as St. Patrick's cross, and an inscribed stone (MAA022-044002-) 30m to SSE, and a holy well (MA022-042001-) 180m to NW. Two raths (MA022-047----; MA 022-041001-) are located nearby, 240m to E and 200m to NW respectively, and there is a ringbarrow (MA022-045----) 100m to SE.

Compiled by Jane O'Shaughnessy

Date of upload 7 June 2019

#### SMR No MA022-044001-

County MAYO

Townland CROSSPATRICK
Class Cross-inscribed stone
ITM 521573, 828226

Description Located in a pasture field, bordered to N by a minor road; there is a church (MA022-043001-) and graveyard (MA022-043002-) c. 30m to N on the

opposite side of the road.

This cross-inscribed stone is named 'St. Patrick's Cross' on the 1838 and 1929 OS 6-inch maps. It consists of a roughly rectangular slab (0.43m x 0.37m; T 0.009m) with rounded corners, on one surface of which is the incised outline of a cross. A shallow groove (Wth c. 2-2.5cm) forms the vertical and horizontal arms of the cross, which are roughly equal in length and extend almost the full width and height of the slab. The terminal of each arm expands slightly into a roughly circular hollow (diam. 3.5-4cm). The cross is now partly eroded and difficult to discern, although the incised grooves can still be felt/traced with one's finger.

The slab lies horizontally on the ground surface, partly embedded in the sod. Adjacent to it at the W there is an inscribed stone (MA022-044002-). A remnant of an old field bank lies immediately to E of the two stones. There is a ringbarrow (MA022-045----) in the same field 70m to SE.

Compiled by Jane O'Shaughnessy

Date of upload 1 May 2019

#### SMR No MA022-044002-

County MAYO

Townland CROSSPATRICK
Class Inscribed stone
ITM 521573, 828226
Description Located in a pastu

Located in a pasture field, bordered to N by a road. There a church (MA022-043001-) and graveyard (MA022-043002-) c. 30m to N on the opposite side of the road

A roughly rectangular sandstone slab (L 1.02m; T 0.12m) with rounded corners. The slab is broader (Wth 0.45m) at one end than the other (Wth 0.32). A shallow oval depression (c. 0.44m; 0. 36m) occupies the full width of the broadest half of the stone, so that three sides of the depression are defined by the outer edges of the stone; the fourth side of the depression appears to be defined on its outer edge by a shallow incised groove which cuts across the width of the stone. At the opposite, narrower end of the stone an L-shaped incision is deeply cut into the stone surface. The incision (Wth 0.015-0.02m; D 0.02m) begins at the very edge of the stone, more or less on the midline, extends 0.1m along the long axis and then turning at right angles for 0.07m; it is now marked by a growth of moss.

The 1838 OS Letters record a T-shaped incised symbol beside the L-shaped incision, describing it as being smaller, shallower and more finely carved than the other symbol (O'Flanagan, 1927, 140-3 (74-6)); this is no longer visible.

According to tradition, the oval indentation marks the location where St. Patrick sat, and the L-shaped incision is said to be the impression of St. Patrick's pipe (ibid. 140 (74)).

The slab lies horizontally on the ground surface, partly embedded in the sod. It long axis is currently aligned roughly NW-SE, with the broader end of the stone at SE. Immediately adjacent at E there is a cross-inscribed stone (MA022-044001-). A remnant of a field fence lies immediately to E of the two stones. There is a ringbarrow (MA022-045----) in the same field 70mm to E.

Compiled by Jane O'Shaughnessy

Date of upload 1 May 2019

SMR No MA022-045----

County MAYO

Townland CROSSPATRICK
Class Barrow - ring-barrow
ITM 521618, 828154

Description Located at the NW end of a NW-SE rise in rolling average pasture. Killala

Bay is visible to NE, the Ox Mountains define the far horizon to E-SE, and

Nephin Mountain looms to SSW.

Slightly raised circular area (8m N–S; 8m E–W; H 0.35m) defined by a fosse (Wth 2.6m at N) with an external bank (Wth 2-2.4m; int. H 0.5-0.8m; ext. H 0.55-0.7m at SSE). The perimeter of the central platform is well defined SW–NE, but elsewhere it is degraded and indistinct, merging with the fosse, and giving the impression that the central platform is set off-centre to NW within the ring of the outer bank. The outer bank is fairly compact and well-defined. The overall diameter is 17m.

There is a cross-inscribed stone (MA022-044001-) and an inscribed stone

(MA022-044002-) in the same field 70m to NW.

Compiled by Jane O'Shaughnessy

Date of upload 1 May 2019

SMR No MA022-049----

County MAYO

Townland CARROWREAGH (Tirawley By.)

Class Ringfort - rath ITM 521420, 827640

Description In gently undulating average pasture, located on a rise. It is located close to

the SW boundary of the townland.

This rath is named 'Cullahoof Fort' on the 1838 and 1929 OS 6-inch maps. It consists of a raised oval area (c. 25m NW–SE; c. 27.7mm NE–SW) defined by a scarp (Wth slope 2m; H 1.4m at SW). The scarp is well defined at NE and at S–SW, but elsewhere is low and degraded, with a broadly slumped external slope. At NE the scarp is topped with a grass-covered rise (L 4m; Wth 3.9m; H 0.75m) of earth and stones, which appear to be the result of disturbance or field clearance, rather than remnants of an original bank. There is a gentle slope down from NW to SE in the SE half of the interior.

Compiled by Jane O'Shaughnessy

Date of upload 2 May 2019

SMR No MA022-059----

County MAYO

Townland LISGLENNON Class Ringfort - rath ITM 519230, 826877

Description In pasture, located on a low E–W ridge, straddling the gentle S-facing slope.

There is a stream/drain c. 100m to W.

This rath is shown on the 1838 OS 6-inch map but is not shown on the 1929 edition. It consists of a slightly raised, circular area (24m N–S; 22m E–S) defined by remnants of an earthen bank. The bank retains a low internal lip (int. H c. 0.25 at SW) in parts, but is largely reduced to a scarp. The scarp is

most pronounced on the S side where it merges with the natural ridge slope (H 2.2m); the S half is effectively built up to compensate for the slope and to create a level interior. The entrance is likely to have been on the E half, where the enclosing slope is lowest; it may have been at SE where there is a low area/gap (Wth 3m).

At N-NE, remnants of an E-W linear field fence (Wth 1.5m; max H 0.8m) truncates, or possibly incorporates, the rath bank, this has been levelled where it extended beyond the rath to W and E. A similar field fence now levelled, appears to have skirted the S side of the rath. Heaps of field clearance debris lie to W of the rath. An E-W farm track lies close to the side of the rath.

Jane O'Shaughnessy

Date of upload 2 May 2019

SMR No MA022-101----

County MAYO

Compiled by

Townland TAWNAGHMORE LOWER, MEELICK (Tirawley By.)

Class Ringfort - rath ITM 520895, 828271

Description In average pasture, located on a slight N-facing slope. Views to NE are good,

including part of Killala Bay. There is a factory complex 60m to S.

This possible rath is not shown on the 1838 and 1929 OS 6-inch maps; it was first recorded in an aerial photograph (OS 5 6882-3, Roll 217, pr. 10). Roughly D-shaped raised area (c. 20-23m N–S; c. 16m E–W to field fence)

defined in an irregular arc NNW-S by an earthen bank (Wth 3.3m; int. H 0.2m; ext. H 1.1m, at NE), and on the straight side at W by a field fence. The bank is best defined at NNW-NE but at E–SE it is very low and degraded. A band of irises immediately outside the bank at N–NE may indicate an infilled fosse. At the time of visit, the perimeter and part of the interior at S and W were

engulfed in brambles, making inspection difficult.

Compiled by Jane O'Shaughnessy

Date of upload 7 May 2019

PRORING STATISON

## **APPENDIX 12.2**

## **STRAY FINDS**

## PREPARED BY CRDS

The National Museum of Ireland's topographical files are a national archive of all known archaeological finds from Ireland. They relate primarily to artefacts but also include references to monuments and contain a unique archive of records of previous excavations. The topographical files were consulted to determine if any archaeological artefacts had been recorded from the area. Other published catalogues of prehistoric material were also studied: Raftery (1983 - Iron Age antiquities), Eogan (1965, 1993; 1994 - bronze swords, Bronze Age hoards and goldwork), Harbison (1968; 1969a; 1969b - bronze axes, halberds and daggers).

Register Number NMI 1997:25

County Mayo

Townland Tawnaghmore

Find type Vessel Material Wood Find Place -

Description Wooden vessel containing bog butter. Found on surface after peat

milling

Register Number NMI 1997:26

County Mayo

Townland Tawnaghmore

Find type Vessel Material Wood

Find Place -

Description Found on surface after peat milling

Register Number NMI 1997:27

County Mayo

Townland Tawnaghmore

Find type Rope Material Straw

Find Place -

Description Found on surface after peat milling

Register Number NMI 1971:1042

County Mayo

Townland Tawnaghmore Find type Human remains Material Human remains

Find Place -

Description Found on floor of cist burial

Register Number NMI 1965:68

County Mayo

Townland Tawnaghmore
Find type Axehead
Material Stone

Find Place Bed of stream

Description Found 3-4 ft deep in bed of stream

Register Number NMI 1960:610

County Mayo

Townland Tawnaghmore

Find type Lid
Material Wood
Find Place Sheskin bog

Description Wooden lid, churn-type. Found in Sheskin bog

**Register Number** NMI 1960:620

County Mayo

Townland Tawnaghmore

Find type Mether Material Wood Find Place Sheskin bog

PROPERTY AND STATE OF A Description Decorated wooden mether. Found in Sheskin bog

NMI 1930:131.1 **Register Number** 

Mayo County

Townland Tawnaghmore

Find type Trap Wood Material Find Place Boa

Description Wooden animal trap frame. Found in bog

**Register Number** NMI 1930:131.2

County Mayo

Townland Tawnaghmore Find type Sample Wood Material Find Place Bog

Description Found in bog

**Register Number** NMI 1933:1232

County Mayo Townland Killala

Find type Human remains

Material Bone Find Place Killala

Description Skeletal remains. Found on seashore

**Register Number** NMI 1886:42

County Mayo Townland N/A Axehead Find type Material Bronze Find Place near Killala

Description Flat bronze axehead. Axe-head bronze\_brownish\_flat\_cutting edge

curved and bevelled partially patinat edges ridged Length 6 1/4in. Width at cutting edge 3 5/8in. Fond near Killala Purchased from finder through W.A. Know Esqre. Castlerea Killala for £ 10/s Antiq. Com. Min.

14th April and Nov.

**Register Number** NMI 2013:96

County Mayo

Townplots West Townland

Find type Font Material Stone

Find Place The Cathedral Church of St Patrick, Killala

Carved sandstone font. The Cathedral Church of St Patrick, Killala Description

**Register Number** NMI 2013:97

County Mayo

Townland **Townplots West** 

Find type Quern Material Stone

Find Place The Cathedral Church of St Patrick, Killala

Upper stone of beehive guern. The Cathedral Church of St Patrick, Description

Killala

**Register Number** 

County Townland

NMI 2013:605
Mayo
Killala
Human remains
Human remains
Church Street, Killala
Skeletal remains representing two adults and one juvenile. Digging to Find type Material Find Place

Description

repair water mains in the Cathedral

**Register Number** NMI 2021:100

County Mayo Townland N/A

Find type Human remains Material Human remains Find Place Killala Bay

Description Human skull portion. member of the public walking in Killala Bay

PRORING STATISON

## **APPENDIX 12.3**

## **EXCAVATIONS**

## PREPARED BY CRDS

The excavation bulletin website (https://excavations.ie; https://hertagemaps.ie) was consulted to identify previous excavations that have been carried out within the study area. This database contains summary accounts of excavations carried out in Ireland from 1970 to 2023. · 27/1/2024

2012:448 - TAWNAGHMORE UPPER, Mayo

Licence No. 12E383 County Mavo

TAWNAGHMORE UPPER Site name

SMR No.

Author Suzanne Zajac, Mayo County Council, Civic Offices, Ballina, Co. Mayo

No archaeological significance Site type

Period/Dating

ITM E 521223m, N 827810m

Description Pre-development testing took place in advance of the construction of

an Amenity Park just south-east of Killala. Field walking of the development site revealed nothing of archaeological interest and likewise nothing of archaeological significance was uncovered during the mechanical excavation of 17 trenches across the 19-acre site.

#### 2011:450 - TAWNAGHMORE, KILLALA, Mayo

Licence No. 11E0072 and ext.

County Mavo

Site name TAWNAGHMORE, KILLALA

SMR No.

Author Declan Moore, Moore Archaeological & Environmental Services Ltd

Site type Testing, shell deposit

Period/Dating

E 496004m, N 839493m ITM

Description The proposed development entails a biomass-fuelled (wood and

herbaceous) nominal 50MWe Combined Heat and Power (CHP) facility on a portion of the Killala Business Park (formerly the Asahi Business Park) and adjacent land, in the townlands of Tawnaghmoe Upper and Lower, approximately 3.2km south of Killala. This brownfield site is

approximately 21.7ha in extent.

Initial testing of the site was carried out on 23 and 24 March 2011. Groundworks involved the mechanical excavation of eight trenches measuring between 80m and 130m in length by 1.5m in width. All trenches were aligned roughly east-west. Nothing of archaeological significance was noted during the course of testing.

Given the extent of the works and the site's prominence in the local landscape, it was recommended that monitoring be carried out during topsoil-stripping for the proposed development. Monitoring of site investigation works, which involved excavation of trial pits and test trenches at the southern part of the site, was therefore carried out.

Groundworks for site investigation involved the mechanical excavation of trial trenches measuring 0.5m in width, 1-2m in length and between approx. 0.5m and 2m in depth. Engineering site investigation works exposed deposits of clays and sandy silts overlying bedrock. A deposit of shells was encountered in TPL 11. No artefactual evidence was encountered to provide a more secure indication of its nature. It was therefore recommended that the area be further investigated.

Subsequently, the area around the shell deposit was topsoil-stripped to the depth of the deposit. This phase of testing confirmed that the shell deposit was a discrete site measuring approximately 3m northsouth by 5m, consisting of two shell spreads and an intervening clay layer. No diagnostic material was recovered.

The material was removed by hand at the beginning of December 2011. Excavation indicated that the midden was a temporary site. No post-holes or other features were noted. The inland ocation and depth of the feature may, however, indicate that it is of antiquity. D. 27/1/2028

#### 2013:418 - Tawnaghmore, Mayo Licence No. 11E0072 ext.

Mayo County

Tawnaghmore Site name

SMR No. N/A

Declan Moore, Moore Group, Corporate House, Ballybrit Business Author

Park, Galway.

No archaeological significance Site type

Period/Dating

ITM E 520979m. N 827707m

The proposed development entails a biomass-fuelled (wood and Description

herbaceous) nominal 50MWe Combined Heat and Power (CHP) facility on a portion of the Killala Business Park (formerly the Asahi Business Park) and adjacent land, in the townlands of Tawnaghmoe Upper and Lower, approximately 3.2km south of Killala, County Mayo. The

brownfield site is approximately 21.7ha in extent.

This site was already subject to a number of archaeological investigations including an initial testing programme (March 2011)

followed by the monitoring of engineering test pits.

Monitoring in 2013 was carried out of an additional phase of 9 Engineering Test Pits, TP1-9, a soakaway notation S1, a percolation notation and 6 CBR notations. All the pits were mechanically excavated using a track machine with a 1.5m ditching bucket. Nothing of archaeological significance was noted.

#### 2014:159 - Tawnaghmore, Mayo Licence No. 11E0072 Ext.

County Mayo

Site name Tawnaghmore

SMR No. NA

Declan Moore Author Site type Monitoring

Period/Dating

E 520735m, N 827755m ITM

No details recorded on excavations.ie Description

2013:418 - Tawnaghmore, Mayo 11E0072 ext. Licence No. County Mayo

Site name Tawnaghmore

SMR No.

Author Declan Moore, Moore Group, Corporate House, Ballybrit Business

Park, Galway.

No archaeological significance Site type

Period/Dating

ITM E 520979m, N 827707m

Description The proposed development entails a biomass-fuelled (wood and

herbaceous) nominal 50MWe Combined Heat and Power (CHP) facility on a portion of the Killala Business Park (formerly the Asahi Business Park) and adjacent land, in the townlands of Tawnaghmoe Upper and Lower, approximately 3.2km south of Killala, County Mayo. The

brownfield site is approximately 21.7ha in extent.

This site was already subject to a number of archaeological investigations including an initial testing programme (March 2011)

followed by the monitoring of engineering test pits.

Monitoring in 2013 was carried out of an additional phase of 9 Engineering Test Pits, TP1-9, a soakaway notation S1, a percolation notation and 6 CBR notations. All the pits were mechanically excavated using a track machine with a 1.5m ditching bucket. Nothing of archaeological significance was noted.

PRORINGO. 277712024

## **APPENDIX 12.4**

## **DOWN SURVEY DEPOSITIONS**

## PREPARED BY CRDS

Ireland in the 1650s lay in ruins. Twelve years of calamitous warfare had destroyed the country's infrastructure and resulted in the death of over 20% of the Irish population.

The armies of the English Commonwealth, commanded by Oliver Cromwell, emerged victorious and immediately undertook an ambitious project of social engineering, underpinned by a massive transfer in landownership from Irish Catholics to English Protestants. For this to happen, the land had to be accurately surveyed and mapped, a task overseen by the surgeon-general of the English army, William Petty.

Taken in the years 1656-1658, the Down Survey of Ireland is the first ever detailed land survey on a national scale anywhere in the world. The survey sought to measure all the land to be forfeited by the Catholic Irish in order to facilitate its redistribution to Merchant Adventurers and English soldiers. Copies of these maps have survived in dozens of libraries and archives throughout Ireland and Britain, as well as in the National Library of France. This Project has brought together for the first time in over 300 years all the surviving maps, digitised them and made them available as a public online resource (https://downsurvey.tchpc.tcd.ie/index.html).

Mullafarry is in the Electoral Division of Ballysakeery, in Civil Parish of Ballysakeery, in the Barony of Tirawley, in the County of Mayo

Mullafarry borders the following other townlands:

- Cloonawillin to the west
- Lisglennon to the south
- Magherabrack to the west
- Tawnaghmore Lower to the east
- Tawnaghmore Upper to the east

#### Townland MULLAFARRY

Down Survey Name Mullaghfarrow, Bloonawoolen, Lecarrowantihan & Lisclenan

1641 Owner(s) Bourke, John (Catholic) 1670 Owner(s) Gore, Sir Arthur (Protestant)

County Mayo
Barony Tirawley
Parish Ballyshikilly
Unprofitable land 23 plantation acres
Profitable land 376 plantation acres

#### Townland CLOONAWILLIN (ED Ballysakeery)

Down Survey Name Cloonavollin

1641 Owner(s) Philbin, Edmund (Protestant)

1670 Owner(s) Bermingham, Remigeus (Protestant)

County Mayo
Barony Tirawley
Parish Crossmolina
Profitable land 95 plantation acres
Forfeited 95 plantation acres

#### Townland LISGLENNON

Down Survey Name Mullaghfarrow, Bloonawoolen, Lecarrowantihan & Lisclenan

1641 Owner(s) Bourke, John (Catholic) 1670 Owner(s) Gore, Sir Arthur (Protestant)

County Mayo
Barony Tirawley
Parish Ballyshikilly

## **Townland** MAGHERABRACK Down Survey Name Rosserricke & Lygan

1641 Owner(s) Cork, Earl of (Protestant) 1670 Owner(s) Cork, Earl of (Protestant)

County Mayo
Barony Tirawley
Parish Ballyshikilly

#### Townland TAWNAGHMORE LOWER

Down Survey Name Tewmore

1641 Owner(s) Nolan, John (Catholic) 1670 Owner(s) Gore, Sir Arthur (Protestant)

County Mayo
Barony Tirawley
Parish Killala

#### Townland TAWNAGHMORE UPPER

Down Survey Name Tewmore

1641 Owner(s) Nolan, John (Catholic) 1670 Owner(s) Gore, Sir Arthur (Protestant)

County Mayo
Barony Tirawley
Parish Killala

Profitable land 4 plantation acres Forfeited 4 plantation acres

PRORINGO. 27772028

## **APPENDIX 12.5**

## NATIONAL INVENTORY OF ARCHITECTURAL HERITAGE

PREPARED BY CRDS

The recorded architectural heritage sites within c. 500m of the proposed development te. route are listed below, all noted in the National Inventory of Architectural Heritage (NIAH) (https://archaeology.ie; https://buildingsofireland.ie)

Reg No 31302204





Ballysakeery Church (Ballysakeery), LISGLENNON, MAYO

Regional Rating

Categories of Special Interest Architectural, Artistic, Historical, Social

Original Use Church/chapel Date 1805 - 1815 Coordinates 119416, 327399 13/12/2010 Date Recorded Date Updated

Description

Detached four-bay double-height Board of First Fruits Church of Ireland church, under construction 1806; complete 1810, on a rectangular plan comprising three-bay double-height nave opening into single-bay double-height chancel (east) with single-bay three-stage tower to entrance (west) front on a square plan. "Improved", 1853-4. Closed, 1980. Now in ruins. Pitched roofs now missing with tooled cutlimestone coping to gables, and no rainwater goods surviving on tooled cut-limestone eaves retaining cast-iron octagonal or ogee hoppers and downpipes. Part creeper- or ivy-covered fine roughcast coursed rubble limestone walls with concealed hammered limestone flush quoins to corners; fine roughcast surface finish (tower) with tooled cut-limestone stringcourse (bell stage) supporting battlemented parapet having tooled cut-limestone coping. Pointed-arch window openings with drag edged dragged cut-limestone sills, timber Y-mullions, and drag edged tooled cut-limestone block-and-start surrounds centred on keystones framing fixed-pane timber fittings having cast-iron lattice glazing bars. Cusped "Trinity Window" (east) with drag edged dragged cut-limestone sill, and drag edged tooled hammered limestone block-and-start surround having chamfered reveals framing fixed-pane fittings having cast-iron lattice glazing bars. Pointed-arch window opening (tower) with drag edged dragged cut-limestone sill, and concealed dressings with no fittings surviving. Pointed-arch openings (bell stage) with drag edged dragged cut-limestone surrounds having chamfered reveals framing applied timber Y-mullions on louvered fittings. Interior in ruins with remains of plastered slate hung surface finish, and Tudor-headed chancel arch framing overgrown stepped dais to chancel (east) below "Trinity Window". Set in landscaped grounds with piers to perimeter having lichen-covered dragged cut-limestone pyramidal capping supporting "Fleur-de-Lys"-detailed looped wrought iron double gates. A church representing an important component of the early nineteenthcentury ecclesiastical heritage of the rural environs of Killala with the architectural value of the composition, a 'neat plain edifice erected by a loan [1809] from the late Board of First Fruits [fl. 1711-1833]' (Lewis 1837 I, 121), confirmed by such attributes as the standardised navewith-entrance tower plan form, aligned along a liturgically-correct axis; the "pointed" profile of the openings underpinning a contemporary Georgian Gothic theme with the chancel defined by cusped "Trinity

Appraisal

Window" designed (12th August 1853) by Joseph Welland (1798-1860); and the "toy fortifications" embellishing the tower as a picturesque eye-catcher in the landscape. Although reduced to ruins following a prolonged period of neglect, the elementary form and massing survive intact together with interesting remnants of the original fabric, both to the exterior and to the interior showing fragments of a plastered slate hung surface finish (cf. 31310907; 31311025). An adjacent graveyard features an array of markers of genealogical interest including those standing over the burial plots of John Perlins (d. 1836) of nearby Ballybroony House (see 31302201); Mabel Emma Kirkwood (d. 1910), 'the exemplary daughter of Captain Charles Kirkwood of Bartra [see 31302216]'; and Reverend John Robert Perdue MA (1855-1946), 'for nearly forty years the beloved rector of this parish' (cf. 31302208).





LISGLENNON, MAYO

Rating Regional

Categories of Special Interest Architectural, Historical, Social

31302205

Original Use School Date 1800 - 1838 Coordinates 119451, 327423 Date Recorded 07/05/2013 --/--/--Date Updated

Description

Detached three-bay single-storey school house with half-dormer attic, extant 1838, on a rectangular plan with outline of single-bay singlestorey gabled advanced or projecting porch. In use, 1901. Disused, 1911. Pitched slate roof on timber construction with clay ridge tiles, ivvcovered rendered off-central chimney stack with capping not visible, and no rainwater goods surviving on cut-limestone eaves. Part ivycovered fine roughcast walls. Square-headed window openings (east) with cut-limestone sills, and concealed dressings framing remains of six-over-six timber sash windows. Square-headed door opening (west) with concealed dressings framing timber boarded door. Squareheaded window openings to gables to side elevations with cutlimestone sills, and concealed dressings framing one one-over-one timber sash windows. Road fronted with overgrown verge to front.

A school house forming part of a neat self-contained group alongside the ruined Ballysakeery Church (Ballysakeery) (see 31302204) with the resulting ensemble making a pleasing visual statement in a sylvan

street scene.

Appraisal





PROBINED. PARA

Mullafarry Presbyterian Church, MULLAFARRY, MAYO

Rating Regional

Categories of Special Interest Architectural, Artistic, Historical, Social

Original Use Church/chapel
In Use As Church/chapel
Date 1820 - 1830
Coordinates 119831, 327416
Date Recorded 13/12/2010

Date Updated --/--/--

Description

Detached three-bay double-height single-cell Presbyterian church, dated 1824; "unfinished" 1826; complete 1829, on a rectangular plan with single-bay single-storey gabled projecting porch to entrance (west) front abutting single-bay two-storey vestry. Pitched slate roofs including pitched (gabled) slate roof (porch) with clay or terracotta ridge tiles, rendered coping to gables including rendered red brick coping to gable (porch), and cast-iron rainwater goods on rendered eaves retaining cast-iron octagonal or ogee hoppers and downpipes. Rendered, ruled and lined walls. Pointed-arch window openings with rendered red brick sills, and concealed dressings framing storm glazing over three-over-nine timber sash windows without horns having interlocking Y-tracery glazing bars. Paired lancet window openings (east) with rendered red brick sills, and concealed dressings framing fixed-pane timber fittings having stained glass margins centred on leaded glazing bars. Full-height interior with tessellated terracotta tiled central aisle between trefoil-detailed timber pews, timber boarded or tongue-and-groove timber panelled wainscoting supporting carved timber dado rail, cut-white marble Classical-style wall monument (----), and carpeted stepped dais (east) with paired stained glass windows centred on trefoil-perforated Gothic-style timber panelled pulpit on an octagonal plan. Set in landscaped grounds with rendered piers to perimeter having gabled cruciform capping supporting spear headdetailed wrought iron double gates.

Appraisal

A church erected under the aegis of Reverend David Rogers (d. 1859) representing an important component of the early nineteenth-century ecclesiastical heritage of north County Mayo with the architectural value of the composition, one allegedly succeeding the later seventeenth-century Moywater Presbyterian Church (Killen 1886, 251), confirmed by such attributes as the compact rectilinear "barn" plan form, aligned along a liturgically-correct axis; and the "pointed"

profile of the openings underpinning a contemporary Georgian Gothic theme with those openings showing pretty Churchwarden glazing patterns. Having been well maintained, the elementary form and massing survive intact together with substantial quantities of the original fabric, both to the exterior and to the interior, including crown or cylinder glazing panels in hornless sash frames: meanwhile, contemporary joinery; and a Classical wall monument commemorating members of the congregation 'who fought and fell in the Great War 1914-1919', all highlight the modest artistic potential of the composition. An adjacent graveyard contributing positively to the group and setting values of the church features an array of markers of genealogical interest including those standing over the burial plots of Robert Massey (1832-1902) of nearby Courthill House (see 31302107); James Hunter Massey (d. 1916) of Carn House (see 31301410); and Dr. Thomas Hunter Massey OBE MD (d. 1934), Senior Medical Officer with the Colonial Medical Service (appointed 1923; retired 1933).

Reg No 31302207



**MULLAFARRY, MAYO** 

Rating Regional

Categories of Special Interest Architectural, Artistic, Historical, Social

Original Use Manse
Date 1870 - 1875
Coordinates 119886, 327644
Date Recorded 07/05/2013

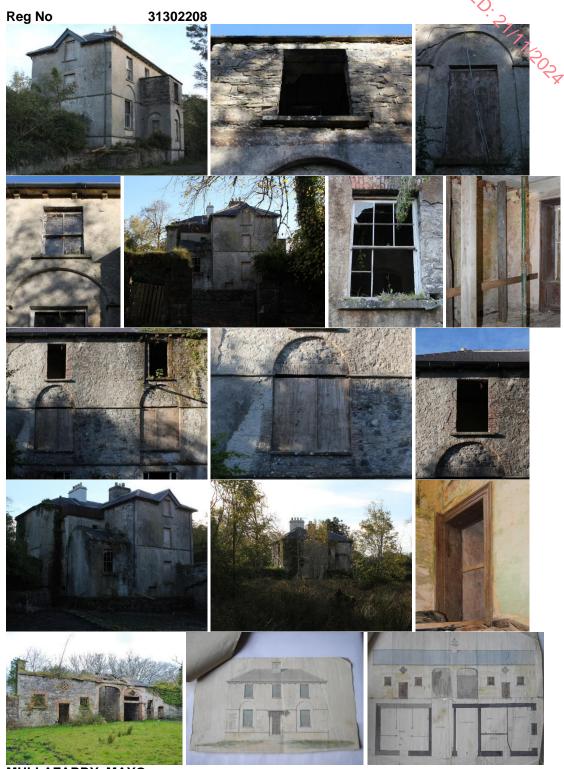
Date Updated --/--/-Description Detac

Detached three-bay two-storey manse, "secured" 1872, on a T-shaped plan centred on single-bay single-storey gabled projecting porch to ground floor. Occupied, 1901; 1911. Reroofed, ----. Replacement pitched artificial slate roofs including pitched (gabled) artificial slate roof (porch) with ridge tiles, red brick Running bond chimney stacks having corbelled stepped stringcourses below capping supporting terracotta or yellow terracotta octagonal pots, and uPVC rainwater goods on box eaves. Rendered walls with rusticated rendered quoins to ends. Segmental-headed central door opening with concealed dressings framing replacement timber panelled door having overlight. Square-headed window openings with cut-limestone sills, and concealed dressings framing two-over-two timber sash windows having part exposed sash boxes. Set back from road in landscaped grounds.

Appraisal

A manse representing an integral component of the later nineteenth-century built heritage of north County Mayo with the architectural value of the composition, 'a commodious [house] secured for [Reverend John Wilson (d. 1890)]' (Irwin 1890, 191), suggested by such attributes as the compact plan form centred on an expressed porch; the diminishing in scale of the openings on each floor producing a graduated tiered visual effect; and the high pitched roofline. Having been well maintained, the elementary form and massing survive intact together with substantial quantities of the original fabric, both to the exterior and to the interior, thus upholding the character or integrity of a manse

having historic connections with the Mullafarry Presbyterian ministry including Reverend George Clarke Love (1855-1929); Reverend Thomas Edwards (1860-1932), 'Presbyterian Clergyman' (NA 1901); and Reverend Robert Boyle (----), 'Presbyterian Clergyman' (NA 1911).



#### **MULLAFARRY, MAYO**

Rating Regional

Categories of Special Interest Architectural, Artistic, Historical, Social

Original Use Rectory/glebe/vicarage/curate's house

Date 1810 - 1825 Coordinates 120253, 327530 Date Recorded Date Updated Description

13/12/2010

--/--/--

Detached three-bay two-storey split-level over part raised basement Board of First Fruits Church of Ireland glebe house, designed 1815: built 1820, on an L-shaped plan centred on single-bay single-storey flat-roofed projecting porch to ground floor; single-bay (west) or twobay (east) full-height side elevations. "Improved", 186-, producing present composition. Occupied, 1901; 1911. Sold, 1933. Now disused. Hipped slate roof on an L-shaped plan with clay ridge tiles centred on limestone ashlar chimney stack having lichen-spotted cut-limestons stringcourse below capping supporting terracotta or yellow terracotta tapered pots, and remains of cast-iron rainwater goods on cutlimestone eaves on cut-limestone consoles retaining cast-iron downpipes. Part creeper- or ivv-covered lime rendered coursed or snecked limestone walls on cut-limestone chamfered cushion course on rendered base with concealed cut- or hammered limestone flush quoins to corners. Square-headed central window opening in roundheaded recess (porch) with cut-limestone sill, and concealed dressings framing two-over-two timber sash window. Central door opening into glebe house. Square-headed window openings in round-headed recesses (ground floor) with drag edged dragged cut-limestone sills, and concealed red brick block-and-start surrounds framing two-overtwo timber sash windows. Square-headed window openings (first floor) with drag edged dragged cut-limestone sills, and concealed red brick block-and-start surrounds framing two-over-two timber sash windows. Interior including (ground floor): central vestibule; hall retaining moulded surrounds to door openings with fittings now missing, staircase with balustrade now missing, and moulded surrounds to door openings to landing with fittings now missing. Set in unkempt grounds. A glebe house erected with financial support (1808-9) from the Board of First Fruits (fl. 1711-1833), and to a design endorsed (1st August 1815) by Reverend James Verschoyle (1750-1834), Bishop of Killala and Achonry (fl. 1810-34), representing an important component of the early nineteenth-century built heritage of the rural environs of Killala with the architectural value of the composition, 'a handsome residence' rooted firmly in the contemporary Georgian fashion (Lewis 1837 I, 121), confirmed by such attributes as the deliberate skewed alignment maximising on panoramic vistas overlooking gently rolling grounds; the compact plan form centred on a restrained doorcase, albeit one largely concealed behind a later porch designed by William Edward Martin (1843-1915) of Dublin (RCB); the diminishing in scale of the openings on each floor producing a graduated tiered visual effect with the principal "apartments" defined by Wyatt-style tripartite glazing patterns; and the stone work embellishing the roofline. A prolonged period of unoccupancy notwithstanding, the elementary form and massing survive intact together with quantities of the original fabric, both to the exterior and to the interior where contemporary joinery; and sleek plasterwork refinements, all highlight the modest artistic potential of the composition. Furthermore, an adjacent coach house-cum-stable outbuilding (extant 1838); and an overgrown walled garden (extant 1838), all continue to contribute positively to the group and setting values of a self-contained ensemble having historic connections with the Ballysakeery parish Church of Ireland clergy including Reverend Robert Young Lynn (1844-1923); Reverend John Robert Perdue BA (1855-1946), 'Incumbent Minister' (NA 1911); and Reverend Francis Kenny (c.1868-1933). NOTE: The birthplace of Dr. Kathleen Florence Lynn (1874-1955), Chief Medical Officer in the City Hall Garrison

Appraisal

(1916; cf. 31312010).



#### CROSSPATRICK, MAYO

Rating Regional

Categories of Special Interest Architectural, Artistic

Original Use Grave monument
In Use As Grave monument
Date 1875 - 1885
Coordinates 121568, 328279
Date Recorded 14/12/2010

Date Updated --/--/--

Description Freestanding cut-limestone monument, dated 1880, on repointed

battered plinth. Set in unkempt graveyard on a slightly elevated site with repointed piers to perimeter having lichen-covered truncated

pyramidal capping supporting flat iron gate.

Appraisal A monument signed by T. Mulloy representing an important component

of the later nineteenth-century built heritage of County Mayo.

PRORINGO. STATISTA

### **APPENDIX 12.6**

# BUILDINGS OF IRELAND REPORT ON BALLYSAKEERY GLEBE HOUSE, MULLAFARRY TD., COUNTY MAYO

PREPARED BY CRDS

The following is a report by the National Inventory of Architectural Heritage on Ballysakeery House, dating to April 2018 (Ballysakeery Glebe House, MULLAFARRY Td., County Mayo - Buildings of Ireland).

The report was undertaken by David Hicks of Bourke Builders of Ballina who specialise in the conservation of historic buildings and who, in addition to the first stage of the restoration of Ballysakeery Glebe House, have carried out works on McKee Barracks and the Lower House, Grangegorman, Dublin. David is the author of Irish Country Houses — A Chronicie of Change (2012) and Irish Country Houses — Portraits and Painters (2014). David has conducted extensive research on the architectural heritage of his native County Mayo and publishes regularly on his blog

Ballysakeery Glebe House, MULLAFARRY Td., County Mayo



Figure 1: Ballysakeery Glebe House, near Killala, County Mayo, an early nineteenth-century glebe house erected with the financial assistance of a grant of £400 and a loan of £400 from the Board of First Fruits (fl. 1711-1833). Among the incumbents who served the parish of Ballysakeery, and who occupied the glebe house, was Reverend Robert Young Lynn (1844-1923) whose daughter, Dr. Kathleen Lynn (1874-1955), claimed her place in Irish history as the Chief Medical Officer in the City Hall Garrison during the 1916 Rising. The glebe house is pictured in December 2016 following the first stage of restoration

Ballysakeery Glebe House, hidden from view on a tree-lined road branching off the R314 from Ballina to Killala in north County Mayo, boasts a strong connection with the 1916 Rising as the birthplace and childhood home of Dr. Kathleen Lynn (1874-1955), Chief Medical Officer at the City Hall Garrison. Owing to its architectural and historical significance, the glebe house received funding from the Department of Culture, Heritage and the Gaeltacht under the Structures at Risk Fund 2016 for emergency repair works intended to bring the structure back from the brink of ruin and to prevent the further deterioration of its surviving original fabric. The glebe house was the recipient of further funding from the Department under the Structures at Risk Fund 2017.



Figure 2: The glebe house pictured in May 2016 before work began on the first stage of restoration. The glebe house passed into private ownership following the death of the last resident incumbent, Reverend Francis Kenny (c.1868-1933), and fell into disrepair when sold as part of a bank of land purchased for the development of the Asahi Synthetic Fibre Plant (1977)

#### **Ballysakeery Glebe House: Early History**

Ballysakeery Glebe House can trace its origins back to the early nineteenth century when 'a new church [for] the parish' was erected 'on a new and more central site' in Lisglennon townland. Ballysakeery Church was one of almost seven hundred Church of Ireland churches built or rebuilt between 1808 and 1823 with the financial support of gifts or loans from the Board of First Fruits (fl. 1711-1833). The Board, a Church of Ireland institution deriving its income from tithes payable irrespective of religious persuasion, was established by Queen Anne with the express purpose of building churches and glebe houses and, in respect of Ballysakeery parish, gave a gift of £400 and an equal loan of £400 for the construction of a glebe house in the neighbouring townland of Mullafarry.

The architect of the glebe house is unknown, however, surviving drawings in the collection of the Representative Church Body Library show the elevation, basement and ground floor plans 'of a Glebe House to be built on the Glebe of the Parish of Ballisakeery [sic] in the Diocese of Killalla [sic] by the Revd. Joseph Verschoyle Vicar of the united Parishes of Ballisakeery [sic] & Rathrea'. Conveniently, Reverend Joseph Verschoyle (1794-1867) was the son of the Right Reverend James Verschoyle (1750-1834), Bishop of Killala, whose note states: 'I approve of this Plan & authorise the Vicar to commence the work 1st August 1815'.



Figure 3: One of a small set of surviving plans for a glebe house 'to be built on the Glebe of the Parish of Ballisakeery [sic] in the Diocese of Killalla [sic] by the Revd. Joseph Vershoyle [1794-1867]'. The plans were approved by Verschoyle's father, the Bishop of Killala, on the 1st August 1815. An accompanying note confirms that the Right Reverend James Verschoyle (1750-1834) also approved a proposal 'by the Incumbent...to enclose the Glebe with a Stone wall coped & dashed with Mortar & to build a Garden Wall round half an acre of land more or less & to enclose an Office Yard with Privy &c'. Courtesy of the Representative Church Body Library (i\_gh014003001)At first glance the glebe house is typical of the many glebe houses built across Ireland in the first two decades of the nineteenth century: a streamlined Classical façade shows a canopied central doorcase; window openings in arcaded recesses on the ground floor; slightly smaller window openings on the first floor; and simple stone work embellishing the eaves. However, the symmetry of the façade is misleading and a closer inspection of the plans reveals an interesting segregation of the interior where three floors of lowceilinged rooms for the staff to the left of the hall correspond as two floors of high-ceilinged rooms for the family to the right of the hall. Blind window openings on the left side of the façade mask the floor levels in order to preserve the strict symmetry of the composition. As further evidence of the hierarchy of accommodations, small window openings in the staff rooms overlooked a yard while large window openings, including tripartite windows in Morrison-esque recesses, allowed the family to enjoy scenic views overlooking manicured grounds.

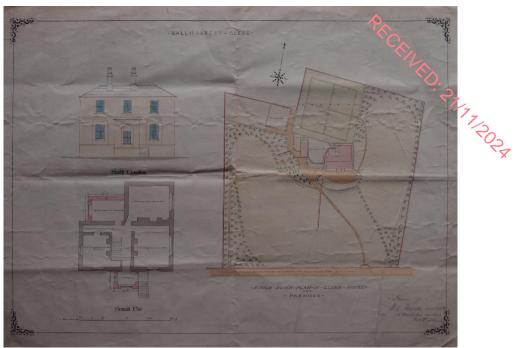


Figure 4: A drawing signed by William Edward Martin (1843-1915) of 10 Waterloo Avenue, North Strand, Dublin, showing a ROUGH BLOCK PLAN OF GLEBE HOUSE and PREMISES and the South Elevation and Ground Plan with proposals for the addition of a porch and new bathroom. Courtesy of the Representative Church Body Library (i\_gh01800101)

A chimney stack placed front and centre in the roof served fireplaces on either side of the central hall and, effectively hovering over a void, was carried on an arch spanning the first floor landing. A later drawing signed by William Edward Martin (1843-1915) of 10 Waterloo Avenue, North Strand, Dublin, suggests that it was once contemplated to replace the central stack with chimney stacks on either side of the hall but this was never carried into effect. The drawing also shows, shaded in pink, the porch and bathroom added to the glebe house in the 1860s.



Dr Kathleen Lynn (1874-1955)

Reverend Robert Young Lynn (1844-1923) was appointed rector of Ballysakeery in the early 1870s. Lynn and his wife, Kathleen Marian (*née* Wynne) (1840-1915), welcomed a daughter, named Kathleen Florence, on the 28<sup>th</sup> January 1874. Kathleen's place of birth is often given as Cong, south County Mayo, where the family moved in 1886 and where Reverend Lynn served as rector until his death in 1923. However, Kathleen specifies *Mullafarry Co. Mayo* in the Household Return Form of the 1911 National Census and begins her Statement by

Witness (1950) thus: I was born in Mallaghfarry [sic] in Mayo, two miles from Killala, where my father was a clergyman.

The young Kathleen, affected by the conditions of the poor in the west of reland, vowed to become a doctor and, completing her studies at the Medical School of the Catholic University of Ireland in Cecilia Street, received a degree from the Royal University of Ireland in 1899. Following her graduation, and internships in a number of hospitals across Dublin, Dr. Lynn set up private practice in her home at 9 Belgrave Road, Rathmines. Constance Markievicz (1868-1927), a distant cousin, contacted Dr. Lynn 'about 1912 or 1913' to treat Helena Molony (1883-1967), activist and member of Inghinidhe na hÉireann, and it was during her convalescence at Belgrave Road that Molony encouraged her host's interest in politics. Dr. Lynn later recalled 'We used to have long talks and she converted me to the National movement. She was a very clever and attractive girl with a tremendous power of making friends... I had become interested in the Women's Suffrage Movement before that...and quite sympathised with the militant side of it'

As a member of the Irish Citizen Army, Dr. Lynn spent the weeks leading up to Easter 1916 assisting James Connolly (1868-1916) in reconnaissance and Willie Pearse (1881-1916) in munitions smuggling in preparation for a Rising 'coming off altho' we did not know the exact date...we knew from the precautions that were being made that it could not be far off. On Easter Monday Dr. Lynn received her commission as a Captain and Chief Medical Officer and was ordered to report to City Hall. Once City Hall was re-taken by British forces, Dr. Lynn was arrested and detained in Ship Street, Richmond Barracks, Kilmainham Gaol where she could hear the execution of the 1916 leaders, and Mountjoy Prison where she and her fellow detainees were interviewed by the American press. Dr. Lynn was eventually deported to England where she worked as a locum in Coltford and Bath before returning to Ireland. Dr. Lynn was elected as Vice-President of Sinn Féin in 1917 and was elected to Dáil Éireann in 1923 representing the South Dublin constituency. Losing her seat in June 1927, and failing to win a by-election the following August, Dr. Lynn abandoned her political career in order to concentrate on her work at Saint Ultan's Children's Hospital [Teach Naomh Ultuin] which she co-founded with Madeleine ffrench-Mullen (1880-1944) in 1919. Dr. Lynn died on the 14th September 1955 and was buried with full military honours in the family plot in Deansgrange Cemetery.

#### **Ballysakerry Glebe House: Later History**

Following Reverend Lynn's transferral to Cong, Ballysakeery Glebe House continued to serve the incumbent of the parish and the Household Return Form of the 1901 National Census gives Reverend John Perdue (1855-1946), his wife Mary Isabella (1859-1924), three sons, and a servant named Mary Quigley, as residents. The 1911 National Census saw the glebe house occupied by a diminished household of Reverend Perdue, one son, a niece, and a servant named Norah Lowin. An auction of furniture and household effects, held in March 1925 on the instructions of Perdue, described the glebe house as containing a hall, a dining room, a drawing room, and three bedrooms together with a kitchen and stores in the basement. The last resident incumbent, Reverend Francis Kenny (c.1868-1933), was appointed to the parish in 1929 and, on his death, the glebe house was vacated and the contents sold. A decline in parishioners saw Ballysakeery Church close and the glebe house pass into private ownership. The glebe house eventually formed part of a bank of land purchased for the development of the Asahi Synthetic Fibre Plant (1977) and, neglected and unoccupied, began its descent into disrepair.

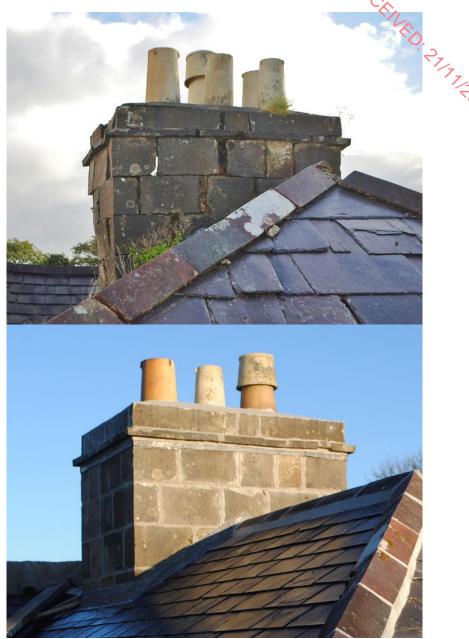
**Ballysakeery Glebe House: Restoration** 

Figures 6-9: Although increasingly exposed to the elements, and subjected to theft and vandalism, the interior nevertheless retains original features of interest including, clockwise, an unusual architrave framing a corner door opening; a second architrave with integrated brackets for a draught curtain rod; an architrave around a window in the dining room with a simple moulded plasterwork cornice overhead; and an architrave with panelled reveals and shutters framing a window in one of the bedrooms on the first floor

The first glimmer of hope for a brighter future came when the glebe house passed into the ownership of Mayo County Council, however, a detailed analysis by Southgate Associates revealed a structure in a perilous state with a roof on the point of collapse, walls showing evidence of long-term water penetration, structurally unsound chimney breasts, subsiding floors, and broken or missing windows. The interior, similarly dilapidated and subjected to theft and vandalism, nevertheless retained features of interest, particularly in the dining room, including door and window architraves and simple moulded plasterwork cornices.

A tender for stabilisation works was advertised in June 2016 and, although it was anticipated that the works would include both the glebe house and the adjacent stables, the resources available allowed for the stabilisation of the glebe house alone. Once scaffolding was in place, a close inspection of the roof was made, confirming that the central chimney stack and its

supporting arch were in a precarious condition: indeed, light was visible through the stone work at various points. Sections of slate and the underlying timber work were also loose or missing.



Figures 10-11: A photograph illustrating the poor condition of the central chimney stack in May 2016 with light visible through dislodged stone work. The limestone was numbered and carefully dismantled to allow for a faithful reconstruction with each stone returned to its original position and repointed using a lime mortar

The first stage of the restoration saw the entire roof stripped back to its timber skeleton with the original slate and ridge tiles carefully stacked and stored for later reused. Similarly, the limestone of the central chimney stack was numbered and carefully dismantled to allow for a faithful reconstruction with each stone returned to its original position. Among the interesting features uncovered during this process were the various marks stamped into the head of the nails ("VIII"), the chimney pots ("GARNKIRK") and the ridge tiles ("R. ASHTON & Co. BUCKLEY FLINTSHIRE").



Figures 12-13: The roof photographed before and after its restoration

Once the supporting arch had been inspected by a conservation engineer, the central chimney stack was reconstructed and repointed using a lime mortar. As many of the original slates as possible were reused. Damaged or defective slates were re-cut for use on the angles of ridges and valleys. A gablet was also repaired with surviving fragments of the original timber bargeboards used as templates to create a suitable replica. The glebe house could now boast, for the first time in many years, a watertight roof. The installation of new rainwater goods brought the first stage of the restoration to a satisfactory conclusion. Plywood sheets on the doors and windows, perforated to allow for ventilation, will allow the glebe house to gradually dry out in advance of the next stage of restoration.



Figures 14-15: A tripartite window opening in a Morrison-esque recess originally allowed the occupants to enjoy scenic views overlooking manicured grounds. Although in poor repair, and with much of the glazing broken or missing, the hornless frames may potentially be restored or, at the very least, used as templates for period-appropriate replacements when work on the next stage of restoration takes place. In the meantime, plywood sheets, perforated to allow for ventilation, prevent unauthorised access into the glebe house and the further deterioration of its original fabric

The first stage of the restoration of Ballysakeery Glebe House was supported by the Department of Culture, Heritage and the Gaeltacht under the <u>Structures at Risk Fund 2016</u>. The glebe house received additional support from the Department under the <u>Structures at Risk Fund 2017</u>.



Figure 16: The first stage of the restoration of Ballysakeery Glebe House was supported by the Department of Culture, Heritage and the Gaeltacht under the Structures at Risk Fund 2016. The glebe house received additional funding from the Department under the Structures at Risk Fund 2017

#### **Ballysakeery Glebe House: Restoration Update (2023)**





Figures 17-18: The phased restoration of Ballysakeery Glebe House is ongoing and the repair of the roof was completed in 2020

The phased restoration of Ballysakeery Glebe House has progressed since this Building of the Month was first published in April 2018. The repair of the roof of the return was completed in 2020 and, in addition to the repointing and refinishing of the chimney, saw the installation of new cast-iron gutters and downpipes. The plaster below, damaged and stained by damp, will be renewed in a later phase of works.

The porch designed by William Edward Martin has been removed in preparation for the full restoration of the façade to its original 1815 appearance.



Figure 19: An unsigned drawing for a multi-purpose outbuilding which, in addition to stables and byres on either side of central carriageways, included nesting boxes in eye-catching diamond formations. Courtesy of the Representative Church Body Library (i\_gh01400401)

The restoration has taken in an adjacent outbuilding which, according to a plan in the Representative Church Body Architectural Drawings Collection, was designed to house stables and byres either side of coupled carriageways. The multi-purpose outbuilding also included nesting boxes in eye-catching diamond formations. The outbuilding was an overgrown ruin in 2010 but ivy has been cleared, brick work has been repaired and, most importantly, it has been made largely weather-tight by the construction of a new roof.



Figures 20-21: The outbuilding had fallen into ruins by 2010, its exterior covered in ivy, its interior a forest of brambles. The first phase of restoration has included the removal of vegetation, the rebedding of loose and missing masonry and the construction of a new roof with cast-iron rainwater goods

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## **APPENDIX 12.7**

# MAYO COUNTY DEVELOPMENT PLAN (EXTRACTS RELATING TO ARCHITECTURAL HERITAGE)

PREPARED BY CRDS

The Mayo County Development Plan 2022-2028 sets out the roadmap for the overall proper planning and sustainable development of County Mayo over the plan period. While the Plan is in place for a six-year period, it is framed having regard to the long-term development objectives of the county up until 2040, to align with national and regional spatial plans. The Plan governs the whole functional area of Mayo County Council, including the former Town Council functional areas of Castlebar, Ballina and Westport. The Council operates through four Municipal Districts (MD) in the county, which include Ballina MD; Castlebar MD; Claremornis-Swinford MD and Westport-Belmullet. This plan provides for, and manages, the physical, economic, and social development of the County, in the interests of the overall common good, and in compliance with environmental legislation. It includes a set of development objectives and standards, which set out where land is to be developed, and for what purposes (e.g. housing, retail, education, schools, employment, open space, amenity, conservation etc). It informs decisions on where public services such as roads and water infrastructure are to be provided and affects the type of buildings that can be constructed and how land is utilised. It influences many facets of daily economic and social life, in terms of where people can live, what services and facilities are available and where job opportunities are to be sited.

It includes policy on archaeological and architectural heritage. The following are relevant extracts from the Architectural Heritage Policy statement.

## CHAPTER 9 BUILT ENVIRONMENT

eology and Record of Monuments and's built and

To protect archaeological sites, monuments, underwater archaeology and BEO 6 archaeological objects in their setting, which are listed on the Record of Monuments and Places for Mayo.

BEO 7

To promote awareness and the appropriate adaptation of Ireland's built and archaeological heritage to deal with the effects of climate change with reference to the Built and Archaeological Heritage Climate Change and Adaptation Plan.

#### 9.4.1.2 Architectural Heritage

Architectural heritage consists of buildings and structures of architectural, historical, archaeological, artistic, cultural, scientific, social or technical importance. The principal mechanism for protection of these buildings and structures is through inclusion on the 'Record of Protected Structures' (RPS). Mayo County Council recognises the important contribution that all historic structures, features and landscapes, including those which are not listed in the RPS, makes to the county's heritage. Local authorities can also preserve the special character of a place, area, group of structures, or townscape known as Architectural Conservation Areas (ACAs). The special character of an ACA is made up of its architectural features, setting, spatial qualities and land uses.

	Architectural Heritage Policies
BEP 4	To protect the erchitectural heritage of County Mayo which is a unique and special resource.
BEP 5	To promote best conservation practice and encourage the use of appropriately qualified professional advisors, tradesmen and craftsmen with recognised conservation expertise, for works to protected structures or historic buildings in an Architectural Conservation Area.
BEP 6	To encourage the conservation of Protected Structures, and where appropriate, the adaptive re-use of existing buildings and sites in a manner compatible with their character and significance.
BEP 7	To protect buildings and structures included in the Record of Protected Structures (RPS) which forms part of this Plan.

	Architectural Heritage Objectives
BEO 8	To review and update the Record of Protected Structures within 12 months of adopting this plan, and on-going basis, and to make additions and deletions, as appropriate. Where exceptional circumstances apply, that discretion would be applied to work with affected parties.
BEO 9	To ensure the protection and sympathetic enhancement of buildings and structures included and proposed for inclusion in the Record of Protected Structures (RPS) that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, together with the integrity of their character and setting.

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BEO 10	To protect the setting of protected structures and seek to prevent the demolition or inappropriate alteration of Protected Structures, which would adversely impact on the character and special interest of the structure, where appropriate.
BEO 11	To ensure that any new development or alteration to a building within or adjoining an Architectural Conservation Area positively enhances the character of the area and is appropriate in terms of the proposed materials, scale, density, layout, proportions, plot ratio and building lines.
BEO 12	To identify places of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, and to define them as Architectural Conservation Areas and to undertake an assessment to inform the potential ACA designation for the following areas: Castlebar, Ballinrobe, Killala, Pontoon and Doogort or any other special character areas considered by the Planning Authority worthy of such protection in County Mayo.
BEO 13	To protect the built heritage of Ballina, Castlebar and Westport, including the protected structures listed in the existing town and environs development plans and seek to review the Record of Protected Structures for County Mayo to incorporate protected structures from the plan areas of these towns.

#### 9.4.1.3 Historic Building Stock and Vernacular Architecture

Scattered throughout the countryside and within the towns and villages of Mayo is an extensive stock of modest historic buildings and structures, some of which have been designed by an architect or engineer, while others are vernacular structures built to no formal plans, using traditional building types and materials. While these older buildings may not meet the criteria of sufficient special interest to be designated protected structures, their form, scale, materials and orientation contribute positively to the rural landscape, as well as to the historic villages and towns of Mayo, establishing the distinctive character of a particular area. The retention and reuse of these buildings and structures exemplifies sustainable development and so Mayo County Council will encourage the appropriate re- use of vernacular buildings, rather than their replacement or dereliction, where practicable.

Histor	ic Building Stock and Vernacular Architecture Policies
BEP 8	To encourage the retention, sympathetic maintenance and sustainable re-use of historic buildings, including vernacular dwellings or farm buildings and the retention of historic streetscape character, fabric, detail and features, where appropriate.
BEP 9	To promote the retention and restoration of thatched dwellings as a key component of the built heritage of the county.
BEP 10	To encourage the protection, retention, appreciation and appropriate revitalisation of the vernacular heritage of Mayo.
BEP 11	To promote the sympathetic maintenance refurbishment and re-use of vernacular built heritage and to support the retention of original fabric such as windows, doors, renders/pub/shopfronts, roof coverings and interiors.
BEP 12	To support proposals to appropriately refurbish and extend vernacular structures in a semi-derelict or derelict condition.

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# CHAPTER 9 BUILT ENVIRONMENT

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l o encour	age the protection, conservation, promotion and enhancement of Country
	erdens and Demesnes in the county and support public awareness, of and access to these sites, where appropriate.

**BEP 14** 

To discourage development that would lead to a loss of, or cause damage to, the character, the principle components of, or the setting of Country Houses, Gardens and Demesnes in recognition of their contribution to cultural heritage, landscapes and green infrastructure. Architectural heritage impact assessment, including consideration of demesne and setting may be required for proposals.

#### Historic Building Stock and Vernacular Architecture Objectives

BEO 14	To identify and retain good examples of vernacular architecture and historic street furniture in situ, for example, cast-iron post boxes, water pumps, signage, street lighting, kerbing and traditional road and street surface coverings.
BEO 15	To ensure that conversions or extensions of traditional buildings or the provision of new adjoining buildings, are sensitively designed and do not detract from the character of the historic building.
BEO 16	To update the survey of surviving thatched structures in the county and to promote available grant schemes in order to assist owners with their retention and repair.
BEO 17	To preserve the character and setting (for example, gates, gate piers and courtyards) of historic building and vernacular buildings, where deemed appropriate by the

#### 9.4.2 Sustainable Buildings

planning authority.

Buildings form a valuable part of our historic building stock, yet most are not protected structures. On environmental grounds and in the interest of sustainability and locking in carbon, the Plan encourages the reuse of as much of an original building/structure as is possible. Raw material shortages will become a critical factor over the next 10 to 20 years and already major companies worldwide are switching to recycling old concrete, steel, glass, etc. Demolition and rebuilding generates significantly greater amounts of carbon. The Plan promotes the re-use and re-purposing of extant building stock on these grounds.

To create sustainable buildings, it is vital to examine the lifecycle performance of the building to address greenhouse gas emissions and circular economy principles. In the building life cycle, embodied carbon is the greenhouse gas emission associated with the non-operational phase of the building. This includes emissions cause by extraction, manufacture, transportation, assembly, maintenance, replacement, deconstruction, disposal and end of life aspects of the materials and systems that make up a building. The whole life carbon of the building is both the embodied carbon and the carbon associated with operation (heating, cooling, powering, providing water, etc). Low embodied, carbon building designs can make projects more resilient to future resource and material scarcity, price rises and uncertainty, as well as rising energy prices.

Crucially, improved buildings deliver substantial societal benefits. By improving indoor air quality and lighting, green buildings improve the health of their occupants and neighbours. While energy savings are themselves valuable, adding public health to the equation makes it even clearer, that zero carbon buildings are worthy investments.

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# **APPENDIX 13.1**

# **IDASO TRAFFIC SURVEY REPORT**



Data Analysis Services
Traffo-Transportation-Commercial-Innovation

NECENED. 27/1/2024

24543 - Killala, Co. Mayo

with compliments

24543 - Killala, Co. Mayo Tue 01 Oct 2024 Survey Name:

Date:





24543 - Killala, Co. Mayo Site 1 Survey Name:

Site: Location: R314

Tue 01-Oct-2024 Date:

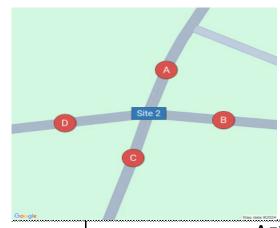
Arm A - R314

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12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	11	0	1	1	38
H/TOT	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91	0	24	5 5		1	123
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H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	85	1	26	5	4	2	123
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Location:

Survey Name: 24543 - Killala, Co. Mayo

Site:

Access To R314/Access To Ballintean/Access To Mullafarry Presbyterian Church

Tue 01-Oct-2024 Date:

Arm A - Access To R314 Arm B - Access To R314 Arm C - Access To Ballintean Arm D - Access To Mullafarry Presbyterian Church

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14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Q	0	1	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	0	2	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0	1	0	0	1	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
Н/ТОТ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	4	0	0	1	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	* 3	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ò	_ 0	1	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	<b>€</b>	1	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0 <	<b>)</b> 0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	× <sub>1</sub>	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Н/ТОТ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
Н/ТОТ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0
12 TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	33	0	10	2	0	0

PRICHINED: STATED.

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тот	DCII	D/C	M / C	CAD		> D	067/1	061/2	DCV	тот	DCII	D/C	M /C	CAD	B =		0674	OGV2	DCV	тот	DCII	D/C	M /C	CAD	TAY		061/1	OGV2	DCV
<b>TOT</b> 1	PCU 1	<b>P/C</b> 0	<b>M/C</b>	CAR	<b>TAXI</b> 0	LGV 0	<b>OGV1</b>	<b>OGV2</b>	<b>PSV</b> 0	TOT 1	PCU	<b>P/C</b>	<b>M/C</b>	CAR 0	<b>TAXI</b> 0	<b>LGV</b>	0001	0002	<b>PSV</b>	<b>TOT</b> 0	<b>PCU</b> 0	<b>P/C</b> 0	<b>M/C</b>	0	<b>TAXI</b>	<b>LGV</b>	0001	0002	<b>PSV</b> 0
1	1	0	0	0	0	0	0	0	0	U	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	n	0	0	0
n	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	n	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	3	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0
4	4	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	4	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1.5	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1.5	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	3	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	1	0	0	0		1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	0	0		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	1	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

2	2	0	0	2	0	3	1	0	0	6	6.5	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	1	2 ′	0	0	0	0	0	0	0	0
2	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
3	0.6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0 0	1	1	0	0	0	0	0	0	0	0
8	6.1	0	0	0	0	2	0	0	0	2	2	0	0	1	0	0	0	0 1	2	3	0	g	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0 0	0	0	0	1	0	0	0	0	0	0
3	3	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0 0	0	0	0	0 *	<del>ر</del> ي	0	0	0	0	0
1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0 7	0	1	0	0	0
5	5	0	0	2	0	1	0	0	1	4	5	0	0	0	0	0	0	0 0	0	0	0	0	0	<del>7</del> 8	1	0	0	0
1	1	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0 0	0	0	0	0	0	65	0	0	0	0
1	1	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0 0	0	0	0	0	0	0 ×	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
4	4	0	0	3	0	0	0	1	0	4	5.3	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
5	5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
3	3	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0 0	1	1	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
11	11	0	0	1	0	2	0	0	0	3	3	0	0	1	0	0	0	0 0	1	1	0	0	0	0	0	0	0	0
48	46.6	0	0	17	0	13	1	1	1	33	35.8	0	0	3	0	0	0	0 2	5	7	0	0	0	0	1	0	0	0

PRICH IN THE STATES

		<u></u>									,										4				$\sum_{i}$				
					B =	:> C									B =	> D									TC.	> A			
тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	1	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	2	0	1	1	0	0	4	4.5	0	0	4	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	2	0	4	6.6	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	2.5	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	4.3	0	0	1	0	1	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	8	0	0	1	3	0	12	16.4	0	0	1	0	2	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	2	2.5	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	5.3	0	0	2	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	3.8	0	0	0	0	2	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	4	3	0	8	13.9	0	0	2	0	3	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	1	0	0	0	0	0
0	<u>.</u>	0	0	1	0	0	0	0	0	1	1	0	0	2	0		0	2	0	5	7.6	0	0		0		0	0	0
0	0	0	0	<u>†</u>	0	0	0	 0	0	0	0	0	0 	0	 0	<u>-</u>	0	<u>-</u>	0	4	7.9	0	0	<u>.</u>	0	 O	1	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	3	4.3	1	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	1	0	0	0	2	2	0	0	2	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	3.8	0	0	1	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	2	0	3	1		0	11	18	1	0	3 1	0	0	1	0	0
·····	0	0	0		0	0	0	0	0	0	0	0	······	ے ************************************	O	0		0	0	11 00000000000000000000000000000000000	10	0	0	 0	0	······	0	0	0
0	0	0	-	1	0	0	0	0		1	1		0		0	1	0	0		1	1	0	0	1	_	0		0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0	2	2.2	0	0	0	0	0	0	0	0
0	_	0	0	1	0	0	0	0		1	1	0	0	1	0	1	1	1	0		3.3	0		0	0	0	0	0	0
0	0	U	0	1	0			0	0		1	<u>.</u>	0	1 1	0	1		2	0	2	8.1	U	0	U		0		0	0
0	0	0	0	3	0	0	0	0	0	3	3	0	0	3	0	2	1	3	0	9	13.4	0	0		0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	1	0	0
0	· ·	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	3	4.8	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	3.3	0	0	1	0	0	0	0	0
0	0	0	0	2	0	0	0		0	2	2	0	0	3		1	1	2	0	7	10.1	0	0	2	0		1		0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	1	0	1	0	0	0	2	2	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	4.6	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0

0	0	0	0	3	0	1	0	0	0	4	4	0	0	1	0	2	0	3	0	6	9.9	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	2	1	0	3	5.3	0	0	2	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	0	2	0	3	5.6	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	4	4	0	0	2	0	0	0	0	0
0	0	0	0	2	0	0	0	0	0	2	2	0	0	2	0	3	2	3	0	10	14.9	0	Q	6	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0	<b>O</b> .	2	0	1	0	0	0
0	0	0	0	1	0	1	0	0	0	2	2	0	0	0	0	1	1	2	0	4	7.1	0	0	3_3	0	1	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0	2	3.3	0	0	3	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	ď	0	0	0	0	0
1	1	0	0	2	0	1	0	0	0	3	3	0	0	5	0	2	1	3	0	11	15.4	0	0	8	<del>2</del> 3	2	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	(D)	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0 ×	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	4	0	1	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	3	4.3	0	0	2	0	1	0	0	0
0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	1	0	1	2.3	0	0	1	0	0	0	0	0
0	0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	2	0	0	0	3	3	0	0	1	0	1	0	0	0
0	0	0	0	6	0	0	0	0	0	6	6	0	0	2	0	3	0	2	0	7	9.6	0	0	5	0	2	0	0	0
1	1	0	0	22	0	3	0	0	0	25	25	0	0	33	0	19	12	29	0	93	136.7	1	0	37	0	13	2	1	0

PRICHINED: STATED.

<u>,</u>																					······	······			<u> </u>				
		- /-				=> B									C =							_,_							
ТОТ	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1		PSV	ТОТ	PCU	P/C	M/C	CAR	TAXI	LGV		OGV2	PSV	TOT	PCU	P/C	M/C		TAXI			OGV2	
0 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0 0	1	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0	0	0 0	0	0	0 0	0 0	0	1	0 0	0	0
4	4	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	O	0	0	0	0	0	0	1	0	3	0	n	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	3	0	0	1		0	0	0	0	1	1	0	0	0	0		0	0	0	0	0	1	0	3	0	0		0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	<u>.</u>	0	0	0
2	2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
5	5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	4.7	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1		0	2	0	0	0		0		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
2	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	6.5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0 ′	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0 0	0	0	0	0	1	0	0	0	0	0
6	6	0	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0 0	0	0	0	Q	1	0	0	0	0	0
3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	10	1	0	0	0	0	0
4	4	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0 0	0	0	0	0 *	ر_1	0	0	0	0	0
3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	1/2	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	O ,	0	0	0	0	0
10	10	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0 0	0	0	0	0	3	<del>2</del> 3	0	0	0	0
1	1	0	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0 0	0	0	0	0	0	60	0	0	0	0
1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0 🗙	0	0	0	0
3	3	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
6	7.3	0	0	0	0	1	1	0	0	2	2.5	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
3	3	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
7	7	0	0	2	0	2	0	0	0	4	4	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0
54	55.5	0	0	14	0	3	3	0	0	20	21.5	0	0	0	0	0	0	0 0	0	0	1	0	9	0	3	0	1	0

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					D =										D =	> B									D :	> C			
тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	2	0	3	5.6	0	0	3	0	0	0	0	0	3	3	0	0	1	0	0	0	0	0
4	3.2	0	0	0	0	0	0	0	1	1	2	0	0	3	0	1	0	0	0	4	4	1	0	2	0	0	0	0	0
0	0	0	0	0	0	0	1	2	0	3	6.1	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	3	0	3	6.9	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	1	0	2	3.3	0	0	0	0	0	0	0	0
4	3.2	0	0	0	0	1	1	5	1	8	16	0	0	4	0	3	0	1	0	8	9.3	1	0	2	0	0	0	0	0
1	1	0	0	0	0	1	0	1	0	2	3.3	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	6.8	0	0	0	0	0	0	0	0
1	1	0	0	0	0	1	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	2	0	3	0	5	8.9	0	0	1	0	1	3	1	0	6	8.8	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	2	0	3	5.6	0	0	2	0	1	0	1	0	4	5.3	0	0	0	0	0	0	0	0
0	0	0	0	1	0	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	1	0	1	0	1	0	3	4.3	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	3	0	1	0	5	6.3	0	0	2	0	1	0	1	0	4	5.3	0	0	0	0	0	0	0	0
0	0	0	0	2	0	0	0	1	0	3	4.3	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0
0	0	0	0	4	0	0	0	1	0	5	6.3	0	0	1	0	2	1	0	0	4	4.5	0	0	0	0	0	0	1	0
2	3.3	0	0	1	0	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	2	0	3	5.6	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0
2	3.3	0	0	3	0	0	0	3	0	6	9.9	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1	0	3	4.8	0	0	3	0	1	0	0	0	4	4	0	0	1	0	0	0	0	0
0	0	0	0	1	0	1	0	1	0	3	4.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0

0	0	0	0	2	0	2	1	3	0	8	12.4	0	0	3	0	2	0	0	0	5	5	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	1	0	1	0	2	3.3	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 🥎	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	2	0	0	2	3	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	2	0	3	5.6	0	0	0	0	1	0		0	1	1	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	4	0	5	10.2	0	0	0	0	2	2		0	5	7.3	0	G	0	0	0	0	0	0
1	1	0	0	1	0	1	0	0	0	2	2	0	0	1	0	1	0	0	0	2	2	0	<b>`</b> Ø,	0	0	1	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0 *	5_5	0	1	0	0	0
1	1	0	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0	0	0	0	10-	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	3	0	0	0	0	0	3	3	0	0	0 7	0	0	0	0	0
3	3	0	0	1	0	2	1	0	0	4	4.5	0	0	7	0	1	0	0	0	8	8	0	0	5	<del>7</del> 8	2	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	1	0	4	5.3	0	0	0	65	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0 🗙	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	3	0	0	0	0	0	3	3	0	0	4	0	1	0	1	0	6	7.3	0	0	0	0	1	0	0	0
0	0	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0
0	0	0	0	1	0	2	0	0	0	3	3	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0
14	14.5	0	0	18	0	12	3	24	1	58	91.7	0	0	31	0	16	6	6	0	59	69.8	1	0	9	0	3	0	1	0

					D =	> D					
тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU
1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
3	2.2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
3	2.2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	2.3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	2.3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0			0	0		0		0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

PRICEINED: 27772024

1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
6	6	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
7	7	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
14	14.5	0	0	0	0	0	0	0	0	0	0

PRICEINED: 27/77/2024

200020002000000000000000000000000000000	~~~~~~~~~												*********		******		~~~~~~~~		*********					0.0000.0000.0000.000		0.000.000.000.000		*******	202000200020002000
H/TOT	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	93	0	15	4	7	2	121
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	30	0	5	1	1	0	38
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	or x	27	0	7	1	0	0	35
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	4	2	2	0	28
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	5	0	1	0	31
н/тот	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	102	0	21	4	4	0	132
16:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	32	<u>()</u>	3	1	0	1	37
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	•0	7	1	1	0	39
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	0	2	0	0	1	46
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	0	7	0	0	1	38
Н/ТОТ	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	139	0	15	2	1	3	160
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	40	0	8	<del>2</del> 0	0	0	48
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	0	11	ð	0	1	53
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	0	7	1	0	0	61
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	0	10	1	0	0	49
н/тот	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	172	0	36	2	0	1	211
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	0	6	1	0	0	46
18:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	42	0	7	0	0	1	50
18:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	22	1	5	1	1	0	30
18:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	32	0	7	0	0	0	39
н/тот	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	135	1	25	2	1	1	165
12 TOT	0	0	1	0	0	0	0	0	1	1	0	0	6	0	2	0	1	0	9	10.3	0	1	1113	6	232	38	36	13	1439

P--

,									,	,	,								,	.,	,					$\nabla_{2}$				, <u>,</u>
				B =:	> A									B =:										B =		7	•			
PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU
15.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
9.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
14.3	0	0	1	0	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.3	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
66.2	0	0	1	0	0	0	2	0	3	5.6	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5
16.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
15.3	0	0	0	0	0	1	2	0	3	6.1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
28.6	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2
27.3	0	0	0	0	0	0	2	1	3	6.6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3	3
87.7	0	0	0	0	0	1	5	1	7	15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	1	7	8
20.5	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1 1	1
23.8	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
21.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
19.5	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0		0	0	0	0	0	0	0	3	0	0	0	3	3
85.3	0	0	0	0	0	0	3	0	3	6.9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	5	0	0	0	6	6
27.4	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.8	0	0	1	0	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	1	0	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
99.5	0	0	3	0	0	0	2	0	5	7.6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
21	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	0	4	4.5
17.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	1.2
26.9	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
32	0	0	U	0	U 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	U	0	1	0	U	0	0	0	1	1
97.4	0	0	1 1	0	1	0	1 ************************************	0	3	4.3	0	0	0	0	0	0	0	0	0	0	1	0	5 1	0	2 0	0	0	0	9	8.7
28.5	0	0	1	0	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
29 31.3	0	0	1	0	0	0	0	0	1 0	1	0	0	0	0	0	0	0	0	0	0 0	0	0	1	0	0	0	0	0 0	2	2
40.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
129.1	0	0	2	0	0	0	1	0	3	4.3	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
29.3	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2
33.5	0	0	0	0	1	0	0	0	1	2.5 1	0	0	0	0	n	0	0	0	0	0	0	0	0	0	2	1	0	0	3	3.5
30.8	0	n	0	0	0	n	0	0	0	0	0	n	n	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	3.3 2
39.1	0	0	0	0	0	0	2	0	2	4.6	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
132.7	0	0	0	0	1	0	3	0	4	7.9	0	0	0	0	0	0	0	0	0	0	0	0	<u>-</u> 5	0	3	1	0	0	9	2 9.5
17.3	0	0	0	0	0	1	1	0	2	7.9 3.8	0	0	0	0 0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	9.5 1
43.6	0	0	0	0	0	U	1	0	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2
38.1	0	0	1	0	0	0	0	0	1	2.5 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
35.1	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JJ.1	U	U	U	U	U	U	1	U	1	۷.၁	U	U	U	U	U	U	U	U	U		U	U	U	U	U	U	U	U	U	U

134.1	0	0	1	0	0	1	3	0	5	9.4	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	4	4
39.2	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	^ 1	0	0	0	0	0	1	1
35.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	0	0	0	0	1	3	4
31.6	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0	0	0	0	i	0	0	0	0	0	1	1
32.3	0	0	0	0	0	0	2	0	2	4.6	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
138.6	0	0	0	0	0	0	4	0	4	9.2	0	0	0	0	0	0	0	0	0	0	0	0	7	9	0	0	0	1	8	9
38.5	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	9	3	0	0	0	5	5
40.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0 *	\J_1_	0	0	0	2	2
47	0	0	1	0	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7_0	0	0	1	1
165.3	0	0	1	0	1	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	7	0	0	10	10
48	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6	0	0	1	1
54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0 ×	1	0	2	3.3
61.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4
49.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2
213	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	1	0	9	10.3
46.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	2	0	0	0	5	5
51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
31.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2
168.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	5	0	0	0	12	12
1517.2	0	0	12	0	3	3	24	1	43	76.7	0	0	0	0	0	0	0	0	0	0	1	0	52	0	26	2	1	2	84	87.5

C => C

<i>,</i>										,										,						Q			3
5/6		240	C =		0.01/4	0.61/0	DC)/		D.C.I.	D/6		645	C =:		0014	0.61/0	DC1/		<b>D</b> 611	D ( C	N4 / G	645	C =:		0014	× ×			2011
P/C	M/C	CAR	TAXI			OGV2	PSV	TOT	PCU	P/C	M/C	CAR	TAXI		OGV1		PSV	тот	PCU	P/C	M/C	CAR	TAXI	LGV		OGV2		тот	PCU
0	0	20	0	4	0	0	0	24	24	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	19	0	3	0	1	0	23	24.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	27 39	0	10 9	0	1	0 0	38	39.3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0
0	0	39 105	0	9 26	1	0 2	0	49 134	49.5 137.1	0 0	0	3	0	0 1	0	0	0	4	1 4	0	0	0	0	0	0	0	0	0 0	0
······································	0	26	0	3	 T		1	33	36.3	0	0	0	······	1 1	0	0	0	1	1	0	0	······	0	O	0	0	0	0	0
0	0	31	0	6	1	2	1	33 41	45.1	0	0	1	0	U	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	48	0	7	3	0	0	58	59.5	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	53	0	2	0	2	2	59	63.6	0	0	1	0	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	158	0	18	6	5	4	191	204.5	0	0	3	0	4	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
0	0	34	0	6	0	2	0	42	44.6	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	25	0	5	0	3	0	33	36.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	25	1	6	1	2	0	35	38.1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	29	0	8	2	0	1	40	42	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	113	1	25	3	7	1	150	161.6	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
0	0	27	0	7	2	1	0	37	39.3	0	0	0	0	1	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0
0	0	15	0	9	2	1	0	27	29.3	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	22	1	4	0	2	0	29	31.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	31	0	3	0	0	1	35	36	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	95	1	23	4	4	1	128	136.2	0	0	2	0	2	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0	0
0	0	24	1	5	0	3	0	33	36.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	22	0	6	1	0	0	29	29.5	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	21	0	5	0	1	0	27	28.3	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	22	0	4	0	0	0	26	26	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	89	1	20	1	4	0	115	120.7	0	0	3	0	2	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
0	0	21	1	3	2	4	0	31	37.2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	16	0	6	1	0	0	23	23.5	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	15	0	5	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	24	0	2	1	0	0	27	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	76	1	16	4	4	0	101	108.2	0	0		0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	21	0	2	1	0	0	24	24.5	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	27	0	10 5	0	1	0	42	46.1	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	13 20	0	4	1	1	2 0	22 26	25.3 27.8	0 0	0	1	0	0	0	0	0 0	1	1	0	0	0	0	0	0	0	0 0	0 0	0
0	0	81	1	21	 5	1 1	2	20 114	123.7	0	0	3	·····	2	0	0	0	5	1 5	0	0	0	0	0	0	0	0	0	0
n	0	24	0	<u>۲</u> ۱ ۸	1	1	1	35	37.8	0	0	ر 1	0 	1	0	0	0	2	2	0	0	0	0	<u></u>	0	0	0	0	0
n	0	19	0	4	1	0	0	24	24.5	0	0	1	0	1	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0	0
0	0	22	0	8	2	0	0	32	33	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	21	0	2	1	0	0	24	24.5	0	0	1	0	0	0	0	0	- 1	1	0	0	0	0	0	0	0	0	0	0
ľ	•		•	-	-	Ü	•		21.5	1	•	-	•	-	ŭ	•	•	- :	£	1	•	•	•	•	•	•	-	_	Lummina

2000200020002000	000000000000000000000000000000000000000				***********	***********						000000000000000000000000000000000000000			******	~~~~~~~~~~		~~~~~~~~~~~~~			0.0000000000000000000000000000000000000	20002000000000000		200020000000000000000000000000000000000		~~~~~~~~~~~~~	*********	0.0000.0000.0000.0000.000	000000000000000000000000000000000000000
0	0	86	0	22	5	1	1	115	119.8	0	0	4	0	3	1	0	0	8	8.5	0	0	0	0	0	0	0	0	0	0
0	0	22	0	4	0	1	0	27	28.3	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	30	0	3	1	1	0	35	36.8	0	0	2	0	0	0	0	0	2	2	0	0	0	Ta	0	0	0	0	0	0
0	0	32	0	3	1	2	0	38	41.1	0	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0	0
0	1	20	0	8	2	3	0	34	38.3	3	0	0	0	0	0	0	0	3	0.6	0	0	0	0	0	0	0	0	0	0
0	1	104	0	18	4	7	0	134	144.5	3	0	3	0	1	1	0	0	8	6.1	0	0	0	0	100	0	0	0	0	0
1	0	41	0	2	1	0	0	45	44.7	0	0	2	0	1	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0
0	0	26	0	4	2	0	0	32	33	0	0	4	0	1	0	0	0	5	5	0	0	0	0	0		0	0	0	0
0	0	24	0	6	2	1	1	34	37.3	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	3	0	0	0	0
0	0	22	0	7	3	0	0	32	33.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7_0	0	0	0
1	0	113	0	19	8	1	1	143	148.5	0	0	7	0	3	0	0	1	11	12	0	0	0	0	0	0	<b>3</b>	0	0	0
0	0	26	0	6	0	0	0	32	32	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	8	0	0	0
0	0	19	0	2	0	0	1	22	23	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0 ×	0	0	0
0	0	24	0	5	0	0	0	29	29	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	21	0	2	1	0	0	24	24.5	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	90	0	15	1	0	1	107	108.5	0	0	5	0	2	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
0	0	22	1	4	0	0	0	27	27	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
0	0	13	0	4	1	1	0	19	20.8	0	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	20	0	5	4	0	1	30	33	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	16	0	9	0	0	0	25	25	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	71	1	22	5	1	1	101	105.8	0	0	10	0	3	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0
1	1	1181	6	245	47	40	12	1533	1619.1	3	0	49	0	25	3	0	1	81	81.1	0	0	0	0	0	0	0	0	0	0



Survey Name: 24543 - Killala, Co. Mayo

Site:

Access To Newtownwhite School/R314/Access To Mullafarry Presbyterian Church Location:

Date: Tue 01-Oct-2024 Arm A - Access To Newtownwhite School Arm B 8314

Arm B - R 14
Arm C - Access To Mullafarry Presbyterian Church
Arm D - R314

Google				Map data 802004	> A	••••••		• • • • • • • • • • • • • • • • • • • •						<b>A</b> =				•••••				•••••		A =		••••••		•••••
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	1	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	1	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	1	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	10	10	0	0	3	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0	0	0	0	1	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	0	0	0	0	1	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	1	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	1	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	1	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3	0	0	0	0	1	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3	3	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	1	0	0	0	0	0

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H/TOT	0	0	U	0	0	0	0	0	0	0	0	U	6	U	2	U	U	U	8	8	0	0	1	0	0	U	U	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3	D	0	0	0	0	1	0	1
15:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Н/ТОТ	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4	0	6	1	0	1	1	0	1
16:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0.1	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	٠ وي	0	1	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	o Z	<b>_</b> 0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	70	0	0	0	0
Н/ТОТ	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	0	0	1		1	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	3	3.5	0	0	1	0	<b>)</b> 0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
н/тот	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	5	5.5	0	0	1	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Н/ТОТ	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0	0	1	0	1	0	0	0
12 TOT	0	0	0	0	0	0	0	0	0	0	0	0	49	0	5	1	0	0	55	55.5	0	0	12	0	5	2	0	1
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3	1	1	0	0	1	0	0		0	0	1	1	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0
1	0	0	0	0	3	0	0	0	0	0	3	3	0	0	6	0	0	0	0	1	7	8	0	0	0	0	0	0		0
1	3	3	0	0	6	0	0	0	0	0	6	6	0	0	12	0	0	0	0	1	13	14	0	0	0	0	0	0	0	0
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1	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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1	-	0	0	0	2		0	1	0		3	3	0	0	0	0	1	0	0		1	1	0	0	0	0	0	0	-	0
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20	22	0	0	36	0	5	2	0	1	44	46	0	0	45	0	8	0	0 2		55	57	0	0	0	0	0	0	0	0

PRICHARD: PARAZOS

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тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU	P/C	M/C	CAR	TAXI		OGV1	OGV2	PSV
0	0	0	0	1	0	0	0	0	0	1	1	0	0	11	0	2	0	1	0	14	15.3	0	0	0	0	0	0	0	0
0	0	0	0	2	0	0	0	0	0	2	2	0	0	7	0	1	0	1	0	9	10.3	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	6	0	4	0	1	1	12	14.3	0	0	1	0	0	0	0	0
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0	0	0	0	3	0	2	1	0	0	6	6.5	0	0	41	0	15	0	4	1	61	67.2	0	0	1	0	0	0	0	0
0	0	0	0	3	0	0	0	0	0	3	3	0	0	8	0	4	1	0	0	13	13.5	0	0	1	0	0	0	0	0
0	0	0	0	2	0	0	0	2	0	4	6.6	0	0	11	0	1	0	1	0	13	14.3	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	18	0	5	0	2	0	25	27.6	0	0	0	0	0	0	0	0
0	0	0	0	2	0	0	0	1	0	3	4.3	0	0	17	0	2	2	1	0	22	24.3	0	0	0	0	0	0	0	0
0	0	0	0	7	0	0	1	3	0	11	15.4	0	0	54	0	12	3	4	0	73	79.7	0	0	1	0	1	0	0	0
0	0	0	0	1	0	0	1	0	0	2	2.5	0	0	15	0	2	1	0	0	18	18.5	0	0	2	0	0	0	0	0
0	0	0	0	0	0	0	2	1	0	3	5.3	0	0	19	0	1	1	1	0	22	23.8	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	12	0	4	1	0	1	18	19.5	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	1	2.3	0	0	12	0	5	1	0	0	18	18.5	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	1	7	0	1	0	30	31.3	0	0	1	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	14	1	0	2	0	0	17	18	0	0	0	0	0	0	0	0
0	0	0	0	2	0	1	0	2	0	5	7.6	0	0	63	3	15	4	5	1	91	100.5	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	3	0	3	6.9	0	0	17	0	4	0	0	0	21	21	0	0	0	0	0	0	0	0
0	0	0	0	1	0	1	0	1	0	3	4.3	0	0	12	0	2	0	0	0	14	14	0	0	0	0	0	0	0	0
0	0	0	0	2	0	1	0	0	0	3	3	0	0	16	0	2	2	3	0	23	27.9	0	0	1	0	0	0	0	0
0	0	0	0	1	0	0	0	1	0	2	3.3	0	0	22	1	5	0	0	0	28	28	0	0	0	0	0	0	0	0
0	0	0	0	4	0	2	0	5	0	11	17.5	0	0	67	1	13	2	3	0	86	90.9	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	4	1	0	0	28	28.5	0	0	1	0	0	0	0	0
0	0	0	0	1	0	1	0	0	0	2	2	0	0	18	0	4	3	0	0	25	26.5	0	0	0	0	1	0	0	0
0	0	0	0	1	0	0	0	1	0	2	3.3	0	0	24	0	5	0	1	0	30	31.3	0	0	1	0	0	0	0	0
0	0	0	0	2	0	1	1	2	0	6	9.1	0	0	24	0	11	0	1	1	37	39.3	0	0	0	0	0	0	0	0
0	0	0	0	4	0	2	1	3	0	10	14.4	0	0	89	0	24	4	2	1	120	125.6	0	0	2	0	1	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	18	0	5	2	1	0	26	28.3	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	10	1	0	1	34	35.5	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1	0	3	4.8	0	0	20	1	4	1	1	1	28	30.8	0	0	0	0	0	0	0	0
0	0	0	0	2	0	0	0	1	0	3	4.3	0	0	25	0	8	1	2	0	36	39.1	0	0	1	0	0	0	0	0
0	0	0	0	4	0	0	1	2	0	7	10.1	0	0	85	1	27	5	4	2	124	133.7	0	0	1	0	0	0	0	0
0	0	0	0	1	0	2	0	0	0	3	3	0	0	14	0	3	0	1	0	18	19.3	0	0	0	0	1	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	27	0	5	0	2	2	36	40.6	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	2	0	2	4.6	0	0	19	0	5	3	2	0	29	33.1	0	0	0	0	0	1	0	0
0	0	0	0	1	0	0	0	1	0	2	3.3	0	0	24	0	2	1	2	0	29	32.1	0	0	0	0	0	0	0	0

0	0	0	0	2	0	3	0	3	0	8	11.9	0	0	84	0	15	4	7	2	112	125.1	0	0	0	0	1	1	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	1	30	0	5	1	1	0	38	39.2	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	1	1	0	3	4.8	0	0	26	0	8	1	0	0	35	35.5	0	0	0	0	0	0	0	0
0	0	0	0	1	0	1	0	2	0	4	6.6	0	0	17	0	4	2	2	0	25	28.6	0	0	0	0	0	0	0	0
0	0	0	0	2	0	1	0	0	0	3	3	0	0	25	0	4	0	1	0	30	31.3	0	0	0	0	0	0	0	0
0	0	0	0	4	0	2	1	3	0	10	14.4	0	1	98	0	21	4	4	0	128	134.6	0	0	0	0	0	0	0	0
0	0	0	0	3	0	0	0	0	0	3	3	0	0	34	0	2	1	0	1	38	39.5	0	<b>`</b> O.	0	0	0	0	0	0
0	0	0	0	1	0	1	1	2	0	5	8.1	0	0	27	0	7	1	1	0	36	37.8	0	0	<del>ر</del> ع	0	0	0	0	0
0	0	0	0	2	0	0	0	1	0	3	4.3	0	0	40	0	2	0	0	1	43	44	0	0	2	0	0	0	0	0
0	0	0	0	0	0	2	0	0	0	2	2	0	0	34	0	3	0	0	0	37	37	0	0	1 7	0	0	0	0	0
0	0	0	0	6	0	3	1	3	0	13	17.4	0	0	135	0	14	2	1	2	154	158.3	0	0	4	79	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	0	7	0	0	0	46	46	0	0	1	<b>4</b> 2	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	40	0	11	0	0	1	52	53	0	0	0	0 🗙	0	0	0	0
0	0	0	0	3	0	0	0	0	0	3	3	0	0	51	0	8	1	0	0	60	60.5	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	0	10	1	0	0	49	49.5	0	0	0	0	0	0	0	0
0	0	0	0	4	0	0	0	0	0	4	4	0	0	168	0	36	2	0	1	207	209	0	0	1	0	1	0	0	0
0	0	0	0	1	0	0	0	1	0	2	3.3	0	0	37	0	6	1	0	0	44	44.5	0	0	1	0	1	0	0	0
0	0	0	0	1	0	1	0	1	0	3	4.3	0	0	45	0	6	0	0	1	52	53	0	0	0	0	0	0	0	0
0	0	0	0	4	0	0	0	0	0	4	4	0	0	22	1	5	1	1	0	30	31.8	0	0	0	0	0	0	0	0
0	0	0	0	1	0	2	0	0	0	3	3	0	0	32	0	7	0	0	0	39	39	0	0	1	0	0	0	0	0
0	0	0	0	7	0	3	0	2	0	12	14.6	0	0	136	1	24	2	1	1	165	168.3	0	0	2	0	1	0	0	0
0	0	0	0	48	0	18	9	29	0	104	146.2	0	1	1078	6	228	36	36	12	1397	1473.2	0	0	16	0	5	1	0	0

PRICHARD: PARA

§		 3	•••••		C =							 Š			C =:						3				C	- D		•••••	•••••
тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU	P/C	M/C	CAR	TAXI		OGV1	OGV2	PSV
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	5	0	2	0	1	0	8	9.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	3	1	0	4	6.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	1	0	1	3	1	0	6	8.8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	3	0	1	0	1	0	5	6.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	1	0	1	0	3	4.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	2	0	1	0	1	0	4	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0 0	0	0	0	0 0	1	1	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0 0
1	1	0	0	1	0	0	0	0	0	0 1	0 1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	3	0	0	2	0	0	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	0	0	<u>-</u> 1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	<del>1</del>	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
₹ ;		.8								;	·	R							:	3	₹i	₹							

2	2.5	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
0	0	0	0	0	0	2	0	1	0	3	4.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>~</b>	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	2	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	3	3	1	0	7	9.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	<b>`</b> Ø.	0	0	1	0	0	0
3	3	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0 .	ورح	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0-	0	0	0	0	0
1	1	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0 7	0	0	0	0	0
4	4	0	0	5	0	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0 <	79	1	0	0	0
1	1	0	0	2	0	1	1	0	0	4	4.5	0	0	0	0	0	0	0	0	0	0	0	0	1	<b>4</b>	0	0	1	0
0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0 🗙	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	6	0	1	1	0	0	8	8.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
1	1	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	3	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
22	22.5	0	0	34	0	13	8	5	0	60	70.5	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	1	0

PRICHIAND: 27/7/2

	ų									¿	ų	ę								ų	·				<b>7</b> 05				
					D =	:> A									D =	=> B									D	> C			
тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV
0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	4	0	0	0	23	23	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	3	0	1	0	23	24.3	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	10	0	2	0	40	42.6	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	0	8	1	1	0	49	50.8	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	105	0	25	1	4	0	135	140.7	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	1	2	3	0	0	23	0	3	2	1	0	29	31.3	0	0	0	0	0	0	0	0
0	0	0	0	2	0	0	0	0	0	2	2	0	0	29	0	6	2	4	1	42	49.2	0	0	0	0	0	0	0	0
0	0	0	0	5	0	0	0	0	0	5	5	0	0	41	0	7	3	1	0	52	54.8	0	0	0	0	0	0	0	0
0	0	0	0	4	0	0	0	1	1	6	8.3	0	0	51	0	3	0	3	1	58	62.9	0	0	0	0	0	0	0	1
0	0	0	0	12	0	0	0	1	2	15	18.3	0	0	144	0	19	7	9	2	181	198.2	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	0	6	0	3	0	43	46.9	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	5	0	4	0	33	38.2	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	25	1	6	1	2	0	35	38.1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0	8	1	1	1	40	42.8	0	0	0	0	0	1	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0	112	1	25	2	10	1	151	166	0	0	0	0	0	1	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	7	2	1	0	36	38.3	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	8	2	2	0	28	31.6	0	0	0	0	0	0	0	0
0	0	0	0	2	0	1	0	0	0	3	3	0	0	20	1	3	0	2	0	26	28.6	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	0	4	0	1	1	38	40.3	0	0	0	0	0	0	0	0
0	0	0	0	2	0	1	0	0	0	3	3	0	0	94	1	22	4	6	1	128	138.8	0	0	1	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	25	1	4	0	3	0	33	36.9	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	6	1	0	0	27	27.5	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	19	0	5	0	2	0	26	28.6	0	0	0	0	0	0	0	0
0	0	0	0	2	0	1	0	0	0	3	3	0	0	20	0	3	0	0	0	23	23	0	0	0	0	0	0	0	0
0	0	0	0	3	0	2	0	0	0	5	5	0	0	84	1	18	1	5	0	109	116	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	22	1	3	1	5	0	32	39	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	16	0	6	1	0	0	23	23.5	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	0	0	1	1	0	0	16	0	4	0	0	0	20	20	0	0	0	0	0	0	0	0
0	0	0	0	2	0	0	0	0	0	2	2	0	0	22	0	2	1	0	0	25	25.5	0	0	0	0	0	0	0	0
1	1	0	0	4	0	0	1	0	0	5	5.5	0	0	76	1	15	3	5	0	100	108	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	20	0	2	1	1	0	24	25.8	0	0	1	0	0	0	0	0
0	0	0	0	1	0	1	0	0	0	2	2	0	0	25	0	11	3	2	0	41	45.1	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	12	1	3	0	1	2	19	22.3	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	5	1	3	0	30	34.4	0	0	0	0	0	0	0	0
0	0	0	0	3	0	1	0	0	0	4	4	0	0	 78	1	21	- 5	7	2	114	127.6	0	0	2	0	0	0	0	0
1	1	0	0	1	0	0	0	0	0	1	1	0	0	23	0	9	2	2	1	37	41.6	0	0	0	0	0	0	0	0
0	0	0	0	2	0	1	0	0	0	3	3	0	0	17	0	2	1	1	0	21	22.8	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	9	2	0	0	35	36	0	0	0	0	0	0	0	0
1	1	0	n	n	0	n	1	0	0	1	1.5	0	n	20	0	2	<u>^</u>	1	0	23	24.3	0	0	1	0	n	n	n	0
1	1	J	U	J	U	U	1	U	J	_	1.5	U	U	20	U	_	U	1	J	23	∠+.∋	J	J	т	J	U	U	J	J

2	2	0	0	3	0	1	1	0	0	5	5.5	0	0	84	0	22	5	4	1	116	124.7	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	4	0	2	0	28	30.6	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	29	0	3	1	1	0	34	35.8	0	0	0	0	0	0	0	0
0	0	0	0	2	0	1	0	0	0	3	3	0	0	30	0	3	1	3	0	37	41.4	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	1	20	0	7	2	5	0	35	41.9	0	0	0	0	0	0	0	0
0	0	0	0	4	0	1	0	0	0	5	5	0	1	101	0	17	4	11	0	134	149.7	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	0	0	1	1	1	0	40	0	3	1	0	0	45	44.7	0	<b>`</b> O.	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	4	2	0	0	31	32	0	0	0_0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	6	3	1	1	37	40.8	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	7	3	0	0	32	33.5	0	0	0 7	0	0	0	0	0
1	1	0	0	1	0	0	0	0	0	1	1	1	0	113	0	20	9	1	1	145	151	0	0	0 <	9	0	0	0	0
2	3.3	0	0	1	0	0	0	0	0	1	1	0	0	28	0	6	0	0	0	34	34	0	0	0	<b>6</b>	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	2	0	0	1	21	22	0	0	1	0	0	0	0	0
0	0	0	0	2	0	0	0	0	0	2	2	0	0	24	0	5	0	0	0	29	29	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	1	1	0	0	20	0	2	1	0	0	23	23.5	0	0	0	0	0	0	0	0
2	3.3	0	0	4	0	0	0	0	0	4	4	0	0	90	0	15	1	0	1	107	108.5	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	1	4	0	0	0	28	28	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	1	0	0	2	2.5	0	0	14	0	3	0	1	0	18	19.3	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	1	0	0	1	1.5	0	0	20	0	4	3	0	1	28	30.5	0	0	0	1	0	0	0	0
0	0	0	0	2	0	1	0	0	0	3	3	0	0	13	0	8	0	0	0	21	21	0	0	1	0	0	0	0	0
2	2	0	0	2	0	2	2	0	0	6	7	0	0	70	1	19	3	1	1	95	98.8	0	0	1	1	0	0	0	0
9	10.3	0	0	38	0	8	4	1	2	53	58.3	1	1	1151	6	238	45	63	10	1515	1628	0	0	6	1	1	1	0	1

				•••••	D =	> D			•••••		
тот	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	PSV	тот	PCU
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1.5	0	0	0	0	0	0	0	0	0	0
1	1.5	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0

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1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	0
10	11.5	0	0	0	0	0	0	0	0	0	0

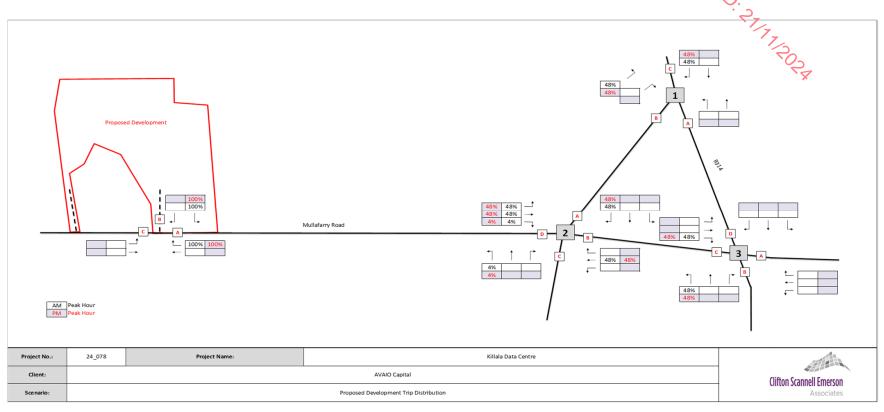
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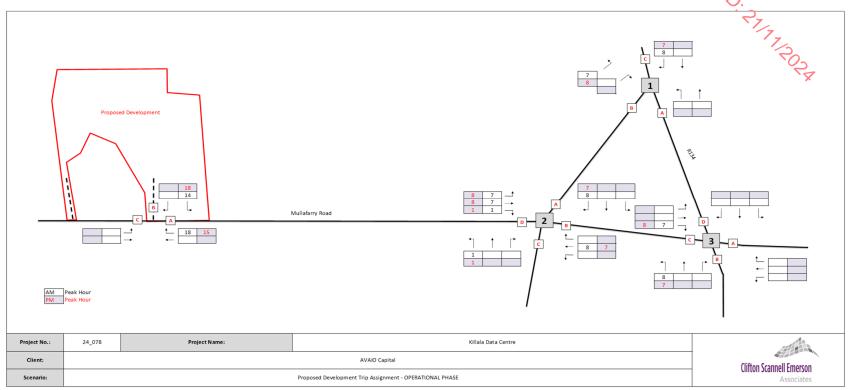
### **APPENDIX 13.2**

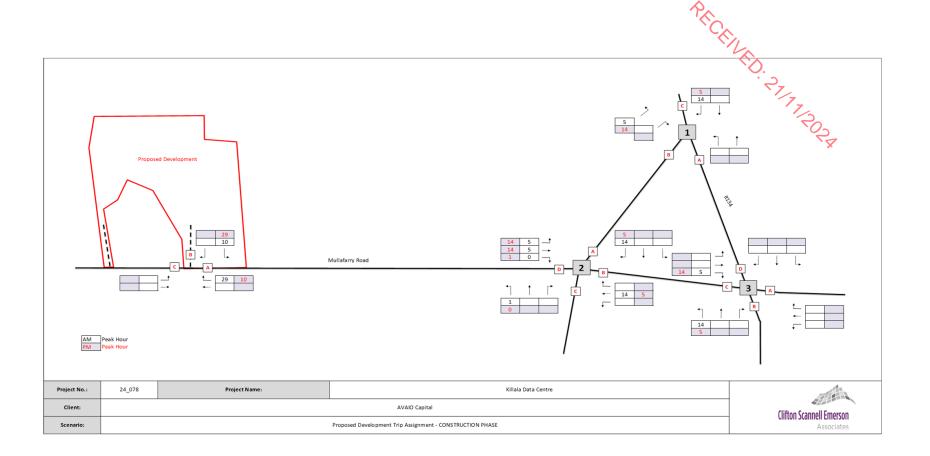
### **TRAFFIC FLOW DIAGRAMS**

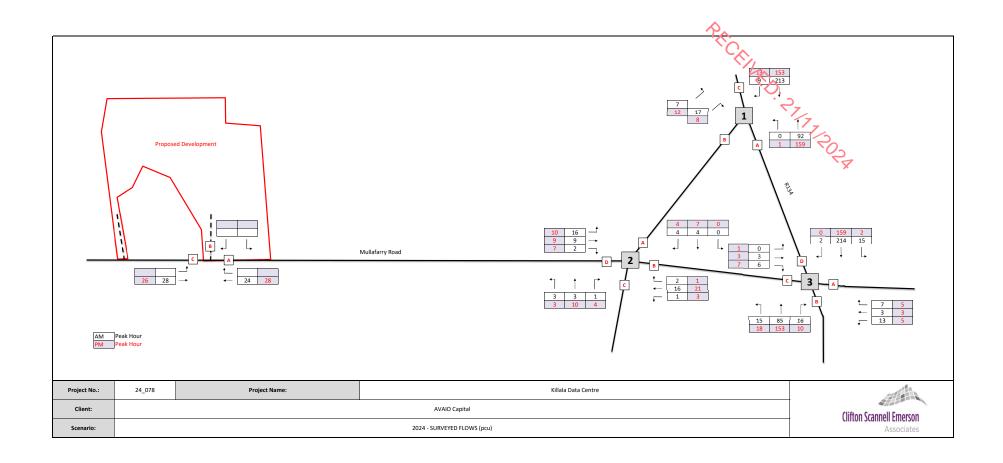
### PECEN

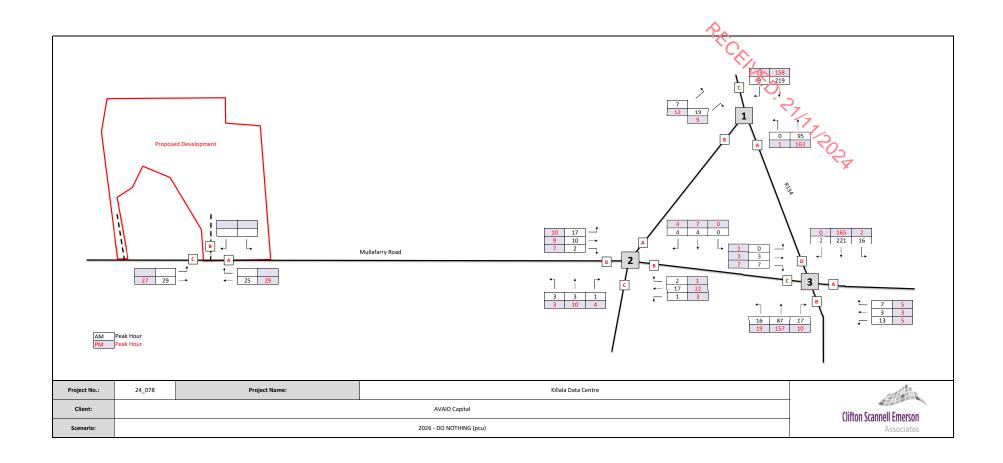


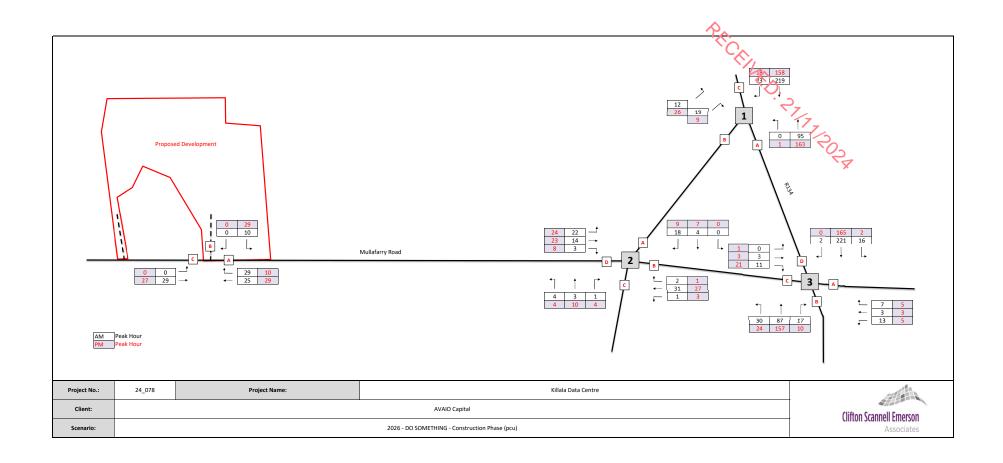
### P.E.C.E.I.L.E.

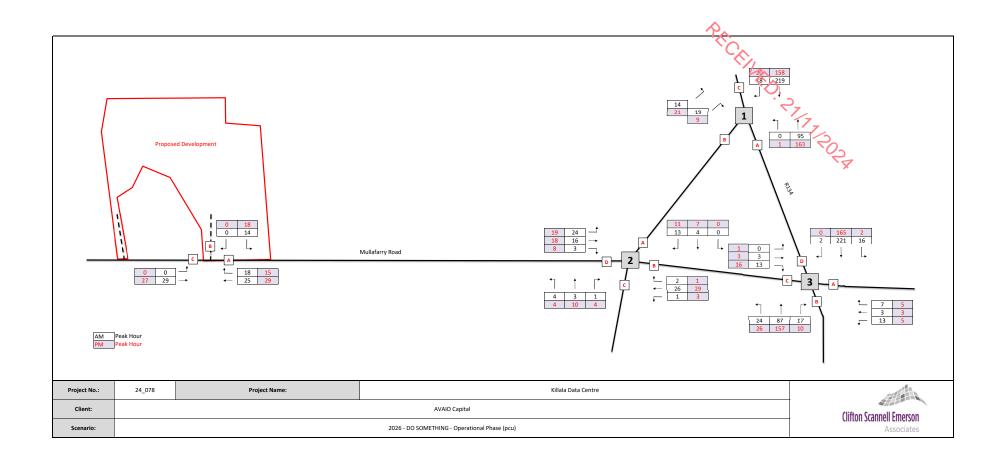


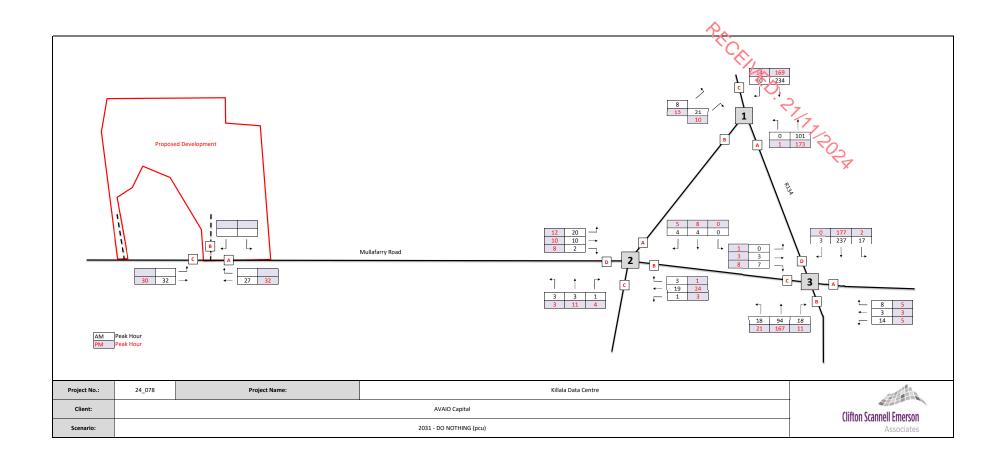


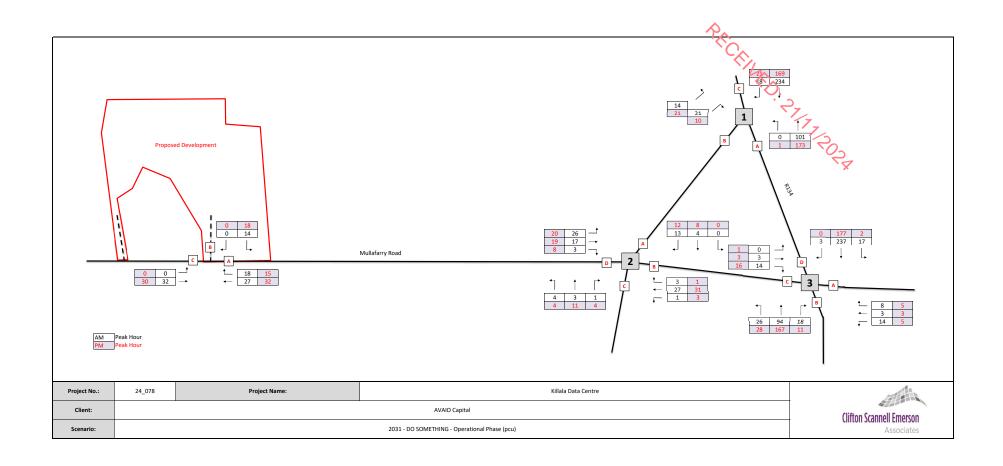


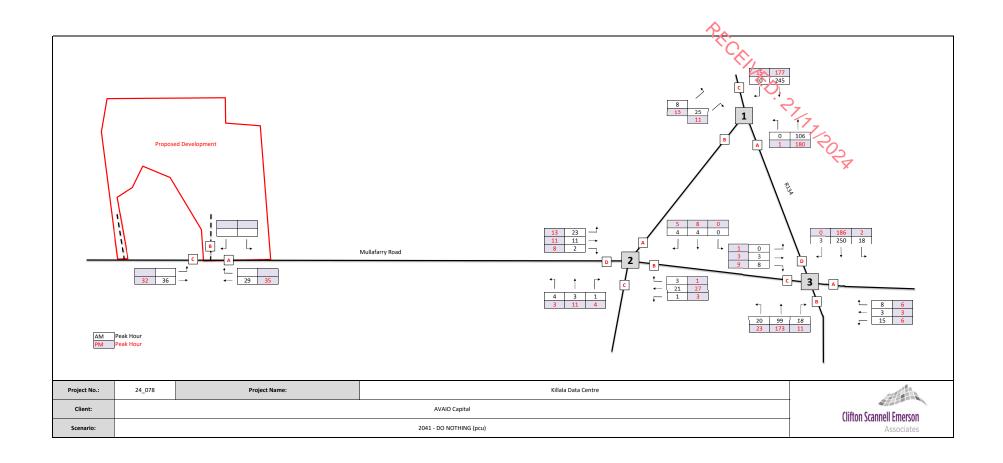


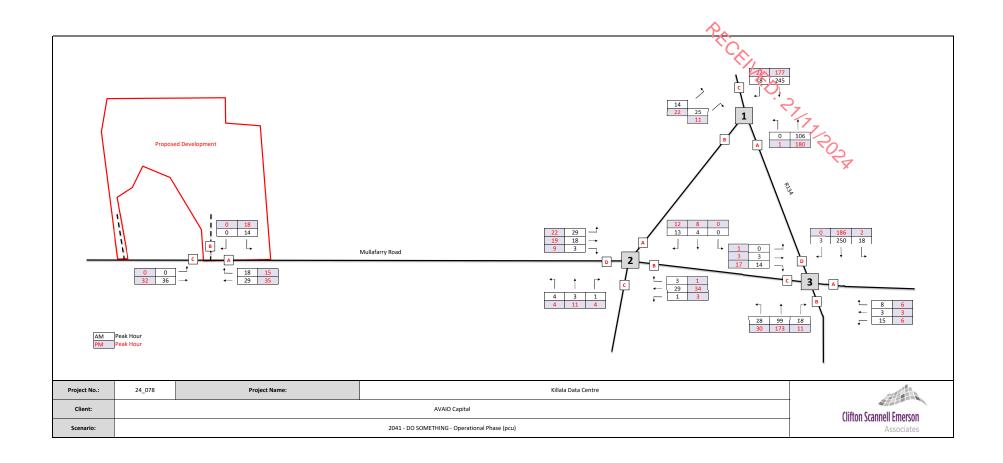












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### **APPENDIX 13.3**

### JUNCTIONS 10 (PICADY) OUTPUT REPORTS



### **Junctions 10**

### **PICADY 10 - Priority Intersection Module**

Version: 10.0.4.1693 © Copyright TRL Software Limited, 2021

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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Junction 1 - AM & PM.j10

Path: Q:\2024 Jobs\24\_078 Killala DC Project\08. Traffic\03. Junction Models\Junction 1

Report generation date: 17/10/2024 13:56:36

»Junction 1 - 2024 Base Year, AM

»Junction 1 - 2024 Base Year, PM

»Junction 1 - 2026 Do Nothing, AM

»Junction 1 - 2026 Do Nothing, PM

»Junction 1 - 2026 Do Something Construction Phase, AM

»Junction 1 - 2026 Do Something Construction Phase, PM

»Junction 1 - 2026 Do Something Operational Phase, AM

»Junction 1 - 2026 Do Something Operational Phase, PM

»Junction 1 - 2031 Do Nothing, AM

»Junction 1 - 2031 Do Nothing, PM

»Junction 1 - 2031 Do Something Operational Phase, AM

»Junction 1 - 2031 Do Something Operational Phase, PM

»Junction 1 - 2041 Do Nothing, AM

»Junction 1 - 2041 Do Nothing, PM

»Junction 1 - 2041 Do Something Operational Phase, AM

»Junction 1 - 2041 Do Something Operational Phase, PM



### Summary of junction performance

		А	M			Р	M			
	Set ID	Queue (PCU)	Delay (s)	RFC	Los	Set ID	Queue (PCU)	Delay (s)	RFC	Los
			Jun	ction	1 - 20	)24 Ba	se Year			
Stream B-C		0.0	5.72	0.01	Α		0.0	6.11	0.02	Α
Stream B-A	D1	0.1	14.58	0.04	В	D2	0.0	10.34	0.02	В
Stream C-AB		0.0	5.70	0.02	Α		0.0	6.31	0.02	Α
			Jun	ction	1 - 20	26 Do	Nothing			
Stream B-C		0.0	5.77	0.01	Α		0.0	6.15	0.02	Α
Stream B-A	D3	0.1	14.67	0.04	В	D4	0.0	10.41	0.02	В
Stream C-AB		0.0	5.70	0.02	Α		0.0	6.33	0.02	Α
		Junctio	n 1 - 202	6 Do	Some	ething (	Construction	n Phase		
Stream B-C		0.0	6.05	0.02	Α		0.1	7.44	0.05	Α
Stream B-A	D5	0.1	15.04	0.04	С	D6	0.0	10.93	0.02	В
Stream C-AB		0.1	7.01	0.04	Α		0.0	6.53	0.03	Α
		Junctio	on 1 - 202	26 Do	Som	ething	Operational	l Phase		
Stream B-C		0.0	6.01	0.02	Α		0.0	6.47	0.04	А
Stream B-A	D7	0.1	15.04	0.04	С	D8	0.0	10.82	0.02	В
Stream C-AB		0.0	6.09	0.03	Α		0.0	6.55	0.04	Α
			Jun	ction	1 - 20	31 Do	Nothing			
Stream B-C		0.0	5.80	0.01	Α		0.0	6.19	0.02	Α
Stream B-A	D9	0.1	14.98	0.05	В	D10	0.0	10.68	0.02	В
Stream C-AB		0.0	5.72	0.02	Α		0.0	6.41	0.03	Α
		Junctio	on 1 - 203	31 Do	Som	ething	Operational	l Phase		
Stream B-C		0.0	6.07	0.02	Α		0.0	6.53	0.04	А
Stream B-A	D11	0.1	15.29	0.05	С	D12	0.0	11.06	0.02	В
Stream C-AB		0.0	6.10	0.03	Α		0.0	6.58	0.04	Α
			Jun	ction	1 - 20	41 Do	Nothing			
Stream B-C		0.0	5.87	0.01	Α		0.0	6.23	0.02	Α
Stream B-A	D13	0.1	15.27	0.06	С	D14	0.0	10.96	0.02	В
Stream C-AB		0.0	5.73	0.02	Α		0.0	6.49	0.03	Α
		Junctio	on 1 - 204	41 Do	Som	ething	Operational	l Phase		
Stream B-C		0.0	6.17	0.02	А		0.0	6.57	0.04	А
Stream B-A	D15	0.1	15.57	0.06	С	D16	0.0	11.38	0.03	В
Stream C-AB		0.0	6.11	0.03	Α		0.0	6.66	0.04	Α

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Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

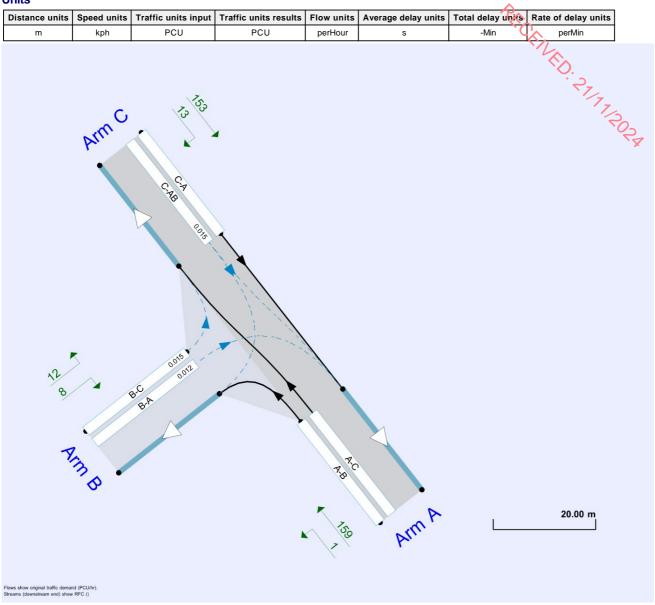
### File summary

### **File Description**

Title	
Location	
Site number	
Date	15/10/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\fernando.figueiredo
Description	



### **Units**



The junction diagram reflects the last run of Junctions.

### **Analysis Options**

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00



### **Demand Set Summary**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HM:mm)	Time segment length (min)
D1	2024 Base Year	AM	ONE HOUR	00:00	01:30	15
D2	2024 Base Year	PM	ONE HOUR	16:00	17:30	15
D3	2026 Do Nothing	AM	ONE HOUR	00:00	01:30	15
D4	2026 Do Nothing	PM	ONE HOUR	16:00	17:30	ئے 15
D5	2026 Do Something Construction Phase	AM	ONE HOUR	00:00	01:30	15
D6	2026 Do Something Construction Phase	PM	ONE HOUR	16:00	17:30	15
D7	2026 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15
D8	2026 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15
D9	2031 Do Nothing	AM	ONE HOUR	00:00	01:30	15
D10	2031 Do Nothing	PM	ONE HOUR	16:00	17:30	15
D11	2031 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15
D12	2031 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15
D13	2041 Do Nothing	AM	ONE HOUR	00:00	01:30	15
D14	2041 Do Nothing	PM	ONE HOUR	16:00	17:30	15
D15	2041 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15
D16	2041 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

### **Analysis Set Details**

ID	Name	Network flow scaling factor (%)
A1	Junction 1	100.000

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### Junction 1 - 2024 Base Year, AM

### **Data Errors and Warnings**

No errors or warnings

### **Junction Network**

### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.00	Α

### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.00	Α

### **Arms**

### **Arms**

Arm	Name	Description	Arm type
Α	R314 (SE)		Major
В	Access to R314 (SW)		Minor
С	R314 (NW)		Major

### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
С	6.20			156.0	✓	1.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

### **Minor Arm Geometry**

,	Arm	Minor arm type	Width at give- way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
	В	One lane plus flare	10.00	5.20	2.20	2.20	2.20	✓	1.00	140	45

### Slope / Intercept / Capacity

### **Priority Intersection Slopes and Intercepts**

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	549	0.099	0.250	0.158	0.358
B-C	669	0.102	0.257	-	-
С-В	664	0.255	0.255	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

### **Traffic Demand**

### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024 Base Year	AM	ONE HOUR	00:00	01:30	15



Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	92	100.000	
В		✓	24	100.000	
С		✓	222	100.000	

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### **Origin-Destination Data**

### Demand (PCU/hr)

		То					
		Α	В	C			
F	Α	0	0	92			
From	В	17	0	7			
	С	213	9	0			

### **Vehicle Mix**

### **Heavy Vehicle Percentages**

	То					
From		Α	В	C		
	Α	0	0	5		
	В	88	0	0		
	U	5	0	0		

### Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.01	5.72	0.0	А
B-A	0.04	14.58	0.1	В
C-AB	0.02	5.70	0.0	А
C-A				
A-B				
A-C				

### Main Results for each time segment

### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	5	647	0.008	5	0.0	5.607	A
B-A	13	504	0.025	13	0.0	13.781	В
C-AB	7	648	0.010	7	0.0	5.611	A
C-A	160			160			
A-B	0			0			
A-C	69			69			



### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	6	643	0.010	6	0.0	5.657	A
B-A	15	495	0.031	15	0.1	14.106	В
C-AB	8	646	0.013	8	0.0	5.647	. A
C-A	191			191			77
A-B	0			0			77.
A-C	83			83			(2)

### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	637	0.012	8	0.0	5.724	А
B-A	19	483	0.039	19	0.1	14.575	В
C-AB	10	642	0.016	10	0.0	5.695	A
C-A	234			234			
A-B	0			0			
A-C	101			101			

### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	8	636	0.012	8	0.0	5.725	A
B-A	19	483	0.039	19	0.1	14.577	В
C-AB	10	642	0.016	10	0.0	5.695	A
C-A	234			234			
A-B	0			0			
A-C	101			101			

### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	6	642	0.010	6	0.0	5.659	A
B-A	15	495	0.031	15	0.1	14.111	В
C-AB	8	646	0.013	8	0.0	5.647	A
C-A	191			191			
A-B	0			0			
A-C	83			83			

### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	5	647	0.008	5	0.0	5.611	A
B-A	13	504	0.025	13	0.0	13.787	В
C-AB	7	648	0.010	7	0.0	5.611	A
C-A	160			160			
A-B	0			0			
A-C	69			69			

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### Junction 1 - 2024 Base Year, PM

### **Data Errors and Warnings**

No errors or warnings

### **Junction Network**

### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.69	Α

### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.69	Α

### **Traffic Demand**

### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024 Base Year	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	160	100.000	
В		✓	20	100.000	
С		✓	166	100.000	

### **Origin-Destination Data**

### Demand (PCU/hr)

	То				
		Α	В	O	
	Α	0	1	159	
From	В	8	0	12	
	C	153	13	0	

### **Vehicle Mix**

### Heavy Vehicle Percentages

	То				
		Α	В	С	
	Α	0	0	3	
From	В	40	0	0	
	С	3	7	0	



### Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.02	6.11	0.0	A
B-A	0.02	10.34	0.0	В
C-AB	0.02	6.31	0.0	А
C-A				
A-B				
A-C				



### Main Results for each time segment

### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	9	617	0.015	9	0.0	5.921	A
B-A	6	521	0.012	6	0.0	9.785	А
C-AB	10	636	0.015	10	0.0	6.150	A
C-A	115			115			
A-B	0.75			0.75			
A-C	120			120			

### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	611	0.018	11	0.0	6.000	Α
B-A	7	511	0.014	7	0.0	10.012	В
C-AB	12	631	0.019	12	0.0	6.219	А
C-A	137			137			
A-B	0.90			0.90			
A-C	143			143			

### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	13	602	0.022	13	0.0	6.112	A
B-A	9	496	0.018	9	0.0	10.344	В
C-AB	14	624	0.023	14	0.0	6.313	А
C-A	168			168			
A-B	1			1			
A-C	175			175			

### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	13	602	0.022	13	0.0	6.112	A
B-A	9	496	0.018	9	0.0	10.344	В
C-AB	14	624	0.023	14	0.0	6.313	А
C-A	168			168			
A-B	1			1			
A-C	175			175			



### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s	Unsignalised level of service
В-С	11	611	0.018	11	0.0	6.003	A
B-A	7	511	0.014	7	0.0	10.014	В
C-AB	12	631	0.019	12	0.0	6.219	O. A
C-A	137			137			77
A-B	0.90			0.90			77.
A-C	143			143			7

### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	9	617	0.015	9	0.0	5.925	А
B-A	6	521	0.012	6	0.0	9.785	А
C-AB	10	636	0.015	10	0.0	6.153	А
C-A	115			115			
A-B	0.75			0.75			
A-C	120			120			



### Junction 1 - 2026 Do Nothing, AM

## PECENED. 21/1/202

### **Data Errors and Warnings**

No errors or warnings

### **Junction Network**

### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.06	А

### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.06	Α

### **Traffic Demand**

### **Demand Set Details**

11	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D	2026 Do Nothing	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	95	100.000
В		✓	26	100.000
С		✓	228	100.000

### **Origin-Destination Data**

### Demand (PCU/hr)

	То				
		Α	В	С	
	Α	0	0	95	
From	В	19	0	7	
	С	219	9	0	

### **Vehicle Mix**

### **Heavy Vehicle Percentages**

	То			
		Α	В	С
	Α	0	0	5
From	В	88	0	0
	C	5	0	0



### Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.01	5.77	0.0	A
B-A	0.04	14.67	0.1	В
C-AB	0.02	5.70	0.0	А
C-A				
A-B				
A-C				



### Main Results for each time segment

### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	5	642	0.008	5	0.0	5.649	A
B-A	14	504	0.028	14	0.1	13.820	В
C-AB	7	648	0.010	7	0.0	5.616	A
C-A	165			165			
A-B	0			0			
A-C	72			72			

### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	638	0.010	6	0.0	5.701	А
B-A	17	495	0.035	17	0.1	14.167	В
C-AB	8	645	0.013	8	0.0	5.653	А
C-A	197			197			
A-B	0			0			
A-C	85			85			

### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	8	631	0.012	8	0.0	5.772	A
B-A	21	482	0.043	21	0.1	14.668	В
C-AB	10	641	0.016	10	0.0	5.702	A
C-A	241			241			
A-B	0			0			
A-C	105			105			

### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	8	631	0.012	8	0.0	5.773	А
B-A	21	482	0.043	21	0.1	14.670	В
C-AB	10	641	0.016	10	0.0	5.702	А
C-A	241			241			
A-B	0			0			
A-C	105			105			



### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	6	637	0.010	6	0.0	5.705	A
B-A	17	495	0.035	17	0.1	14.176	В
C-AB	8	645	0.013	8	0.0	5.655	O. A
C-A	197			197			77
A-B	0			0			77.
A-C	85			85			7

### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	5	642	0.008	5	0.0	5.653	А
B-A	14	504	0.028	14	0.1	13.833	В
C-AB	7	648	0.010	7	0.0	5.616	A
C-A	165			165			
A-B	0			0			
A-C	72			72			

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### Junction 1 - 2026 Do Nothing, PM

### **Data Errors and Warnings**

No errors or warnings

### **Junction Network**

### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.70	Α

### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.70	Α

### **Traffic Demand**

### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2026 Do Nothing	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	164	100.000
В		✓	21	100.000
С		✓	171	100.000

### **Origin-Destination Data**

### Demand (PCU/hr)

		То				
		Α	В	С		
	Α	0	1	163		
From	В	9	0	12		
	С	158	13	0		

### **Vehicle Mix**

### **Heavy Vehicle Percentages**

_					
	То				
From		Α	В	С	
	Α	0	0	3	
	В	41	0	0	
	C	4	7	0	



### Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	
в-с	0.02	6.15	0.0	А	
B-A 0.02		10.41	0.0	В	
C-AB	0.02	6.33	0.0	А	
C-A					
A-B					
A-C					

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### Main Results for each time segment

### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	9	614	0.015	9	0.0	5.948	A
B-A	7	523	0.013	7	0.0	9.826	А
C-AB	10	635	0.015	10	0.0	6.157	A
C-A	119			119			
A-B	0.75			0.75			
A-C	123			123			

### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	608	0.018	11	0.0	6.030	А
B-A	8	512	0.016	8	0.0	10.064	В
C-AB	12	630	0.019	12	0.0	6.227	A
C-A	142			142			
A-B	0.90			0.90			
A-C	147			147			

### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	13	599	0.022	13	0.0	6.145	A
B-A	10	497	0.020	10	0.0	10.412	В
C-AB	14	623	0.023	14	0.0	6.323	A
C-A	174			174			
A-B	1			1			
A-C	179			179			

### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	13	599	0.022	13	0.0	6.146	А
B-A	10	497	0.020	10	0.0	10.411	В
C-AB	14	623	0.023	14	0.0	6.325	А
C-A	174			174			
A-B	1			1			
A-C	179			179			

15



### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	608	0.018	11	0.0	6.031	A
B-A	8	512	0.016	8	0.0	10.063	В
C-AB	12	630	0.019	12	0.0	6.227	O. A
C-A	142			142			77
A-B	0.90			0.90			77.
A-C	147			147			7

### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	9	614	0.015	9	0.0	5.952	А
B-A	7	523	0.013	7	0.0	9.828	А
C-AB	10	635	0.015	10	0.0	6.160	A
C-A	119			119			
A-B	0.75			0.75			
A-C	123			123			



# Junction 1 - 2026 Do Something Construction Phase, AM

### **Data Errors and Warnings**

No errors or warnings

### **Junction Network**

### **Junctions**

Junctio	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.42	А

### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	1.42	Α	

### **Traffic Demand**

### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2026 Do Something Construction Phase	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)			
HV Percentages	2.00			

### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	95	100.000	
В		✓	31	100.000	
С		✓	242	100.000	

### **Origin-Destination Data**

### Demand (PCU/hr)

	То					
		Α	В	С		
F	Α	0	0	95		
From	В	19	0	12		
	С	219	23	0		

### **Vehicle Mix**

### **Heavy Vehicle Percentages**

	То						
		Α	В	С			
	Α	0	0	5			
From	В	88	0	7			
	С	5	23	0			



### Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.02	6.05	0.0	А
B-A	0.04	15.04	0.1	С
C-AB	0.04	7.01	0.1	А
C-A				
A-B				
A-C				



### Main Results for each time segment

### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	9	662	0.014	9	0.0	5.901	A
B-A	14	494	0.029	14	0.1	14.104	В
C-AB	18	655	0.027	17	0.0	6.929	A
C-A	165			165			
A-B	0			0			
A-C	72			72			

### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	11	657	0.016	11	0.0	5.963	А
B-A	17	484	0.035	17	0.1	14.486	В
C-AB	21	655	0.032	21	0.0	6.966	А
C-A	196			196			
A-B	0			0			
A-C	85			85			

### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	13	650	0.020	13	0.0	6.047	Α
B-A	21	471	0.044	21	0.1	15.038	С
C-AB	26	656	0.040	26	0.1	7.005	A
C-A	240			240			
A-B	0			0			
A-C	105			105			

### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	13	650	0.020	13	0.0	6.048	А
B-A	21	471	0.044	21	0.1	15.041	С
C-AB	26	655	0.040	26	0.1	7.008	A
C-A	240			240			
A-B	0			0			
A-C	105			105			



### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s	Unsignalised level of service
В-С	11	656	0.016	11	0.0	5.966	A
B-A	17	484	0.035	17	0.1	14.492	В
C-AB	21	654	0.032	21	0.0	6.967	O. A
C-A	196			196			77
A-B	0			0			77.
A-C	85			85			P

### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	9	661	0.014	9	0.0	5.908	А
B-A	14	494	0.029	14	0.1	14.116	В
C-AB	18	654	0.027	18	0.0	6.935	A
C-A	165			165			
A-B	0			0			
A-C	72			72			



# Junction 1 - 2026 Do Something Construction Phase, PM

# **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### **Junctions**

Junc	tion	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1		untitled	T-Junction	Two-way	Two-way	Two-way		1.09	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	1.09	Α	

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2026 Do Something Construction Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

# **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	164	100.000
В		✓	35	100.000
С		✓	176	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

		Т	o	
		Α	В	С
F	Α	0	1	163
From	В	9	0	26
	C	158	18	0

# **Vehicle Mix**

		To To A B C A 0 0 3 B 41 0 20		
		Α	В	ပ
	Α	0	0	3
From	В	41	0	20
	С	4	10	0



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	B-C 0.05 7.44		0.1	А
B-A 0.02		10.93	0.0	В
C-AB	0.03	6.53	0.0	А
C-A				
A-B				
A-C				



# Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	20	625	0.031	19	0.0	7.130	A
B-A	7	500	0.014	7	0.0	10.292	В
C-AB	14	636	0.021	14	0.0	6.355	A
C-A	119			119			
A-B	0.75			0.75			
A-C	123			123			

# 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	23	619	0.038	23	0.0	7.257	A
B-A	8	489	0.017	8	0.0	10.550	В
C-AB	16	632	0.026	16	0.0	6.430	A
C-A	142			142			
A-B	0.90			0.90			
A-C	147			147			

## 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	29	610	0.047	29	0.1	7.435	A
B-A	10	474	0.021	10	0.0	10.928	В
C-AB	20	626	0.032	20	0.0	6.531	A
C-A	174			174			
A-B	1			1			
A-C	179			179			

# 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service		
в-с	29	610	0.047	29	0.1	7.435	А		
B-A	10	474	0.021	10	0.0	10.927	В		
C-AB	20	626	0.032	20	0.0	6.534	А		
C-A	174			174					
A-B	1			1					
A-C	179			179					



# 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s	Unsignalised level of service
В-С	23	618	0.038	23	0.0	7.259	Α
B-A	8	489	0.017	8	0.0	10.553	В
C-AB	16	632	0.026	16	0.0	6.433	O. A
C-A	142			142			77
A-B	0.90			0.90			77.
A-C	147			147			7

# 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	20	625	0.031	20	0.0	7.135	А
B-A	7	500	0.014	7	0.0	10.295	В
C-AB	14	636	0.021	14	0.0	6.356	А
C-A	119			119			
A-B	0.75			0.75			
A-C	123			123			



# Junction 1 - 2026 Do Something Operational Phase, AM Data Errors and Warnings No errors or warnings

# **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.32	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.32	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2026 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

# **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	95	100.000
В		✓	33	100.000
С		✓	237	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То				
		Α	В	С	
F	Α	0	0	95	
From	В	19	0	14	
	C	219	18	0	

# **Vehicle Mix**

	То				
		Α	В	C	
	Α	0	0	5	
From	В	88	0	7	
	С	5	6	0	



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.02	6.01	0.0	A
B-A	0.04	15.04	0.1	С
C-AB	0.03	6.09	0.0	А
C-A				
A-B				
A-C				



# Main Results for each time segment

#### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	668	0.016	10	0.0	5.860	A
B-A	14	493	0.029	14	0.1	14.122	В
C-AB	14	650	0.021	14	0.0	5.992	A
C-A	165			165			
A-B	0			0			
A-C	72			72			

# 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	663	0.019	13	0.0	5.924	А
B-A	17	484	0.035	17	0.1	14.495	В
C-AB	16	649	0.025	16	0.0	6.034	А
C-A	197			197			
A-B	0			0			
A-C	85			85			

## 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	15	656	0.024	15	0.0	6.012	A
B-A	21	471	0.044	21	0.1	15.034	С
C-AB	20	647	0.031	20	0.0	6.088	A
C-A	241			241			
A-B	0			0			
A-C	105			105			

# 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	15	656	0.024	15	0.0	6.013	А
B-A	21	471	0.044	21	0.1	15.036	С
C-AB	20	647	0.031	20	0.0	6.090	A
C-A	241			241			
A-B	0			0			
A-C	105			105			



# 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	13	662	0.019	13	0.0	5.929	A
B-A	17	484	0.035	17	0.1	14.503	В
C-AB	16	649	0.025	16	0.0	6.036	O. A
C-A	197			197			77
A-B	0			0			77
A-C	85			85			7

# 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	667	0.016	11	0.0	5.865	А
B-A	14	493	0.029	14	0.1	14.135	В
C-AB	14	650	0.021	14	0.0	5.994	А
C-A	165			165			
A-B	0			0			
A-C	72			72			



# Junction 1 - 2026 Do Something Operational Phase, PM Data Errors and Warnings No errors or warnings

# **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### **Junctions**

Junc	ion	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1		untitled	T-Junction	Two-way	Two-way	Two-way		0.98	А

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS
Left	Normal/unknown	0.98	А

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2026 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

# **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Jse O-D data Average Demand (PCU/hr)	
Α		✓	164	100.000
В		✓	30	100.000
С		✓	178	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То				
		Α	В	С	
F	Α	0	1	163	
From	В	9	0	21	
	С	158	20	0	

# **Vehicle Mix**

	То			
		Α	В	ပ
	Α	0	0	3
From	В	41	0	5
	С	4	10	0



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.04	6.47	0.0	А
B-A	0.02	10.82	0.0	В
C-AB	0.04	6.55	0.0	А
C-A				
A-B				
A-C				



# Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	16	622	0.025	16	0.0	6.231	A
B-A	7	505	0.013	7	0.0	10.189	В
C-AB	15	637	0.024	15	0.0	6.367	A
C-A	119			119			
A-B	0.75			0.75			
A-C	123			123			

# 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	19	616	0.031	19	0.0	6.331	A
B-A	8	494	0.016	8	0.0	10.447	В
C-AB	18	632	0.029	18	0.0	6.443	A
C-A	142			142			
A-B	0.90			0.90			
A-C	147			147			

## 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	23	607	0.038	23	0.0	6.474	A
B-A	10	479	0.021	10	0.0	10.823	В
C-AB	22	627	0.036	22	0.0	6.547	A
C-A	174			174			
A-B	1			1			
A-C	179			179			

# 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service	
в-с	23	607	0.038	23	0.0	6.474	A	
B-A	10	479	0.021	10	0.0	10.823	В	
C-AB	22	627	0.036	22	0.0	6.547	A	
C-A	174			174				
A-B	1			1				
A-C	179			179				



# 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s	Unsignalised level of service
В-С	19	616	0.031	19	0.0	6.332	A
B-A	8	494	0.016	8	0.0	10.447	В
C-AB	18	632	0.029	18	0.0	6.444	O. A
C-A	142			142			77
A-B	0.90			0.90			77.
A-C	147			147			7

# 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	16	622	0.025	16	0.0	6.235	А
B-A	7	505	0.013	7	0.0	10.190	В
C-AB	15	637	0.024	15	0.0	6.367	А
C-A	119			119			
A-B	0.75			0.75			
A-C	123			123			

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# Junction 1 - 2031 Do Nothing, AM

# ounction 1 - 2031 Do Nothing, Ai

# **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.12	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	1.12	Α	

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2031 Do Nothing	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

# **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	101	100.000	
В		✓	29	100.000	
С		✓	244	100.000	

# **Origin-Destination Data**

# Demand (PCU/hr)

	То				
From		Α	В	С	
	Α	0	0	101	
	В	21	0	8	
	C	234	10	0	

# **Vehicle Mix**

	То			
		Α	В	С
	Α	0	0	5
From	В	89	0	0
	С	5	0	0



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.01	5.80	0.0	A
B-A	0.05	14.98	0.1	В
C-AB	0.02	5.72	0.0	А
C-A				
A-B				
A-C				



# Main Results for each time segment

#### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	6	642	0.009	6	0.0	5.661	A
B-A	16	500	0.032	16	0.1	14.035	В
C-AB	8	647	0.012	8	0.0	5.630	A
C-A	176			176			
A-B	0			0			
A-C	76			76			

# 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	7	637	0.011	7	0.0	5.718	А
B-A	19	491	0.038	19	0.1	14.422	В
C-AB	9	644	0.014	9	0.0	5.669	А
C-A	210			210			
A-B	0			0			
A-C	91			91			

## 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	9	630	0.014	9	0.0	5.796	A
B-A	23	477	0.048	23	0.1	14.981	В
C-AB	11	640	0.017	11	0.0	5.721	A
C-A	258			258			
A-B	0			0			
A-C	111			111			

# 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service	
в-с	9	630	0.014	9	0.0	5.797	А	
B-A	23	477	0.048	23	0.1	14.982	В	
C-AB	11	640	0.017	11	0.0	5.724	A	
C-A	258			258				
A-B	0			0				
A-C	111			111				



# 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s	Unsignalised level of service
B-C	7	636	0.011	7	0.0	5.722	A
B-A	19	491	0.038	19	0.1	14.431	В
C-AB	9	644	0.014	9	0.0	5.671	O. A
C-A	210			210			77
A-B	0			0			77
A-C	91			91			7

# 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	6	641	0.009	6	0.0	5.667	А
B-A	16	500	0.032	16	0.1	14.049	В
C-AB	8	647	0.012	8	0.0	5.632	А
C-A	176			176			
A-B	0			0			
A-C	76			76			

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# Junction 1 - 2031 Do Nothing, PM

# Junction 1 - 2031 Do Nothing, PN

# **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.73	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.73	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2031 Do Nothing	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

# **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	174	100.000
В		✓	23	100.000
С		✓	183	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То					
		Α	В	С		
	Α	0	1	173		
From	В	10	0	13		
	C	169	14	0		

# **Vehicle Mix**

	То					
		Α	В	С		
	Α	0	0	3		
From	В	43	0	0		
	С	4	8	0		



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.02	6.19	0.0	А
B-A	0.02	10.68	0.0	В
C-AB	0.03	6.41	0.0	А
C-A				
A-B				
A-C				



# Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	10	612	0.016	10	0.0	5.981	A
B-A	8	520	0.014	7	0.0	10.035	В
C-AB	11	634	0.017	11	0.0	6.237	A
C-A	127			127			
A-B	0.75			0.75			
A-C	130			130			

# 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	12	605	0.019	12	0.0	6.069	А
B-A	9	509	0.018	9	0.0	10.298	В
C-AB	13	629	0.020	13	0.0	6.311	А
C-A	152			152			
A-B	0.90			0.90			
A-C	156			156			

## 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	14	595	0.024	14	0.0	6.194	A
B-A	11	493	0.022	11	0.0	10.684	В
C-AB	16	622	0.025	16	0.0	6.412	A
C-A	186			186			
A-B	1			1			
A-C	190			190			

# 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service	
в-с	14	595	0.024	14	0.0	6.194	А	
B-A	11	493	0.022	11	0.0	10.683	В	
C-AB	16	622	0.025	16	0.0	6.415	A	
C-A	186			186				
A-B	1			1				
A-C	190			190				



# 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	12	605	0.019	12	0.0	6.070	A
B-A	9	509	0.018	9	0.0	10.300	В
C-AB	13	628	0.020	13	0.0	6.311	O. A
C-A	152			152			77
A-B	0.90			0.90			77.
A-C	156			156			(4)

# 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	10	612	0.016	10	0.0	5.982	А
B-A	8	521	0.014	8	0.0	10.037	В
C-AB	11	634	0.017	11	0.0	6.237	А
C-A	127			127			
A-B	0.75			0.75			
A-C	130			130			



# Junction 1 - 2031 Do Something Operational Phase, AM Data Errors and Warnings No errors or warnings

# **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.33	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.33	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2031 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

# **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	101	100.000
В		✓	35	100.000
С		✓	252	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

		То					
		Α	В	С			
	Α	0	0	101			
From	В	21	0	14			
	С	234	18	0			

# **Vehicle Mix**

		То					
		Α	В	С			
F	Α	0	0	5			
From	В	89	0	7			
	C	5	6	0			



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.02	6.07	0.0	A
B-A	0.05	15.29	0.1	С
C-AB	0.03	6.10	0.0	А
C-A				
A-B				
A-C				



# Main Results for each time segment

#### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	662	0.016	10	0.0	5.911	Α
B-A	16	492	0.032	16	0.1	14.287	В
C-AB	14	650	0.021	14	0.0	6.000	A
C-A	176			176			
A-B	0			0			
A-C	76			76			

# 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	657	0.019	13	0.0	5.980	Α
B-A	19	482	0.039	19	0.1	14.698	В
C-AB	16	648	0.025	16	0.0	6.043	A
C-A	210			210			
A-B	0			0			
A-C	91			91			

## 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	15	650	0.024	15	0.0	6.073	A
B-A	23	468	0.049	23	0.1	15.293	С
C-AB	20	646	0.031	20	0.0	6.098	A
C-A	257			257			
A-B	0			0			
A-C	111			111			

# 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service	
в-с	15	649	0.024	15	0.0	6.074	А	
B-A	23	468	0.049	23	0.1	15.294	С	
C-AB	20	646	0.031	20	0.0	6.098	A	
C-A	257			257				
A-B	0			0				
A-C	111			111				



# 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	13	656	0.019	13	0.0	5.985	A
B-A	19	482	0.039	19	0.1	14.707	В
C-AB	16	648	0.025	16	0.0	6.046	O. A
C-A	210			210			77
A-B	0			0			77
A-C	91			91			

# 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	661	0.016	11	0.0	5.917	А
B-A	16	492	0.032	16	0.1	14.302	В
C-AB	14	649	0.021	14	0.0	6.000	А
C-A	176			176			
A-B	0			0			
A-C	76			76			



# Junction 1 - 2031 Do Something Operational Phase, PM Data Errors and Warnings No errors or warnings

# **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### **Junctions**

Junc	tion	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1		untitled	T-Junction	Two-way	Two-way	Two-way		0.98	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.98	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2031 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

# **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	174	100.000	
В		✓	31	100.000	
С		✓	190	100.000	

# **Origin-Destination Data**

# Demand (PCU/hr)

		Т	o	
		Α	В	С
F	Α	0	1	173
From	<b>A</b> 0 1 <b>B</b> 10 0	21		
	С	169	21	0

# **Vehicle Mix**

		7	ō	
		Α	В	ပ
F	Α	0	0	3
From	В	43	0	5
	С	4	10	0



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.04	6.53	0.0	A
B-A	0.02	11.06	0.0	В
C-AB	0.04	6.58	0.0	А
C-A				
A-B				
A-C				



# Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	16	619	0.026	16	0.0	6.268	A
B-A	8	504	0.015	7	0.0	10.364	В
C-AB	16	635	0.025	16	0.0	6.389	A
C-A	127			127			
A-B	0.75			0.75			
A-C	130			130			

# 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	19	612	0.031	19	0.0	6.374	A
B-A	9	493	0.018	9	0.0	10.646	В
C-AB	19	631	0.030	19	0.0	6.469	A
C-A	152			152			
A-B	0.90			0.90			
A-C	156			156			

## 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	23	602	0.038	23	0.0	6.525	A
B-A	11	476	0.023	11	0.0	11.061	В
C-AB	23	625	0.038	23	0.0	6.578	A
C-A	186			186			
A-B	1			1			
A-C	190			190			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	23	602	0.038	23	0.0	6.525	A
B-A	11	476	0.023	11	0.0	11.061	В
C-AB	23	625	0.038	23	0.0	6.581	A
C-A	186			186			
A-B	1			1			
A-C	190			190			



# 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	19	612	0.031	19	0.0	6.377	A
B-A	9	493	0.018	9	0.0	10.648	В
C-AB	19	631	0.030	19	0.0	6.473	O. A
C-A	152			152			77
A-B	0.90			0.90			77.
A-C	156			156			7

# 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	16	619	0.026	16	0.0	6.272	А
B-A	8	504	0.015	8	0.0	10.366	В
C-AB	16	635	0.025	16	0.0	6.390	А
C-A	127			127			
A-B	0.75			0.75			
A-C	130			130			

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# Junction 1 - 2041 Do Nothing, AM

# **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.23	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.23	Α

# **Traffic Demand**

#### **Demand Set Details**

I	D Scenario nam	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D	13 2041 Do Nothin	g AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

# **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	106	100.000	
В		✓	33	100.000	
С		✓	255	100.000	

# **Origin-Destination Data**

# Demand (PCU/hr)

		То					
		Α	В	O			
	Α	0	0	106			
From	В	25	0	8			
	C	245	10	0			

# **Vehicle Mix**

	То				
		Α	В	С	
	Α	0	0	6	
From	В	90	0	0	
	C	6	0	0	



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.01	5.87	0.0	Α
B-A	0.06	15.27	0.1	С
C-AB	0.02	5.73	0.0	Α
C-A				
A-B				
A-C				



# Main Results for each time segment

#### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	6	634	0.009	6	0.0	5.727	A
B-A	19	500	0.038	19	0.1	14.210	В
C-AB	8	646	0.012	8	0.0	5.638	A
C-A	184			184			
A-B	0			0			
A-C	80			80			

# 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	7	629	0.011	7	0.0	5.789	A
B-A	22	490	0.046	22	0.1	14.641	В
C-AB	9	643	0.014	9	0.0	5.678	А
C-A	220			220			
A-B	0			0			
A-C	95			95			

# 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	9	622	0.014	9	0.0	5.874	Α
B-A	28	476	0.058	27	0.1	15.260	С
C-AB	11	639	0.017	11	0.0	5.733	A
C-A	270			270			
A-B	0			0			
A-C	117			117			

# 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	9	621	0.014	9	0.0	5.875	A
B-A	28	476	0.058	28	0.1	15.265	С
C-AB	11	639	0.017	11	0.0	5.733	А
C-A	270			270			
A-B	0			0			
A-C	117			117			



# 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s	Unsignalised level of service
B-C	7	629	0.011	7	0.0	5.794	A
B-A	22	490	0.046	23	0.1	14.652	В
C-AB	9	643	0.014	9	0.0	5.681	O. A
C-A	220			220			77
A-B	0			0			77
A-C	95			95			7

# 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	6	634	0.010	6	0.0	5.734	А
B-A	19	500	0.038	19	0.1	14.229	В
C-AB	8	646	0.012	8	0.0	5.638	А
C-A	184			184			
A-B	0			0			
A-C	80			80			

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# Junction 1 - 2041 Do Nothing, PM

# **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.76	А

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS
Left	Normal/unknown	0.76	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2041 Do Nothing	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

# **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	181	100.000
В		✓	24	100.000
С		✓	192	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То			
		Α	В	С
	Α	0	1	180
From	В	11	0	13
	C	177	15	0

# **Vehicle Mix**

	То			
		Α	В	С
	Α	0	0	3
From	В	46	0	0
	C	4	9	0



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.02	6.23	0.0	A
B-A	0.02	10.96	0.0	В
C-AB	0.03	6.49	0.0	А
C-A				
A-B				
A-C				



# Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	10	609	0.016	10	0.0	6.011	A
B-A	8	521	0.016	8	0.0	10.255	В
C-AB	11	633	0.018	11	0.0	6.311	A
C-A	133			133			
A-B	0.75			0.75			
A-C	136			136			

# 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	12	601	0.019	12	0.0	6.103	A
B-A	10	509	0.019	10	0.0	10.539	В
C-AB	14	628	0.022	14	0.0	6.388	A
C-A	159			159			
A-B	0.90			0.90			
A-C	162			162			

## 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	14	592	0.024	14	0.0	6.234	A
B-A	12	492	0.025	12	0.0	10.958	В
C-AB	17	621	0.027	17	0.0	6.494	A
C-A	195			195			
A-B	1			1			
A-C	198			198			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	14	592	0.024	14	0.0	6.234	А
B-A	12	492	0.025	12	0.0	10.958	В
C-AB	17	621	0.027	17	0.0	6.494	A
C-A	195			195			
A-B	1			1			
A-C	198			198			



# 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s	Unsignalised level of service
в-с	12	601	0.019	12	0.0	6.104	A
B-A	10	509	0.019	10	0.0	10.539	В
C-AB	14	627	0.022	14	0.0	6.391	O. A
C-A	159			159			77
A-B	0.90			0.90			77.
A-C	162			162			7

# 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	10	608	0.016	10	0.0	6.015	А
B-A	8	521	0.016	8	0.0	10.257	В
C-AB	11	633	0.018	11	0.0	6.311	А
C-A	133			133			
A-B	0.75			0.75			
A-C	136			136			



# Junction 1 - 2041 Do Something Operational Phase, AM Data Errors and Warnings No errors or warnings

# **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ſ	1	untitled	T-Junction	Two-way	Two-way	Two-way		1.44	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.44	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	2041 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

# **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	106	100.000
В		✓	39	100.000
С		✓	263	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То					
From		Α	В	С		
	Α	0	0	106		
	В	25	0	14		
	C	245	18	0		

# **Vehicle Mix**

	То			
From		Α	В	ပ
	Α	0	0	6
	В	90	0	7
	С	6	6	0



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.02	6.17	0.0	А
B-A	0.06	15.57	0.1	С
C-AB	0.03	6.11	0.0	А
C-A				
A-B				
A-C				



# Main Results for each time segment

#### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	653	0.016	10	0.0	5.991	A
B-A	19	491	0.038	19	0.1	14.455	В
C-AB	14	649	0.021	14	0.0	6.007	A
C-A	184			184			
A-B	0			0			
A-C	80			80			

# 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	13	648	0.019	13	0.0	6.065	A
B-A	22	481	0.047	22	0.1	14.911	В
C-AB	16	647	0.025	16	0.0	6.051	A
C-A	220			220			
A-B	0			0			
A-C	95			95			

## 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	15	640	0.024	15	0.0	6.167	A
B-A	28	467	0.059	27	0.1	15.568	С
C-AB	20	645	0.031	20	0.0	6.108	A
C-A	269			269			
A-B	0			0			
A-C	117			117			

# 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	15	640	0.024	15	0.0	6.168	А
B-A	28	467	0.059	28	0.1	15.574	С
C-AB	20	645	0.031	20	0.0	6.108	A
C-A	269			269			
A-B	0			0			
A-C	117			117			



# 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	13	647	0.019	13	0.0	6.070	A
B-A	22	481	0.047	23	0.1	14.922	В
C-AB	16	647	0.025	16	0.0	6.054	O. A
C-A	220			220			77
A-B	0			0			77.
A-C	95			95			P

# 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	653	0.016	11	0.0	5.997	А
B-A	19	492	0.038	19	0.1	14.476	В
C-AB	14	649	0.021	14	0.0	6.010	А
C-A	184			184			
A-B	0			0			
A-C	80			80			



# Junction 1 - 2041 Do Something Operational Phase, PM Data Errors and Warnings No errors or warnings

# **Data Errors and Warnings**

No errors or warnings

# **Junction Network**

#### **Junctions**

I	Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way	Two-way	Two-way		1.01	Α

#### **Junction Network**

Driving side	Lighting	Lighting Network delay (s)	
Left	Normal/unknown	1.01	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	2041 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)			
HV Percentages	2.00			

# **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)		
Α		✓	181	100.000		
В		✓	33	100.000		
С		✓	199	100.000		

# **Origin-Destination Data**

# Demand (PCU/hr)

	То						
		Α	В	С			
F	Α	0	1	180			
From	В	11	0	22			
	С	177	22	0			

# **Vehicle Mix**

	То					
		Α	В	С		
	Α	0	0	3		
From	В	46	0	5		
	C	4	11	0		



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
В-С	0.04	6.57	0.0	А
B-A	0.03	11.38	0.0	В
C-AB	0.04	6.66	0.0	А
C-A				
A-B				
A-C				



# Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	17	617	0.027	16	0.0	6.299	A
B-A	8	503	0.016	8	0.0	10.625	В
C-AB	17	635	0.026	17	0.0	6.463	A
C-A	133			133			
A-B	0.75			0.75			
A-C	136			136			

# 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	20	609	0.032	20	0.0	6.411	А
B-A	10	491	0.020	10	0.0	10.930	В
C-AB	20	630	0.032	20	0.0	6.546	А
C-A	159			159			
A-B	0.90			0.90			
A-C	162			162			

## 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	24	599	0.040	24	0.0	6.571	A
B-A	12	474	0.026	12	0.0	11.382	В
C-AB	25	624	0.039	25	0.0	6.658	A
C-A	194			194			
A-B	1			1			
A-C	198			198			

# 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	24	599	0.040	24	0.0	6.572	А
B-A	12	474	0.026	12	0.0	11.382	В
C-AB	25	624	0.039	25	0.0	6.658	А
C-A	194			194			
A-B	1			1			
A-C	198			198			

51



# 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	20	609	0.032	20	0.0	6.415	A
B-A	10	491	0.020	10	0.0	10.930	В
C-AB	20	630	0.032	20	0.0	6.549	O. A
C-A	159			159			77
A-B	0.90			0.90			77.
A-C	162			162			1

# 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	17	616	0.027	17	0.0	6.304	А
B-A	8	503	0.016	8	0.0	10.625	В
C-AB	17	634	0.026	17	0.0	6.466	A
C-A	133			133			
A-B	0.75			0.75			
A-C	136			136			



# **Junctions 10**

# **PICADY 10 - Priority Intersection Module**

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Filename: Junction 2 - AM & PM.j10

Path: Q:\2024 Jobs\24\_078 Killala DC Project\08. Traffic\03. Junction Models\Junction 2

Report generation date: 17/10/2024 13:58:03

»Junction 2 - 2024 Base Year, AM

»Junction 2 - 2024 Base Year, PM

»Junction 2 - 2026 Do Nothing, AM

»Junction 2 - 2026 Do Nothing, PM

»Junction 2 - 2026 Do Something Construction Phase, AM

»Junction 2 - 2026 Do Something Construction Phase, PM

»Junction 2 - 2026 Do Something Operational Phase, AM

»Junction 2 - 2026 Do Something Operational Phase, PM

»Junction 2 - 2031 Do Nothing, AM

»Junction 2 - 2031 Do Nothing, PM

»Junction 2 - 2031 Do Something Operational Phase, AM

»Junction 2 - 2031 Do Something Operational Phase, PM

»Junction 2 - 2041 Do Nothing, AM

»Junction 2 - 2041 Do Nothing, PM

»Junction 2 - 2041 Do Something Operational Phase, AM

»Junction 2 - 2041 Do Something Operational Phase, PM



# Summary of junction performance

		А	.M				Р	M		
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
			Jun	ction	2 - 20	)24 Ba	se Year			
Stream B-ACD		0.0	7.78	0.01	Α		0.0	8.11	0.04	А
Stream A-BCD	D.	0.0	5.09	0.00	Α	<b>D</b> 0	0.0	6.76	0.00	Α
Stream D-ABC	D1	0.0	7.57	0.02	Α	D2	0.0	7.21	0.02	Α
Stream C-ABD		0.0	5.51	0.00	Α		0.0	5.57	0.01	Α
			Jun	ction	2 - 20	26 Do	Nothing			
Stream B-ACD		0.0	7.81	0.01	Α		0.0	8.11	0.04	А
Stream A-BCD	D3	0.0	5.09	0.00	Α	D4	0.0	6.81	0.00	Α
Stream D-ABC	D3	0.0	7.58	0.02	Α	D4	0.0	7.21	0.02	Α
Stream C-ABD		0.0	5.52	0.00	Α		0.0	5.58	0.01	Α
		Junctio	n 2 - 202	6 Do	Some	ething	Construction	n Phase		
Stream B-ACD		0.0	7.78	0.02	Α		0.0	7.95	0.04	А
Stream A-BCD	D5	0.0	6.80	0.00	Α	D6	0.0	6.18	0.00	Α
Stream D-ABC	סט	0.1	7.61	0.05	Α	D6	0.0	8.11	0.03	Α
Stream C-ABD		0.0	5.56	0.01	Α		0.0	5.59	0.01	Α
		Junctio	on 2 - 20	26 Do	Som	ething	Operational	l Phase		
Stream B-ACD		0.0	7.48	0.02	Α		0.0	7.94	0.04	Α
Stream A-BCD	D7	0.0	5.53	0.00	Α	D8	0.0	6.15	0.00	Α
Stream D-ABC	01	0.0	7.58	0.04	Α	D6	0.0	7.58	0.04	Α
Stream C-ABD		0.0	5.55	0.01	Α		0.0	5.60	0.01	Α
			Jun	ction	2 - 20	31 Do	Nothing			
Stream B-ACD		0.0	7.87	0.01	Α		0.0	8.29	0.04	Α
Stream A-BCD	D0	0.0	5.11	0.00	Α	D40	0.0	6.92	0.00	Α
Stream D-ABC	D9	0.0	7.62	0.02	Α	D10	0.0	7.26	0.03	Α
Stream C-ABD		0.0	5.52	0.00	Α		0.0	5.59	0.01	Α
		Junctio	on 2 - 20	31 Do	Som	ething	Operational	l Phase		
Stream B-ACD		0.0	7.51	0.02	Α		0.0	8.10	0.04	А
Stream A-BCD	D11	0.0	5.55	0.00	Α	D12	0.0	6.21	0.00	Α
Stream D-ABC	ווט	0.0	7.59	0.04	Α	DIZ	0.0	7.64	0.04	Α
Stream C-ABD		0.0	5.55	0.01	Α		0.0	5.60	0.01	Α
			Jun	ction	2 - 20	41 Do	Nothing			
Stream B-ACD		0.0	7.63	0.02	Α		0.0	8.41	0.04	А
Stream A-BCD	D42	0.0	5.11	0.00	Α	D14	0.0	7.08	0.00	Α
Stream D-ABC	D13	0.0	7.70	0.02	Α	D14	0.0	7.28	0.03	Α
Stream C-ABD		0.0	5.53	0.00	Α		0.0	5.60	0.01	Α
		Junctio	on 2 - 20	41 Do	Som	ething	Operational	l Phase		
Stream B-ACD		0.0	7.56	0.02	Α		0.0	8.19	0.04	А
Stream A-BCD	D45	0.0	5.56	0.00	Α	D46	0.0	6.32	0.00	Α
Stream D-ABC	D15	0.0	7.62	0.04	Α	D16	0.0	7.65	0.04	Α
Stream C-ABD		0.0	5.56	0.01	Α		0.0	5.62	0.02	Α

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

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# File summary

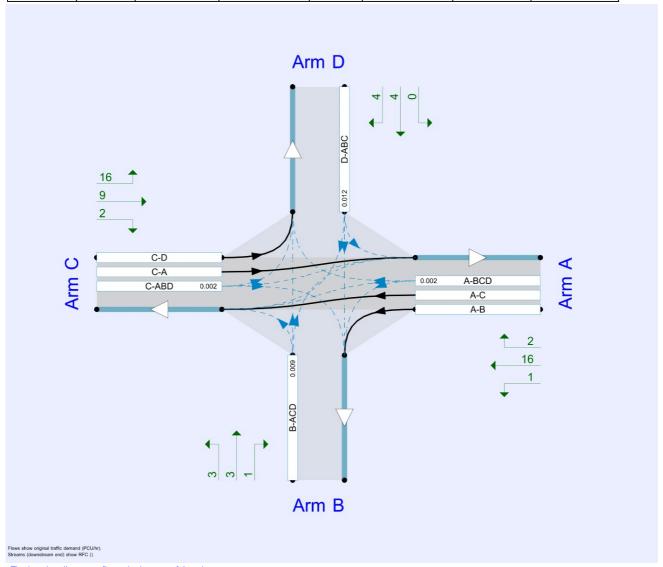
# **File Description**

no Boodi phon					
Title					
Location					
Site number					
Date	11/10/2024				
Version					
Status	(new file)				
Identifier					
Client					
Jobnumber					
Enumerator	DOMAIN\fernando.figueiredo				
Description					

# PRORINGO. 2777 ROSA

# **Units**

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.



#### **Analysis Options**

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

#### **Demand Set Summary**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024 Base Year	AM	ONE HOUR	08:00	09:30	715
D2	2024 Base Year	PM	ONE HOUR	16:00	17:30	15/2
D3	2026 Do Nothing	AM	ONE HOUR	08:00	09:30	15
D4	2026 Do Nothing	PM	ONE HOUR	16:00	17:30	15
D5	2026 Do Something Construction Phase	AM	ONE HOUR	08:00	09:30	15
D6	2026 Do Something Construction Phase	PM	ONE HOUR	16:00	17:30	15
D7	2026 Do Something Operational Phase	AM	ONE HOUR	08:00	09:30	15
D8	2026 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15
D9	2031 Do Nothing	AM	ONE HOUR	08:00	09:30	15
D10	2031 Do Nothing	PM	ONE HOUR	16:00	17:30	15
D11	2031 Do Something Operational Phase	AM	ONE HOUR	08:00	09:30	15
D12	2031 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15
D13	2041 Do Nothing	AM	ONE HOUR	08:00	09:30	15
D14	2041 Do Nothing	PM	ONE HOUR	16:00	17:30	15
D15	2041 Do Something Operational Phase	AM	ONE HOUR	08:00	09:30	15
D16	2041 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

#### **Analysis Set Details**

ID	Name	Network flow scaling factor (%)					
A1	Junction 2	100.000					



# Junction 2 - 2024 Base Year, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

J	unction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
	1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.23	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.23	Α

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Access to R314 (E)		Major
В	Access to Ballintean (S)		Minor
С	Mallafarry Road (W)		Major
D	Access to R314 (N)		Minor

#### **Major Arm Geometry**

	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
	Α	5.00			250.0	✓	1.00
Γ	С	5.00			150.0	✓	1.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

#### **Minor Arm Geometry**

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
В	One lane	2.20	100	110
D	One lane	2.20	50	150



#### Slope / Intercept / Capacity

#### **Priority Intersection Slopes and Intercepts**

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	719	-	-	-	-	-	-	0.291	0.415	0.291	-	-	-
B-A	521	0.099	0.250	0.250	-	-	-	0.157	0.357	-	0.250	0.250	0.125
B-C	638	0.102	0.258	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	521	0.099	0.250	0.250	-	-	-	0.157	0.357	0.157	-	-	-
B-D, offside lane	521	0.099	0.250	0.250	-	-	-	0.157	0.357	0.157	-	-	-
С-В	661	0.267	0.267	0.382	-	-	-	-	-	-	-	-	-
D-A	661	-	-	-	-	-	-	0.267	-	0.106	-	-	-
D-B, nearside lane	523	0.158	0.158	0.359	-	-	-	0.251	0.251	0.099	-	-	-
D-B, offside lane	523	0.158	0.158	0.359	-	-	-	0.251	0.251	0.099	-	-	-
D-C	523	-	0.158	0.359	0.126	0.251	0.251	0.251	0.251	0.099	-	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024 Base Year	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	19	100.000
В		✓	7	100.000
С		✓	27	100.000
D		✓	8	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То					
From		Α	В	С	D		
	Α	0	1	16	2		
	В	1	0	3	3		
	С	9	2	0	16		
	D	0	4	4	0		

#### **Vehicle Mix**

#### **Heavy Vehicle Percentages**

			То		
		Α	В	С	D
	Α	0	0	0	0
From	В	100	0	0	25
	С	0	0	0	0
	D	75	13	0	0



# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.01	7.78	0.0	А
A-BCD	0.00	5.09	0.0	А
A-B				
A-C				
D-ABC	0.02	7.57	0.0	А
C-ABD	0.00	5.51	0.0	А
C-D				
C-A				



#### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	559	0.009	5	0.0	7.707	А
A-BCD	2	713	0.002	1	0.0	5.061	A
A-B	0.75			0.75			
A-C	12			12			
D-ABC	6	516	0.012	6	0.0	7.483	A
C-ABD	2	657	0.002	1	0.0	5.492	A
C-D	12			12			
C-A	7			7			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	558	0.011	6	0.0	7.737	A
A-BCD	2	711	0.003	2	0.0	5.072	A
A-B	0.90			0.90			
A-C	14			14			
D-ABC	7	515	0.014	7	0.0	7.518	А
C-ABD	2	656	0.003	2	0.0	5.501	A
C-D	14			14			
C-A	8			8			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	557	0.014	8	0.0	7.778	А
A-BCD	2	710	0.003	2	0.0	5.086	A
A-B	1			1			
A-C	18			18			
D-ABC	9	513	0.017	9	0.0	7.568	A
C-ABD	2	655	0.003	2	0.0	5.513	A
C-D	18			18			
C-A	10			10			



#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s	Unsignalised level of service
B-ACD	8	557	0.014	8	0.0	7.778	A
A-BCD	2	710	0.003	2	0.0	5.086	A
A-B	1			1			, , , , , , , , , , , , , , , , , , ,
A-C	18			18			77
D-ABC	9	513	0.017	9	0.0	7.568	A 77
C-ABD	2	655	0.003	2	0.0	5.513	Α 🧡
C-D	18			18			
C-A	10			10			

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	558	0.011	6	0.0	7.737	A
A-BCD	2	711	0.003	2	0.0	5.074	А
A-B	0.90			0.90			
A-C	14			14			
D-ABC	7	515	0.014	7	0.0	7.519	A
C-ABD	2	656	0.003	2	0.0	5.503	A
C-D	14			14			
C-A	8			8			

#### 09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	559	0.009	5	0.0	7.708	А
A-BCD	2	713	0.002	2	0.0	5.063	A
A-B	0.75			0.75			
A-C	12			12			
D-ABC	6	516	0.012	6	0.0	7.486	A
C-ABD	2	657	0.002	2	0.0	5.494	A
C-D	12			12			
C-A	7			7			



# Junction 2 - 2024 Base Year, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.33	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.33	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024 Base Year	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	25	100.000
В		✓	17	100.000
С		✓	26	100.000
D		✓	11	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То							
		Α	В	C	D				
	Α	0	3	21	1				
From	В	4	0	3	10				
	С	9	7	0	10				
	D	0	7	4	0				



	То							
		Α	В	U	ם			
	Α	0	0	0	33			
From	В	0	0	0	27			
	С	0	0	0	0			
	D	50	0	0	0			

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	8.11	0.0	А
A-BCD	0.00	6.76	0.0	А
A-B				
A-C				
D-ABC	0.02	7.21	0.0	А
C-ABD	0.01	5.57	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	530	0.024	13	0.0	7.954	A
A-BCD	0.75	713	0.001	0.75	0.0	6.725	A
A-B	2			2			
A-C	16			16			
D-ABC	8	515	0.016	8	0.0	7.103	Α
C-ABD	5	656	0.008	5	0.0	5.533	A
C-D	8			8			
C-A	7			7			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	15	528	0.029	15	0.0	8.020	A
A-BCD	0.90	711	0.001	0.90	0.0	6.738	А
A-B	3			3			
A-C	19			19			
D-ABC	10	513	0.019	10	0.0	7.148	А
C-ABD	6	655	0.010	6	0.0	5.549	А
C-D	9			9			
C-A	8			8			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	19	526	0.036	19	0.0	8.109	, A
A-BCD	1	710	0.002	1	0.0	6.756	A
A-B	3			3			~O
A-C	23			23			77
D-ABC	12	511	0.024	12	0.0	7.209	A 77
C-ABD	8	654	0.012	8	0.0	5.573	A
C-D	11			11			•
C-A	10			10			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	19	526	0.036	19	0.0	8.109	A
A-BCD	1	710	0.002	1	0.0	6.756	А
A-B	3			3			
A-C	23			23			
D-ABC	12	511	0.024	12	0.0	7.210	A
C-ABD	8	654	0.012	8	0.0	5.573	A
C-D	11			11			
C-A	10			10			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	15	528	0.029	15	0.0	8.023	A
A-BCD	0.90	711	0.001	0.90	0.0	6.741	A
A-B	3			3			
A-C	19			19			
D-ABC	10	513	0.019	10	0.0	7.148	A
C-ABD	6	655	0.010	6	0.0	5.550	A
C-D	9			9			
C-A	8			8			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	530	0.024	13	0.0	7.958	А
A-BCD	0.75	712	0.001	0.75	0.0	6.726	А
A-B	2			2			
A-C	16			16			
D-ABC	8	515	0.016	8	0.0	7.107	А
C-ABD	5	656	0.008	5	0.0	5.535	А
C-D	8			8			
C-A	7			7			



# Junction 2 - 2026 Do Nothing, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

J	unction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
	1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.13	Α

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS	
Left	Normal/unknown	2.13	Α	

# **Traffic Demand**

#### **Demand Set Details**

П	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D	2026 Do Nothing	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	20	100.000	
В		✓	7	100.000	
С		✓	29	100.000	
D		✓	8	100.000	

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		Α	В	C	D			
	Α	0	1	17	2			
From	В	1	0	3	3			
	С	10	2	0	17			
	D	0	4	4	0			



	То							
		Α	В	C	D			
	Α	0	0	0	0			
From	В	100	0	0	26			
	С	0	0	0	0			
	D	76	13	0	0			

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.01	7.81	0.0	А
A-BCD	0.00	5.09	0.0	А
A-B				
A-C				
D-ABC	0.02	7.58	0.0	A
C-ABD	0.00	5.52	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	559	0.009	5	0.0	7.737	A
A-BCD	2	712	0.002	1	0.0	5.064	A
A-B	0.75			0.75			
A-C	13			13			
D-ABC	6	516	0.012	6	0.0	7.488	A
C-ABD	2	657	0.002	1	0.0	5.494	A
C-D	13			13			
C-A	8			8			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	558	0.011	6	0.0	7.768	A
A-BCD	2	711	0.003	2	0.0	5.075	А
A-B	0.90			0.90			
A-C	15			15			
D-ABC	7	515	0.014	7	0.0	7.525	А
C-ABD	2	656	0.003	2	0.0	5.503	A
C-D	15			15			
C-A	9			9			



#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	556	0.014	8	0.0	7.810	, A
A-BCD	2	709	0.003	2	0.0	5.091	A
A-B	1			1			~ <u>~</u> . ~
A-C	19			19			77
D-ABC	9	513	0.017	9	0.0	7.576	A 77
C-ABD	2	655	0.003	2	0.0	5.515	A
C-D	19			19			
C-A	11			11			

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	556	0.014	8	0.0	7.810	А
A-BCD	2	709	0.003	2	0.0	5.091	А
A-B	1			1			
A-C	19			19			
D-ABC	9	513	0.017	9	0.0	7.576	А
C-ABD	2	655	0.003	2	0.0	5.515	А
C-D	19			19			
C-A	11			11			

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	558	0.011	6	0.0	7.769	Α
A-BCD	2	711	0.003	2	0.0	5.075	A
A-B	0.90			0.90			
A-C	15			15			
D-ABC	7	515	0.014	7	0.0	7.526	А
C-ABD	2	656	0.003	2	0.0	5.503	A
C-D	15			15			
C-A	9			9			

#### 09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	559	0.009	5	0.0	7.737	А
A-BCD	2	712	0.002	2	0.0	5.064	A
A-B	0.75			0.75			
A-C	13			13			
D-ABC	6	516	0.012	6	0.0	7.489	A
C-ABD	2	657	0.002	2	0.0	5.494	А
C-D	13			13			
C-A	8			8			



# Junction 2 - 2026 Do Nothing, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

,	Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
	1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.29	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.29	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D	2026 Do Nothing	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	26	100.000
В		✓	17	100.000
С		✓	26	100.000
D		✓	11	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То					
		Α	В	C	D	
	Α	0	3	22	1	
From	В	4	0	3	10	
	С	9	7	0	10	
	D	0	7	4	0	



	То					
		Α	В	U	ם	
	Α	0	0	0	34	
From	В	0	0	0	27	
	С	0	0	0	0	
	D	51	0	0	0	

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	8.11	0.0	А
A-BCD	0.00	6.81	0.0	A
A-B				
A-C				
D-ABC	0.02	7.21	0.0	А
C-ABD	0.01	5.58	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	530	0.024	13	0.0	7.957	A
A-BCD	0.75	713	0.001	0.75	0.0	6.776	A
A-B	2			2			
A-C	17			17			
D-ABC	8	515	0.016	8	0.0	7.105	А
C-ABD	5	656	0.008	5	0.0	5.534	A
C-D	8			8			
C-A	7			7			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	15	528	0.029	15	0.0	8.024	A
A-BCD	0.90	711	0.001	0.90	0.0	6.789	А
A-B	3			3			
A-C	20			20			
D-ABC	10	513	0.019	10	0.0	7.150	А
C-ABD	6	655	0.010	6	0.0	5.551	A
C-D	9			9			
C-A	8			8			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	19	526	0.036	19	0.0	8.114	), A
A-BCD	1	710	0.002	1	0.0	6.806	A
A-B	3			3			
A-C	24			24			77
D-ABC	12	511	0.024	12	0.0	7.212	A 77
C-ABD	8	653	0.012	8	0.0	5.575	Α 🧲
C-D	11			11			
C-A	10			10			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	19	526	0.036	19	0.0	8.114	A
A-BCD	1	710	0.002	1	0.0	6.806	A
A-B	3			3			
A-C	24			24			
D-ABC	12	511	0.024	12	0.0	7.212	A
C-ABD	8	653	0.012	8	0.0	5.575	A
C-D	11			11			
C-A	10			10			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	15	528	0.029	15	0.0	8.026	A
A-BCD	0.90	711	0.001	0.90	0.0	6.791	А
A-B	3			3			
A-C	20			20			
D-ABC	10	513	0.019	10	0.0	7.153	А
C-ABD	6	655	0.010	6	0.0	5.554	A
C-D	9			9			
C-A	8			8			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	530	0.024	13	0.0	7.962	А
A-BCD	0.75	712	0.001	0.75	0.0	6.779	A
A-B	2			2			
A-C	17			17			
D-ABC	8	515	0.016	8	0.0	7.108	А
C-ABD	5	656	0.008	5	0.0	5.534	A
C-D	8			8			
C-A	7			7			



# Junction 2 - 2026 Do Something Construction AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.52	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.52	Α

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2026 Do Something Construction Phase	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	34	100.000
В		✓	8	100.000
С		✓	39	100.000
D		✓	22	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То						
		Α	В	С	D			
	Α	0	1	31	2			
From	В	1	0	4	3			
	С	14	3	0	22			
	D	0	4	18	0			



		То						
		Α	В	C	D			
	Α	0	0	0	33			
From	В	100	0	0	35			
	С	0	0	0	0			
	D	48	14	0	0			

# PRICHINADI. 27/17/202

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	7.78	0.0	А
A-BCD	0.00	6.80	0.0	A
A-B				
A-C				
D-ABC	0.05	7.61	0.1	A
C-ABD	0.01	5.56	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	564	0.011	6	0.0	7.680	A
A-BCD	2	710	0.002	1	0.0	6.754	A
A-B	0.75			0.75			
A-C	23			23			
D-ABC	17	513	0.032	16	0.0	7.420	A
C-ABD	2	654	0.003	2	0.0	5.523	A
C-D	17			17			
C-A	11			11			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	562	0.013	7	0.0	7.721	A
A-BCD	2	709	0.003	2	0.0	6.772	А
A-B	0.90			0.90			
A-C	28			28			
D-ABC	20	511	0.039	20	0.0	7.502	А
C-ABD	3	653	0.004	3	0.0	5.538	A
C-D	20			20			
C-A	13			13			



#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	560	0.016	9	0.0	7.779	A
A-BCD	2	706	0.003	2	0.0	6.797	A
A-B	1			1			<del>~</del> 0. ~
A-C	34			34			77
D-ABC	24	508	0.048	24	0.1	7.614	A 77
C-ABD	3	651	0.005	3	0.0	5.559	A
C-D	24			24			
C-A	15			15			

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	560	0.016	9	0.0	7.779	А
A-BCD	2	706	0.003	2	0.0	6.797	A
A-B	1			1			
A-C	34			34			
D-ABC	24	508	0.048	24	0.1	7.614	А
C-ABD	3	651	0.005	3	0.0	5.559	A
C-D	24			24			
C-A	15			15			

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	562	0.013	7	0.0	7.723	А
A-BCD	2	709	0.003	2	0.0	6.773	A
A-B	0.90			0.90			
A-C	28			28			
D-ABC	20	511	0.039	20	0.0	7.506	А
C-ABD	3	653	0.004	3	0.0	5.541	A
C-D	20			20			
C-A	13			13			

#### 09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	564	0.011	6	0.0	7.680	А
A-BCD	2	710	0.002	2	0.0	6.757	A
A-B	0.75			0.75			
A-C	23			23			
D-ABC	17	513	0.032	17	0.0	7.427	A
C-ABD	2	654	0.003	2	0.0	5.526	A
C-D	17			17			
C-A	11			11			



# Junction 2 - 2026 Do Something Construction Place PM

#### **Data Errors and Warnings**

Severity	Area Item		Description
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway widness than 6m.
Warning	Major arm width	·	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
I	1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.70	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.70	Α

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2026 Do Something Construction Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	31	100.000
В		✓	18	100.000
С		✓	55	100.000
D		✓	16	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То							
		Α	В	С	D				
	Α	0	3	27	1				
From	В	4	0	4	10				
	С	23	8	0	24				
	D	0	7	9	0				



		То							
		Α	В	U	D				
	Α	0	0	0	20				
From	В	0	0	0	23				
	С	0	0	0	0				
	D	50	25	0	0				

# PRICHINADI. 27/17/202

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	7.95	0.0	А
A-BCD	0.00	6.18	0.0	А
A-B				
A-C				
D-ABC	0.03	8.11	0.0	А
C-ABD	0.01	5.59	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	531	0.026	13	0.0	7.763	A
A-BCD	0.75	706	0.001	0.75	0.0	6.124	A
A-B	2			2			
A-C	20			20			
D-ABC	12	510	0.024	12	0.0	7.922	А
C-ABD	6	655	0.009	6	0.0	5.548	Α
C-D	18			18			
C-A	17			17			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	16	528	0.031	16	0.0	7.841	A
A-BCD	0.90	704	0.001	0.90	0.0	6.147	А
A-B	3			3			
A-C	24			24			
D-ABC	14	507	0.028	14	0.0	8.004	А
C-ABD	7	654	0.011	7	0.0	5.567	A
C-D	22			22			
C-A	21			21			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service	
B-ACD	20	525	0.038	20	0.0	7.947	Α Α	
A-BCD	1	700	0.002	1	0.0	6.178	A	
A-B	3			3			<del></del>	
A-C	30			30			77	
D-ABC	18	504	0.035	18	0.0	8.115	A 77	
C-ABD	9	652	0.014	9	0.0	5.594	A	
C-D	26			26				
C-A	25			25				

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	525	0.038	20	0.0	7.947	А
A-BCD	1	700	0.002	1	0.0	6.178	A
A-B	3			3			
A-C	30			30			
D-ABC	18	504	0.035	18	0.0	8.115	A
C-ABD	9	652	0.014	9	0.0	5.594	A
C-D	26			26			
C-A	25			25			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	16	528	0.031	16	0.0	7.844	A
A-BCD	0.90	704	0.001	0.90	0.0	6.147	A
A-B	3			3			
A-C	24			24			
D-ABC	14	507	0.028	14	0.0	8.005	A
C-ABD	7	654	0.011	7	0.0	5.567	A
C-D	22			22			
C-A	21			21			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	531	0.026	14	0.0	7.768	А
A-BCD	0.75	706	0.001	0.75	0.0	6.124	A
A-B	2			2			
A-C	20			20			
D-ABC	12	510	0.024	12	0.0	7.927	A
C-ABD	6	655	0.009	6	0.0	5.548	A
C-D	18			18			
C-A	17			17			



# Junction 2 - 2026 Do Something Operational Phase, AM Data Errors and Warnings

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

## **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.23	Α

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS	
Left	Normal/unknown	2.23	Α	

# Traffic Demand

#### **Demand Set Details**

П	Scenario name	Time Period name   Traffic profile type   S		Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D	2026 Do Something Operational Phase	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	29	100.000	
В		✓	8	100.000	
С		✓	43	100.000	
D		✓	17	100.000	

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То					
		Α	В	С	D		
	Α	0	1	26	2		
From	В	1	0	4	3		
	С	16	3	0	24		
	D	0	4	13	0		



		То					
		Α	В	C	D		
	Α	0	0	0	8		
From	В	100	0	0	21		
	С	0	0	0	0		
	D	48	14	0	0		

# PRICHINADI. 27/17/202

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	7.48	0.0	А
A-BCD	0.00	5.53	0.0	А
A-B				
A-C				
D-ABC	0.04	7.58	0.0	А
C-ABD	0.01	5.55	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	565	0.011	6	0.0	7.386	A
A-BCD	2	709	0.002	1	0.0	5.493	A
A-B	0.75			0.75			
A-C	20			20			
D-ABC	13	513	0.025	13	0.0	7.412	А
C-ABD	2	655	0.003	2	0.0	5.515	A
C-D	18			18			
C-A	12			12			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	563	0.013	7	0.0	7.423	Α
A-BCD	2	707	0.003	2	0.0	5.510	А
A-B	0.90			0.90			
A-C	23			23			
D-ABC	15	511	0.030	15	0.0	7.482	Α
C-ABD	3	654	0.004	3	0.0	5.528	А
C-D	22			22			
C-A	14			14			



#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	561	0.016	9	0.0	7.476	, A
A-BCD	2	705	0.003	2	0.0	5.533	A
A-B	1			1			<del></del>
A-C	29			29			77
D-ABC	19	508	0.037	19	0.0	7.576	A 77
C-ABD	3	652	0.005	3	0.0	5.546	A
C-D	26			26			,
C-A	18			18			

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	561	0.016	9	0.0	7.476	A
A-BCD	2	705	0.003	2	0.0	5.533	А
A-B	1			1			
A-C	29			29			
D-ABC	19	508	0.037	19	0.0	7.576	A
C-ABD	3	652	0.005	3	0.0	5.546	A
C-D	26			26			
C-A	18			18			

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	563	0.013	7	0.0	7.427	Α
A-BCD	2	707	0.003	2	0.0	5.512	A
A-B	0.90			0.90			
A-C	23			23			
D-ABC	15	511	0.030	15	0.0	7.486	А
C-ABD	3	654	0.004	3	0.0	5.528	A
C-D	22			22			
C-A	14			14			

#### 09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	565	0.011	6	0.0	7.386	А
A-BCD	2	709	0.002	2	0.0	5.496	A
A-B	0.75			0.75			
A-C	20			20			
D-ABC	13	513	0.025	13	0.0	7.419	A
C-ABD	2	655	0.003	2	0.0	5.515	А
C-D	18			18			
C-A	12			12			



# Junction 2 - 2026 Do Something Operational Phase, PM Data Errors and Warnings

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway widness than 6m.
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

## **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.90	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	2.90	Α	

## **Traffic Demand**

#### **Demand Set Details**

10	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D	2026 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	33	100.000
В		✓	18	100.000
С		✓	45	100.000
D		✓	18	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То					
		Α	В	С	D		
	Α	0	3	29	1		
From	В	4	0	4	10		
	С	18	8	0	19		
	D	0	7	11	0		



	То					
		Α	В	U	ם	
	Α	0	0	0	20	
From	В	0	0	0	23	
	С	0	0	0	0	
	D	29	6	0	0	

# PRICEINAID: 27/7/2003

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	7.94	0.0	А
A-BCD	0.00	6.15	0.0	А
A-B				
A-C				
D-ABC	0.04	7.58	0.0	А
C-ABD	0.01	5.60	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	531	0.026	13	0.0	7.756	A
A-BCD	0.75	708	0.001	0.75	0.0	6.105	A
A-B	2			2			
A-C	22			22			
D-ABC	14	511	0.027	13	0.0	7.399	A
C-ABD	6	654	0.009	6	0.0	5.552	A
C-D	14			14			
C-A	14			14			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	16	529	0.031	16	0.0	7.833	A
A-BCD	0.90	706	0.001	0.90	0.0	6.124	A
A-B	3			3			
A-C	26			26			
D-ABC	16	508	0.032	16	0.0	7.477	A
C-ABD	7	653	0.011	7	0.0	5.572	A
C-D	17			17			
C-A	16			16			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	526	0.038	20	0.0	7.937	A
A-BCD	1	703	0.002	1	0.0	6.150	A
A-B	3			3			· O. `
A-C	32			32			77
D-ABC	20	505	0.039	20	0.0	7.583	A 77
C-ABD	9	652	0.014	9	0.0	5.600	Α 🥎
C-D	21			21			
C-A	20			20			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	526	0.038	20	0.0	7.937	А
A-BCD	1	703	0.002	1	0.0	6.150	A
A-B	3			3			
A-C	32			32			
D-ABC	20	505	0.039	20	0.0	7.583	A
C-ABD	9	652	0.014	9	0.0	5.600	A
C-D	21			21			
C-A	20			20			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	16	529	0.031	16	0.0	7.834	Α
A-BCD	0.90	706	0.001	0.90	0.0	6.124	A
A-B	3			3			
A-C	26			26			
D-ABC	16	508	0.032	16	0.0	7.481	Α
C-ABD	7	653	0.011	7	0.0	5.574	A
C-D	17			17			
C-A	16			16			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	531	0.026	14	0.0	7.760	А
A-BCD	0.75	708	0.001	0.75	0.0	6.105	А
A-B	2			2			
A-C	22			22			
D-ABC	14	511	0.027	14	0.0	7.406	A
C-ABD	6	654	0.009	6	0.0	5.554	А
C-D	14			14			
C-A	14			14			



# Junction 2 - 2031 Do Nothing, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	g Major arm width Arm A - Major arm geometry		For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.04	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.04	Α

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2031 Do Nothing	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	23	100.000
В		✓	7	100.000
С		✓	32	100.000
D		✓	8	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То						
		Α	В	C	D			
	Α	0	1	19	3			
From	В	1	0	3	3			
	С	10	2	0	20			
	D	0	4	4	0			



		То						
		Α	В	С	D			
	Α	0	0	0	0			
From	В	100	0	0	28			
	С	0	0	0	0			
	D	77	14	0	0			

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.01	7.87	0.0	А
A-BCD	0.00	5.11	0.0	А
A-B				
A-C				
D-ABC	0.02	7.62	0.0	А
C-ABD	0.00	5.52	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	558	0.009	5	0.0	7.796	A
A-BCD	2	712	0.003	2	0.0	5.074	A
A-B	0.75			0.75			
A-C	14			14			
D-ABC	6	515	0.012	6	0.0	7.530	A
C-ABD	2 656		0.002	1	0.0	5.499	A
C-D	15			15			
C-A	8			8			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	557	0.011	6	0.0	7.829	A
A-BCD	3	710	0.004	3	0.0	5.087	A
A-B	0.90			0.90			
A-C	17			17			
D-ABC	7	514	0.014	7	0.0	7.569	A
C-ABD	2	655	0.003	2	0.0	5.510	A
C-D	18			18			
C-A	9			9			



#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	555	0.014	8	0.0	7.875	, A
A-BCD	3	708	0.005	3	0.0	5.105	A
A-B	1			1			<del></del>
A-C	21			21			77
D-ABC	9	512	0.017	9	0.0	7.624	A 77
C-ABD	2	654	0.003	2	0.0	5.524	A
C-D	22			22			•
C-A	11			11			

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)			Throughput (PCU/hr)			Unsignalised level of service	
B-ACD	8	555	0.014	8	0.0	7.875	А	
A-BCD	3	708	0.005	3	0.0	5.105	A	
A-B	1			1				
A-C	21			21				
D-ABC	9	512	0.017	9	0.0	7.624	A	
C-ABD	2	654	0.003	2	0.0	5.524	A	
C-D	22			22				
C-A	11			11				

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr) RFC		Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	557	0.011	6	0.0	7.831	A
A-BCD	3	710	0.004	3	0.0	5.089	A
A-B	0.90			0.90			
A-C	17			17			
D-ABC	7 514		0.014	7	0.0	7.570	A
C-ABD	2	655	0.003	2	0.0	5.512	A
C-D	18			18			
C-A	9			9			

#### 09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	) RFC (PCU/hr) En		End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	558	0.009	5	0.0	7.796	А
A-BCD	2	712	0.003	2	0.0	5.074	A
A-B	0.75			0.75			
A-C	14			14			
D-ABC	6	515	0.012	6	0.0	7.534	A
C-ABD	2	656	0.002	2	0.0	5.502	А
C-D	15			15			
C-A	8			8			



# Junction 2 - 2031 Do Nothing, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

Ju	unction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
	1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.32	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.32	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2031 Do Nothing	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	28	100.000
В		✓	18	100.000
С		✓	30	100.000
D		✓	13	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		Α	В	C	D			
	Α	0	3	24	1			
From	В	4	0	3	11			
	С	10	8	0	12			
	D	0	8	5	0			



	То							
		Α	В	U	ם			
	Α	0	0	0	36			
From	В	0	0	0	29			
	С	0	0	0	0			
	D	53	0	0	0			

# PRICHINADI. 27/17/202

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	8.29	0.0	А
A-BCD	0.00	6.92	0.0	А
A-B				
A-C				
D-ABC	0.03	7.26	0.0	А
C-ABD	0.01	5.59	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	528	0.026	13	0.0	8.113	А
A-BCD	0.75	712	0.001	0.75	0.0	6.886	А
A-B	2			2			
A-C	18			18			
D-ABC	10	514	0.019	10	0.0	7.139	Α
C-ABD	6	655	0.009	6	0.0	5.544	А
C-D	9			9			
C-A	8			8			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	16	526	0.031	16	0.0	8.187	A
A-BCD	0.90	710	0.001	0.90	0.0	6.901	A
A-B	3			3			
A-C	22			22			
D-ABC	12	512	0.023	12	0.0	7.191	A
C-ABD	7	654	0.011	7	0.0	5.563	A
C-D	11			11			
C-A	9			9			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	523	0.038	20	0.0	8.287	Α Α
A-BCD	1	708	0.002	1	0.0	6.921	A
A-B	3			3			· O.
A-C	26			26			77
D-ABC	14	510	0.028	14	0.0	7.263	AZZ
C-ABD	9	653	0.014	9	0.0	5.589	Α 🥎
C-D	13			13			
C-A	11			11			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	523	0.038	20	0.0	8.287	A
A-BCD	1	708	0.002	1	0.0	6.921	А
A-B	3			3			
A-C	26			26			
D-ABC	14	510	0.028	14	0.0	7.263	A
C-ABD	9	653	0.014	9	0.0	5.589	A
C-D	13			13			
C-A	11			11			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	16	526	0.031	16	0.0	8.188	А
A-BCD	0.90	710	0.001	0.90	0.0	6.901	A
A-B	3			3			
A-C	22			22			
D-ABC	12	512	0.023	12	0.0	7.194	Α
C-ABD	7	654	0.011	7	0.0	5.563	A
C-D	11			11			
C-A	9			9			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	528	0.026	14	0.0	8.119	A
A-BCD	0.75	712	0.001	0.75	0.0	6.886	A
A-B	2			2			
A-C	18			18			
D-ABC	10	514	0.019	10	0.0	7.142	A
C-ABD	6	655	0.009	6	0.0	5.546	А
C-D	9			9			
C-A	8			8			



# Junction 2 - 2031 Do Something Operational Phase, AM Data Errors and Warnings

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

## **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.18	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	2.18	Α	

# **Traffic Demand**

#### **Demand Set Details**

	ID	Scenario name	Scenario name Time Period name Traffic profile type S		Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
C	011	2031 Do Something Operational Phase	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	m Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	31	100.000
В		✓	8	100.000
С		✓	46	100.000
D		✓	17	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То						
		Α	В	С	D			
	Α	0	1	27	3			
From	В	1	0	4	3			
	С	17	3	0	26			
	D	0	4	13	0			



		То						
		Α	В	O	ם			
	Α	0	0	0	8			
From	В	100	0	0	22			
	С	0	0	0	0			
	D	51	14	0	0			

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	7.51	0.0	А
A-BCD	0.00	5.55	0.0	А
A-B				
A-C				
D-ABC	0.04	7.59	0.0	А
C-ABD	0.01	5.55	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	564	0.011	6	0.0	7.414	А
A-BCD	2	708	0.003	2	0.0	5.504	А
A-B	0.75			0.75			
A-C	20			20			
D-ABC	13	512	0.025	13	0.0	7.423	A
C-ABD	2	654	0.003	2	0.0	5.519	A
C-D	20			20			
C-A	13			13			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	562	0.013	7	0.0	7.453	A
A-BCD	3	707	0.004	3	0.0	5.523	A
A-B	0.90			0.90			
A-C	24			24			
D-ABC	15	510	0.030	15	0.0	7.495	A
C-ABD	3	653	0.004	3	0.0	5.533	A
C-D	23			23			
C-A	15			15			



#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	560	0.016	9	0.0	7.508	A
A-BCD	3	704	0.005	3	0.0	5.549	A
A-B	1			1			~ <u>~</u>
A-C	30			30			77/
D-ABC	19	507	0.037	19	0.0	7.592	A 77
C-ABD	3	652	0.005	3	0.0	5.552	A
C-D	29			29			•
C-A	19			19			

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	560	0.016	9	0.0	7.508	A
A-BCD	3	704	0.005	3	0.0	5.549	А
A-B	1			1			
A-C	30			30			
D-ABC	19	507	0.037	19	0.0	7.593	A
C-ABD	3	652	0.005	3	0.0	5.552	A
C-D	29			29			
C-A	19			19			

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	562	0.013	7	0.0	7.456	A
A-BCD	3	707	0.004	3	0.0	5.525	A
A-B	0.90			0.90			
A-C	24			24			
D-ABC	15	510	0.030	15	0.0	7.499	А
C-ABD	3	653	0.004	3	0.0	5.535	A
C-D	23			23			
C-A	15			15			

#### 09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	564	0.011	6	0.0	7.417	А
A-BCD	2	708	0.003	2	0.0	5.504	A
A-B	0.75			0.75			
A-C	20			20			
D-ABC	13	512	0.025	13	0.0	7.427	A
C-ABD	2	654	0.003	2	0.0	5.519	A
C-D	20			20			
C-A	13			13			



# Junction 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operational Phase, PM Operation 2 - 2031 Do Something Operation Phase, PM Opera

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

## **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.96	Α

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS	
Left	Normal/unknown	2.96	Α	

# Traffic Demand

#### **Demand Set Details**

I	ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D	12	2031 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	35	100.000
В		✓	19	100.000
С		✓	47	100.000
D		✓	20	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То					
		Α	В	С	D	
	Α	0	3	31	1	
From	В	4	0	4	11	
	С	19	8	0	20	
	D	0	8	12	0	



	То					
		Α	В	U	ם	
	Α	0	0	0	21	
From	В	0	0	0	25	
	С	0	0	0	0	
	D	31	6	0	0	

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	8.10	0.0	А
A-BCD	0.00	6.21	0.0	A
A-B				
A-C				
D-ABC	0.04	7.64	0.0	A
C-ABD	0.01	5.60	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	529	0.027	14	0.0	7.901	A
A-BCD	0.75	708	0.001	0.75	0.0	6.159	A
A-B	2			2			
A-C	23			23			
D-ABC	15	510	0.030	15	0.0	7.435	А
C-ABD	6	654	0.009	6	0.0	5.555	A
C-D	15			15			
C-A	14			14			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	527	0.032	17	0.0	7.984	А
A-BCD	0.90	706	0.001	0.90	0.0	6.179	А
A-B	3			3			
A-C	28			28			
D-ABC	18	508	0.035	18	0.0	7.520	А
C-ABD	7	653	0.011	7	0.0	5.576	A
C-D	18			18			
C-A	17			17			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	524	0.040	21	0.0	8.097	), A
A-BCD	1	703	0.002	1	0.0	6.207	A
A-B	3			3			
A-C	34			34			77
D-ABC	22	504	0.044	22	0.0	7.636	A 77
C-ABD	9	651	0.014	9	0.0	5.605	Α -
C-D	22			22			
C-A	21			21			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	524	0.040	21	0.0	8.097	А
A-BCD	1	703	0.002	1	0.0	6.207	A
A-B	3			3			
A-C	34			34			
D-ABC	22	504	0.044	22	0.0	7.636	A
C-ABD	9	651	0.014	9	0.0	5.605	A
C-D	22			22			
C-A	21			21			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	527	0.032	17	0.0	7.985	А
A-BCD	0.90	706	0.001	0.90	0.0	6.182	A
A-B	3			3			
A-C	28			28			
D-ABC	18	508	0.035	18	0.0	7.522	А
C-ABD	7	653	0.011	7	0.0	5.578	A
C-D	18			18			
C-A	17			17			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	529	0.027	14	0.0	7.907	А
A-BCD	0.75	708	0.001	0.75	0.0	6.162	А
A-B	2			2			
A-C	23			23			
D-ABC	15	510	0.030	15	0.0	7.440	A
C-ABD	6	654	0.009	6	0.0	5.555	А
C-D	15			15			
C-A	14			14			



# Junction 2 - 2041 Do Nothing, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.94	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.94	Α

#### **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1:	2041 Do Nothing	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	25	100.000
В		✓	8	100.000
С		✓	36	100.000
D		✓	8	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То				
		Α	В	C	D	
	Α	0	1	21	3	
From	В	1	0	4	3	
	С	11	2	0	23	
	D	0	4	4	0	



		То					
		Α	В	C	D		
	Α	0	0	0	0		
From	В	100	0	0	30		
	С	0	0	0	0		
	D	79	16	0	0		

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	7.63	0.0	А
A-BCD	0.00	5.11	0.0	A
A-B				
A-C				
D-ABC	0.02	7.70	0.0	A
C-ABD	0.00	5.53	0.0	A
C-D				
C-A				

#### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	566	0.011	6	0.0	7.551	A
A-BCD	2	711	0.003	2	0.0	5.080	A
A-B	0.75			0.75			
A-C	16			16			
D-ABC	6	515	0.012	6	0.0	7.602	A
C-ABD	2	656	0.002	1	0.0	5.503	A
C-D	17			17			
C-A	8			8			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	565	0.013	7	0.0	7.585	А
A-BCD	3	709	0.004	3	0.0	5.095	А
A-B	0.90			0.90			
A-C	19			19			
D-ABC	7	513	0.014	7	0.0	7.644	А
C-ABD	2	655	0.003	2	0.0	5.514	A
C-D	21			21			
C-A	10			10			



#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	563	0.016	9	0.0	7.633	), A
A-BCD	3	707	0.005	3	0.0	5.114	A
A-B	1			1			<i>`</i> ⊘. `
A-C	23			23			77
D-ABC	9	511	0.017	9	0.0	7.703	A 77
C-ABD	2	653	0.003	2	0.0	5.529	Α -
C-D	25			25			
C-A	12			12			

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	563	0.016	9	0.0	7.633	А
A-BCD	3	707	0.005	3	0.0	5.114	А
A-B	1			1			
A-C	23			23			
D-ABC	9	511	0.017	9	0.0	7.703	А
C-ABD	2	653	0.003	2	0.0	5.529	A
C-D	25			25			
C-A	12			12			

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	565	0.013	7	0.0	7.585	А
A-BCD	3	709	0.004	3	0.0	5.097	A
A-B	0.90			0.90			
A-C	19			19			
D-ABC	7	513	0.014	7	0.0	7.645	А
C-ABD	2	655	0.003	2	0.0	5.516	A
C-D	21			21			
C-A	10			10			

#### 09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	566	0.011	6	0.0	7.554	А
A-BCD	2	711	0.003	2	0.0	5.082	А
A-B	0.75			0.75			
A-C	16			16			
D-ABC	6	515	0.012	6	0.0	7.603	А
C-ABD	2	656	0.002	2	0.0	5.503	А
C-D	17			17			
C-A	8			8			



# Junction 2 - 2041 Do Nothing, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description			
Warning	Major arm width  Arm A - Major arm geometry		For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.			
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.			

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.17	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	3.17	Α	

#### **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2041 Do Nothing	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	31	100.000
В		✓	18	100.000
С		✓	32	100.000
D		✓	13	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То						
		Α	В	C	D			
	Α	0	3	27	1			
From	В	4	0	3	11			
	С	11	8	0	13			
	D	0	8	5	0			



		То							
		Α	В	U	D				
	Α	0	0	0	39				
From	В	0	0	0	32				
	С	0	0	0	0				
	D	56	0	0	0				

# PECENED. 27/7/202

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	<b>B-ACD</b> 0.04 8.4		0.0	А
A-BCD	0.00	7.08	0.0	А
A-B				
A-C				
D-ABC	0.03	7.28	0.0	А
C-ABD	0.01	5.60	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	527	0.026	13	0.0	8.228	А
A-BCD	0.75	711	0.001	0.75	0.0	7.042	А
A-B	2			2			
A-C	20			20			
D-ABC	10	513	0.019	10	0.0	7.148	A
C-ABD	6	655	0.009	6	0.0	5.549	Α
C-D	10			10			
C-A	8			8			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	16	525	0.031	16	0.0	8.305	A
A-BCD	0.90	710	0.001	0.90	0.0	7.058	А
A-B	3			3			
A-C	24			24			
D-ABC	12	512	0.023	12	0.0	7.201	А
C-ABD	7	654	0.011	7	0.0	5.569	A
C-D	12			12			
C-A	10			10			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	522	0.038	20	0.0	8.410	), A
A-BCD	1	708	0.002	1	0.0	7.079	A
A-B	3			3			
A-C	30			30			77
D-ABC	14	509	0.028	14	0.0	7.276	A 77
C-ABD	9	652	0.014	9	0.0	5.597	Α 🧲
C-D	14			14			
C-A	12			12			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	522	0.038	20	0.0	8.410	A
A-BCD	1	708	0.002	1	0.0	7.079	А
A-B	3			3			
A-C	30			30			
D-ABC	14	509	0.028	14	0.0	7.276	А
C-ABD	9	652	0.014	9	0.0	5.597	A
C-D	14			14			
C-A	12			12			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	16	525	0.031	16	0.0	8.307	A
A-BCD	0.90	710	0.001	0.90	0.0	7.061	А
A-B	3			3			
A-C	24			24			
D-ABC	12	511	0.023	12	0.0	7.202	А
C-ABD	7	654	0.011	7	0.0	5.569	A
C-D	12			12			
C-A	10			10			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	527	0.026	14	0.0	8.232	А
A-BCD	0.75	711	0.001	0.75	0.0	7.045	А
A-B	2			2			
A-C	20			20			
D-ABC	10	513	0.019	10	0.0	7.148	А
C-ABD	6	655	0.009	6	0.0	5.551	А
C-D	10			10			
C-A	8			8			



# Junction 2 - 2041 Do Something Operational Phase, AM Data Errors and Warnings

#### **Data Errors and Warnings**

Severity	/ Area Item		Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

#### **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.07	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	2.07	Α	

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	2041 Do Something Operational Phase	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	n Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	33	100.000	
В		✓	8	100.000	
С		✓	50	100.000	
D		✓	17	100.000	

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То						
		Α	В	С	D			
	Α	0	1	29	3			
From	В	1	0	4	3			
	С	18	3	0	29			
	D	0	4	13	0			



	То							
		Α	В	C	D			
	Α	0	0	0	8			
From	В	100	0	0	24			
	С	0	0	0	0			
	D	54	15	0	0			

# PRICHINADI. 27/17/202

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	7.56	0.0	A
A-BCD	0.00	5.56	0.0	A
A-B				
A-C				
D-ABC	0.04	7.62	0.0	A
C-ABD	0.01	5.56	0.0	A
C-D				
C-A				

#### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	564	0.011	6	0.0	7.464	A
A-BCD	2	708	0.003	2	0.0	5.511	A
A-B	0.75			0.75			
A-C	22			22			
D-ABC	13	511	0.025	13	0.0	7.446	Α
C-ABD	2	654	0.003	2	0.0	5.522	А
C-D	22			22			
C-A	14			14			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	562	0.013	7	0.0	7.506	A
A-BCD	3	705	0.004	3	0.0	5.531	A
A-B	0.90			0.90			
A-C	26			26			
D-ABC	15	509	0.030	15	0.0	7.521	A
C-ABD	3	653	0.004	3	0.0	5.537	A
C-D	26			26			
C-A	16			16			



#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	559	0.016	9	0.0	7.563	A
A-BCD	3	703	0.005	3	0.0	5.559	A
A-B	1			1			<del>~</del> 0. ~
A-C	32			32			77
D-ABC	19	506	0.037	19	0.0	7.621	A 77
C-ABD	3	651	0.005	3	0.0	5.557	A
C-D	32			32			
C-A	20			20			

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	559	0.016	9	0.0	7.563	А
A-BCD	3	703	0.005	3	0.0	5.559	А
A-B	1			1			
A-C	32			32			
D-ABC	19	506	0.037	19	0.0	7.621	A
C-ABD	3	651	0.005	3	0.0	5.557	A
C-D	32			32			
C-A	20			20			

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	562	0.013	7	0.0	7.506	А
A-BCD	3	705	0.004	3	0.0	5.533	А
A-B	0.90			0.90			
A-C	26			26			
D-ABC	15	509	0.030	15	0.0	7.525	Α
C-ABD	3	653	0.004	3	0.0	5.539	A
C-D	26			26			
C-A	16			16			

#### 09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	564	0.011	6	0.0	7.465	А
A-BCD	2	708	0.003	2	0.0	5.513	А
A-B	0.75			0.75			
A-C	22			22			
D-ABC	13	511	0.025	13	0.0	7.453	A
C-ABD	2	654	0.003	2	0.0	5.524	А
C-D	22			22			
C-A	14			14			



# Junction 2 - 2041 Do Something Operational Phase, PM Data Errors and Warnings

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

#### **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.88	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	2.88	Α	

# **Traffic Demand**

#### **Demand Set Details**

IC	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2041 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	38	100.000
В		✓	19	100.000
С		✓	50	100.000
D		✓	20	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То					
		Α	В	С	D		
	Α	0	3	34	1		
From	В	4	0	4	11		
	С	19	9	0	22		
	D	0	8	12	0		



	То								
		Α	В	U	ם				
From	Α	0	0	0	23				
	В	0	0	0	27				
	С	0	0	0	0				
	D	34	6	0	0				

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.04	8.19	0.0	Α
A-BCD	0.00	6.32	0.0	А
A-B				
A-C				
D-ABC	0.04	7.65	0.0	А
C-ABD	0.02	5.62	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	528	0.027	14	0.0	7.982	A
A-BCD	0.75	707	0.001	0.75	0.0	6.268	A
A-B	2			2			
A-C	26			26			
D-ABC	15	509	0.030	15	0.0	7.446	Α
C-ABD	7	653	0.010	7	0.0	5.566	A
C-D	17			17			
C-A	14			14			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	526	0.032	17	0.0	8.069	A
A-BCD	0.90	705	0.001	0.90	0.0	6.289	А
A-B	3			3			
A-C	31			31			
D-ABC	18	507	0.035	18	0.0	7.533	А
C-ABD	8	652	0.012	8	0.0	5.589	A
C-D	20			20			
C-A	17			17			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service	
B-ACD	21	522	0.040	21	0.0	8.187	A	
A-BCD	1	702	0.002	1	0.0	6.319	A	
A-B	3			3			~O	
A-C	37			37			77	
D-ABC	22	503	0.044	22	0.0	7.652	A 77	
C-ABD	10	650	0.015	10	0.0	5.621	Α ?	
C-D	24			24			· ·	
C-A	21			21				

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	522	0.040	21	0.0	8.187	А
A-BCD	1	702	0.002	1	0.0	6.319	А
A-B	3			3			
A-C	37			37			
D-ABC	22	503	0.044	22	0.0	7.653	А
C-ABD	10	650	0.015	10	0.0	5.621	A
C-D	24			24			
C-A	21			21			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	526	0.032	17	0.0	8.070	А
A-BCD	0.90	705	0.001	0.90	0.0	6.292	A
A-B	3			3			
A-C	31			31			
D-ABC	18	507	0.035	18	0.0	7.537	A
C-ABD	8	652	0.012	8	0.0	5.592	A
C-D	20			20			
C-A	17			17			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	528	0.027	14	0.0	7.986	А
A-BCD	0.75	707	0.001	0.75	0.0	6.270	А
A-B	2			2			
A-C	26			26			
D-ABC	15	509	0.030	15	0.0	7.453	A
C-ABD	7	653	0.010	7	0.0	5.568	А
C-D	17			17			
C-A	14			14			



#### **Junctions 10**

#### **PICADY 10 - Priority Intersection Module**

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Filename: Junction 3 - AM & PM.j10

Path: Q:\2024 Jobs\24\_078 Killala DC Project\08. Traffic\03. Junction Models\Junction 3

Report generation date: 17/10/2024 13:59:36

- »Junction 3 2024 Base Year, AM
- »Junction 3 2024 Base Year, PM
- »Junction 3 2026 Do Nothing, AM
- »Junction 3 2026 Do Nothing, PM
- »Junction 3 2026 Do Something Construction Phase, AM
- »Junction 3 2026 Do Something Construction Phase, PM
- »Junction 3 2026 Do Something Operational Phase, AM
- »Junction 3 2026 Do Something Operational Phase, PM
- »Junction 3 2031 Do Nothing, AM
- »Junction 3 2031 Do Nothing, PM
- »Junction 3 2031 Do Something Operational Phase, AM
- »Junction 3 2031 Do Something Operational Phase, PM
- »Junction 3 2041 Do Nothing, AM
- »Junction 3 2041 Do Nothing, PM
- »Junction 3 2041 Do Something Operational Phase, AM
- »Junction 3 2041 Do Something Operational Phase, PM

#### Summary of junction performance

		AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	Los	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	
	Junction 3 - 2024 Base Year										
Stream B-CD		0.0	8.09	0.00	Α		0.0	7.24	0.01	А	
Stream B-AD		0.0	9.00	0.02	Α		0.0	7.93	0.02	Α	
Stream A-BCD	D1	0.0	6.44	0.03	Α	D2	0.0	5.76	0.02	Α	
Stream D-AB	וטו	0.0	6.41	0.03	Α	DZ	0.0	5.57	0.01	Α	
Stream D-BC		0.0	7.42	0.02	Α		0.0	8.27	0.02	Α	
Stream C-ABD		0.0	10.71	0.00	В		0.0	0.00	0.00	Α	
	Junction 3 - 2026 Do Nothing										
Stream B-CD		0.0	8.21	0.00	Α		0.0	7.27	0.01	А	
Stream B-AD		0.0	9.14	0.02	Α		0.0	7.97	0.02	Α	
Stream A-BCD	D3	0.0	6.47	0.03	Α	D4	0.0	5.78	0.02	Α	
Stream D-AB	DS	0.0	6.44	0.03	Α	D4	0.0	5.59	0.01	Α	
Stream D-BC		0.0	7.47	0.02	Α		0.0	8.32	0.02	Α	
Stream C-ABD		0.0	10.72	0.00	В		0.0	0.00	0.00	Α	
		Junctio	n 3 - 202	6 Do	Some	ething (	Construction	n Phase			
Stream B-CD		0.0	8.47	0.00	Α		0.0	7.80	0.01	А	
Stream B-AD		0.0	9.02	0.03	Α		0.1	10.16	0.05	В	
Stream A-BCD	D5	0.0	6.47	0.03	Α	D6	0.0	5.78	0.02	Α	
Stream D-AB	סט	0.0	6.44	0.03	Α	סט	0.0	5.60	0.01	Α	



				l									
Stream D-BC		0.0	7.49	0.02	Α		0.0	8.35	0.02	Α			
Stream C-ABD		0.0	10.78	0.00	В		0.0	0.00	0.00	Α			
		Junction	on 3 - 20	26 Do	Som	ething	Operational	l Phase					
Stream B-CD		0.0	8.53	0.00	А		0.0	7.68	0.01	Α			
Stream B-AD		0.0	9.05	0.03	Α		0.0	8.53	0.04	Α			
Stream A-BCD	D7	0.0	6.47	0.03	Α	D8	0.0	5.77	0.02	Α			
Stream D-AB	"	0.0	6.44	0.03	Α	D6	0.0	5.60	0.01	Α			
Stream D-BC		0.0	7.49	0.02	Α		0.0	8.34	0.02	Α			
Stream C-ABD		0.0	10.75	0.00	В		0.0	0.00	0.00	Α			
		Junction 3 - 2031 Do Nothing											
Stream B-CD		0.0	8.32	0.00	А		0.0	7.41	0.01	Α			
Stream B-AD		0.0	9.32	0.02	Α		0.0	8.06	0.02	Α			
Stream A-BCD	D9	0.0	6.60	0.03	Α	D10	0.0	5.81	0.02	Α			
Stream D-AB	D9	0.0	6.50	0.03	Α	D10	0.0	5.64	0.01	Α			
Stream D-BC		0.0	7.60	0.02	Α		0.0	8.42	0.02	Α			
Stream C-ABD		0.0	10.68	0.01	В		0.0	0.00	0.00	Α			
		Junctio	Operational	l Phase									
Stream B-CD		0.0	8.67	0.00	Α		0.0	7.76	0.01	Α			
Stream B-AD		0.0	9.26	0.04	Α		0.0	8.63	0.04	Α			
Stream A-BCD		0.0	6.60	0.03	Α		0.0	5.81	0.02	Α			
Stream D-AB	D11	0.0	6.50	0.03	Α	D12	0.0	5.64	0.01	Α			
Stream D-BC		0.0	7.62	0.02	Α		0.0	8.45	0.02	Α			
Stream C-ABD		0.0	10.71	0.01	В		0.0	0.00	0.00	Α			
			Jun	ction	3 - 20	041 Do	Nothing						
Stream B-CD		0.0	8.46	0.00	Α		0.0	7.51	0.01	Α			
Stream B-AD		0.0	9.57	0.02	Α		0.0	8.13	0.03	Α			
Stream A-BCD	D40	0.0	6.65	0.03	Α	Data	0.0	5.84	0.02	Α			
Stream D-AB	D13	0.0	6.55	0.03	Α	D14	0.0	5.62	0.01	Α			
Stream D-BC		0.0	7.69	0.02	Α		0.0	8.52	0.02	Α			
Stream C-ABD		0.0	10.68	0.01	В		0.0	0.00	0.00	Α			
		Junctio	on 3 - 20	Operational	l Phase								
Stream B-CD		0.0	8.75	0.00	А		0.0	7.84	0.01	Α			
Stream B-AD		0.0	9.42	0.04	Α		0.0	8.73	0.04	Α			
Stream A-BCD	B	0.0	6.64	0.03	Α	D	0.0	5.84	0.02	Α			
Stream D-AB	D15	0.0	6.55	0.03	Α	D16	0.0	5.62	0.01	Α			
Stream D-BC		0.0	7.71	0.02	Α		0.0	8.54	0.02	Α			
Stream C-ABD		0.0	10.71	0.01	В		0.0	0.00	0.00	Α			

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There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

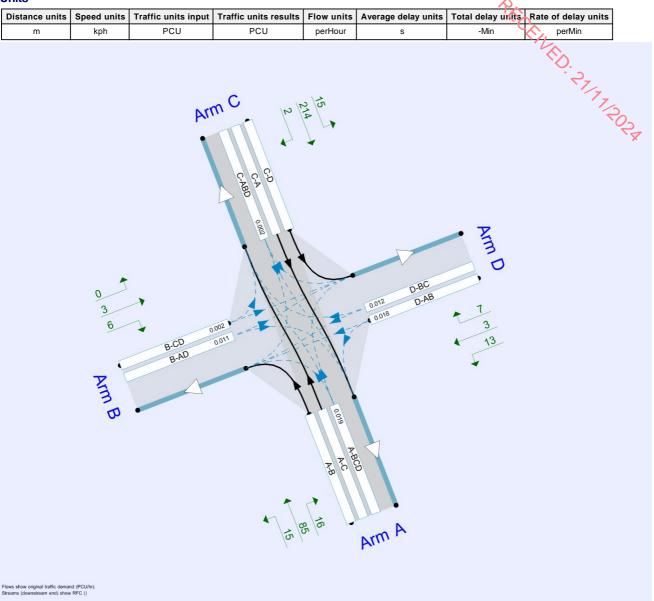
#### File summary

#### **File Description**

no Boodinption							
Title							
Location							
Site number							
Date	15/10/2024						
Version							
Status	(new file)						
Identifier							
Client							
Jobnumber							
Enumerator	DOMAIN\fernando.figueiredo						
Description							



#### **Units**



The junction diagram reflects the last run of Junctions.

#### **Analysis Options**

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	
		0.85	36.00	20.00	



#### **Demand Set Summary**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HM:mm)	Time segment length (min)
D1	2024 Base Year	AM	ONE HOUR	00:00	01:30	15
D2	2024 Base Year	PM	ONE HOUR	16:00	17:30	15
D3	2026 Do Nothing	AM	ONE HOUR	00:00	01:30	15
D4	2026 Do Nothing	PM	ONE HOUR	16:00	17:30	ئے 15
D5	2026 Do Something Construction Phase	AM	ONE HOUR	00:00	01:30	15
D6	2026 Do Something Construction Phase	PM	ONE HOUR	16:00	17:30	15
D7	2026 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15
D8	2026 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15
D9	2031 Do Nothing	AM	ONE HOUR	00:00	01:30	15
D10	2031 Do Nothing	PM	ONE HOUR	16:00	17:30	15
D11	2031 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15
D12	2031 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15
D13	2041 Do Nothing	AM	ONE HOUR	00:00	01:30	15
D14	2041 Do Nothing	PM	ONE HOUR	16:00	17:30	15
D15	2041 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15
D16	2041 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

#### **Analysis Set Details**

I	ID	Name	Network flow scaling factor (%)					
I	<b>A1</b>	Junction 3	100.000					



# Junction 3 - 2024 Base Year, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description					
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less 6m.					
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.					

# **Junction Network**

#### **Junctions**

J	lunction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
	1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.95	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	0.95	Α	

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	R314 (SE)		Major
В	Access to R314 (SW)		Minor
С	R314 (NW)		Major
D	Access to Newtownwhite School		Minor

#### **Major Arm Geometry**

	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
	Α	5.50			184.0	✓	1.00
Ī	С	5.50			190.0	✓	1.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

#### **Minor Arm Geometry**

Arn	Minor arm type	Width at give- way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
В	One lane plus flare	8.40	5.40	2.50	2.20	2.20	✓	1.00	35	100
D	One lane plus flare	9.50	4.30	2.20	2.20	2.20		1.00	25	50



#### Slope / Intercept / Capacity

#### **Priority Intersection Slopes and Intercepts**

Slope / Interce		_		cepts									PK	C <sub>A</sub>
Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C	
A-D	681	-	-	-	-	-	-	0.269	0.385	0.269	-	-	-	17/1/2024
B-A	544	0.101	0.256	0.256	-	-	-	0.161	0.365	-	0.256	0.256	0.128	17-
B-C	659	0.103	0.261	-	-	-	-	•	-	-	-	-	-	2
B-D, nearside lane	517	0.096	0.243	0.243	-	-	-	0.153	0.347	0.153	-	-	-	,05
B-D, offside lane	544	0.101	0.256	0.256	-	-	-	0.161	0.365	0.161	-	-	-	<b>`</b> ×
С-В	684	0.271	0.271	0.387	-	-	-	•	-	-	-	-	-	
D-A	667	-	-	-	-	-	-	0.264	-	0.105	-	-	-	
D-B, nearside lane	519	0.154	0.154	0.349	-	-	-	0.244	0.244	0.097	-	-	-	
D-B, offside lane	587	0.174	0.174	0.394	-	-	-	0.276	0.276	0.109	-	-	-	
D-C	587	-	0.174	0.394	0.138	0.276	0.276	0.276	0.276	0.109	-	-	-	

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

# **Traffic Demand**

#### **Demand Set Details**

ı	ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	
ı	D1	2024 Base Year	AM	ONE HOUR	00:00	01:30	15	

Vehicle mix source	PCU Factor for a HV (PCU)					
HV Percentages	2.00					

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	116	100.000
В		✓	9	100.000
С		✓	231	100.000
D		✓	23	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		Α	В	C	D			
	Α	0	15	85	16			
From	В	6	0	0	3			
	С	214	2	0	15			
	D	13	3	7	0			

#### **Vehicle Mix**

#### **Heavy Vehicle Percentages**

	То						
		Α	В	C	D		
	Α	0	30	5	7		
From	В	20	0	0	0		
	С	7	100	0	15		
	D	0	0	0	0		



# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.00	8.09	0.0	А
B-AD	0.02	9.00	0.0	А
A-BCD	0.03	6.44	0.0	А
A-B				
A-C				
D-AB	0.03	6.41	0.0	А
D-BC	0.02	7.42	0.0	А
C-ABD	0.00	10.71	0.0	В
C-D				
C-A				

# ROLL RIVERS

#### Main Results for each time segment

#### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	469	0.002	1	0.0	7.696	A
B-AD	6	493	0.011	6	0.0	8.520	А
ABCD	12	635	0.019	12	0.0	6.179	A
A-B	11			11			
A-C	64			64			
D-AB	11	600	0.018	11	0.0	6.112	A
D-BC	6	523	0.012	6	0.0	6.960	A
C-ABD	2	667	0.002	2	0.0	10.701	В
C-D	11			11			
C-A	161			161			

#### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service			
B-CD	1	460	0.003	1	0.0	7.857	A			
B-AD	7	483	0.014	7	0.0	8.717	A			
A-BCD	14	627	0.023	14	0.0	6.287	А			
A-B	13			13						
A-C	76			76						
D-AB	13	590	0.022	13	0.0	6.234	А			
D-BC	8	511	0.015	8	0.0	7.148	А			
C-ABD	2	666	0.003	2	0.0	10.709	В			
C-D	13			13						
C-A	192			192						



#### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	447	0.004	2	0.0	8.089	), A
B-AD	8	470	0.018	8	0.0	9.002	A
A-BCD	18	616	0.029	18	0.0	6.441	O. A
A-B	16			16			77
A-C	93			93			77
D-AB	16	577	0.028	16	0.0	6.413	Α 💛
D-BC	9	494	0.019	9	0.0	7.424	A
C-ABD	2	664	0.003	2	0.0	10.707	В
C-D	17			17			
C-A	236			236			

#### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	447	0.004	2	0.0	8.089	A
B-AD	8	470	0.018	8	0.0	9.003	A
A-BCD	18	616	0.029	18	0.0	6.441	A
A-B	16			16			
A-C	93			93			
D-AB	16	577	0.028	16	0.0	6.413	A
D-BC	9	494	0.019	9	0.0	7.425	A
C-ABD	2	662	0.003	2	0.0	10.709	В
C-D	17			17			
C-A	236			236			

#### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	460	0.003	1	0.0	7.857	А
B-AD	7	483	0.014	7	0.0	8.719	A
A-BCD	14	627	0.023	14	0.0	6.290	A
A-B	13			13			
A-C	76			76			
D-AB	13	590	0.022	13	0.0	6.235	A
D-BC	8	511	0.015	8	0.0	7.152	A
C-ABD	2	663	0.003	2	0.0	10.711	В
C-D	13			13			
C-A	192			192			

#### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	469	0.002	1	0.0	7.699	А
B-AD	6	493	0.011	6	0.0	8.525	А
A-BCD	12	635	0.019	12	0.0	6.182	А
A-B	11			11			
A-C	64			64			
D-AB	11	600	0.018	11	0.0	6.115	А
D-BC	6	523	0.012	6	0.0	6.962	А
C-ABD	2	666	0.002	2	0.0	10.704	В
C-D	11			11			
C-A	161			161			



# Junction 3 - 2024 Base Year, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.64	А

#### **Junction Network**

Driving side	Driving side Lighting		Network LOS	
Left	Normal/unknown	0.64	Α	

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024 Base Year	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	181	100.000
В		✓	11	100.000
С		✓	161	100.000
D		✓	13	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То						
		Α	В	С	D			
	Α	0	18	153	10			
From	В	7	0	1	3			
	С	159	0	0	2			
	D	5	3	5	0			



	То						
		Α	В	U	D		
	Α	0	21	3	0		
From	В	0	0	0	0		
	С	5	0	0	0		
	D	0	0	0	0		

# PECENED. 27,77,803

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	7.24	0.0	А
B-AD	0.02	7.93	0.0	А
A-BCD	0.02	5.76	0.0	А
A-B				
A-C				
D-AB	0.01	5.57	0.0	А
D-BC	0.02	8.27	0.0	A
C-ABD	0.00	0.00	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	523	0.004	2	0.0	6.911	A
B-AD	6	488	0.013	6	0.0	7.469	A
A-BCD	8	649	0.012	7	0.0	5.609	A
A-B	14			14			
A-C	115			115			
D-AB	5	675	0.007	5	0.0	5.368	A
D-BC	5	466	0.010	5	0.0	7.809	A
C-ABD	0	1309	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	120			120			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	513	0.004	2	0.0	7.044	А
B-AD	8	478	0.016	8	0.0	7.654	А
ABCD	9	644	0.014	9	0.0	5.672	A
A-B	16			16			
A-C	138			138			
D-AB	6	666	0.009	6	0.0	5.452	А
D-BC	6	456	0.013	6	0.0	7.997	A
C-ABD	0	1294	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	143			143			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	500	0.006	3	0.0	7.236	A
B-AD	9	463	0.020	9	0.0	7.926	A
A-BCD	11	636	0.017	11	0.0	5.760	O. A
A-B	20			20			77
A-C	168			168			77.
D-AB	7	653	0.011	7	0.0	5.574	Α 🧡
D-BC	7	442	0.016	7	0.0	8.273	А
C-ABD	0	1273	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	175			175			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	500	0.006	3	0.0	7.236	А
B-AD	9	463	0.020	9	0.0	7.926	А
A-BCD	11	636	0.017	11	0.0	5.760	А
A-B	20			20			
A-C	168			168			
D-AB	7	653	0.011	7	0.0	5.574	А
D-BC	7	442	0.016	7	0.0	8.273	А
C-ABD	0	1273	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	175			175			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	513	0.004	2	0.0	7.044	А
B-AD	8	478	0.016	8	0.0	7.655	А
A-BCD	9	644	0.014	9	0.0	5.675	А
A-B	16			16			
A-C	138			138			
D-AB	6	666	0.009	6	0.0	5.455	А
D-BC	6	456	0.013	6	0.0	8.000	А
C-ABD	0	1294	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	143			143			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	523	0.004	2	0.0	6.912	Α
B-AD	6	488	0.013	6	0.0	7.473	А
A-BCD	8	649	0.012	8	0.0	5.609	А
A-B	14			14			
A-C	115			115			
D-AB	5	675	0.007	5	0.0	5.371	А
D-BC	5	466	0.010	5	0.0	7.811	A
C-ABD	0	1309	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	120			120			



# Junction 3 - 2026 Do Nothing, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.97	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.97	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2026 Do Nothing	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	120	100.000
В		✓	10	100.000
С		✓	239	100.000
D		✓	23	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То								
		Α	В	C	D				
	Α	0	16	87	17				
From	В	7	0	0	3				
	С	221	2	0	16				
	D	13	3	7	0				



	То								
		Α	В	U	D				
	Α	0	31	5	7				
From	В	21	0	0	0				
	С	7	100	0	16				
	D	0	0	0	0				

# PRICEINED. 27/1/202

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.00	8.21	0.0	А
B-AD	0.02	9.14	0.0	А
A-BCD	0.03	6.47	0.0	А
A-B				
A-C				
D-AB	0.03	6.44	0.0	А
D-BC	0.02	7.47	0.0	А
C-ABD	0.00	10.72	0.0	В
C-D				
C-A				

#### Main Results for each time segment

#### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	463	0.002	1	0.0	7.798	А
B-AD	6	493	0.013	6	0.0	8.626	А
A-BCD	13	634	0.020	13	0.0	6.201	А
A-B	12			12			
A-C	65			65			
D-AB	11	598	0.018	11	0.0	6.128	А
D-BC	6	521	0.012	6	0.0	6.990	А
C-ABD	2	667	0.002	2	0.0	10.707	В
C-D	12			12			
C-A	166			166			

#### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	453	0.003	1	0.0	7.967	А
B-AD	8	483	0.016	8	0.0	8.835	А
A-BCD	15	625	0.025	15	0.0	6.314	А
A-B	14			14			
A-C	78			78			
D-AB	13	588	0.022	13	0.0	6.255	А
D-BC	8	509	0.015	8	0.0	7.186	А
C-ABD	2	665	0.003	2	0.0	10.715	В
C-D	14			14			
C-A	199			199			



#### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	440	0.004	2	0.0	8.212	A
B-AD	9	469	0.020	9	0.0	9.138	A
A-BCD	19	614	0.031	19	0.0	6.474	O. A
A-B	18			18			77
A-C	96			96			77.
D-AB	16	575	0.028	16	0.0	6.439	A 2
D-BC	9	491	0.019	9	0.0	7.474	A
C-ABD	2	663	0.003	2	0.0	10.713	В
C-D	18			18			
C-A	243			243			

#### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	440	0.004	2	0.0	8.212	A
B-AD	9	469	0.020	9	0.0	9.138	A
A-BCD	19	614	0.031	19	0.0	6.475	A
A-B	18			18			
A-C	96			96			
D-AB	16	575	0.028	16	0.0	6.439	A
D-BC	9	491	0.019	9	0.0	7.474	A
C-ABD	2	661	0.003	2	0.0	10.715	В
C-D	18			18			
C-A	243			243			

#### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	453	0.003	1	0.0	7.968	A
B-AD	8	483	0.016	8	0.0	8.838	A
A-BCD	15	625	0.025	15	0.0	6.315	A
A-B	14			14			
A-C	78			78			
D-AB	13	588	0.022	13	0.0	6.258	А
D-BC	8	508	0.015	8	0.0	7.187	А
C-ABD	2	662	0.003	2	0.0	10.715	В
C-D	14			14			
C-A	199			199			

#### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	463	0.002	1	0.0	7.799	Α
B-AD	6	493	0.013	6	0.0	8.629	А
A-BCD	13	634	0.020	13	0.0	6.204	А
A-B	12			12			
A-C	65			65			
D-AB	11	598	0.018	11	0.0	6.129	А
D-BC	6	521	0.012	6	0.0	6.991	A
C-ABD	2	665	0.002	2	0.0	10.708	В
C-D	12			12			
C-A	166			166			



# Junction 3 - 2026 Do Nothing, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

J	unction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
	1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.62	Α

#### **Junction Network**

Driving side	Driving side Lighting		Network LOS
Left	Normal/unknown	0.62	Α

# Traffic Demand

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2026 Do Nothing	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	n Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	186	100.000	
В		✓	11	100.000	
С		✓	167	100.000	
D		✓	13	100.000	

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То						
		Α	В	С	D		
	Α	0	19	157	10		
From	В	7	0	1	3		
	С	165	0	0	2		
	D	5	3	5	0		



	То					
		Α	В	U	D	
	Α	0	22	3	0	
From	В	0	0	0	0	
	С	5	0	0	0	
	D	0	0	0	0	

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	7.27	0.0	А
B-AD	0.02	7.97	0.0	А
A-BCD	0.02	5.78	0.0	А
A-B				
A-C				
D-AB	0.01	5.59	0.0	А
D-BC	0.02	8.32	0.0	А
C-ABD	0.00	0.00	0.0	А
C-D				
C-A				

#### Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service		
B-CD	2	521	0.004	2	0.0	6.930	А		
B-AD	6	487	0.013	6	0.0	7.493	А		
A-BCD	8	648	0.012	7	0.0	5.619	A		
A-B	14			14					
A-C	118			118					
D-AB	5	674	0.007	5	0.0	5.381	А		
D-BC	5	464	0.011	5	0.0	7.836	A		
C-ABD	0	1307	0.000	0	0.0	0.000	A		
C-D	2			2					
C-A	124			124					

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	512	0.004	2	0.0	7.066	А
B-AD	8	476	0.016	8	0.0	7.685	А
A-BCD	9	642	0.014	9	0.0	5.685	A
A-B	17			17			
A-C	141			141			
D-AB	6	664	0.009	6	0.0	5.469	A
D-BC	6	454	0.013	6	0.0	8.031	А
C-ABD	0	1291	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	148			148			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	498	0.006	3	0.0	7.265	), A
B-AD	9	461	0.020	9	0.0	7.966	A
A-BCD	11	634	0.017	11	0.0	5.776	O. A
A-B	21			21			77
A-C	173			173			77.
D-AB	7	651	0.011	7	0.0	5.594	Α 🥎
D-BC	7	440	0.016	7	0.0	8.317	A
C-ABD	0	1270	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	182			182			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	498	0.006	3	0.0	7.265	A
B-AD	9	461	0.020	9	0.0	7.966	A
A-BCD	11	634	0.017	11	0.0	5.776	A
A-B	21			21			
A-C	173			173			
D-AB	7	651	0.011	7	0.0	5.594	A
D-BC	7	440	0.016	7	0.0	8.318	A
C-ABD	0	1270	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	182			182			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	512	0.004	2	0.0	7.067	А
B-AD	8	476	0.016	8	0.0	7.688	А
A-BCD	9	642	0.014	9	0.0	5.685	А
A-B	17			17			
A-C	141			141			
D-AB	6	664	0.009	6	0.0	5.471	А
D-BC	6	454	0.013	6	0.0	8.033	А
C-ABD	0	1291	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	148			148			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	521	0.004	2	0.0	6.933	A
B-AD	6	487	0.013	6	0.0	7.494	A
A-BCD	8	648	0.012	8	0.0	5.619	А
A-B	14			14			
A-C	118			118			
D-AB	5	674	0.007	5	0.0	5.382	А
D-BC	5	464	0.011	5	0.0	7.838	А
C-ABD	0	1306	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	124			124			



# Junction 3 - 2026 Do Something Construction AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.01	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.01	Α

#### **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
DS	2026 Do Something Construction Phase	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	134	100.000
В		✓	14	100.000
С		✓	239	100.000
D		✓	23	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То					
		Α	В	С	D	
	Α	0	30	87	17	
From	В	11	0	0	3	
	C	221	2	0	16	
	D	13	3	7	0	



	То					
		Α	В	U	D	
	Α	0	39	5	7	
From	В	17	0	0	0	
	С	7	100	0	16	
	D	0	0	0	0	

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.00	8.47	0.0	А
B-AD	0.03	9.02	0.0	А
A-BCD	0.03	6.47	0.0	А
A-B				
A-C				
D-AB	0.03	6.44	0.0	А
D-BC	0.02	7.49	0.0	А
C-ABD	0.00	10.78	0.0	В
C-D				
C-A				

#### Main Results for each time segment

#### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service			
B-CD	1	450	0.003	1	0.0	8.023	А			
B-AD	9	497	0.019	9	0.0	8.471	Α			
A-BCD	13	634	0.020	13	0.0	6.199	A			
A-B	23			23						
A-C	65			65						
D-AB	11	598	0.018	11	0.0	6.131	А			
D-BC	6	521	0.012	6	0.0	6.999	A			
C-ABD	2	664	0.002	2	0.0	10.752	В			
C-D	12			12						
C-A	166			166						

#### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	440	0.003	1	0.0	8.203	А
B-AD	11	486	0.023	11	0.0	8.693	А
ABCD	15	626	0.025	15	0.0	6.311	А
A-B	27			27			
A-C	78			78			
D-AB	13	588	0.022	13	0.0	6.259	А
D-BC	8	508	0.015	8	0.0	7.197	А
C-ABD	2	662	0.003	2	0.0	10.768	В
C-D	14			14			
C-A	199			199			



#### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	427	0.004	2	0.0	8.466	Α Α
B-AD	14	472	0.029	14	0.0	9.015	A
A-BCD	19	614	0.031	19	0.0	6.470	O. A
A-B	33			33			77
A-C	96			96			77.
D-AB	16	575	0.028	16	0.0	6.444	Α 🧡
D-BC	9	490	0.019	9	0.0	7.489	A
C-ABD	2	659	0.003	2	0.0	10.778	В
C-D	18			18			
C-A	243			243			

#### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	427	0.004	2	0.0	8.467	A
B-AD	14	472	0.029	14	0.0	9.016	А
A-BCD	19	614	0.031	19	0.0	6.470	A
A-B	33			33			
A-C	96			96			
D-AB	16	574	0.028	16	0.0	6.445	A
D-BC	9	490	0.019	9	0.0	7.490	А
C-ABD	2	657	0.003	2	0.0	10.780	В
C-D	18			18			
C-A	243			243			

#### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	440	0.003	1	0.0	8.204	Α
B-AD	11	486	0.023	11	0.0	8.697	А
A-BCD	15	626	0.025	15	0.0	6.314	А
A-B	27			27			
A-C	78			78			
D-AB	13	588	0.022	13	0.0	6.262	А
D-BC	8	508	0.015	8	0.0	7.198	А
C-ABD	2	659	0.003	2	0.0	10.771	В
C-D	14			14			
C-A	199			199			

#### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	450	0.003	1	0.0	8.024	A
B-AD	9	497	0.019	9	0.0	8.475	A
A-BCD	13	634	0.020	13	0.0	6.200	A
A-B	23			23			
A-C	65			65			
D-AB	11	598	0.018	11	0.0	6.132	А
D-BC	6	521	0.012	6	0.0	7.000	A
C-ABD	2	662	0.002	2	0.0	10.753	В
C-D	12			12			
C-A	166			166			



# Junction 3 - 2026 Do Something Construction Place PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

#### **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.00	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.00	Α

#### **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2026 Do Something Construction Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)		
HV Percentages	2.00		

#### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	191	100.000	
В		✓	25	100.000	
С		✓	167	100.000	
D		✓	13	100.000	

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То						
		Α	В	С	D		
	Α	0	24	157	10		
From	В	21	0	1	3		
	С	165	0	0	2		
	D	5	3	5	0		



	То					
		Α	В	U	ם	
	Α	0	20	3	0	
From	В	28	0	0	0	
	С	5	0	0	0	
	D	0	0	0	0	

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	7.80	0.0	Α
B-AD	0.05	10.16	0.1	В
A-BCD	0.02	5.78	0.0	А
A-B				
A-C				
D-AB	0.01	5.60	0.0	А
D-BC	0.02	8.35	0.0	А
C-ABD	0.00	0.00	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service		
B-CD	2	488	0.004	2	0.0	7.404	A		
B-AD	17	497	0.034	17	0.0	9.425	A		
A-BCD	8	648	0.012	8	0.0	5.619	A		
A-B	18			18					
A-C	118			118					
D-AB	5	673	0.007	5	0.0	5.383	A		
D-BC	5	463	0.011	5	0.0	7.855	A		
C-ABD	0	1304	0.000	0	0.0	0.000	A		
C-D	2			2					
C-A	124			124					

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	478	0.005	2	0.0	7.565	А
B-AD	20	486	0.042	20	0.1	9.722	А
ABCD	9	642	0.014	9	0.0	5.684	А
A-B	22			22			
A-C	141			141			
D-AB	6	664	0.009	6	0.0	5.471	А
D-BC	6	453	0.013	6	0.0	8.055	А
C-ABD	0	1289	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	148			148			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	464	0.006	3	0.0	7.800	A
B-AD	25	470	0.052	25	0.1	10.153	В
A-BCD	11	634	0.017	11	0.0	5.775	O. A
A-B	26			26			77
A-C	173			173			77.
D-AB	7	650	0.011	7	0.0	5.598	Α 🧡
D-BC	7	438	0.016	7	0.0	8.349	А
C-ABD	0	1267	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	182			182			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	464	0.006	3	0.0	7.800	А
B-AD	25	470	0.052	25	0.1	10.156	В
A-BCD	11	634	0.017	11	0.0	5.775	A
A-B	26			26			
A-C	173			173			
D-AB	7	650	0.011	7	0.0	5.598	A
D-BC	7	438	0.016	7	0.0	8.350	А
C-ABD	0	1267	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	182			182			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	478	0.005	2	0.0	7.569	А
B-AD	20	486	0.042	20	0.1	9.726	А
A-BCD	9	642	0.014	9	0.0	5.684	А
A-B	22			22			
A-C	141			141			
D-AB	6	664	0.009	6	0.0	5.473	А
D-BC	6	453	0.013	6	0.0	8.056	А
C-ABD	0	1289	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	148			148			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	488	0.004	2	0.0	7.409	А
B-AD	17	497	0.034	17	0.0	9.433	A
A-BCD	8	648	0.012	8	0.0	5.619	A
A-B	18			18			
A-C	118			118			
D-AB	5	673	0.007	5	0.0	5.386	А
D-BC	5	463	0.011	5	0.0	7.856	A
C-ABD	0	1304	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	124			124			

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# Junction 3 - 2026 Do Something Operational Phase, AM Data Errors and Warnings

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

### **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.07	Α

#### **Junction Network**

Driving sid	de Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	1.07	Α	

# **Traffic Demand**

#### **Demand Set Details**

ı	ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
Г	07 2	2026 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	128	100.000
В		✓	16	100.000
С		✓	239	100.000
D		✓	23	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То						
		Α	В	С	D		
	Α	0	24	87	17		
From	В	13	0	0	3		
	C	221	2	0	16		
	D	13	3	7	0		



	То					
		A	В	U	D	
	Α	0	23	5	7	
From	В	17	0	0	0	
	С	7	100	0	16	
	D	0	0	0	0	

# PECENED. 27,77,803

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.00	8.53	0.0	А
B-AD	0.03	9.05	0.0	A
A-BCD	0.03	6.47	0.0	А
A-B				
A-C				
D-AB	0.03	6.44	0.0	А
D-BC	0.02	7.49	0.0	А
C-ABD	0.00	10.75	0.0	В
C-D				
C-A				

#### Main Results for each time segment

#### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service	
B-CD	1	446	0.003	1	0.0	8.084	А	
B-AD	11	499	0.022	11	0.0	8.487	А	
A-BCD	13	634	0.020	13	0.0	6.200	А	
A-B	18			18				
A-C	65			65				
D-AB	11	598	0.018	11	0.0	6.130	A	
D-BC	6	521	0.012	6	0.0	7.000	А	
C-ABD	2	665	0.002	2	0.0	10.733	В	
C-D	12			12				
C-A	166			166				

#### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	437	0.003	1	0.0	8.266	А
B-AD	13	488	0.027	13	0.0	8.715	А
A-BCD	15	626	0.025	15	0.0	6.312	A
A-B	22			22			
A-C	78			78			
D-AB	13	588	0.022	13	0.0	6.257	А
D-BC	8	508	0.015	8	0.0	7.198	А
C-ABD	2	663	0.003	2	0.0	10.745	В
C-D	14			14			
C-A	199			199			



#### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service	
B-CD	2	424	0.004	2	0.0	8.531	A	
B-AD	16	474	0.034	16	0.0	9.045	A	
A-BCD	19	614	0.031	19	0.0	6.471	O. A	
A-B	26			26			77	
A-C	96			96			77.	
D-AB	16	575	0.028	16	0.0	6.442	Α 🥹	h
D-BC	9	490	0.019	9	0.0	7.490	А	4
C-ABD	2	660	0.003	2	0.0	10.750	В	^
C-D	18			18				
C-A	243			243				

#### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	424	0.004	2	0.0	8.531	A
B-AD	16	474	0.034	16	0.0	9.046	А
A-BCD	19	614	0.031	19	0.0	6.471	A
A-B	26			26			
A-C	96			96			
D-AB	16	575	0.028	16	0.0	6.442	A
D-BC	9	490	0.019	9	0.0	7.490	A
C-ABD	2	659	0.003	2	0.0	10.752	В
C-D	18			18			
C-A	243			243			

#### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	437	0.003	1	0.0	8.269	А
B-AD	13	488	0.027	13	0.0	8.717	А
A-BCD	15	626	0.025	15	0.0	6.315	А
A-B	22			22			
A-C	78			78			
D-AB	13	588	0.022	13	0.0	6.258	А
D-BC	8	508	0.015	8	0.0	7.202	А
C-ABD	2	660	0.003	2	0.0	10.746	В
C-D	14			14			
C-A	199			199			

#### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	446	0.003	1	0.0	8.086	А
B-AD	11	498	0.022	11	0.0	8.492	А
A-BCD	13	634	0.020	13	0.0	6.203	А
A-B	18			18			
A-C	65			65			
D-AB	11	598	0.018	11	0.0	6.133	А
D-BC	6	521	0.012	6	0.0	7.004	А
C-ABD	2	664	0.002	2	0.0	10.736	В
C-D	12			12			
C-A	166			166			



# Junction 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operational Phase, PM Operation 3 - 2026 Do Something Operation 3 - 2026 D

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.81	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.81	Α

# Traffic Demand

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2026 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	193	100.000	
В		✓	20	100.000	
С		✓	167	100.000	
D		✓	13	100.000	

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То						
		Α	В	С	D			
	Α	0	26	157	10			
From	В	16	0	1	3			
	C	165	0	0	2			
	D	5	3	5	0			



		То						
		Α	В	C	D			
	Α	0	20	3	0			
From	В	7	0	0	0			
	С	5	0	0	0			
	D	0	0	0	0			

# PRICEINED. 27/1/202

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	7.68	0.0	А
B-AD	0.04	8.53	0.0	А
A-BCD	0.02	5.77	5.77 0.0	
A-B				
A-C				
D-AB	0.01	5.60	0.0	А
D-BC	0.02	8.34	0.0	А
C-ABD	0.00	0.00	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service			
B-CD	2	495	0.004	2	0.0	7.302	A			
B-AD	13	495	0.027	13	0.0	7.951	A			
A-BCD	8	648	0.012	8	0.0	5.618	A			
A-B	20			20						
A-C	118			118						
D-AB	5	673	0.007	5	0.0	5.384	A			
D-BC	5	463	0.011	5	0.0	7.850	A			
C-ABD	0	1304	0.000	0	0.0	0.000	A			
C-D	2			2						
C-A	124			124						

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	485	485 0.005 2		0.0	7.456	А
B-AD	16	484	0.032	16	0.0	8.185	А
A-BCD	9	642	0.014	9	0.0	5.684	A
A-B	23			23			
A-C	141			141			
D-AB	6	664	0.009	6	0.0	5.472	А
D-BC	6	453	0.013	6	0.0	8.049	А
C-ABD	0	1288	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	148			148			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	471	0.006	3	0.0	7.681	Α Α
B-AD	19	468	0.041	19	0.0	8.527	A
A-BCD	11	634	0.017	11	0.0	5.775	O. A
A-B	29			29			77
A-C	173			173			77
D-AB	7	650	0.011	7	0.0	5.599	Α 🥹
D-BC	7	439	0.016	7	0.0	8.341	A
C-ABD	0	1266	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	182			182			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	471	0.006	3	0.0	7.681	А
B-AD	19	468	0.041	19	0.0	8.528	А
ABCD	11	634	0.017	11	0.0	5.775	А
A-B	29			29			
A-C	173			173			
D-AB	7	650	0.011	7	0.0	5.599	А
D-BC	7	439	0.016	7	0.0	8.341	А
C-ABD	0	1266	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	182			182			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	485	0.005	2	0.0	7.457	A
B-AD	16	484	0.032	16	0.0	8.187	A
A-BCD	9	642 0.014		9	0.0	5.684	A
A-B	23			23			
A-C	141			141			
D-AB	6	664	0.009	6	0.0	5.472	A
D-BC	6	453	0.013	6	0.0	8.051	А
C-ABD	0	1288	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	148			148			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	495	0.004	2	0.0	7.303	А
B-AD	13	495	0.027	13	0.0	7.955	A
A-BCD	8	648	0.012	8	0.0	5.619	А
A-B	20			20			
A-C	118			118			
D-AB	5	673	0.007	5	0.0	5.385	А
D-BC	5	463	0.011	5	0.0	7.852	А
C-ABD	0	1304	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	124			124			

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# Junction 3 - 2031 Do Nothing, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

Jı	unction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
	1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.99	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.99	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2031 Do Nothing	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	130	100.000	
В		✓	10	100.000	
С		✓	257	100.000	
D		✓	25	100.000	

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		Α	В	C	D			
	Α	0	18	94	18			
From	В	7	0	0	3			
	С	237	3	0	17			
	D	14	3	8	0			



	То							
		Α	В	U	D			
	Α	0	33	6	8			
From	В	22	0	0	0			
	С	8	100	0	17			
	D	0	0	0	0			

# PECENED. 27,77,803

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.00	8.32	0.0	А
B-AD	0.02	9.32	0.0	A
A-BCD	0.03	6.60	0.0	А
A-B				
A-C				
D-AB	0.03	6.50	0.0	А
D-BC	0.02	7.60	0.0	А
C-ABD	0.01	10.68	0.0	В
C-D				
C-A				

#### Main Results for each time segment

#### 00:00 - 00:15

	0.10						
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	459	0.002	1	0.0	7.862	A
B-AD	6	489	0.013	6	0.0	8.757	А
A-BCD	14	631	0.022	14	0.0	6.301	A
A-B	14			14			
A-C	71			71			
D-AB	12	596	0.020	12	0.0	6.161	А
D-BC	7	516	0.014	7	0.0	7.067	A
C-ABD	2	667	0.003	2	0.0	10.677	В
C-D	13			13			
C-A	178			178		_	

#### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	449	0.003	1	0.0	8.048	А
B-AD	8	478	0.016	8	0.0	8.987	А
ABCD	16	621	0.026	16	0.0	6.424	А
A-B	16			16			
A-C	84			84			
D-AB	14	585	0.024	14	0.0	6.299	А
D-BC	9	503	0.017	9	0.0	7.283	А
C-ABD	3	666	0.004	3	0.0	10.670	В
C-D	15			15			
C-A	213			213			



#### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	434	0.004	2	0.0	8.317	Α Α
B-AD	9	463	0.020	9	0.0	9.322	A
A-BCD	20	609	0.033	20	0.0	6.599	O. A
A-B	20			20			77
A-C	103			103			77.
D-AB	17	571	0.030	17	0.0	6.500	Α 💛
D-BC	10	484	0.022	10	0.0	7.604	A
C-ABD	3	665	0.005	3	0.0	10.645	В
C-D	19			19			
C-A	261			261			

#### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	434	0.004	2	0.0	8.318	А
B-AD	9	463	0.020	9	0.0	9.323	А
A-BCD	20	609	0.033	20	0.0	6.599	А
A-B	20			20			
A-C	103			103			
D-AB	17	571	0.030	17	0.0	6.500	A
D-BC	10	484	0.022	10	0.0	7.604	А
C-ABD	3	663	0.005	3	0.0	10.647	В
C-D	19			19			
C-A	261			261			

#### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	449	0.003	1	0.0	8.048	А
B-AD	8	478	0.016	8	0.0	8.991	А
A-BCD	16	621	0.026	16	0.0	6.427	А
A-B	16			16			
A-C	84			84			
D-AB	14	585	0.024	14	0.0	6.302	А
D-BC	9	503	0.017	9	0.0	7.287	А
C-ABD	3	663	0.004	3	0.0	10.671	В
C-D	15			15			
C-A	213			213			

#### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	459	0.002	1	0.0	7.864	Α
B-AD	6	489	0.013	6	0.0	8.761	А
A-BCD	14	631	0.022	14	0.0	6.304	А
A-B	14			14			
A-C	71			71			
D-AB	12	596	0.020	12	0.0	6.162	А
D-BC	7	516	0.014	7	0.0	7.069	A
C-ABD	2	666	0.003	2	0.0	10.680	В
C-D	13			13			
C-A	178			178			



# Junction 3 - 2031 Do Nothing, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.62	А

#### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS
Left	Normal/unknown	0.62	А

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2031 Do Nothing	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	199	100.000	
В		✓	12	100.000	
С		✓	179	100.000	
D		✓	13	100.000	

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		Α	В	С	D			
	Α	0	21	167	11			
From	В	8	0	1	3			
	С	177	0	0	2			
	D	5	3	5	0			



	То							
		A	В	U	D			
	Α	0	24	3	0			
From	В	0	0	0	0			
	С	5	0	0	0			
	D	0	0	0	0			

# PRICEINED. 27-17-1202

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	7.41	0.0	А
B-AD	0.02	8.06	0.0	А
A-BCD	0.02	5.81	0.0	А
A-B				
A-C				
D-AB	0.01	5.64	0.0	А
D-BC	0.02	8.42	0.0	А
C-ABD	0.00	0.00	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	513	0.004	2	0.0	7.036	A
B-AD	7	485	0.015	7	0.0	7.539	А
A-BCD	8	646	0.013	8	0.0	5.645	A
A-B	16			16			
A-C	126			126			
D-AB	5	670	0.007	5	0.0	5.409	A
D-BC	5	461	0.011	5	0.0	7.900	A
C-ABD	0	1301	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	133			133			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	503	0.005	2	0.0	7.186	А
B-AD	9	473	0.018	9	0.0	7.749	А
ABCD	10	640	0.016	10	0.0	5.716	А
A-B	19			19			
A-C	150			150			
D-AB	6	660	0.009	6	0.0	5.503	А
D-BC	6	450	0.013	6	0.0	8.112	А
C-ABD	0	1285	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	159			159			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	489	0.006	3	0.0	7.405	), A
B-AD	10	457	0.023	10	0.0	8.057	A
A-BCD	12	631	0.019	12	0.0	5.814	O. A
A-B	23			23			77
A-C	184			184			77.
D-AB	7	645	0.011	7	0.0	5.639	Α 🧡
D-BC	7	434	0.016	7	0.0	8.424	A
C-ABD	0	1262	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	195			195			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	489	0.006	3	0.0	7.405	А
B-AD	10	457	0.023	10	0.0	8.057	А
ABCD	12	631	0.019	12	0.0	5.814	А
A-B	23			23			
A-C	184			184			
D-AB	7	645	0.011	7	0.0	5.639	А
D-BC	7	434	0.016	7	0.0	8.424	А
C-ABD	0	1262	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	195			195			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	503	0.005	2	0.0	7.190	А
B-AD	9	473	0.018	9	0.0	7.750	А
A-BCD	10	640	0.016	10	0.0	5.716	А
A-B	19			19			
A-C	150			150			
D-AB	6	660	0.009	6	0.0	5.506	А
D-BC	6	450	0.013	6	0.0	8.113	А
C-ABD	0	1285	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	159			159			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	513	0.004	2	0.0	7.040	А
B-AD	7	485	0.015	7	0.0	7.540	А
A-BCD	8	646	0.013	8	0.0	5.647	А
A-B	16			16			
A-C	126			126			
D-AB	5	670	0.007	5	0.0	5.412	А
D-BC	5	461	0.011	5	0.0	7.901	A
C-ABD	0	1301	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	133			133			

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# Junction 3 - 2031 Do Something Operational Phase, AM Data Errors and Warnings

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	·	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

### **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.10	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.10	Α

#### **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2031 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	138	100.000
В		✓	17	100.000
С		✓	257	100.000
D		✓	25	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То						
		Α	В	С	D			
	Α	0	26	94	18			
From	В	14	0	0	3			
	С	237	3	0	17			
	D	14	3	8	0			



		То					
		Α	В	С	D		
	Α	0	24	6	8		
From	В	18	0	0	0		
	С	8	100	0	17		
	D	0	0	0	0		

# PRICEINED. 27/17/202

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.00 8.67		0.0	А
B-AD	0.04	9.26	0.0	А
A-BCD	<b>ABCD</b> 0.03 6.60		0.0	А
A-B				
A-C				
D-AB	0.03	6.50	0.0	А
D-BC	0.02	7.62	0.0	A
C-ABD	0.01	10.71	0.0	В
C-D				
C-A				

#### Main Results for each time segment

#### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service	
B-CD	1	441	0.003	1	0.0	8.181	А	
B-AD	12	495	0.024	12	0.0	8.640	A	
A-BCD	14	631	0.022	14	0.0	6.299	A	
A-B	20			20				
A-C	71			71				
D-AB	12	596	0.020	12	0.0	6.163	A	
D-BC	7	516	0.014	7	0.0	7.078	A	
C-ABD	2	666	0.003	2	0.0	10.703	В	
C-D	13			13				
C-A	178			178				

#### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	431	0.003	1	0.0	8.382	А
B-AD	14	484	0.029	14	0.0	8.893	А
ABCD	16	622	0.026	16	0.0	6.422	А
A-B	23			23			
A-C	84			84			
D-AB	14	585	0.024	14	0.0	6.301	А
D-BC	9	502	0.017	9	0.0	7.297	А
C-ABD	3	665	0.004	3	0.0	10.700	В
C-D	15			15			
C-A	213			213			



#### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service	
B-CD	2	417	0.004	2	0.0	8.674	A	
B-AD	17	468	0.036	17	0.0	9.261	A	
A-BCD	20	609	0.033	20	0.0	6.595	O. A	
A-B	29			29			77	
A-C	103			103			77.	
D-AB	17	571	0.030	17	0.0	6.503	Α 🥎	2
D-BC	10	483	0.022	10	0.0	7.622	A	$\frac{2}{3}$
C-ABD	3	663	0.005	3	0.0	10.681	В	
C-D	19			19				
C-A	261			261				

#### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	417	0.004	2	0.0	8.675	А
B-AD	17	468	0.036	17	0.0	9.262	А
A-BCD	20	609	0.033	20	0.0	6.595	A
A-B	29			29			
A-C	103			103			
D-AB	17	571	0.030	17	0.0	6.503	А
D-BC	10	483	0.022	10	0.0	7.622	А
C-ABD	3	661	0.005	3	0.0	10.681	В
C-D	19			19			
C-A	261			261			

#### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	431	0.003	1	0.0	8.384	А
B-AD	14	484	0.029	14	0.0	8.895	A
A-BCD	16	622	0.026	16	0.0	6.422	A
A-B	23			23			
A-C	84			84			
D-AB	14	585	0.024	14	0.0	6.304	A
D-BC	9	502	0.017	9	0.0	7.301	А
C-ABD	3	661	0.004	3	0.0	10.703	В
C-D	15			15			
C-A	213			213			

#### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	441	0.003	1	0.0	8.184	А
B-AD	12	495	0.024	12	0.0	8.646	А
A-BCD	14	631	0.022	14	0.0	6.302	А
A-B	20			20			
A-C	71			71			
D-AB	12	596	0.020	12	0.0	6.163	А
D-BC	7	516	0.014	7	0.0	7.082	А
C-ABD	2	664	0.003	2	0.0	10.706	В
C-D	13			13			
C-A	178			178			



# Junction 3 - 2031 Do Something Operational Phase, PM Data Errors and Warnings

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway widness than 6m.
Warning	Major arm width	·	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

### **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.78	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.78	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2031 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)		
Α		✓	206	100.000		
В		✓	20	100.000		
С		✓	179	100.000		
D		✓	13	100.000		

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То						
		Α	В	С	D			
	Α	0	28	167	11			
From	В	16	0	1	3			
	С	177	0	0	2			
	D	5	3	5	0			



	То						
		A	В	U	D		
	Α	0	21	3	0		
From	В	7	0	0	0		
	С	5	0	0	0		
	D	0	0	0	0		

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	7.76	0.0	Α
B-AD	0.04	8.63	0.0	А
A-BCD	0.02	5.81	0.0	А
A-B				
A-C				
D-AB	0.01	5.64	0.0	А
D-BC	0.02	8.45	0.0	А
C-ABD	0.00	0.00	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	492	0.004	2	0.0	7.348	A
B-AD	13	491	0.027	13	0.0	8.014	A
A-BCD	8	646	0.013	8	0.0	5.644	A
A-B	21			21			
A-C	126			126			
D-AB	5	670	0.007	5	0.0	5.412	A
D-BC	5	460	0.011	5	0.0	7.913	A
C-ABD	0	1298	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	133			133			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	481	0.005	2	0.0	7.514	A
B-AD	16	479	0.033	16	0.0	8.265	А
A-BCD	10	640	0.016	10	0.0	5.715	A
A-B	25			25			
A-C	150			150			
D-AB	6	659	0.009	6	0.0	5.507	A
D-BC	6	449	0.013	6	0.0	8.128	A
C-ABD	0	1281	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	159			159			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	467	0.006	3	0.0	7.758	A
B-AD	19	463	0.042	19	0.0	8.633	A
A-BCD	12	632	0.019	12	0.0	5.813	O. A
A-B	31			31			77
A-C	184			184			77
D-AB	7	645	0.011	7	0.0	5.644	Α 🥎
D-BC	7	433	0.016	7	0.0	8.446	A
C-ABD	0	1258	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	195			195			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	467	0.006	3	0.0	7.758	A
B-AD	19	463	0.042	19	0.0	8.634	A
A-BCD	12	632	0.019	12	0.0	5.813	A
A-B	31			31			
A-C	184	184		184			
D-AB	7	645	0.011	7	0.0	5.644	A
D-BC	7	433	0.016	7	0.0	8.446	A
C-ABD	0	1258	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	195			195			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	481	0.005	2	0.0	7.518	Α
B-AD	16	479	0.033	16	0.0	8.267	А
A-BCD	10	640	0.016	10	0.0	5.717	A
A-B	25			25			
A-C	150			150			
D-AB	6	659	0.009	6	0.0	5.507	A
D-BC	6	449	0.013	6	0.0	8.131	A
C-ABD	0	1281	0.000	0	0.0	0.000	Α
C-D	2			2			
C-A	159			159			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service	
B-CD	2	492	0.004	2	0.0	7.352	A	
B-AD	13	491	0.027	13	0.0	8.018	A	
A-BCD	8	646	0.013	8	0.0	5.647	A	
A-B	21			21				
A-C	126			126				
D-AB	5	670	0.007	5	0.0	5.415	Α	
D-BC	5	460	0.011	5	0.0	7.914	A	
C-ABD	0	1298	0.000	0	0.0	0.000	A	
C-D	2			2				
C-A	133			133				

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# Junction 3 - 2041 Do Nothing, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.98	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.98	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2041 Do Nothing	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	137	100.000	
В		✓	11	100.000	
С		✓	271	100.000	
D		✓	26	100.000	

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		Α	В	C	D			
	Α	0	20	99	18			
From	В	8	0	0	3			
	U	250	3	0	18			
	D	15	3	8	0			



	То								
		Α	В	U	D				
	Α	0	36	7	8				
From	В	24	0	0	0				
	С	8	100	0	19				
	D	0	0	0	0				

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# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.00	8.46	0.0	А
B-AD	0.02	9.57	0.0	А
A-BCD	0.03	6.65	0.0	А
A-B				
A-C				
D-AB	0.03	6.55	0.0	А
D-BC	0.02	7.69	0.0	А
C-ABD	0.01	10.68	0.0	В
C-D				
C-A				

#### Main Results for each time segment

#### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	453	0.003	1	0.0	7.973	А
B-AD	7	488	0.015	7	0.0	8.951	А
A-BCD	14	628	0.022	14	0.0	6.329	А
A-B	15			15			
A-C	74			74			
D-AB	12	594	0.021	12	0.0	6.186	A
D-BC	7	513	0.014	7	0.0	7.117	А
C-ABD	2	666	0.003	2	0.0	10.682	В
C-D	14			14			
C-A	188			188			

#### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	442	0.003	1	0.0	8.172	А
B-AD	9	476	0.018	9	0.0	9.202	А
A-BCD	16	618	0.026	16	0.0	6.459	A
A-B	18			18			
A-C	89			89			
D-AB	15	583	0.025	15	0.0	6.332	А
D-BC	9	498	0.017	9	0.0	7.347	A
C-ABD	3	666	0.004	3	0.0	10.673	В
C-D	16			16			
C-A	225			225			



#### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	427	0.004	2	0.0	8.463	A
B-AD	10	460	0.023	10	0.0	9.569	A
A-BCD	20	605	0.033	20	0.0	6.643	O. A
A-B	22			22			77
A-C	109			109			77.
D-AB	18	568	0.032	18	0.0	6.546	Α 🥎
D-BC	10	479	0.022	10	0.0	7.689	A
C-ABD	3	664	0.005	3	0.0	10.645	В
C-D	20			20			
C-A	275			275			

#### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	427	0.004	2	0.0	8.464	А
B-AD	10	460	0.023	10	0.0	9.570	А
A-BCD	20	605	0.033	20	0.0	6.646	А
A-B	22			22			
A-C	109			109			
D-AB	18	568	0.032	18	0.0	6.546	А
D-BC	10	479	0.022	10	0.0	7.689	А
C-ABD	3	662	0.005	3	0.0	10.648	В
C-D	20			20			
C-A	275			275			

#### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	442	0.003	1	0.0	8.175	А
B-AD	9	476	0.018	9	0.0	9.206	А
A-BCD	16	618	0.026	16	0.0	6.459	А
A-B	18			18			
A-C	89			89			
D-AB	15	583	0.025	15	0.0	6.335	А
D-BC	9	498	0.017	9	0.0	7.348	А
C-ABD	3	662	0.004	3	0.0	10.676	В
C-D	16			16			
C-A	225			225			

#### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	453	0.003	1	0.0	7.975	А
B-AD	7	488	0.015	7	0.0	8.955	А
A-BCD	14	628	0.022	14	0.0	6.332	А
A-B	15			15			
A-C	74			74			
D-AB	12	594	0.021	12	0.0	6.187	А
D-BC	7	513	0.014	7	0.0	7.118	А
C-ABD	2	665	0.003	2	0.0	10.683	В
C-D	14			14			
C-A	188			188			



# Junction 3 - 2041 Do Nothing, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway with is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.65	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.65	Α

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2041 Do Nothing	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	207	100.000	
В		✓	13	100.000	
С		✓	188	100.000	
D		✓	15	100.000	

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То							
		Α	В	С	D				
	Α	0	23	173	11				
From	В	9	0	1	3				
	С	186	0	0	2				
	D	6	3	6	0				



	То							
		A	В	U	D			
	Α	0	26	3	0			
From	В	0	0	0	0			
	С	6	0	0	0			
	D	0	0	0	0			

# PRICEINED. 27/17/ROS

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	7.51	0.0	А
B-AD	0.03	8.13	0.0	А
A-BCD	0.02	5.84	0.0	А
A-B				
A-C				
D-AB	0.01	5.62	0.0	А
D-BC	0.02	8.52	0.0	A
C-ABD	0.00	0.00	0.0	A
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	507	0.004	2	0.0	7.120	A
B-AD	8	483	0.016	8	0.0	7.573	A
A-BCD	8	644	0.013	8	0.0	5.660	A
A-B	17			17			
A-C	130			130			
D-AB	6	675	0.008	6	0.0	5.380	A
D-BC	6	458	0.012	6	0.0	7.954	A
C-ABD	0	1301	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	140			140			

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	497	0.005	2	0.0	7.280	А
B-AD	9	471	0.020	9	0.0	7.796	А
A-BCD	10	638	0.016	10	0.0	5.734	A
A-B	21			21			
A-C	155			155			
D-AB	7	664	0.010	7	0.0	5.477	А
D-BC	7	447	0.015	7	0.0	8.182	А
C-ABD	0	1284	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	167			167			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	482	0.006	3	0.0	7.513	A
B-AD	12	455	0.025	12	0.0	8.125	A
A-BCD	12	629	0.019	12	0.0	5.838	O. A
A-B	25			25			77
A-C	190			190			77
D-AB	8	649	0.013	8	0.0	5.618	Α 💝
D-BC	8	431	0.019	8	0.0	8.516	A
C-ABD	0	1260	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	205			205			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	482	0.006	3	0.0	7.513	А
B-AD	12	455	0.025	12	0.0	8.125	А
ABCD	12	629	0.019	12	0.0	5.838	А
A-B	25			25			
A-C	190			190			
D-AB	8	649	0.013	8	0.0	5.618	A
D-BC	8	431	0.019	8	0.0	8.517	А
C-ABD	0	1260	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	205			205			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	497	0.005	2	0.0	7.280	А
B-AD	9	471	0.020	9	0.0	7.798	A
A-BCD	10	638	0.016	10	0.0	5.735	A
A-B	21			21			
A-C	155			155			
D-AB	7	664	0.010	7	0.0	5.477	A
D-BC	7	447	0.015	7	0.0	8.184	А
C-ABD	0	1284	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	167			167			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	507	0.004	2	0.0	7.124	А
B-AD	8	483	0.016	8	0.0	7.573	A
A-BCD	8	644	0.013	8	0.0	5.660	А
A-B	17			17			
A-C	130			130			
D-AB	6	675	0.008	6	0.0	5.381	А
D-BC	6	458	0.012	6	0.0	7.956	А
C-ABD	0	1301	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	140			140			

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# Junction 3 - 2041 Do Something Operational Phase, AM Data Errors and Warnings

#### **Data Errors and Warnings**

Severity	Area	Item	Description 2
Warning	Varning Major arm width Arm A - Major arm geometry		For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

### **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.08	А

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	1.08	Α	

# **Traffic Demand**

#### **Demand Set Details**

	ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D	015	2041 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	n Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	145	100.000
В		✓	17	100.000
С		✓	271	100.000
D		✓	26	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То					
		Α	В	С	D		
	Α	0	28	99	18		
From	В	14	0	0	3		
	C	250	3	0	18		
	D	15	3	8	0		



		То				
		A	В	U	D	
	Α	0	26	7	8	
From	В	19	0	0	0	
	С	8	100	0	19	
	D	0	0	0	0	

# PRICEINED. 27/1/202

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.00	8.75	0.0	А
B-AD	0.04	9.42	0.0	А
A-BCD	<b>ABCD</b> 0.03 6.64		0.0	А
A-B				
A-C				
D-AB	0.03	6.55	0.0	А
D-BC	0.02	7.71	0.0	А
C-ABD	0.01	10.71	0.0	В
C-D				
C-A				

#### Main Results for each time segment

#### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	439	0.003	1	0.0	8.229	A
B-AD	12	492	0.024	12	0.0	8.758	A
A-BCD	14	628	0.022	14	0.0	6.327	A
A-B	21			21			
A-C	74			74			
D-AB	12	594	0.021	12	0.0	6.187	А
D-BC	7	512	0.014	7	0.0	7.127	A
C-ABD	2	665	0.003	2	0.0	10.707	В
C-D	14			14			
C-A	188			188			

#### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	428	0.003	1	0.0	8.442	А
B-AD	14	480	0.029	14	0.0	9.027	A
A-BCD	16	618	0.026	16	0.0	6.456	А
A-B	25			25			
A-C	89			89			
D-AB	15	583	0.025	15	0.0	6.334	А
D-BC	9	498	0.017	9	0.0	7.359	А
C-ABD	3	664	0.004	3	0.0	10.704	В
C-D	16			16			
C-A	225			225			



#### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s	Unsignalised level of service	
B-CD	2	413	0.004	2	0.0	8.753	A	
B-AD	17	464	0.037	17	0.0	9.421	A	
A-BCD	20	606	0.033	20	0.0	6.639	O. A	
A-B	31			31			77	
A-C	109			109			77	
D-AB	18	568	0.032	18	0.0	6.549	A	h
D-BC	10	478	0.022	10	0.0	7.706	А	3
C-ABD	3	662	0.005	3	0.0	10.682	В	′
C-D	20			20				
C-A	275			275				

#### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	413	0.004	2	0.0	8.754	A
B-AD	17	464	0.037	17	0.0	9.422	A
A-BCD	20	606	0.033	20	0.0	6.639	A
A-B	31			31			
A-C	109			109			
D-AB	18	568	0.032	18	0.0	6.549	A
D-BC	10	478	0.022	10	0.0	7.706	A
C-ABD	3	660	0.005	3	0.0	10.682	В
C-D	20			20			
C-A	275			275			

#### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	428	0.003	1	0.0	8.444	А
B-AD	14	480	0.029	14	0.0	9.032	А
A-BCD	16	619	0.026	16	0.0	6.459	А
A-B	25			25			
A-C	89			89			
D-AB	15	583	0.025	15	0.0	6.335	А
D-BC	9	498	0.017	9	0.0	7.360	А
C-ABD	3	660	0.004	3	0.0	10.706	В
C-D	16			16			
C-A	225			225			

#### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	1	439	0.003	1	0.0	8.231	А
B-AD	12	492	0.024	12	0.0	8.766	А
A-BCD	14	628	0.022	14	0.0	6.328	А
A-B	21			21			
A-C	74			74			
D-AB	12	594	0.021	12	0.0	6.188	А
D-BC	7	512	0.014	7	0.0	7.131	А
C-ABD	2	663	0.003	2	0.0	10.708	В
C-D	14			14			
C-A	188			188			



# Junction 3 - 2041 Do Something Operational Phase, PM Data Errors and Warnings

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm A - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

### **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.80	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.80	Α

# **Traffic Demand**

#### **Demand Set Details**

IC	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2041 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	214	100.000
В		✓	21	100.000
С		✓	188	100.000
D		✓	15	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То						
		Α	В	С	D			
	Α	0	30	173	11			
From	В	17	0	1	3			
	C	186	0	0	2			
	D	6	3	6	0			



	То						
		A	В	U	ם		
	Α	0	23	3	0		
From	В	7	0	0	0		
	С	6	0	0	0		
	D	0	0	0	0		

# PECENED. 27,77,803

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.01	7.84	0.0	А
B-AD	0.04	8.73	0.0	А
A-BCD	0.02	5.84	0.0	А
A-B				
A-C				
D-AB	0.01	5.62	0.0	А
D-BC	0.02	8.54	0.0	А
C-ABD	0.00	0.00	0.0	А
C-D				
C-A				

#### Main Results for each time segment

#### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service		
B-CD	2	488	0.004	2	0.0	7.403	A		
B-AD	14	489	0.028	14	0.0	8.066	А		
A-BCD	8	644	0.013	8	0.0	5.660	A		
A-B	23			23					
A-C	130			130					
D-AB	6	674	0.008	6	0.0	5.383	A		
D-BC	6	457	0.012	6	0.0	7.967	A		
C-ABD	0	1298	0.000	0	0.0	0.000	A		
C-D	2			2					
C-A	140			140					

#### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	477	0.005	2	0.0	7.578	А
B-AD	17	476	0.035	17	0.0	8.333	А
A-BCD	10	638	0.016	10	0.0	5.734	А
A-B	27			27			
A-C	155			155			
D-AB	7	664	0.010	7	0.0	5.480	А
D-BC	7	446	0.015	7	0.0	8.199	А
C-ABD	0	1280	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	167			167			



#### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	462	0.006	3	0.0	7.836	A
B-AD	20	459	0.044	20	0.0	8.725	A
A-BCD	12	629	0.019	12	0.0	5.837	O. A
A-B	33			33			77
A-C	190			190			77.
D-AB	8	649	0.013	8	0.0	5.622	Α 🥹
D-BC	8	430	0.019	8	0.0	8.539	А
C-ABD	0	1256	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	205			205			

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	3	462	0.006	3	0.0	7.836	A
B-AD	20	459	0.044	20	0.0	8.727	A
A-BCD	12	629	0.019	12	0.0	5.837	A
A-B	33			33			
A-C	190			190			
D-AB	8	649	0.013	8	0.0	5.622	A
D-BC	8	430	0.019	8	0.0	8.539	A
C-ABD	0	1256	0.000	0	0.0	0.000	А
C-D	2			2			
C-A	205			205			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	477	0.005	2	0.0	7.582	A
B-AD	17	476	0.035	17	0.0	8.337	A
A-BCD	10	638	0.016	10	0.0	5.736	A
A-B	27			27			
A-C	155			155			
D-AB	7	664	0.010	7	0.0	5.483	A
D-BC	7	446	0.015	7	0.0	8.200	А
C-ABD	0	1280	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	167			167			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	2	488	0.004	2	0.0	7.404	А
B-AD	14	489	0.028	14	0.0	8.073	A
A-BCD	8	644	0.013	8	0.0	5.660	А
A-B	23			23			
A-C	130			130			
D-AB	6	674	0.008	6	0.0	5.383	А
D-BC	6	457	0.012	6	0.0	7.970	A
C-ABD	0	1298	0.000	0	0.0	0.000	A
C-D	2			2			
C-A	140			140			

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# **Junctions 10**

#### **PICADY 10 - Priority Intersection Module**

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Filename: Main Site Access Junction - AM & PM.j10

Path: Q:\2024 Jobs\24\_078 Killala DC Project\08. Traffic\03. Junction Models\Main Site Access Junction

**Report generation date:** 17/10/2024 14:01:10

»Main Site Access Junction - 2026 Do Something Construction Phase, AM »Main Site Access Junction - 2026 Do Something Construction Phase, PM »Main Site Access Junction - 2026 Do Something Operational Phase, AM »Main Site Access Junction - 2026 Do Something Operational Phase, PM »Main Site Access Junction - 2031 Do Something Operational Phase, AM »Main Site Access Junction - 2031 Do Something Operational Phase, PM »Main Site Access Junction - 2041 Do Something Operational Phase, AM »Main Site Access Junction - 2041 Do Something Operational Phase, PM

#### Summary of junction performance

		А	.M			PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	Los	Set ID	Queue (PCU)	Delay (s)	RFC	Los
	Mai	n Site Acces	ss Juncti	ion - 2	2026	Do Sor	nething Con	struction	Pha	se
Stream B-C		0.0	5.94	0.01	А		0.1	6.11	0.04	Α
Stream B-A	D1	0.0	0.00	0.00	Α	D2	0.0	0.00	0.00	Α
Stream C-AB		0.1	7.64	0.05	А		0.0	7.37	0.02	Α
	Ma	Main Site Access Junction - 202					mething Ope	erational	Phas	<del>0</del>
Stream B-C		0.0	5.98	0.02	А		0.0	5.97	0.02	Α
Stream B-A	D3	0.0	0.00	0.00	Α	D4	0.0	0.00	0.00	Α
Stream C-AB		0.0	7.49	0.03	Α		0.0	7.48	0.03	Α
	Ma	in Site Acce	ss Junct	ion -	2031	Do So	mething Ope	erational	Phas	e e
Stream B-C		0.0	5.99	0.02	А		0.0	6.02	0.03	Α
Stream B-A	D5	0.0	0.00	0.00	Α	D6	0.0	0.00	0.00	Α
Stream C-AB		0.0	7.50	0.03	А		0.0	7.45	0.03	Α
	Main Site Access Junction - 2041 Do Something Operational							Phas	ō.	
Stream B-C		0.0	6.00	0.02	А		0.0	6.03	0.03	Α
Stream B-A	D7	0.0	0.00	0.00	А	D8	0.0	0.00	0.00	Α
Stream C-AB		0.0	7.51	0.03	А		0.0	7.45	0.03	Α

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.



#### File summary

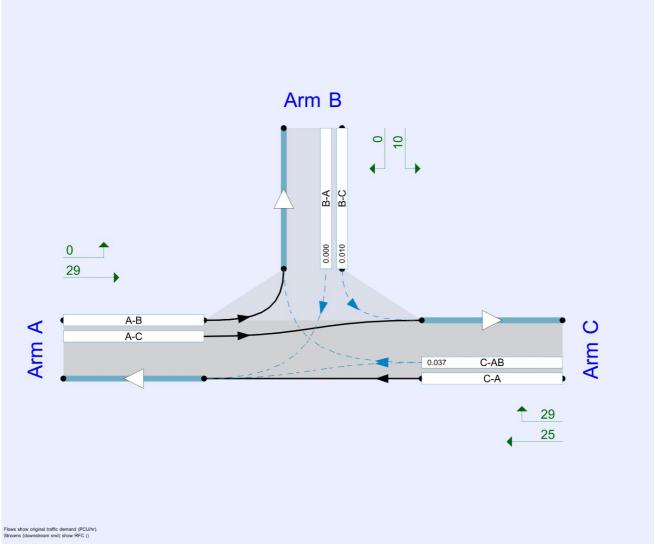
#### **File Description**

Title	
Location	
Site number	
Date	15/10/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DOMAIN\fernando.figueiredo
Description	

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#### **Units**

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.



#### **Analysis Options**

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	
		0.85	36.00	20.00	

#### **Demand Set Summary**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Do Something Construction Phase	AM	ONE HOUR	00:00	01:30	15_
D2	2026 Do Something Construction Phase	PM	ONE HOUR	16:00	17:30	15
D3	2026 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15
D4	2026 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15
D5	2031 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15
D6	2031 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15
D7	2041 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15
D8	2041 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

#### **Analysis Set Details**

ID	Name	Network flow scaling factor (%)
A1	Main Site Access Junction	100.000

3



# Main Site Access Junction - 2026 Do Semething Construction Phase, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.

# **Junction Network**

#### **Junctions**

Junctio	n Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.03	Α

#### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Left Normal/unknown		Α	

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	untitled		Major
В	untitled		Minor
С	untitled		Major

#### **Major Arm Geometry**

Ar	Midth of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)	
C	5.00			50.0	✓	1.00	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

#### **Minor Arm Geometry**

Arr	Minor arm type	Width at give- way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
В	One lane plus flare	10.00	6.00	4.00	4.00	4.00	✓	1.00	50	50

#### Slope / Intercept / Capacity

#### **Priority Intersection Slopes and Intercepts**

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	519	0.099	0.249	0.157	0.356
B-C	747	0.120	0.302	-	-
С-В	603	0.244	0.244	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.



# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segr	ment length (min)
D1	2026 Do Something Construction Phase	AM	ONE HOUR	00:00	01:30	Ď.	15

Vehicle mix source	PCU Factor for a HV (PCU)	
HV Percentages	2.00	

#### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	29	100.000
В		✓	10	100.000
С		✓	54	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То			
		Α	В	С
From	Α	0	0	29
	В	0	0	10
	C	25	29	0

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

	То			
		Α	В	ပ
From	Α	0	20	0
	В	20	0	20
	С	20	20	0

# Results

#### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.01	5.94	0.0	А
B-A	0.00	0.00	0.0	А
C-AB	0.05	7.64	0.1	А
C-A				
A-B				
A-C				



### Main Results for each time segment

### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	8	741	0.010	7	0.0	5.891	. A
B-A	0	502	0.000	0	0.0	0.000	W/
C-AB	22	599	0.037	22	0.0	7.484	A 7
C-A	19			19			9
A-B	0			0			
A-C	22			22			

### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	9	739	0.012	9	0.0	5.913	Α
B-A	0	499	0.000	0	0.0	0.000	Α
C-AB	26	598	0.044	26	0.1	7.550	А
C-A	22			22			
A-B	0			0			
A-C	26			26			

### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	738	0.015	11	0.0	5.944	A
B-A	0	495	0.000	0	0.0	0.000	А
C-AB	32	598	0.054	32	0.1	7.638	A
C-A	27			27			
A-B	0			0			
A-C	32			32			

### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	738	0.015	11	0.0	5.944	A
B-A	0	495	0.000	0	0.0	0.000	A
C-AB	32	598	0.054	32	0.1	7.638	A
C-A	27			27			
A-B	0			0			
A-C	32			32			

### 01:00 - 01:15

71100 VIII0							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	9	739	0.012	9	0.0	5.914	A
B-A	0	499	0.000	0	0.0	0.000	A
C-AB	26	598	0.044	26	0.1	7.551	A
C-A	22			22			
A-B	0			0			
A-C	26			26			

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### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	8	741	0.010	8	0.0	5.894	A
B-A	0	502	0.000	0	0.0	0.000	A
C-AB	22	599	0.037	22	0.0	7.488	O. A
C-A	19			19			77
A-B	0			0			77.
A-C	22			22			. 4



### Main Site Access Junction - 2026 Do Semething Construction Phase, PM

### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.

### **Junction Network**

### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.64	Α

### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.64	Α

### **Traffic Demand**

### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2026 Do Something Construction Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	27	100.000
В		✓	29	100.000
С		✓	39	100.000

### **Origin-Destination Data**

### Demand (PCU/hr)

	То					
		Α	В	С		
	Α	0	0	27		
From	В	0	0	29		
	С	29	10	0		

### **Vehicle Mix**

	То					
		A		С		
F	Α	0	20	0		
From	В	20	0	20		
	С	20	20	0		



### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.04	6.11	0.1	А
B-A	0.00	0.00	0.0	А
C-AB	0.02	7.37	0.0	А
C-A				
A-B				
A-C				

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### Main Results for each time segment

### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	22	741	0.029	22	0.0	6.002	Α
B-A	0	507	0.000	0	0.0	0.000	А
C-AB	8	599	0.013	7	0.0	7.308	А
C-A	22			22			
A-B	0			0			
A-C	20			20			

### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	26	740	0.035	26	0.0	6.050	А
B-A	0	505	0.000	0	0.0	0.000	A
C-AB	9	598	0.015	9	0.0	7.336	А
C-A	26			26			
A-B	0			0			
A-C	24			24			

### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	738	0.043	32	0.1	6.115	А
B-A	0	502	0.000	0	0.0	0.000	А
C-AB	11	597	0.018	11	0.0	7.373	А
C-A	32			32			
A-B	0			0			
A-C	30			30			

### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	32	738	0.043	32	0.1	6.115	А
B-A	0	502	0.000	0	0.0	0.000	А
C-AB	11	597	0.018	11	0.0	7.373	А
C-A	32			32			
A-B	0			0			
A-C	30			30			



### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	26	740	0.035	26	0.0	6.051	// A
B-A	0	505	0.000	0	0.0	0.000	A
C-AB	9	598	0.015	9	0.0	7.336	. <sub>А</sub>
C-A	26			26			57/-
A-B	0			0			7
A-C	24			24			P

### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	22	741	0.029	22	0.0	6.007	A
B-A	0	507	0.000	0	0.0	0.000	A
C-AB	8	599	0.013	8	0.0	7.311	A
C-A	22			22			
A-B	0			0			
A-C	20			20			



## Main Site Access Junction - 2026 Do Semething Operational Phase, AM

### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.

### **Junction Network**

### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.54	Α

### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.54	Α

### **Traffic Demand**

### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2026 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	29	100.000
В		✓	14	100.000
С		✓	43	100.000

### **Origin-Destination Data**

### Demand (PCU/hr)

		То					
		Α	В	С			
	Α	0	0	29			
From	В	0	0	14			
	С	25	18	0			

### **Vehicle Mix**

		То				
		Α	В	С		
	Α	0	20	0		
From	В	20	0	20		
	С	20	20	0		



### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.02	5.98	0.0	А
B-A	0.00	0.00	0.0	А
C-AB	0.03	7.49	0.0	А
C-A				
A-B				
A-C				

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### Main Results for each time segment

### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	741	0.014	10	0.0	5.916	А
B-A	0	505	0.000	0	0.0	0.000	A
C-AB	14	598	0.023	13	0.0	7.385	А
C-A	19			19			
A-B	0			0			
A-C	22			22			

### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	13	739	0.017	13	0.0	5.943	A
B-A	0	503	0.000	0	0.0	0.000	А
C-AB	16	598	0.027	16	0.0	7.428	A
C-A	22			22			
A-B	0			0			
A-C	26			26			

### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	738	0.021	15	0.0	5.980	А
B-A	0	499	0.000	0	0.0	0.000	А
C-AB	20	597	0.033	20	0.0	7.487	А
C-A	27			27			
A-B	0			0			
A-C	32			32			

### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	15	738	0.021	15	0.0	5.980	А
B-A	0	499	0.000	0	0.0	0.000	А
C-AB	20	597	0.033	20	0.0	7.487	А
C-A	27			27			
A-B	0			0			
A-C	32			32			



### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	13	739	0.017	13	0.0	5.945	// A
B-A	0	503	0.000	0	0.0	0.000	A
C-AB	16	598	0.027	16	0.0	7.432	. <sub>А</sub>
C-A	22			22			57/-
A-B	0			0			7
A-C	26			26			P

### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	741	0.014	11	0.0	5.916	A
B-A	0	505	0.000	0	0.0	0.000	А
C-AB	14	598	0.023	14	0.0	7.389	Α
C-A	19			19			
A-B	0			0			
A-C	22			22			



## Main Site Access Junction - 2026 Do Semething Operational Phase, PM

### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.

### **Junction Network**

### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.60	Α

### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS	
Left	Normal/unknown	2.60	Α	

### **Traffic Demand**

### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2026 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### **Demand overview (Traffic)**

Arm	Linked arm Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)	
Α		✓	27	100.000	
В		✓	14	100.000	
С		✓	43	100.000	

### **Origin-Destination Data**

### Demand (PCU/hr)

		То					
		Α	В	С			
	Α	0	0	27			
From	В	0	0	14			
	С	25	18	0			

### **Vehicle Mix**

		Т	·o	
		Α	В	С
F	Α	0	20	0
From	В	20	0	20
	С	20	20	0



### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.02	5.97	0.0	А
B-A	0.00	0.00	0.0	А
C-AB	0.03	7.48	0.0	А
C-A				
A-B				
A-C				

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### Main Results for each time segment

### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	741	0.014	10	0.0	5.912	A
B-A	0	506	0.000	0	0.0	0.000	A
C-AB	14	599	0.023	13	0.0	7.381	A
C-A	19			19			
A-B	0			0			
A-C	20			20			

### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	13	740	0.017	13	0.0	5.938	A
B-A	0	503	0.000	0	0.0	0.000	А
C-AB	16	598	0.027	16	0.0	7.422	А
C-A	22			22			
A-B	0			0			
A-C	24			24			

### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	15	738	0.021	15	0.0	5.975	A
B-A	0	500	0.000	0	0.0	0.000	A
C-AB	20	597	0.033	20	0.0	7.480	А
C-A	27			27			
A-B	0			0			
A-C	30			30			

### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	15	738	0.021	15	0.0	5.975	Α
B-A	0	500	0.000	0	0.0	0.000	A
C-AB	20	597	0.033	20	0.0	7.480	Α
C-A	27			27			
A-B	0			0			
A-C	30			30			



### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	13	740	0.017	13	0.0	5.938	// A
B-A	0	503	0.000	0	0.0	0.000	A
C-AB	16	598	0.027	16	0.0	7.423	. <sub>А</sub>
C-A	22			22			57/-
A-B	0			0			7
A-C	24			24			7

### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	741	0.014	11	0.0	5.914	Α
B-A	0	506	0.000	0	0.0	0.000	А
C-AB	14	599	0.023	14	0.0	7.381	А
C-A	19			19			
A-B	0			0			
A-C	20			20			



### Main Site Access Junction - 2031 Do Semething Operational Phase, AM

### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.

### **Junction Network**

### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.41	А

### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.41	Α

### **Traffic Demand**

### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2031 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	32	100.000
В		✓	14	100.000
С		✓	45	100.000

### **Origin-Destination Data**

### Demand (PCU/hr)

	То			
		Α	В	С
	Α	0	0	32
From	В	0	0	14
	С	27	18	0

### **Vehicle Mix**

	То			
		Α	В	ပ
F	Α	0	20	0
From	В	20	0	20
	С	20	20	0



### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.02	5.99	0.0	А
B-A	0.00	0.00	0.0	А
C-AB	0.03	7.50	0.0	А
C-A				
A-B				
A-C				



### Main Results for each time segment

### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	740	0.014	10	0.0	5.921	A
B-A	0	504	0.000	0	0.0	0.000	A
C-AB	14	598	0.023	13	0.0	7.391	A
C-A	20			20			
A-B	0			0			
A-C	24			24			

### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	13	739	0.017	13	0.0	5.949	A
B-A	0	502	0.000	0	0.0	0.000	A
C-AB	16	597	0.027	16	0.0	7.435	А
C-A	24			24			
A-B	0			0			
A-C	29			29			

### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	15	737	0.021	15	0.0	5.989	A
B-A	0	498	0.000	0	0.0	0.000	A
C-AB	20	596	0.033	20	0.0	7.496	А
C-A	30			30			
A-B	0			0			
A-C	35			35			

### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	15	737	0.021	15	0.0	5.989	Α
B-A	0	498	0.000	0	0.0	0.000	A
C-AB	20	596	0.033	20	0.0	7.496	Α
C-A	30			30			
A-B	0			0			
A-C	35			35			



### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	13	739	0.017	13	0.0	5.950	// A
B-A	0	502	0.000	0	0.0	0.000	A
C-AB	16	597	0.027	16	0.0	7.436	- A
C-A	24			24			77_
A-B	0			0			7,
A-C	29			29			P

### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	740	0.014	11	0.0	5.924	A
B-A	0	504	0.000	0	0.0	0.000	A
C-AB	14	598	0.023	14	0.0	7.392	А
C-A	20			20			
A-B	0			0			
A-C	24			24			



### Main Site Access Junction - 2031 Do Semething Operational Phase, PM

### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.

### **Junction Network**

### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.32	Α

### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.32	Α

### **Traffic Demand**

### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2031 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	30	100.000
В		✓	18	100.000
С		✓	47	100.000

### **Origin-Destination Data**

### Demand (PCU/hr)

	То					
From		Α	В	С		
	Α	0	0	30		
	В	0	0	18		
	С	32	15	0		

### **Vehicle Mix**

	То					
From		Α	В	ပ		
	Α	0	20	0		
	В	20	0	20		
	С	20	20	0		



### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.03	6.02	0.0	А
B-A	0.00	0.00	0.0	А
C-AB	0.03	7.45	0.0	А
C-A				
A-B				
A-C				

## PROPARID. 27772024

### Main Results for each time segment

### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	14	740	0.018	13	0.0	5.942	A
B-A	0	505	0.000	0	0.0	0.000	A
C-AB	11	598	0.019	11	0.0	7.358	A
C-A	24			24			
A-B	0			0			
A-C	23			23			

### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	16	739	0.022	16	0.0	5.974	A
B-A	0	502	0.000	0	0.0	0.000	A
C-AB	14	598	0.023	13	0.0	7.395	А
C-A	29			29			
A-B	0			0			
A-C	27			27			

### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	20	737	0.027	20	0.0	6.020	A
B-A	0	499	0.000	0	0.0	0.000	A
C-AB	17	597	0.028	17	0.0	7.446	A
C-A	35			35			
A-B	0			0			
A-C	33			33			

### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	737	0.027	20	0.0	6.020	А
B-A	0	499	0.000	0	0.0	0.000	A
C-AB	17	597	0.028	17	0.0	7.446	A
C-A	35			35			
A-B	0			0			
A-C	33			33			



### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	739	0.022	16	0.0	5.975	// A
B-A	0	502	0.000	0	0.0	0.000	A
C-AB	14	598	0.023	14	0.0	7.399	- A
C-A	29			29			77_
A-B	0			0			7,
A-C	27			27			P

### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	14	740	0.018	14	0.0	5.944	A
B-A	0	505	0.000	0	0.0	0.000	A
C-AB	11	598	0.019	11	0.0	7.359	A
C-A	24			24			
A-B	0			0			
A-C	23			23			



### Main Site Access Junction - 2041 Do Semething Operational Phase, AM

### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.

### **Junction Network**

### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.26	Α

### **Junction Network**

Driving side	Lighting	Network delay (s)	Network LOS	
Left	Normal/unknown	2.26	Α	

### **Traffic Demand**

### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2041 Do Something Operational Phase	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	36	100.000
В		✓	14	100.000
С		✓	47	100.000

### **Origin-Destination Data**

### Demand (PCU/hr)

		То					
		Α	В	С			
	Α	0	0	36			
From	В	0	0	14			
	С	29	18	0			

### **Vehicle Mix**

		1	<del>-</del> 0	
		Α	В	ပ
F	Α	0	20	0
From	В	20	0	20
	С	20	20	0



### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.02	6.00	0.0	А
B-A	0.00	0.00	0.0	А
C-AB	0.03	7.51	0.0	А
C-A				
A-B				
A-C				

## PROPARED. 27/17/2024

### Main Results for each time segment

### 00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	739	0.014	10	0.0	5.928	A
B-A	0	504	0.000	0	0.0	0.000	A
C-AB	14	597	0.023	13	0.0	7.400	А
C-A	22			22			
A-B	0			0			
A-C	27			27			

### 00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	13	738	0.017	13	0.0	5.958	A
B-A	0	501	0.000	0	0.0	0.000	A
C-AB	16	596	0.027	16	0.0	7.445	А
C-A	26			26			
A-B	0			0			
A-C	32			32			

### 00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	15	735	0.021	15	0.0	6.000	A
B-A	0	497	0.000	0	0.0	0.000	A
C-AB	20	595	0.033	20	0.0	7.508	Α
C-A	32			32			
A-B	0			0			
A-C	40			40			

### 00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	15	735	0.021	15	0.0	6.000	А
B-A	0	497	0.000	0	0.0	0.000	А
C-AB	20	595	0.033	20	0.0	7.508	А
C-A	32			32			
A-B	0			0			
A-C	40			40			



### 01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	13	738	0.017	13	0.0	5.961	// A
B-A	0	501	0.000	0	0.0	0.000	A
C-AB	16	596	0.027	16	0.0	7.446	, A
C-A	26			26			77_
A-B	0			0			7,
A-C	32			32			7

### 01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	11	739	0.014	11	0.0	5.929	A
B-A	0	503	0.000	0	0.0	0.000	A
C-AB	14	597	0.023	14	0.0	7.403	А
C-A	22			22			
A-B	0			0			
A-C	27			27			



## Main Site Access Junction - 2041 Do Semething Operational Phase, PM

### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway widths less than 6m.

### **Junction Network**

### **Junctions**

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.20	Α

### **Junction Network**

Driving side Lighting		Network delay (s)	Network LOS	
Left	Normal/unknown	2.20	Α	

### **Traffic Demand**

### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2041 Do Something Operational Phase	PM	ONE HOUR	16:00	17:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

### **Demand overview (Traffic)**

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
Α		✓	32	100.000
В		✓	18	100.000
С		✓	50	100.000

### **Origin-Destination Data**

### Demand (PCU/hr)

	То					
		Α	В	С		
	Α	0	0	32		
From	В	0	0	18		
	С	35	15	0		

### **Vehicle Mix**

	То					
		Α	В	С		
	Α	0	20	0		
From	В	20	0	20		
	C	20	20	0		



### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
в-с	0.03	6.03	0.0	А
B-A	0.00	0.00	0.0	А
C-AB	0.03	7.45	0.0	А
C-A				
A-B				
A-C				

## PECANED. 27/7/2024

### Main Results for each time segment

### 16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	14	740	0.018	13	0.0	5.946	A
B-A	0	504	0.000	0	0.0	0.000	A
C-AB	11	598	0.019	11	0.0	7.362	А
C-A	26			26			
A-B	0			0			
A-C	24			24			

### 16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	16	739	0.022	16	0.0	5.979	А
B-A	0	502	0.000	0	0.0	0.000	A
C-AB	14	597	0.023	13	0.0	7.399	А
C-A	31			31			
A-B	0			0			
A-C	29			29			

### 16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	20	737	0.027	20	0.0	6.025	A
B-A	0	498	0.000	0	0.0	0.000	A
C-AB	17	596	0.028	17	0.0	7.451	А
C-A	38			38			
A-B	0			0			
A-C	35			35			

### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	20	737	0.027	20	0.0	6.025	А
B-A	0	498	0.000	0	0.0	0.000	A
C-AB	17	596	0.028	17	0.0	7.451	Α
C-A	38			38			
A-B	0			0			
A-C	35			35			



### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	739	0.022	16	0.0	5.982	/ A
B-A	0	502	0.000	0	0.0	0.000	A
C-AB	14	597	0.023	14	0.0	7.400	. <sub>А</sub>
C-A	31			31			57/-
A-B	0			0			7
A-C	29			29			P

### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	14	740	0.018	14	0.0	5.946	Α
B-A	0	504	0.000	0	0.0	0.000	А
C-AB	11	598	0.019	11	0.0	7.365	А
C-A	26			26			
A-B	0			0			
A-C	24			24			

PRORINGO. 277712024

### **APPENDIX 15.1**

### RESOURCE AND WASTE MANAGEMENT PLAN

## RESOURCE & WASTE MANAGEMENT PLAN FOR A PROPOSED COMMERCIAL DEVELOPMENT AT MULLAFARRY, KILLALA, CO. MAYO.

Report Prepared For

### **Mayo Data Hub Limited**

Report Prepared By

Laura Berry, Environmental Consultant &
Chonaill Bradley, Principal Environmental
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Our Reference

LB/247501.0366WMR01

Date of Issue

15 November 2024



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### **Record of Approval**

Details	Written by	Approved by
Signature	Laure Berry	( Carl
Name	Laura Berry	Chonaill Bradley
Title	Environmental Consultant	Principal Environmental Consultant
Date	15 November 2024	15 November 2024

This report considers the specific instructions and requirements of our client. It is not intended for third-party use or reliance, and no responsibility is accepted for any third party. The provisions in this report apply solely to this project and should not be assumed applicable to other developments without review and modification.

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### 1.0 INTRODUCTION

AWN Consulting Ltd. (AWN) has prepared this Construction and Demolition (C&D) Resource & Waste Management Plan (RWMP) on behalf of Mayo Data Hub Limited. The proposed development comprises the construction of a single data centre building along with all associated and ancillary development, sprinkler tank and pump house, and all associated works. The subject site comprises undeveloped greenfield lands with access from the south.

This plan provides information necessary to ensure that the management of C&D waste at the site is undertaken in accordance with the current legal and industry standards including the *Waste Management Act 1996* as amended and associated Regulations <sup>1</sup>, *Environmental Protection Agency Act 1992* as amended <sup>2</sup>, *Litter Pollution Act 1997* as amended <sup>3</sup>, the National Waste Management Plan for a Circular Economy 2024 - 2030 (NWMPCE) (2024) <sup>4</sup>. In particular, this plan aims to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, wherever possible. It also provides appropriate measures in relation to the collection and transport of waste from the site to prevent issues associated with litter or more serious environmental pollution (e.g. contamination of soil and/or water).

This RWMP includes information on the legal and policy framework for C&D waste management in Ireland, estimates of the type and quantity of waste to be generated by the proposed development and prescribes measures for the management of different waste streams. The RWMP should be viewed as a live document and will be regularly revisited throughout the project's lifecycle so that opportunities to maximise waste reduction / efficiencies are exploited throughout, and that data is collected on an ongoing basis so that it is as accurate as possible.

### 2.0 C&D RESOURCE AND WASTE MANAGEMENT IN IRELAND

### 2.1 National Level

The Irish Government issued a policy statement in September 1998, *Changing Our Ways* <sup>5</sup>, which identified objectives for the prevention, minimisation, reuse, recycling, recovery and disposal of waste in Ireland. The target for C&D waste in this report was to recycle at least 50% of C&D waste within a five year period (by 2003), with a progressive increase to at least 85% over fifteen years (i.e. 2018).

In response to the *Changing Our Ways* report, a task force (Task Force B4) representing the waste sector of the already established Forum for the Construction Industry, released a report entitled '*Recycling of Construction and Demolition Waste*' <sup>6</sup> concerning the development and implementation of a voluntary construction industry programme to meet the Government's objectives for the recovery of C&D waste.

In September 2020, the Irish Government published a policy document outlining a new action plan for Ireland to cover the period of 2020-2025. This plan, 'A Waste Action Plan for a Circular Economy' (WAPCE), replaces the previous national waste management plan, "A Resource Opportunity" (2012), and was prepared in response to the 'European Green Deal' which sets a roadmap for a transition to an altered economical model, where climate and environmental challenges are turned into opportunities.

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The WAPCE sets the direction for waste planning and management I Ireland up to 2025. This reorientates policy from a focus on managing waste to a much greater focus on creating circular patterns of production and consumption. Other policy statements of a number of public bodies already acknowledge the circular economy as a national policy priority.

The policy document contains over 200 measures across various waste areas including circular economy, municipal waste, consumer protection and citizen engagement, plastics and packaging, construction and demolition, textiles, green public procurement and waste enforcement.

One of the first actions to be taken was the development of the *Whole of Government Circular Economy Strategy 2022-2023 'Living More, Using Less'* (2021) <sup>8</sup> to set a course for Ireland to transition across all sectors and at all levels of Government toward circularity and was issued in December 2021. It is anticipated that the Strategy will be updated in full every 18 months to 2 years.

The Circular Economy and Miscellaneous Provisions Act 2022 <sup>9</sup> was signed into law in July 2022. The Act underpins Ireland's shift from a "take-make-waste" linear model to a more sustainable pattern of production and consumption, that retains the value of resources in our economy for as long as possible and that will work to significantly reduce our greenhouse gas emissions. The Act defines Circular Economy for the first time in Irish law, incentivises the use of recycled and reusable alternatives to wasteful, single-use disposable packaging, introduces a mandatory segregation and incentivised charging regime for commercial waste, streamlines the national processes for End-of-Waste and By-Products decisions, tackling the delays which can be encountered by industry, and supporting the availability of recycled secondary raw materials in the Irish market, and tackles illegal fly-tipping and littering.

The Environmental Protection Agency (EPA) of Ireland issued 'Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects' in November 2021 <sup>10</sup>. These guidelines replace the previous 2006 guidelines issued by The National Construction and Demolition Waste Council (NCDWC) and the Department of the Environment, Heritage and Local Government (DoEHLG) in 2006 <sup>11</sup>. The guidelines provide a practical approach which is informed by best practice in the prevention and management of C&D wastes and resources from design to construction of a project, including consideration of the deconstruction of a project. These guidelines have been followed in the preparation of this document and include the following elements:

- Predicted C&D wastes and procedures to prevent, minimise, recycle and reuse wastes;
- Design teams roles and approach;
- Relevant EU, national and local waste policy, legislation and guidelines;
- Waste disposal/recycling of C&D wastes at the site;
- Provision of training for Resource Waste Manager (RM) and site crew;
- Details of proposed record keeping system;
- Details of waste audit procedures and plan; and
- Details of consultation with relevant bodies i.e. waste recycling companies, Local Authority, etc.

Section 3 of the Guidelines identifies thresholds above which there is a requirement for the preparation of a bespoke RWMP for developments. The new guidance classifies developments on a two-tiered system. Developments which do not exceed any of the following thresholds may be classed as Tier 1 development, which require a simplified RWMP:

- New residential development of less than 10 dwellings.
- Retrofit of 20 dwellings or less.
- New commercial, industrial, infrastructural, institutional, educational, health and other developments with an aggregate floor area less than 1,250m<sup>2</sup>.
- Retrofit of commercial, industrial, infrastructural, institutional, educational, health and other developments with an aggregate floor area less than 2,000m<sup>2</sup>; and
- Demolition projects generating in total less than 100m³ in volume of C&D waste.

A development which exceeds one or more of these thresholds is classed as Tier-2 development.

This proposed development requires a RWMP as a Tier 2 development as it is above following criterion:

• New commercial, industrial, infrastructural, institutional, educational, health and other developments with an aggregate floor area less than 1,250m2.

Other guidelines followed in the preparation of this report include 'Construction and Demolition Waste Management – a handbook for Contractors and Site Managers' <sup>12</sup>, published by FÁS and the Construction Industry Federation in 2002 and the previous guidelines, 'Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Projects' (2006).

These guidance documents are considered to define best practice for C&D projects in Ireland and describe how C&D projects are to be undertaken such that environmental impacts and risks are minimised and maximum levels of waste recycling are achieved.

### 2.2 Regional Level

The proposed development is located in the Local Authority area of Mayo County Council (MCC).

The Connacht - Ulster Region (CUR) Waste Management Plan 2015 – 2021, which previously governed waste management policy in the MCC area, has been superseded as of March 2024 by the NWMPCE 2024 – 2030, the new national waste management plan for Ireland.

The NWMPCE does not dissolve the three regional waste areas. The NWCPCE sets the ambition of the plan to have a 0% total waste growth per person over the life of the Plan with an emphasis on non-household wastes including waste from commercial activities and the construction and demolition sector.

This Plan seeks to influence sustainable consumption and prevent the generation of waste, improve the capture of materials to optimise circularity and enable compliance with policy and legislation.

The national plan sets out the following strategic targets for waste management in the country that are relevant to the development:

### **National Targets**

1B. (Construction Materials) 12% Reduction in Construction & Demolition Waste Generated by 2030.

3B. (Reuse Facilities) Provide for reuse at 10 Civic Amenity Sites, minimum

Municipal landfill charges in Ireland are based on the weight of waste disposed. In the Leinster Region, charges are approximately €140 - €160 per tonne of waste which includes an €85 per tonne landfill levy introduced under the *Waste Management (Landfill Levy) (Amendment) Regulations 2015 (as amended).* 

The Mayo County Development Plan 2022-2028 <sup>13</sup> sets out a number of policies and objectives for Mayo County is guided by the National Planning Framework along with several other national and regional plans, including the including the current regional waste management plan and the Waste Action Plan for a Circular Economy. Waste has been addressed under Chapter 7 Infrastructure. Further policies and objectives can be found within the development plan.

### Policies:

- *INP 7:* To support the Implementation of the Connacht Ulster Regional Waste Management Plan 2015-2021 (as amended) or replacement plan with particular emphasis on reuse, recycling and disposal of residual waste in the most appropriate manner where it can be demonstrated that the development will not have significant adverse effects on the environment, the integrity of the Natura 2000 network, traffic safety, residential or visual amenity.
- *INP 8:* To promote the sustainable management of waste generation and investment in different types of waste treatment and support a healthy environment, economy and society.

### Objectives:

 INO 10: Promote prioritising prevention, reuse, recycling and recovery, and to sustainably manage residual waste. New developments shall take account of the provisions of the Connacht Ulster Regional Waste Management Plan 2015 - 2021 (as amended) and observe those elements of it that relate to waste prevention and minimisation, waste recycling facilities and the capacity for source segregation

### 2.3 Legislative Requirements

The primary legislative instruments that govern waste management in Ireland and applicable to the development are:

- Waste Management Act 1996 as amended;
- Environmental Protection Agency Act 1992 as amended:
- Litter Pollution Act 1997 as amended;
- Planning and Development Act 2000 as amended <sup>14</sup>;

### Circular Economy and Miscellaneous Provisions Act 2022.

One of the guiding principles of European waste legislation, which has in turn been incorporated into the *Waste Management Act 1996* as amended and subsequent Irish legislation, is the principle of "*Duty of Care*". This implies that the waste producer is responsible for waste from the time it is generated through until its legal recycling, recovery or disposal (including its method of disposal). As it is not practical in most cases for the waste producer to physically transfer all waste from where it is produced to the final destination, waste contractors will be employed to physically transport waste to the final destination. Following on from this is the concept of "*Polluter Pays*" whereby the waste producer is liable to be prosecuted for pollution incidents, which may arise from the incorrect management of waste produced, including the actions of any contractors engaged (e.g. for transportation and disposal/recovery/recycling of waste).

It is therefore imperative that the Developer ensures that the waste contractors engaged by construction contractors are legally compliant with respect to waste transportation, recycling, recovery and disposal. This includes the requirement that a contractor handle, transport and recycle/recover/dispose of waste in a manner that ensures that no adverse environmental impacts occur as a result of any of these activities.

A collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO). Waste receiving facilities must also be appropriately permitted or licensed. Operators of such facilities cannot receive any waste, unless in possession of a Certificate of Registration (COR) or waste permit granted by the relevant Local Authority under the *Waste Management (Facility Permit & Registration) Regulations 2007 as amended* or a Waste Licence granted by the EPA. The COR / permit / licence held will specify the type and quantity of waste able to be received, stored, sorted, recovered and/or disposed of at the specified site.

### 3.0 DESIGN APPROACH

The client and the design team have integrated the 'Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects' guidelines into the design workshops, to help review processes, identify and evaluate resource reduction measures and investigate the impact on cost, time, quality, buildability, second life and management post construction. Further details on these design principals can be found within the aforementioned guidance document.

The design team have undertaken the design process in line with the international best practice principles to firstly prevent wastes, reuse where possible and thereafter sustainably reduce and recover materials. The below sections have been the focal point of the design process and material selections and will continued to be analysed and investigated throughout the design process and when selecting material.

As noted in the EPA guidelines, the approaches presented are said on international principles of optimising resources and reducing waste on construction projects through: NED. 27/1/2024

- Prevention:
- Reuse:
- Recycling;
- Green Procurement Principles;
- Off-Site Construction;
- Materials Optimisation; and
- Flexibility and Deconstruction.

### 3.1 Designing For Prevention, Reuse and Recycling

Undertaken at the outset and during project feasibility and evaluation the Client and Design Team considered:

- Establishing the potential for any reusable site assets (buildings, structures, equipment, materials, soils, etc.); and
- Enabling the optimum recovery of assets on site.

### 3.2 **Designing for Green Procurement**

Waste prevention and minimisation pre-procurement have been discussed and will be further discussed in this section. The Design Team will discuss proposed design solutions. encourage innovation in tenders and incentivise competitions to recognise sustainable approaches. They will also discuss options for packaging reduction with the main Contractor and subcontractors / suppliers using measures such as 'Just-in-Time' delivery and use ordering procedures that avoid excessive waste. The Green procurement extends from the planning stage into the detailed design and tender stage and will be an ongoing part of the long-term design and selection process for this development.

### 3.3 **Designing for Off-Site Construction**

Use of off-site manufacturing has been shown to reduce residual wastes by up to 90% (volumetric building versus traditional). The decision to use offsite construction is typically cost led but there are significant benefits for resource management. Some further considerations for procurement which are being investigated as part of the planning stage design process are listed as follows:

- Modular buildings as these can displace the use of concrete and the resource losses associated with concrete blocks such as broken blocks, mortars, etc.;
  - Modular buildings are typically pre-fitted with fixed plasterboard and installed insulation, eliminating these residual streams from site.
- Use of pre-cast structural concrete panels which can reduce the residual volumes of concrete blocks, mortars, plasters, etc.;
- The use of prefabricated composite panels for walls and roofing to reduce residual volumes of insulation and plasterboards;
- Using pre-cast hollow-core flooring instead of in-situ ready mix flooring or timber flooring to reduce the residual volumes of concrete/formwork and wood/packaging, respectively; and
- Designing for the preferential use of offsite modular units.

### 3.4 Designing for Materials Optimisation During Construction

To ensure manufacturers and construction companies adopt lean production models, including maximising the reuse of materials onsite as outlined in section 3.1, structures should be designed with the intent of designing out waste. This helps to reduce the environmental impacts associated with transportation of materials and from waste management activities. This includes investigating the use of standardised sizes for certain materials to help reduce the amount of offcuts produced on site, focusing on promotion and development of off-site manufacture.

### 3.5 Designing for Flexibility and Deconstruction

Design flexibility has and will be investigated throughout the design process to ensure that where possible products (including buildings) only contain materials that can be recycled and are designed to be easily disassembled. Material efficiency is being considered for the duration and end of life of a building project to produce; flexible, adaptable spaces that enable a resource-efficient, low-waste future change of use; durability of materials and how they can be recovered effectively when maintenance and refurbishment are undertaken and during disassembly/deconstruction.

### 4.0 DESCRIPTION OF THE DEVELOPMENT

### 4.1 Location, Size and Scale of the Development

The proposed development comprises a single data centre building located towards the north of the site. The building will accommodate data halls, associated electrical and mechanical plant rooms, maintenance and storage space, ancillary office administration areas, with plant at roof level.

To the north of and adjacent to the main data centre building it is proposed to provide for 25 no. backup generators and associated flues within a fenced compound.

To the east of the site is an area which is reserved for a 110kV substation which will connect the proposal to the electricity network. This substation will be subject to a separate pre-application request to An Bord Pleanála, to determine whether it constitutes Electricity Transmission Strategic Infrastructure Development under section 182A of the Planning and Development Act 2000, as amended.

A sprinkler tank and pumphouse compound is located to the north east of the site.

Access to the site is proposed from the south with a gatehouse located on the easternmost of the two entrances along with a turning area to allow vehicles to return to the road safely. Access will be provided around the site for delivery and emergency vehicle access. Car parking is proposed to the east of the building. 56 spaces are proposed which is in line with the future users' requirements. Safe and secure cycle parking is also proposed to the east, close to the building entrance.

An attenuation pond is proposed to the south of the site to facilitate sustainable drainage and a range of planting will be incorporated to screen the site and to increase biodiversity across the site.

The proposed development site is located c. 2.2km south of the town of Killala, to the west of the R314, within the townland of Mullafarry, Co. Mayo. Killala is located c. 10.5km to the north of Ballina, c. 46km west of Sligo town, and c. 39km north of Castlebar.

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Figure 4.1 Proposed Site Location



Figure 4.2 Proposed Site Layout Plan

#### 4.2 Details of the Non-Hazardous Wastes to be Produced

There will be soil and stones excavated to facilitate construction of new foundations and the installation of underground services. The project engineers (CSEA - Clifton Scannell Emerson Associates) have estimated that c. 86,760 m³ of material will need to be excavated to do so. It is currently envisaged that c. 36,150 m³ will be able to be removed and reused onsite for landscaping and fill, the remaining material, will need to be removed offsite due to the limited opportunities for reuse on site. This will be taken for appropriate offsite reuse, recovery, recycling and / or disposal.

During the construction phase there may be a surplus of building materials, such as timber off-cuts, broken concrete blocks, cladding, plastics, metals and tiles generated. There may also be excess concrete during construction which will need to be disposed of. Plastic and cardboard waste from packaging and supply of materials will also be generated. The contractor will be required to ensure that oversupply of materials is kept to a minimum and opportunities for reuse of suitable materials is maximised.

Waste will also be generated from construction workers e.g. organic / food waste, dry mixed recyclables (waste paper, newspaper, plastic bottles, packaging, aluminium cans, tins and Tetra Pak cartons), mixed non-recyclables and potentially sewage sludge from temporary welfare facilities provided on site during the construction phase. Waste printer / toner cartridges, waste electrical and electronic equipment (WEEE) and waste batteries may also be generated infrequently from site offices.

# 4.3 Potential Hazardous Wastes Arising

#### 4.3.1 Contaminated Soil

Site investigations and environmental soil testing were undertaken by Site Investigations Ltd (SIL) between August and September 2024. Field work carried out by SIL included:

- 4 no. cable percussive boreholes with 2 no rotary coreholes,
- 5 no. trial pits,
- 2 no. soakaway tests, and
- 4 no. silt trenches.

Environmental testing was conducted by ALS Environmental Ltd. and consisted of Suite I analysis on one sample form the investigation. Suite I testing was carried out to determine if the material was hazardous or non-hazardous then the leachate results were compared with the published waste acceptance limits of BS EN 12457-2 to determine whether the material on the site could be accepted as 'inert material' by an Irish landfill.

The Waste Classification report created using the HazWasteOnline $^{\text{TM}}$  software shows that the material tested can be classified as non-hazardous material. The subsequent leachate testing indicated that the soil tested generally be able to be treated as Inert Waste.

If any potentially contaminated material is encountered, it will need to be segregated from clean / inert material, tested and classified as either non-hazardous or hazardous in accordance with the EPA publication entitled 'Waste Classification: List of Waste & Determining if Waste is Hazardous or Non-Hazardous' 15 using the HazWasteOnline application (or similar approved classification method). The material will then need to be classified as clean, inert, non-hazardous or hazardous in accordance with the EC Council

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Decision 2003/33/EC <sup>16</sup>, which establishes the criteria for the acceptance of waste at landfills.

In the event that Asbestos Containing Materials (ACMs) are found within the excavated material, the removal will only be carried out by a suitably permitted waste contractor, in accordance with the Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010 and the Best Practice Guidance for Handling Asbestos (2023) 17. All asbestos will be taken to a suitably licensed or permitted facility.

In the event that hazardous soil, or historically deposited waste is encountered during the construction phase, the contractor will notify MCC and provide a Hazardous / Contaminated Soil Management Plan, to include estimated tonnages, description of location, any relevant mitigation, destination for disposal / treatment, in addition to information on the authorised waste collector(s).

#### 4.3.2 Fuel/Oils

Fuels and oils are classed as hazardous materials; any on-site storage of fuel / oil, and all storage tanks and all draw-off points will be bunded and located in a dedicated, secure area of the site. Provided that these requirements are adhered to and the site crew are trained in the appropriate refuelling techniques, it is not expected that there will be any fuel / oil waste generated at the site.

## 4.3.3 Invasive Plant Species

A site survey was carried out by the Project Ecologists (Moore Group). This included a site walkover survey of the entire site, and around part of the outside perimeter to search for any invasive species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended). There were no Third Schedule invasive species found within the proposed development site.

If an invasive species, such as Japanese Knotweed, *Fallopia japonica*, which is listed on the Third Schedule of the Birds and Habitats Regulations, is recorded on the site, a species-specific management plan will created and the necessary remediation measures will be undertaken

#### 4.3.4 Asbestos

As there is no demolition associated with this project it is unlikely that asbestos or Asbestos Containing Materials (ACMS) will be located on site.

Removal of asbestos or ACMs will be carried out by a suitably qualified contractor and ACMs will only be removed from site by a suitably permitted / licenced waste contractor, in accordance with the Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010 and the Best Practice Guidance for Handling Asbestos (2023). All material will be taken to a suitably licensed or permitted facility.

#### 4.3.5 Other Known Hazardous Substances

Paints, glues, adhesives and other known hazardous substances will be stored in designated areas. They will generally be present in small volumes only and associated waste volumes generated will be kept to a minimum. Wastes will be stored in appropriate receptacles pending collection by an authorised waste contractor.

In addition, WEEE (containing hazardous components), printer tone cartridges, batteries (Lead, Ni-Cd or Mercury) and / or fluorescent tubes and other mercury containing waste may be generated from during C&D activities or temporary site offices. These wastes, if generated, will be stored in appropriate receptacles in designated areas of the site pending collection by an authorised waste contractor.

# 5.0 ROLES AND RESPONSIBILITIES

The Best Practice Guidelines on the Preparation of Resource Waste Management Plans for Construction and Demolition Projects promotes that a suitably qualified Resource Manager (RM) with expertise in waste and resource management to implement the RWMP should be appointed. The RM may be performed by number of different individuals over the life-cycle of the Project, however it is intended to be a reliable person chosen from within the Planning / Design / Contracting Team, who is technically competent and appropriately trained, who takes the responsibility to ensure that the objectives and measures within the Project RWMP are complied with. The RM is assigned the requisite authority to meet the objective and obligations of the RWMP. The role will include the important activities of conducting waste checks/audits and adopting construction methodology that is designed to facilitate maximum reuse and/or recycling of waste.

#### 5.1 Role of the Client

The Client are the body establishing the aims and the performance targets for the project.

- The Client has commissioned the preparation and submission of this RWMP as part of the design and planning submission;
- The Client is to commission the preparation and submission of an updated RWMP as part of the construction tendering process;
- The Client will ensure that the RWMP is agreed on and submitted to the local authority and their agreement obtained prior to commencement of works on site;
- The Client will request the end-of-project RWMP from the Contractor.

# 5.2 Role of the Client Advisory Team

The Client Advisory Team or Design Team is formed of architects, consultants, quantity surveyors and engineers and is responsible for:

- Drafting and maintaining the RWMP through the design, planning and procurement phases of the project;
- Appointing a RM to track and document the design process, inform the Design Team and prepare the RWMP.
- Including details and estimated quantities of all projected waste streams with the support of environmental consultants/scientists. This will also include data on waste types (e.g. waste characterisation data, contaminated land assessments, site investigation information) and prevention mechanisms (such as by-products) to illustrate the positive circular economy principles applied by the Design Team;
- Handing over of the RWMP to the selected Contractor upon commencement of construction of the development, in a similar fashion to how the safety file is handed over to the Contractor;

• Working with the Contractor as required to meet the performance targets for the project.

#### 5.3 Future Role of the Contractor

The future construction Contractors have not yet been decided upon for this RWMP. However, once select they will have major roles to fulfil. They will be responsible for:

- Preparing, implementing and reviewing the RWMP throughout the construction
  phases (including the management of all suppliers and sub-contractors) as per the
  requirements of the EPA guidelines;
- Identifying a designated and suitably qualified RM who will be responsible for implementing the RWMP;
- Identifying all hauliers to be engaged to transport each of the resources / wastes off-site:
- Implementing waste management policies whereby waste materials generated on site are to be segregated as far as practicable;
- Renting and operating a mobile-crusher to crush concrete for temporary reuse onsite during construction and reduce the amount of HGV loads required to remove material from site;
- Applying for the appropriate waste permit to crush concrete onsite;
- Identifying all destinations for resources taken off-site. As above, any resource that
  is legally classified as a 'waste' must only be transported to an authorised waste
  facility;
- End-of-waste and by-product notifications addressed with the EPA where required;
- Clarification of any other statutory waste management obligations, which could include on-site processing;
- Full records of all resources (both wastes and other resources) will be maintained for the duration of the project; and
- Preparing a RWMP Implementation Review Report at project handover.

# 6.0 KEY MATERIALS & QUANTITIES

# 6.1 Project Resource Targets

Project specific resource and waste management targets for the site have not yet been set and this information will be updated for these targets once these targets have been confirmed by the client. However, it is expected for projects of this nature that a minimum of 70% of waste is fully re-used, recycled or recovered. Target setting will inform the setting of project-specific benchmarks to track target progress. Typical Key Performance Indicators (KPIs) that will be used to set targets include (as per guidelines):

- Weight (tonnes) or Volume (m³) of waste generated per construction value;
- Weight (tonnes) or Volume (m³) of waste generated per construction floor area (m²);
- Fraction of resource reused on site;
- Fraction of resource notified as by-product;
- Fraction of waste segregated at source before being sent off-site for recycling/recovery; and
- Fraction of waste recovered, fraction of waste recycled, or fraction of waste disposed.

# 6.2 Main Construction and Demolition Waste Categories

The main non-hazardous and hazardous waste streams that could be generated by the construction activities at a typical site are shown in Table 6.1. The List of Waste (LoW) code (2018) for each waste stream is also shown.

**Table 6.1** Typical waste types generated and LoW codes (individual paste types may contain hazardous substances)

Waste Material	Low Code		
Concrete, bricks, tiles, ceramics	17 01 04-03 & 07		
Wood, glass and plastic	17 02 01-03		
Treated wood, glass, plastic, containing hazardous substances	17-02-04*		
Bituminous mixtures, coal tar and tarred products	17 03 01*, 02 & 03*		
Metals (including their alloys) and cable	17 04 01-11		
Soil and stones	17 05 03* & 04		
Gypsum-based construction material	17 08 01* & 02		
Paper and cardboard	20 01 01		
Mixed C&D waste	17 09 04		
Green waste	20 02 01		
Electrical and electronic components	20 01 35 & 36		
Batteries and accumulators	20 01 33 & 34		
Liquid fuels	13 07 01-10		
Chemicals (solvents, pesticides, paints, adhesives, detergents etc.)	20 01 13, 19, 27-30		
Insulation materials	17 06 04		
Organic (food) waste	20 01 08		
Mixed Municipal Waste	20 03 01		

<sup>\*</sup> Individual waste type may contain hazardous substances

# **6.3** Demolition Waste Generation

There is no demolition associated with this proposed development.

# 6.4 Construction Waste Generation

Table 6.2 shows the breakdown of C&D waste types produced on a typical site based on data from the EPA *National Waste Reports* <sup>18</sup> and the joint EPA & GMIT study <sup>19</sup>.

 Table 6.2:
 Waste materials generated on a typical Irish construction site

Waste Types	%
Mixed C&D	33
Timber	28
Plasterboard	10
Metals	8
Concrete	6
Other	15
Total	100

Table 6.3, below, shows the estimated construction waste generation for the proposed Project based on the gross floor area of construction and other information available to date, along with indicative targets for management of the waste streams. The estimated amounts for the main waste types (with the exception of soils and stones) are based on an average large-scale development waste generation rate per m², using the waste breakdown rates shown in Table 6.2. These have been calculated from the schedule of development areas provided by the architect.

Table 6.3:	Predicted on and off-site reuse.	was vala and diamagal vata	a far assaturation waste
Lable b. K	Predicted on and out-site relise	recycle and dishosal rate	se inconstruction waster

Waste Type	Tonnes	Reuse		Recycle / Recovery		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Mixed C&D	152.2	10	15.2	80	121.7	10	15.2
Timber	129.1	40	51.6	55	71.0	5	6.5
Plasterboard	46.1	30	13.8	60	27.7	10	4.6
Metals	36.9	5	1.8	90	33.2	5	1.8
Concrete	27.7	30	8.3	65	18.0	5	1.4
Other	69.2	20	13.8	60	41.5	20	13.8
Total	461.1		104.7		313.1		43.3

In addition to the waste streams in Table 4.3, there will be c. 86,760 m³ of soil and stones excavated to facilitate construction of new foundations, underground services, and the installation of the proposed basements. Any suitable excavated material will be temporarily stockpiled for reuse as fill, where possible, but reuse on site is expected to be limited and all of the excavated material except for c. 36,150 m³ is expected to be removed off-site for appropriate reuse, recovery and / or disposal.

It should be noted that until final materials and detailed construction methodologies have been confirmed, it is difficult to predict with a high level of accuracy the construction waste that will be generated from the proposed works as the exact materials and quantities may be subject to some degree of change and variation during the construction process.

#### 6.5 Proposed Resource and Waste Management Options

Waste materials generated will be segregated on-site, where it is practical. Where the on-site segregation of certain wastes types is not practical, off-site segregation will be carried out. There will be skips and receptacles provided to facilitate segregation at source, where feasible. All waste receptacles leaving the site will be covered or enclosed. The appointed waste contractor will collect and transfer the wastes as receptacles are filled. There are numerous waste contractors in the Mayo region that provide this service.

All waste arisings will be handled by an approved waste contractor holding a current waste collection permit. All waste arisings requiring disposal off-site will be reused, recycled, recovered or disposed of at a facility holding the appropriate registration, permit or licence, as required.

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National End-of-Waste Decision EoW-N001/2023 (Regulation 28) published by the EPA in September 2023, establishes criteria determining when recycled aggregate resulting from a recovery operation ceases to be waste. Material from this proposed development will be investigated to see if it can cease to be a waste under the requirements of the National End of Waste Criteria for Aggregates.

During construction, some of the sub-contractors on site will generate waste in relatively low quantities. The transportation of non-hazardous waste by persons who are not directly involved with the waste business, at weights less than or equal to 2 tonnes, and in vehicles not designed for the carriage of waste, are exempt from the requirement to have a waste collection permit (per Article 30 (1) (b) of the Waste Collection Permit Regulations 2007, as amended). Any sub-contractors engaged that do not generate more than 2 tonnes of waste at any one time can transport this waste off-site in their work vehicles (which are not designed for the carriage of waste). However, they are required to ensure that the receiving facility has the appropriate COR / permit / licence.

Written records will be maintained by the contractor(s), detailing the waste arising throughout the C&D phases, the classification of each waste type, waste collection permits for all waste contactors who collect waste from the site and COR / permit / licence for the receiving waste facility for all waste removed off-site for appropriate reuse, recycling, recovery and / or disposal

Dedicated bunded storage containers will be provided for hazardous wastes which may arise, such as batteries, paints, oils, chemicals, if required.

The anticipated management of the main waste streams is outlined as follows:

#### Soil and Stones

The waste hierarchy states that the preferred option for waste management is prevention and minimisation of waste, followed by preparing for reuse and recycling / recovery, energy recovery (i.e. incineration) and, least favoured of all, disposal. The excavations are required to facilitate construction works so the preferred option (prevention and minimisation) cannot be accommodated for the excavation phase.

It is anticipated that c. 42% (c. 36,150 m³) of excavated material will be reused on site. It is anticipated that 58% (c. 50,610 m³) of material will need to be removed offsite for appropriate reuse, recovery and/or disposal. If material is removed off-site it could be reused as a by-product (and not as a waste). If this is done, it will be done in accordance with Regulation 27 of the European Communities (Waste Directive) Regulations 2011, as amended, which requires that certain conditions are met and that by-product notifications are made to the EPA via their online notification form. Excavated material should not be removed from site until approval from the EPA has been received. The potential to reuse material as a by-product will be confirmed during the course of the excavation works, with the objective of eliminating any unnecessary disposal of material.

The next option (beneficial reuse) may be appropriate for the excavated material, pending environmental testing to classify the material as hazardous or non-hazardous in accordance with the EPA Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous publication. Clean inert material may be used as fill material in other construction projects or engineering fill for waste licensed sites. Beneficial reuse of surplus excavation material as engineering fill may be subject to further testing to determine if materials meet the specific engineering standards for their proposed end use.

Any nearby sites requiring clean fill/capping material will be contacted to investigate reuse opportunities for clean and inert material. If any of the material is to be reused on another site as a by-product (and not as a waste), this will be done in accordance with Regulation 27. Similarly, if any soils/stones are imported onto the site from another construction site as a by-product, this will also be done in accordance with Regulation 27. Regulation 27 will be investigated to see if the material can be imported onto this site for beneficial reuse instead of using virgin materials.

If the material is deemed to be a waste, then removal and reuse / recovery / disposal of the material will be carried out in accordance with the Waste Framework Directive (Directive 2008/98/EC), the *Waste Management Act 1996* as amended, the *Waste Management (Collection Permit) Regulations 2007* as amended and the *Waste Management (Facility Permit & Registration) Regulations 2007* as amended. Once all available beneficial reuse options have been exhausted, the options of recycling and recovery at waste permitted and licensed sites will be considered.

In the event that contaminated material is encountered and subsequently classified as hazardous, this material will be stored separately to any non-hazardous material. It will require off-site treatment at a suitable facility or disposal abroad via Transfrontier Shipment of Wastes (TFS).

#### Bedrock

It is envisaged that bedrock will be encountered during the excavation phase and it is anticipated that it will be crushed on site. When bedrock is to be crushed on-site, the appropriate certificate of registration (COR) or waste facility permit will be obtained from MCC. Any excavated rock is expected to be removed off-site for appropriate reuse, recovery and / or disposal.

#### Silt & Sludge

During the construction phase, silt and petrochemical interception will be carried out on run-off and pumped water from site works, where required. Sludge and silt will then be collected by a suitably licensed contractor and removed off-site.

#### Concrete Blocks, Bricks, Tiles & Ceramics

The majority of concrete blocks, bricks, tiles and ceramics generated as part of the construction works are expected to be clean, inert material and will be recycled, where possible. If concrete is to be crushed on-site, the appropriate mobile waste facility permit will be obtained from MCC.

## Hard Plastic

As hard plastic is a highly recyclable material, much of the plastic generated will be primarily from material off-cuts. All recyclable plastic will be segregated and recycled, where possible.

#### Timber

Timber that is uncontaminated, i.e. free from paints, preservatives, glues, etc., with be disposed of in a separate skip and recycled off-site.

#### Metal

Metals will be segregated, where practical, and stored in skips. Metal is highly recyclable and there are numerous companies that will accept these materials.

## Plasterboard

There are currently a number of recycling services for plasterboard in Ireland. Plasterboard from the construction phases will be stored in a separate skip, pending collection for recycling. The site Manager will ensure that oversupply of new plasterboard is carefully monitored to minimise waste.

#### Glass

Glass materials will be segregated for recycling, where possible.

## Waste Electrical & Electronic Equipment (WEEE)

Any WEEE will be stored in dedicated covered cages / receptacles / pallets pending collection for recycling.

# Other Recyclables

Where any other recyclable wastes, such as cardboard and soft plastic, are generated, these will be segregated at source into dedicated skips and removed off-site.

#### Non-Recyclable Waste

C&D waste which is not suitable for reuse or recovery, such as polystyrene, some plastics and some cardboards, will be placed in separate skips or other receptacles. Prior to removal from site, the non-recyclable waste skip / receptacle will be examined by a member of the waste team (see Section 8.0) to determine if recyclable materials have been placed in there by mistake. If this is the case, efforts will be made to determine the cause of the waste not being segregated correctly and recyclable waste will be removed and placed into the appropriate receptacle.

#### Asbestos Containing Materials

Any asbestos or ACM found on-site will be removed by a suitably competent contractor and disposed of as asbestos waste before the works begin onsite. All asbestos removal work or encapsulation work must be carried out in accordance with the Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010.

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## Other Hazardous Wastes

On-site storage of any hazardous wastes produced (i.e. contaminated soil if encountered and / or waste fuels) will be kept to a minimum, with removal off-site organised on a regular basis. Storage of all hazardous wastes on-site will be undertaken so as to minimise exposure to on-site personnel and the public and to also minimise perential for environmental impacts. Hazardous wastes will be recovered, wherever possible, and failing this, disposed of appropriately.

#### On-Site Crushing

It is currently envisaged that the crushing of bedrock as a waste materials will occur onsite. A COR or waste facility permit will first be obtained from MCC and the destination of the accepting waste facility or if an application under regulation 28 will be made using National End-of-Waste Decision EoW-N001/2023, will be supplied to the MCC waste unit.

It should be noted that until a construction contractor is appointed it is not possible to provide information on the specific destinations of each construction waste stream. Prior to commencement of construction and removal of any waste offsite, details of the proposed destination of each waste stream will be provided to MCC by the project team.

# 6.6 Tracking and Documentation Procedures for Off-Site Waste

All waste will be documented prior to leaving the site. Waste will be weighed by the contractor, either by a weighing mechanism on the truck or at the receiving facility. These waste records will be maintained on site by the nominated project RM (see Section 8.0).

All movement of waste and the use of waste contractors will be undertaken in accordance with the Waste Framework Directive (Directive 2008/98/EC), the *Waste Management Act* 1996 as amended, *Waste Management (Collection Permit) Regulations 2007* as amended and *Waste Management (Facility Permit & Registration) Regulations 2007* and amended. This includes the requirement for all waste contractors to have a waste collection permit issued by the NWCPO. The nominated project RM (see Section 8.0) will maintain a copy of all waste collection permits on-site.

If the waste is being transported to another site, a copy of the Local Authority waste COR / permit or EPA Waste Licence for that site will be provided to the nominated project Waste Manager (see Section 8.0). If the waste is being shipped abroad, a copy of the Transfrontier Shipping (TFS) notification document will be obtained from DCC (as the relevant authority on behalf of all Local Authorities in Ireland) and kept on-site along with details of the final destination (COR, permits, licences, etc.). A receipt from the final destination of the material will be kept as part of the on-site waste management records.

All information will be entered in a waste management recording system to be maintained on-site.

# 7.0 ESTIMATED COST OF WASTE MANAGEMENT

An outline of the costs associated with different aspects of waste management is outlined below. The total cost of C&D waste management will be measured and will take into account handling costs, storage costs, transportation costs, revenue from rebates and disposal costs.

#### 7.1 Reuse

By reusing materials on site, there will be a reduction in the transport and recycle / recovery / disposal costs associated with the requirement for a waste contractor to take the material off-site. Clean and inert soils, gravel, stones, etc., which cannot be reused on-site may be used as access roads or capping material for landfill sites, etc. This material is often taken free of charge or at a reduced fee for such purposes, reducing final waste disposal costs.

# 7.2 Recycling

Salvageable metals will earn a rebate, which can be offset against the costs of collection and transportation of the skips.

Clean, uncontaminated cardboard and certain hard plastics can also be recycled. Waste contractors will charge considerably less to take segregated wastes, such as recyclable waste, from a site than mixed waste.

Timber can be recycled as chipboard. Again, waste contractors will charge considerably less to take segregated wastes, such as timber, from a site than mixed waste.

# 7.3 Disposal

Landfill charges are currently at around €140 - €160 per tonne which includes a €85 per tonne landfill levy specified in the *Waste Management (Landfill Levy) Regulations 2015* as amended. In addition to disposal costs, waste contractors will also charge a collection fee for skips.

Collection of segregated C&D waste usually costs less than municipal waste. Specific C&D waste contractors take the waste off-site to a licensed or permitted facility and, where possible, remove salvageable items from the waste stream before disposing of the remainder to landfill. Clean soil, rubble, etc., is also used as fill / capping material, wherever possible.

# 8.0 TRAINING PROVISIONS

A member of the construction team will be appointed as the RM to ensure commitment, operational efficiency and accountability in relation to waste management ouring the C&D phases of the proposed development.

# 8.1 Resource Manager Training and Responsibilities

The nominated RM will be given responsibility and authority to select a waste tear required, i.e. members of the site crew that will aid them in the organisation, operation and recording of the waste management system implemented on site.

The RM will have overall responsibility to oversee, record and provide feedback to the client on everyday waste management at the site. Authority will be given to the Waste Manager to delegate responsibility to sub-contractors, where necessary, and to coordinate with suppliers, service providers and sub-contractors to prioritise waste prevention and material salvage.

The RM will be trained in how to set up and maintain a record keeping system, how to perform an audit and how to establish targets for waste management on site. The RM will also be trained in the best methods for segregation and storage of recyclable materials, have information on the materials that can be reused on site and be knowledgeable in how to implement this RWMP.

# 8.2 Site Crew Training

Training of site crew in relation to waste is the responsibility of the RM and, as such, a waste training program will be organised. A basic awareness course will be held for all site crew to outline the RWMP and to detail the segregation of waste materials at source. This may be incorporated with other site training needs such as general site induction, health and safety awareness and manual handling.

This basic course will describe the materials to be segregated, the storage methods and the location of the Waste Storage Areas (WSAs). A sub-section on hazardous wastes will be incorporated into the training program and the particular dangers of each hazardous waste will be explained.

# 9.0 TRACKING AND TRACING / RECORD KEEPING

Records will be kept for all waste material which leaves the site, either for youse on another site, recycling or disposal. A recording system will be put in place to record the waste arisings on Site.

A waste tracking log will be used to track each waste movement from the site. On exit from the site, the waste collection vehicle driver will stop at the site office and sign out as a visitor and provide the security personnel or RM with a waste docket (or Waste Transfer Form (WTF) for hazardous waste) for the waste load collected. At this time, the security personnel will complete and sign the Waste Tracking Register with the following information:

- Date
- Time
- Waste Contractor
- Company waste contractor appointed by, e.g. Contractor or subcontractor name
- Collection Permit No.
- Vehicle Reg.
- Driver Name
- Docket No.
- Waste Type
- LoW
- Weight/Quantity

The waste vehicle will be checked by security personal or the RM to ensure it has the waste collection permit no. displayed and a copy of the waste collection permit in the vehicle before they are allowed to remove the waste from the site.

The waste transfer dockets will be transferred to the RM on a weekly basis and can be placed in the Waste Tracking Log file. This information will be forwarded onto the MCC Waste Regulation Unit when requested.

Each subcontractor that has engaged their own waste contractor will be required to maintain a similar waste tracking log with the waste dockets / WTF maintained on file and available for inspection on site by the main contractor as required. These subcontractor logs will be merged with the main waste log.

Waste receipts from the receiving waste facility will also be obtained by the site contractor(s) and retained. A copy of the Waste Collection Permits, CORs, Waste Facility Permits and Waste Licences will be maintained on site at all times and will be periodically reviewed by the RM. Subcontractors who have engaged their own waste contractors, will provide the main contractor with a copy of the waste collection permits and COR / permit / licence for the receiving waste facilities and maintain a copy on file, available for inspection on site as required.

#### 10.0 OUTLINE WASTE AUDIT PROCEDURE

## 10.1 Responsibility for Waste Audit

The appointed RM will be responsible for conducting a waste audit at the site during the C&D phase of the proposed Project. Contact details for the nominated RM will be provided to the MCC Waste Regulation Unit after the main contractor is appointed and prior to any material being removed from site.

#### 10.2 Review of Records and Identification of Corrective Actions

A review of all waste management costs and the records for the waste generated and transported off-site will be undertaken mid-way through the construction phase of the proposed Project.

If waste movements are not accounted for, the reasons for this will be established in order to see if and why the record keeping system has not been maintained. The waste records will be compared with the established recovery / reuse / recycling targets for the site. Each material type will be examined, in order to see where the largest percentage waste generation is occurring. The waste management methods for each material type will be reviewed in order to highlight how the targets can be achieved.

Upon completion of the C&D phase, a final report will be prepared, summarising the outcomes of waste management processes adopted and the total recycling / reuse / recovery figures for the proposed development.

#### 11.0 CONSULTATION WITH RELEVANT BODIES

## 11.1 Local Authority

Once construction contractors have been appointed and have appointed waste contractors, and prior to removal of any C&D waste materials off-site, details of the proposed destination of each waste stream will be provided to the MCC Waste Regulation Unit.

MCC will also be consulted, as required, throughout the excavation and construction phases in order to ensure that all available waste reduction, reuse and recycling opportunities are identified and utilised and that compliant waste management practices are carried out.

## 11.2 Recycling / Salvage Companies

The appointed waste contractor for the main waste streams managed by the construction contractors will be audited in order to ensure that relevant and up-to-date waste collection permits and facility registrations / permits / licences are held. In addition, information will be obtained regarding the feasibility of recycling each material, the costs of recycling / reclamation, the means by which the wastes will be collected and transported off-site, and the recycling / reclamation process each material will undergo off-site.

# 12.0 CONCLUSION

Adherence to this plan will also ensure that waste management during the construction phase at the proposed development is carried out in accordance with the requirements in the EPA's Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects and the MCC Waste Bye-Laws and the NWMPCE.

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