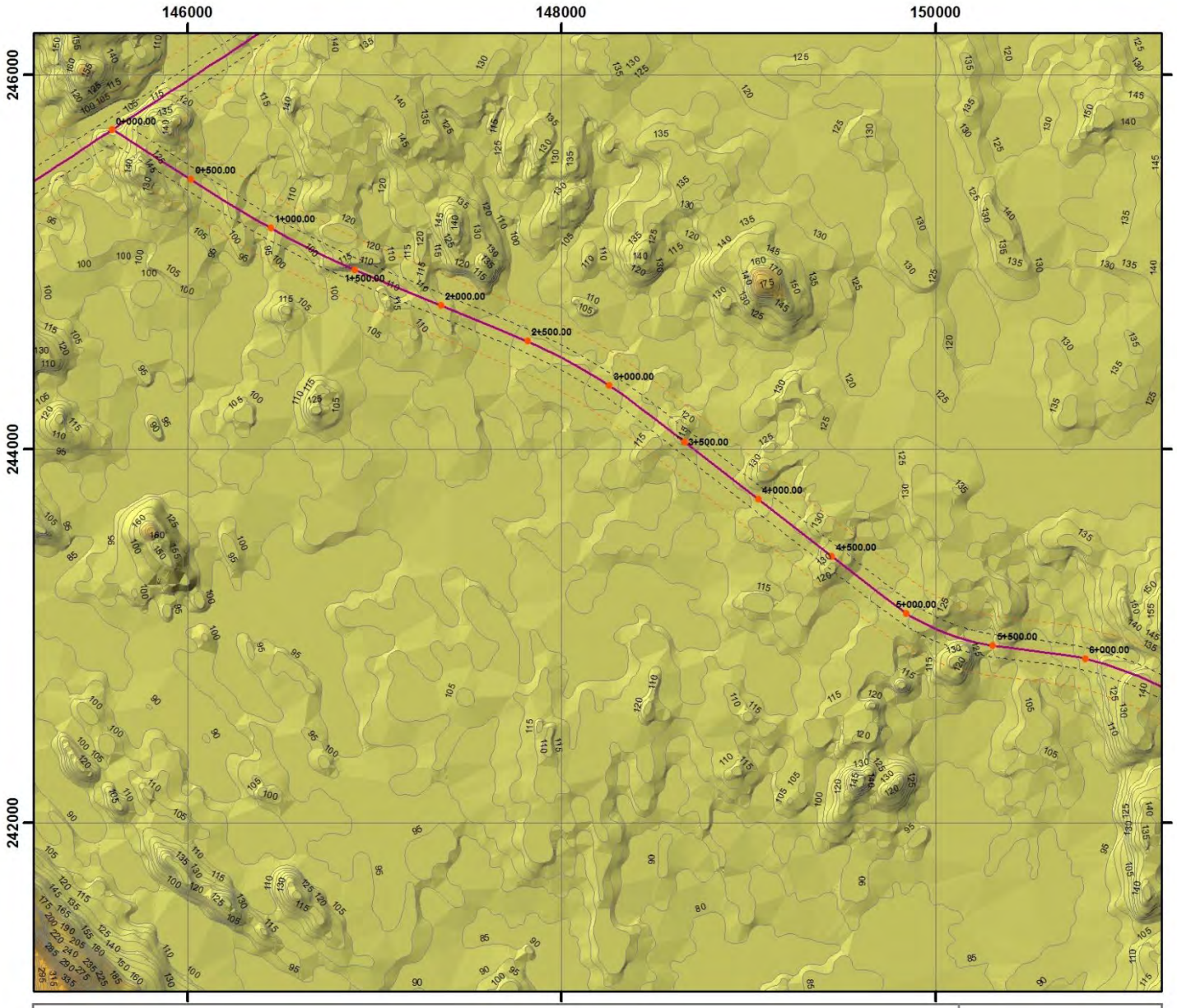
Annex 3.2.1

Contour and Terrain analysis

Contour and terrain analyses along the proposed road from Pothuhera-Galagedara



Legend

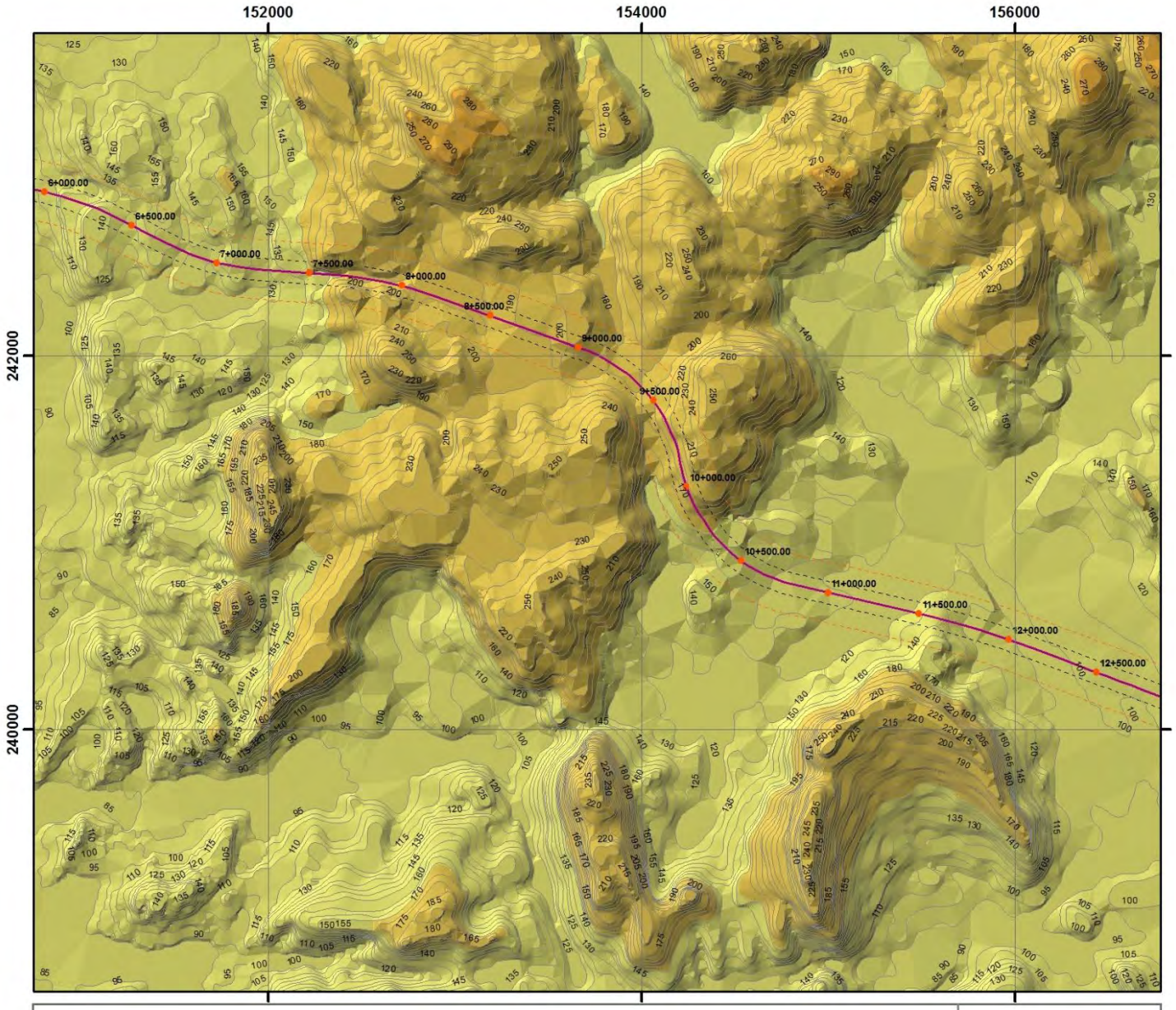
- Center line of the Proposed cetral Expressway
- Contour
- 60m Buffer
- 160m Buffer

Elevation (m)

- 55 - 161
- 161 - 267
- 267 - 373
- 373 - 478
- 478 - 584
- 584 - 690

N
W E
S

1:30 000



Legend

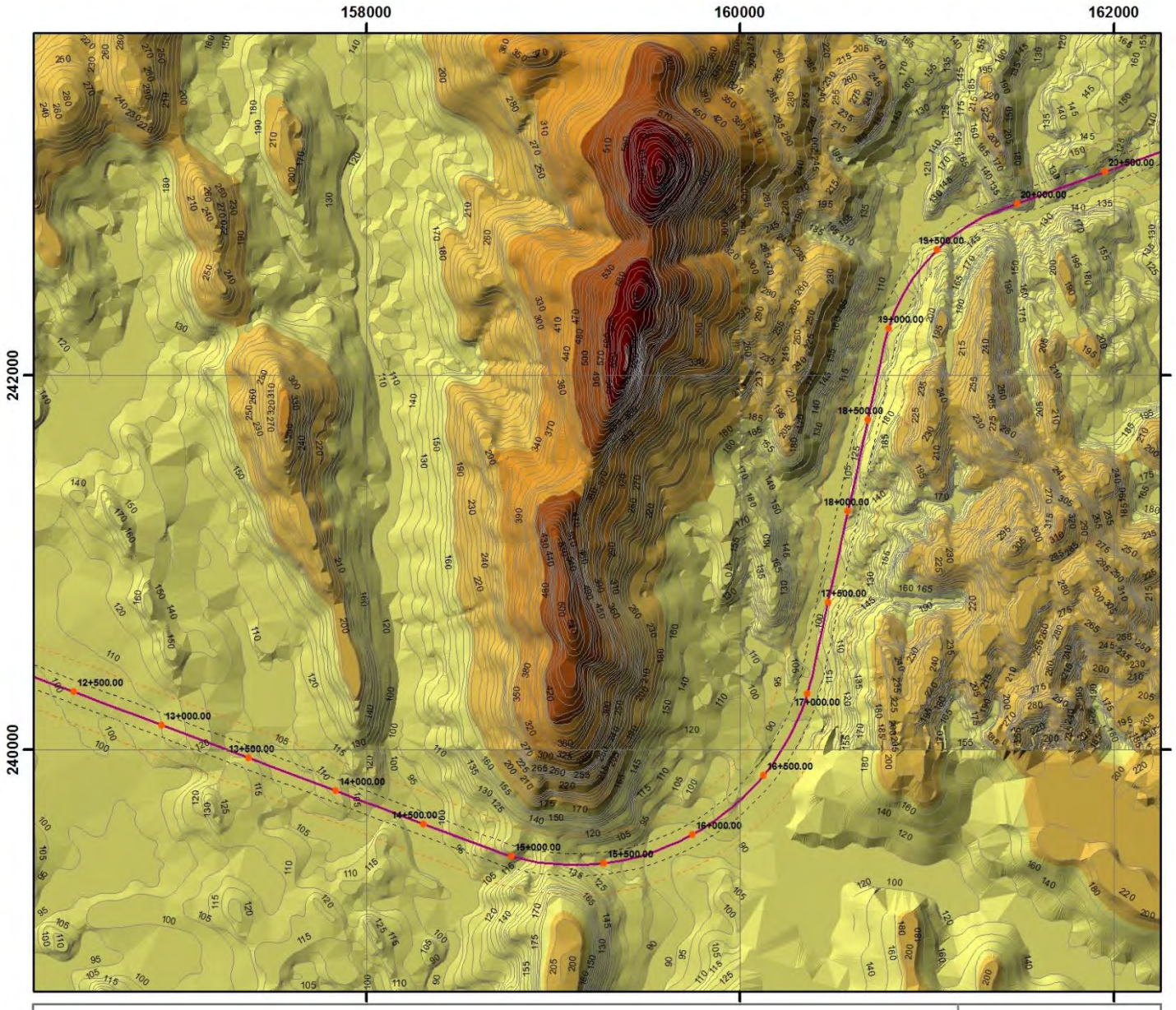
- Center line of the Proposed cetral Expressway
- Contour
- 60m Buffer
- 160m Buffer

Elevation (m)

- 55 - 161
- 161 - 267
- 267 - 373
- 373 - 478
- 478 - 584
- 584 - 690

N
W E
S

1:30 000



Legend

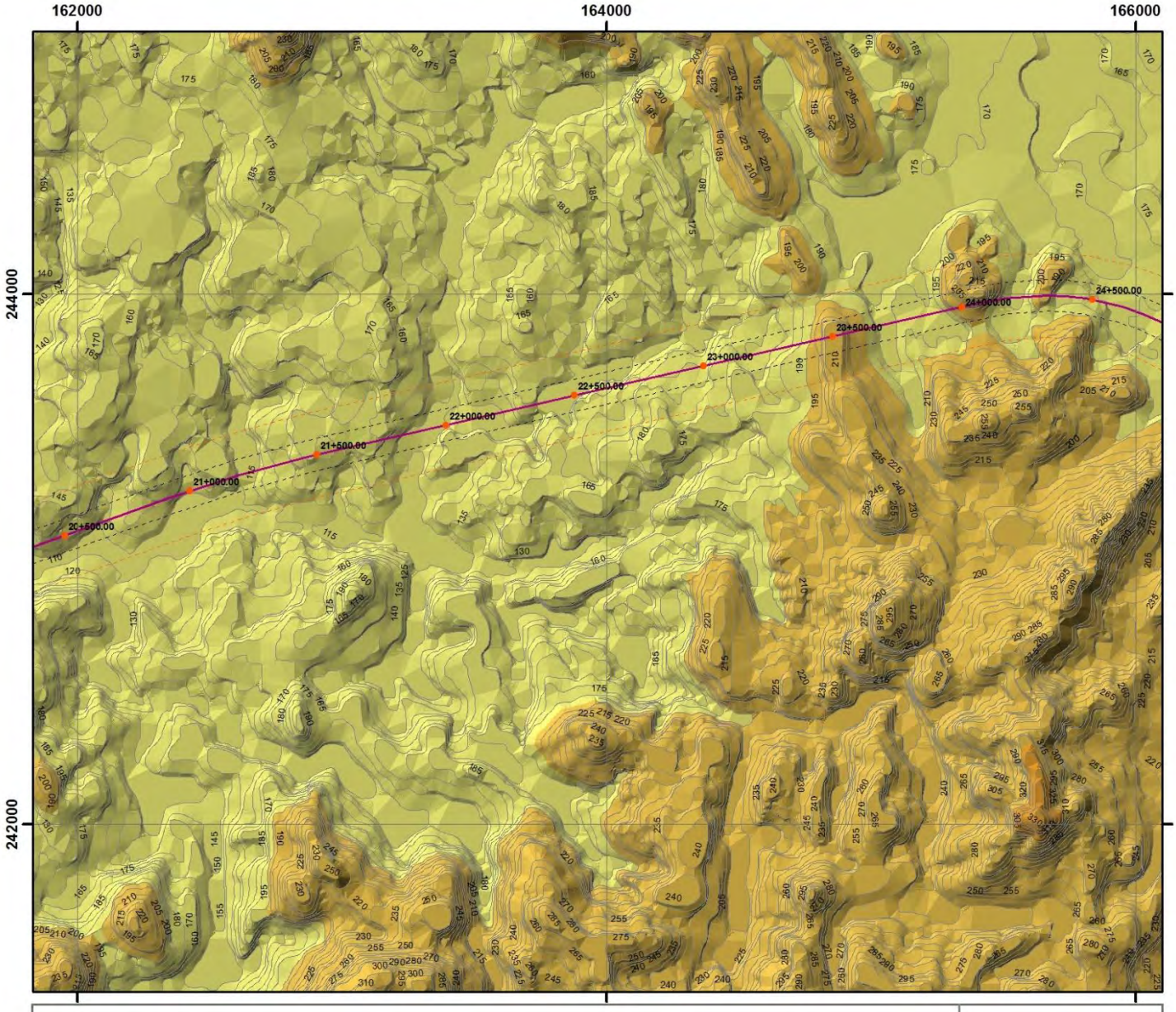
- Center line of the Proposed cetral Expressway
- Contour
- 60m Buffer
- 160m Buffer

Elevation (m)

- 55 - 161
- 161 - 267
- 267 - 373
- 373 - 478
- 478 - 584
- 584 - 690

N
W E
S

1:30 000



Legend

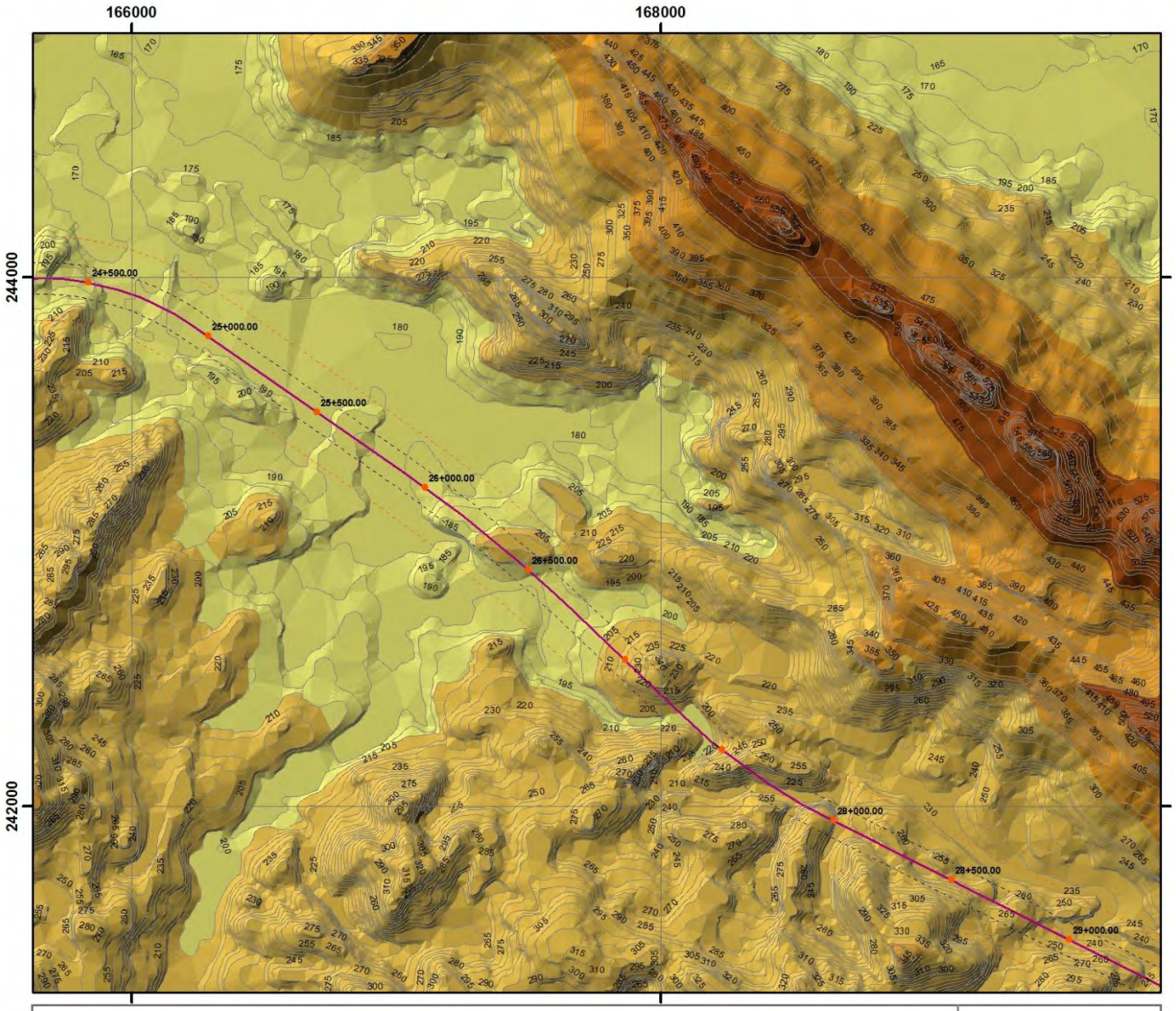
- Center line of the Proposed cetral Expressway
- Contour
- 60m Buffer
- 160m Buffer

Elevation (m)

- 55 - 161
- 161 - 267
- 267 - 373
- 373 - 478
- 478 - 584
- 584 - 690

N
W E
S

1:30 000



Legend

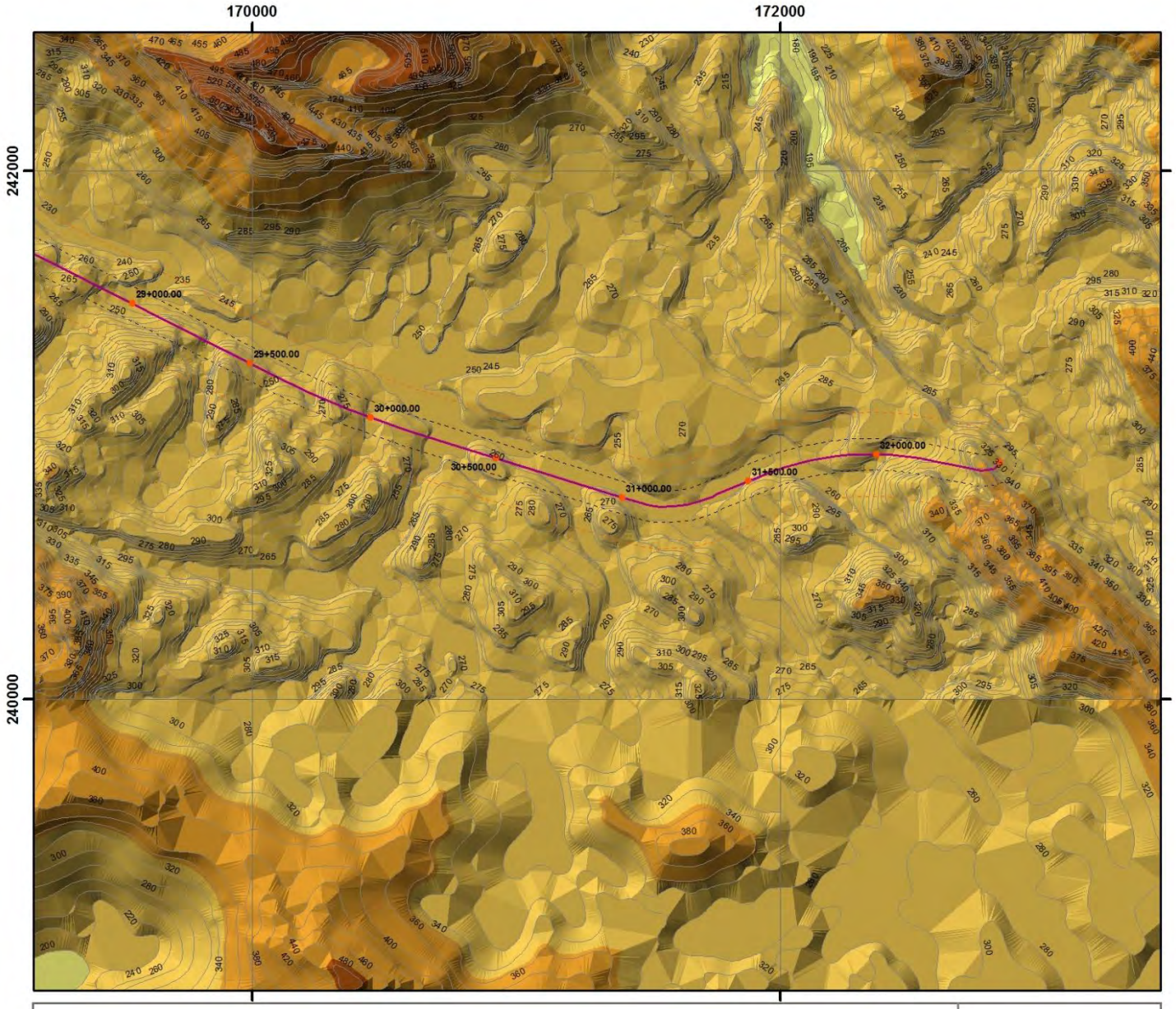
- Center line of the Proposed cetral Expressway
- Contour
- 60m Buffer
- 160m Buffer

Elevation (m)

- 55 - 161
- 161 - 267
- 267 - 373
- 373 - 478
- 478 - 584
- 584 - 690

N
W E
S

1:30 000



Legend

- Center line of the Proposed cetral Expressway
- Contour
- 60m Buffer
- 160m Buffer

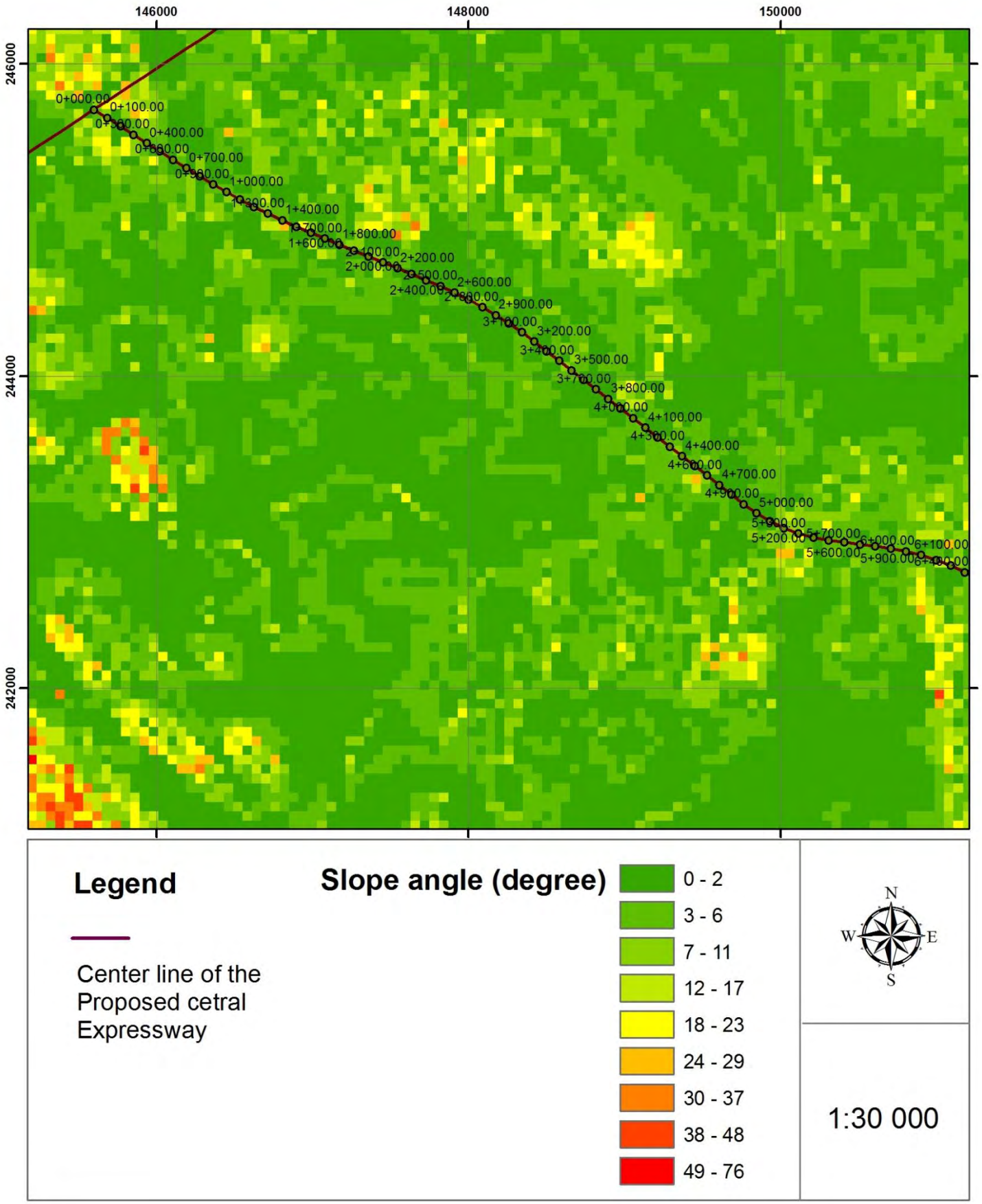
Elevation (m)

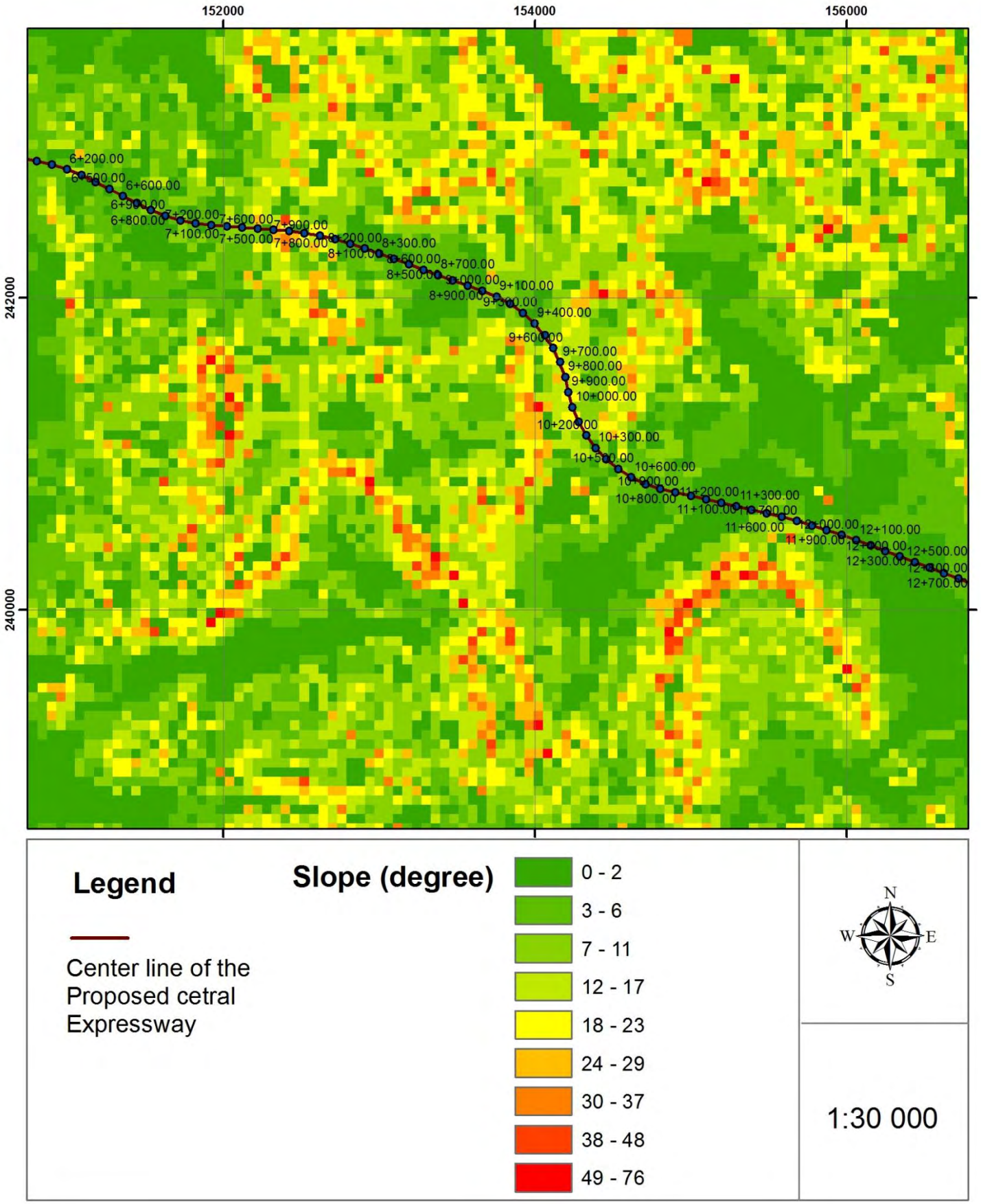
- 55 - 161
- 161 - 267
- 267 - 373
- 373 - 478
- 478 - 584
- 584 - 690

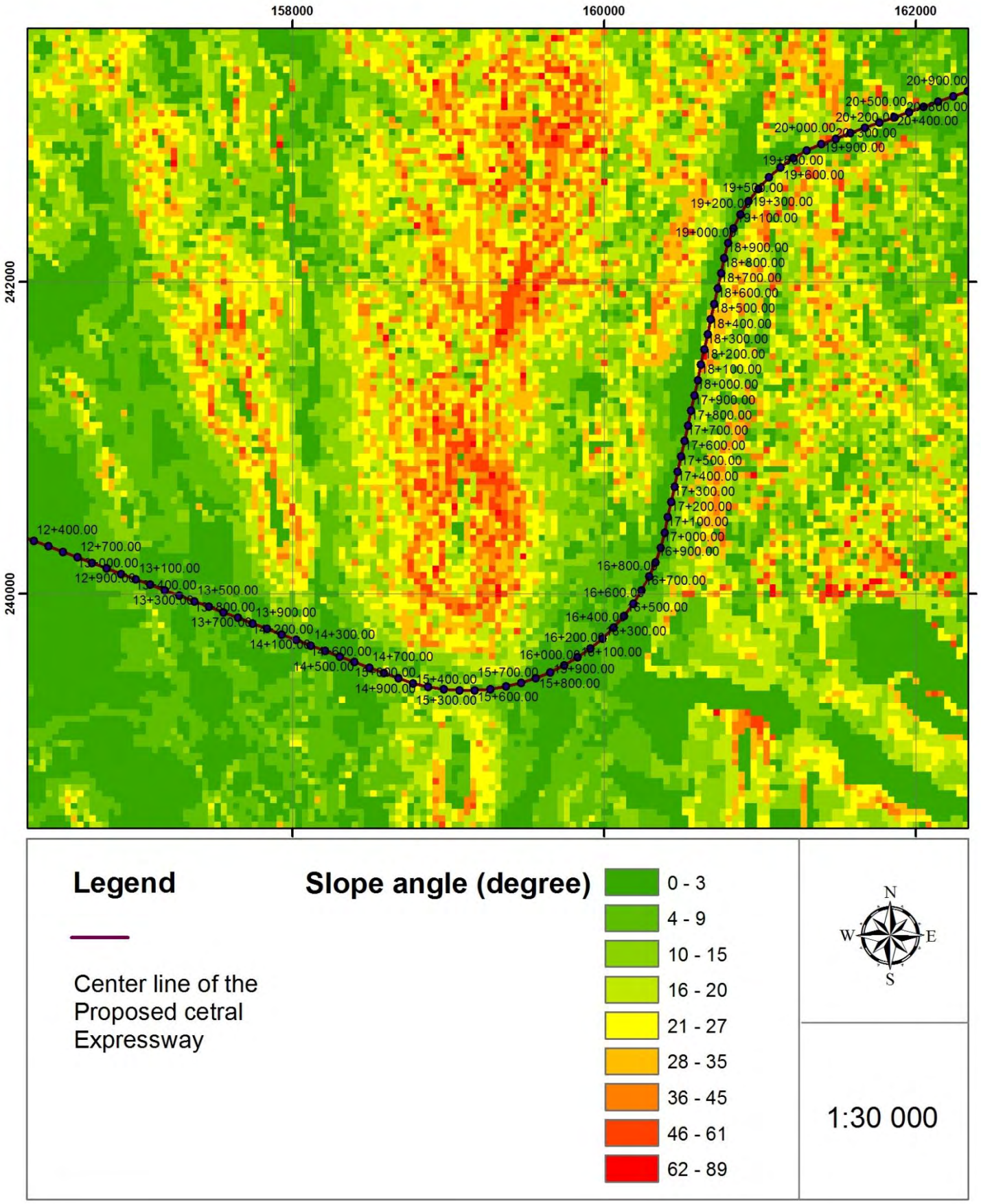
N
W E
S

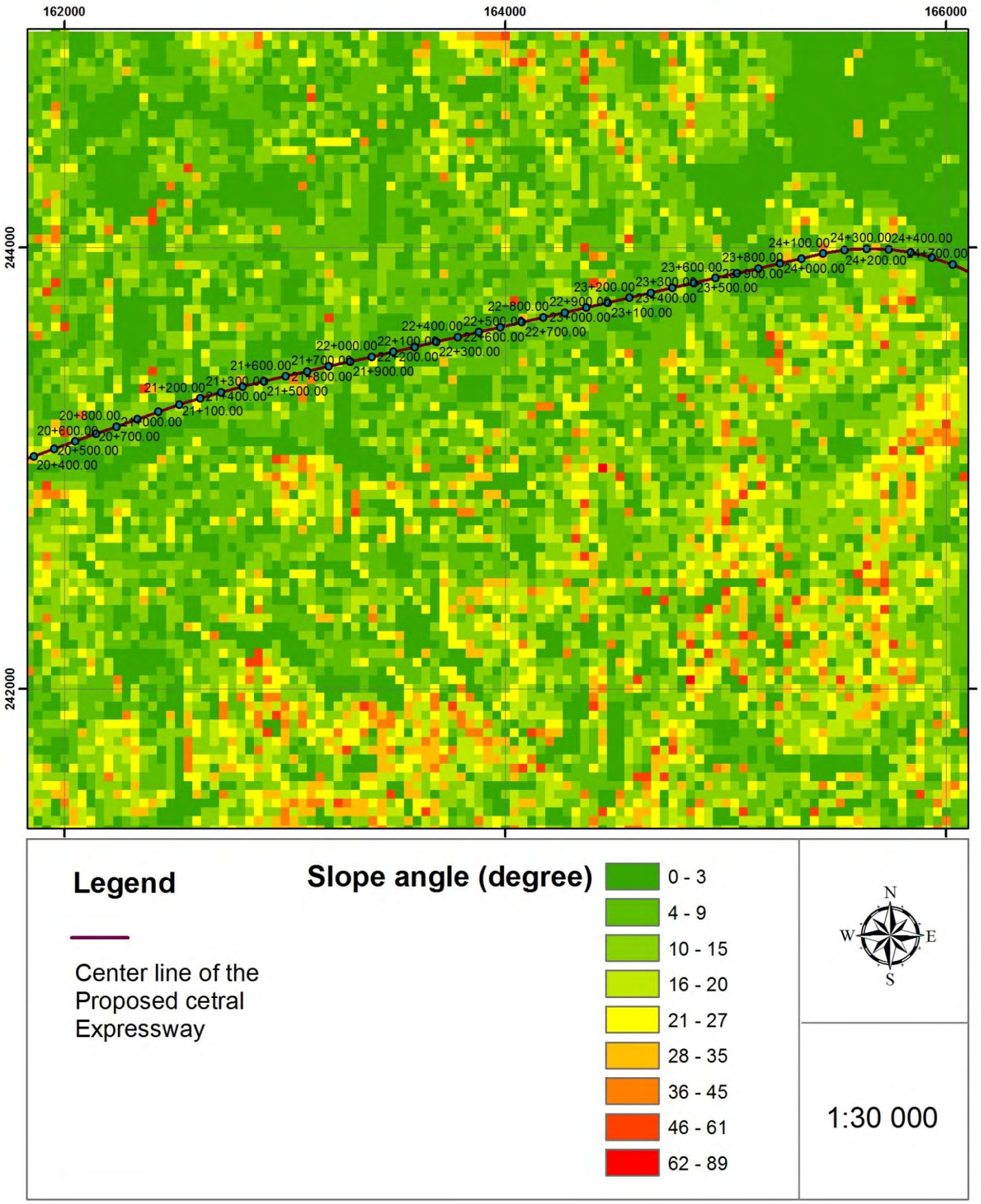
1:30 000

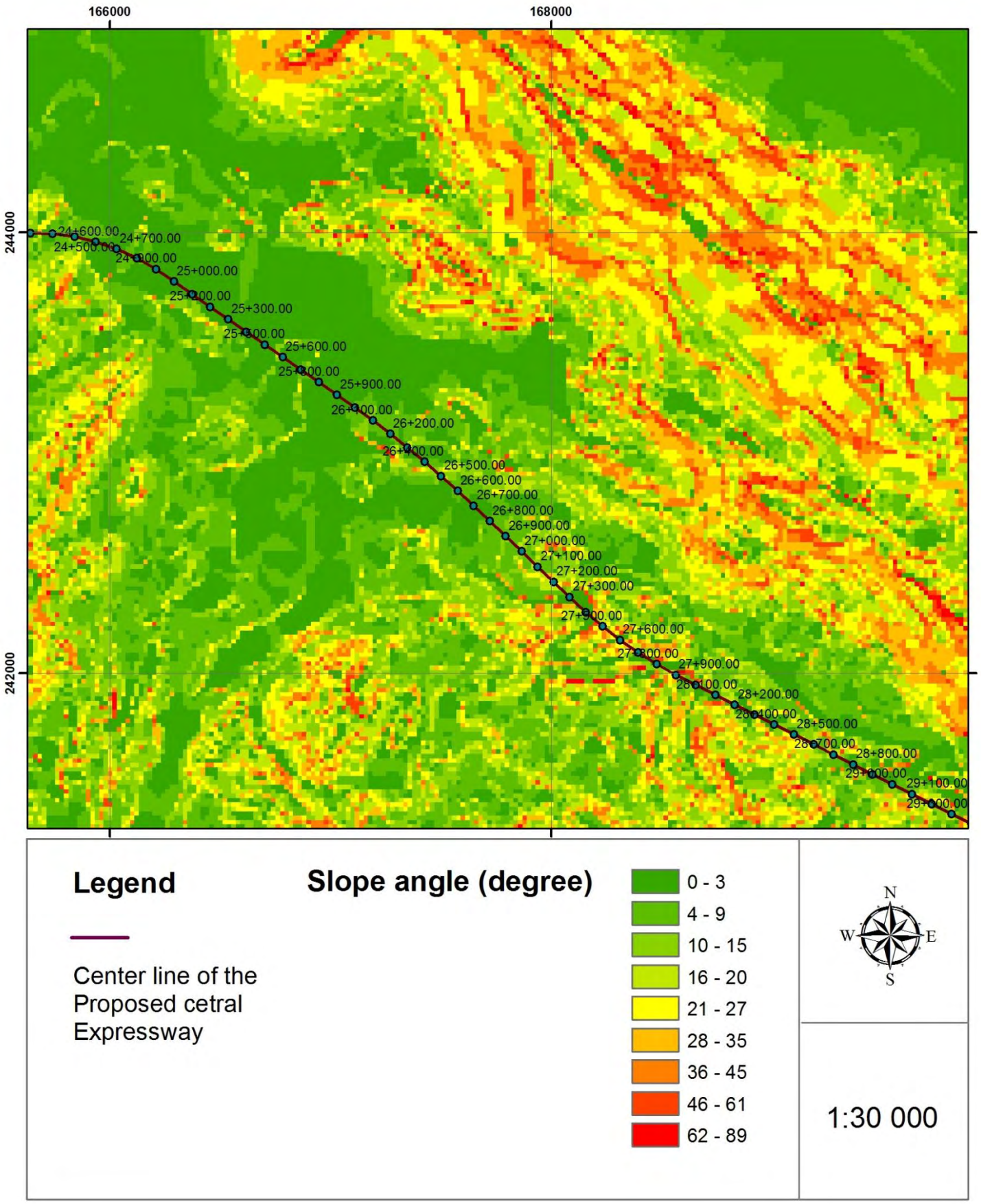
Slope analyses along the proposed road from Pothuhera-Galagedara

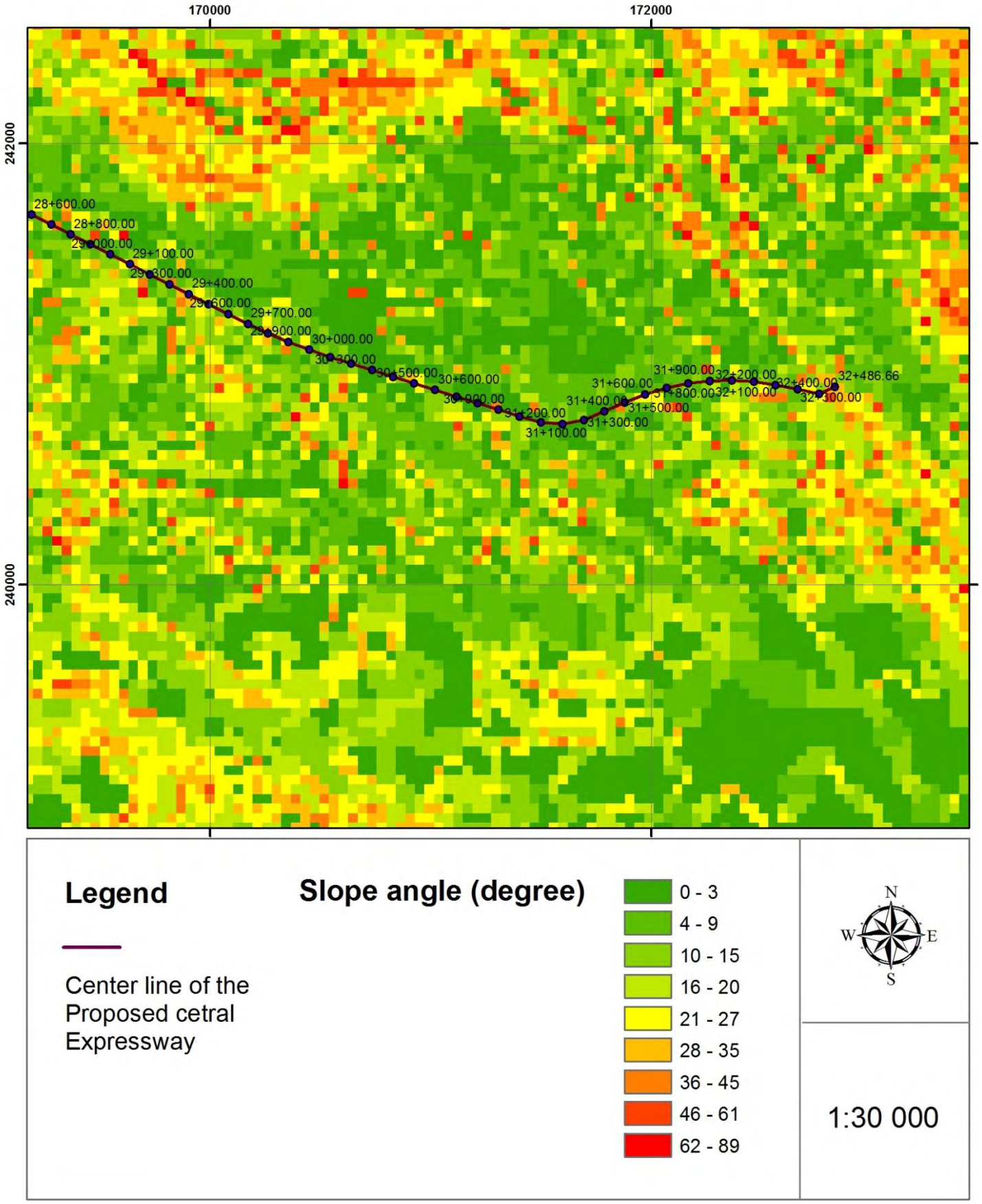



152000
154000
156000
242000
240000
6+200.00
6+500.00
6+600.00
6+900.00
6+800.00
7+200.00
7+600.00
7+900.00
7+100.00
7+500.00
7+800.00
8+200.00
8+300.00
8+100.00
8+600.00
8+700.00
8+500.00
8+900.00
9+100.00
9+400.00
9+600.00
9+700.00
9+800.00
9+900.00
10+000.00
10+200.00
10+300.00
10+600.00
10+800.00
11+200.00
11+300.00
11+100.00
11+600.00
11+900.00
12+100.00
12+300.00
12+500.00
12+700.00
Legend
Center line of the Proposed cetral Expressway
Slope (degree)
0 - 2
3 - 6
7 - 11
12 - 17
18 - 23
24 - 29
30 - 37
38 - 48
49 - 76
N
W
E
S
1:30 000


158000
160000
162000
242000
240000
12+400.00
12+700.00
13+100.00
13+500.00
13+900.00
14+300.00
14+700.00
15+400.00
15+700.00
15+800.00
16+800.00
16+500.00
16+300.00
16+100.00
16+000.00
16+900.00
17+000.00
17+100.00
17+200.00
17+300.00
17+400.00
17+500.00
17+600.00
17+700.00
17+800.00
17+900.00
18+000.00
18+100.00
18+200.00
18+300.00
18+400.00
18+500.00
18+600.00
18+700.00
18+800.00
18+900.00
19+100.00
19+300.00
19+600.00
19+900.00
20+200.00
20+400.00
20+500.00
20+900.00
Legend
Center line of the Proposed cetral Expressway
Slope angle (degree)
0 - 3
4 - 9
10 - 15
16 - 20
21 - 27
28 - 35
36 - 45
46 - 61
62 - 89
N
W
E
S
1:30 000

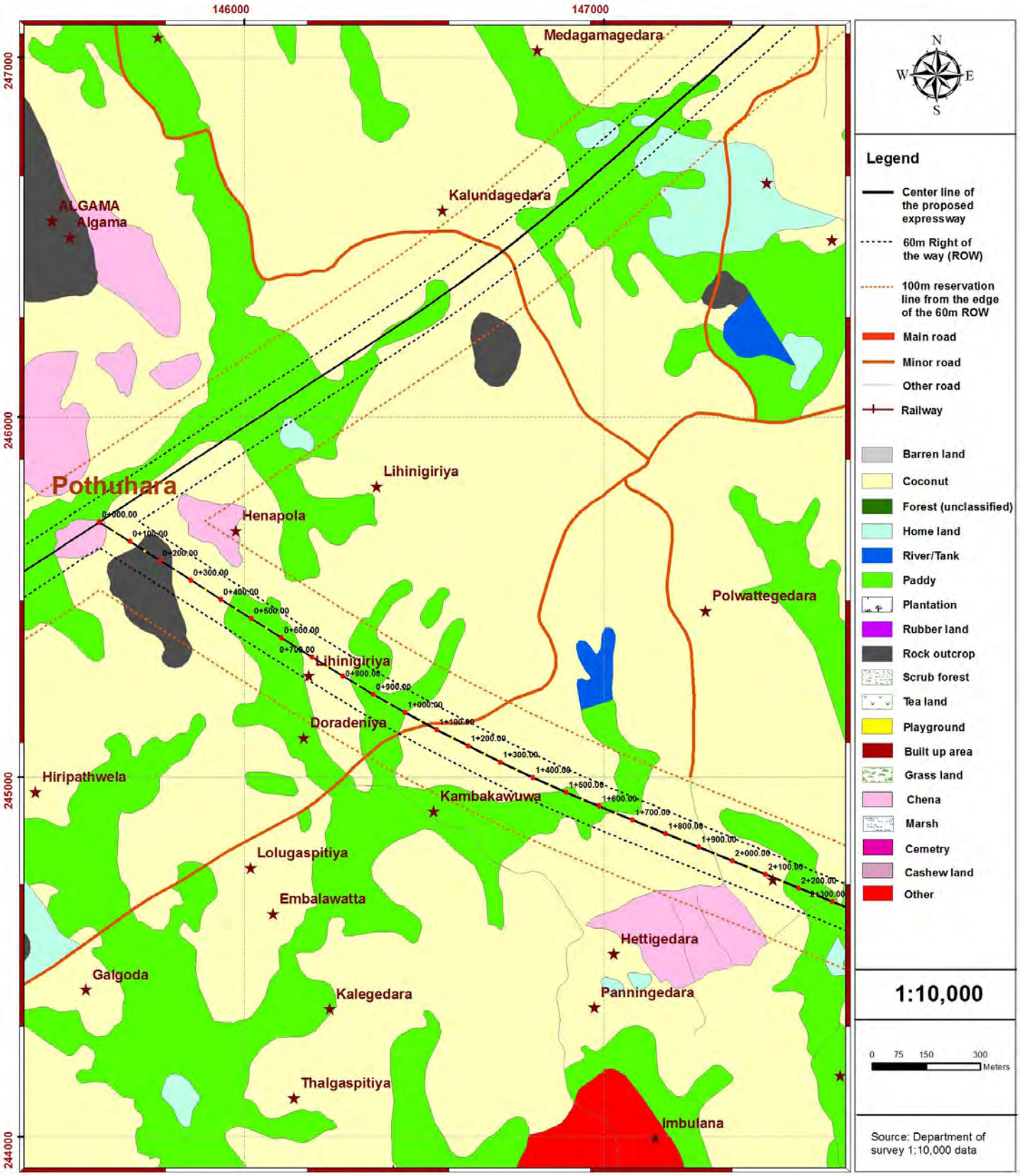

162000
164000
166000
244000
242000
20+400.00
20+500.00
20+600.00
20+700.00
20+800.00
21+000.00
21+100.00
21+200.00
21+300.00
21+400.00
21+500.00
21+600.00
21+700.00
21+800.00
21+900.00
22+000.00
22+100.00
22+200.00
22+300.00
22+400.00
22+500.00
22+600.00
22+700.00
22+800.00
22+900.00
23+000.00
23+100.00
23+200.00
23+300.00
23+400.00
23+500.00
23+600.00
23+800.00
23+900.00
24+000.00
24+100.00
24+200.00
24+300.00
24+400.00
24+700.00
Legend
Center line of the Proposed cetral Expressway
Slope angle (degree)
0 - 3
4 - 9
10 - 15
16 - 20
21 - 27
28 - 35
36 - 45
46 - 61
62 - 89
N
W
E
S
1:30 000

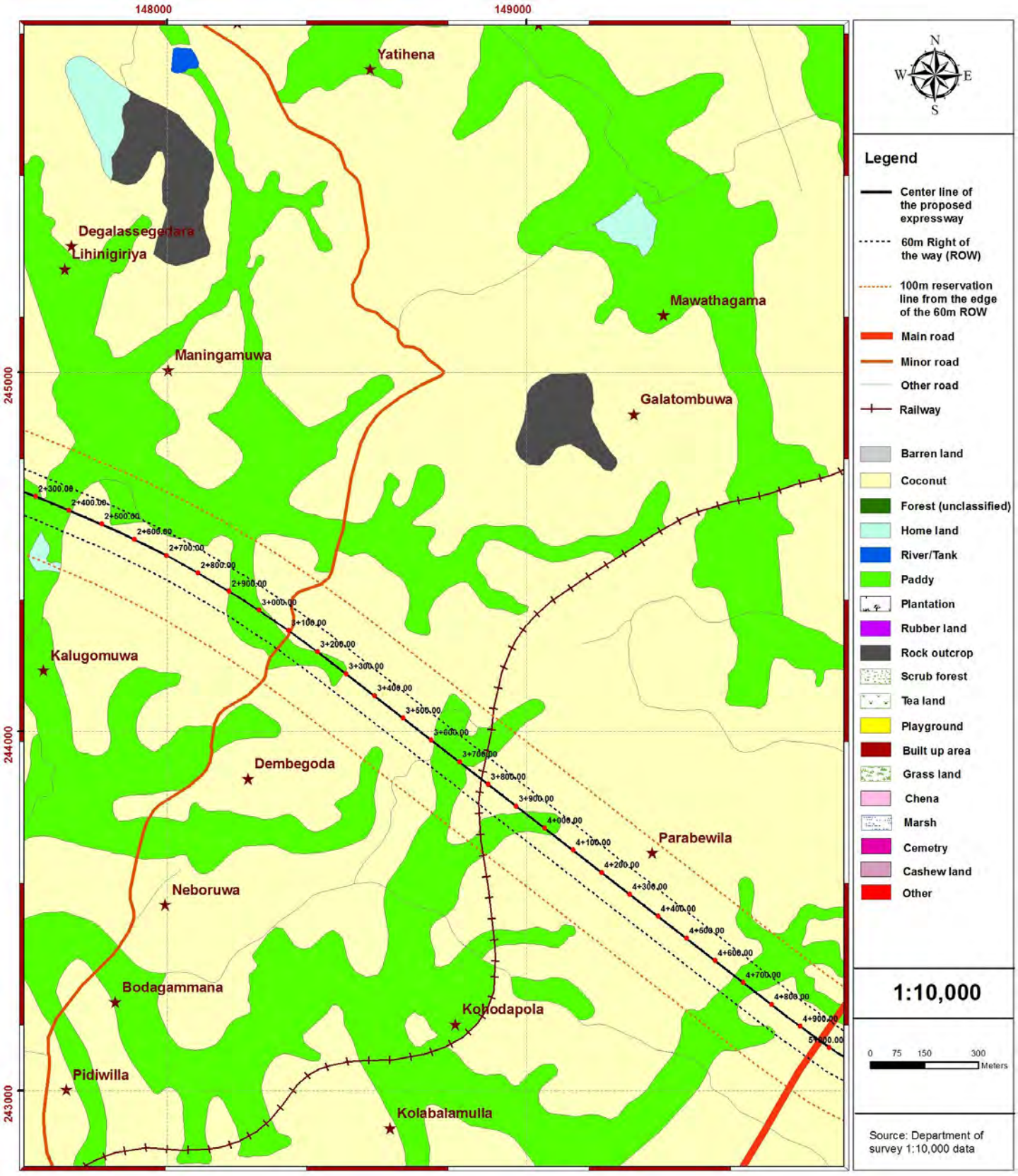

166000
168000
244000
242000
24+600.00
24+700.00
24+500.00
24+800.00
25+000.00
25+100.00
25+300.00
25+400.00
25+600.00
25+700.00
25+900.00
26+000.00
26+200.00
26+300.00
26+500.00
26+600.00
26+700.00
26+800.00
26+900.00
27+000.00
27+100.00
27+200.00
27+300.00
27+600.00
27+900.00
28+200.00
28+500.00
28+800.00
29+100.00
Legend
Center line of the Proposed cetral Expressway
Slope angle (degree)
0 - 3
4 - 9
10 - 15
16 - 20
21 - 27
28 - 35
36 - 45
46 - 61
62 - 89
N
W
E
S
1:30 000

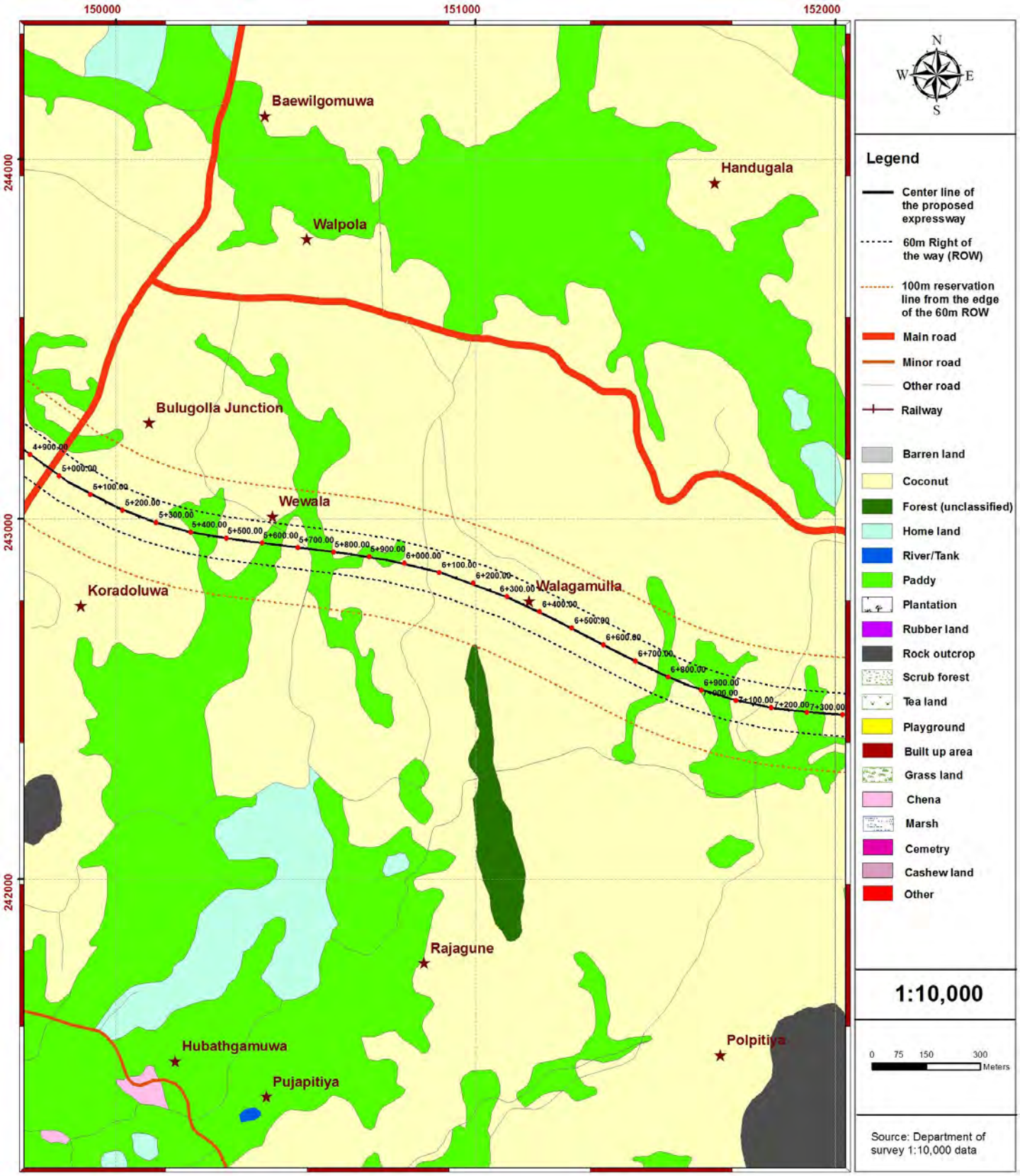

170000
172000
242000
240000
28+600.00
28+800.00
29+000.00
29+100.00
29+300.00
29+400.00
29+600.00
29+700.00
29+900.00
30+000.00
30+300.00
30+500.00
30+600.00
30+900.00
31+100.00
31+200.00
31+300.00
31+400.00
31+500.00
31+600.00
31+800.00
31+900.00
32+100.00
32+200.00
32+400.00
32+486.66
32+300.00
Legend
Center line of the Proposed cetral Expressway
Slope angle (degree)
0 - 3
4 - 9
10 - 15
16 - 20
21 - 27
28 - 35
36 - 45
46 - 61
62 - 89
N
W
E
S
1:30 000

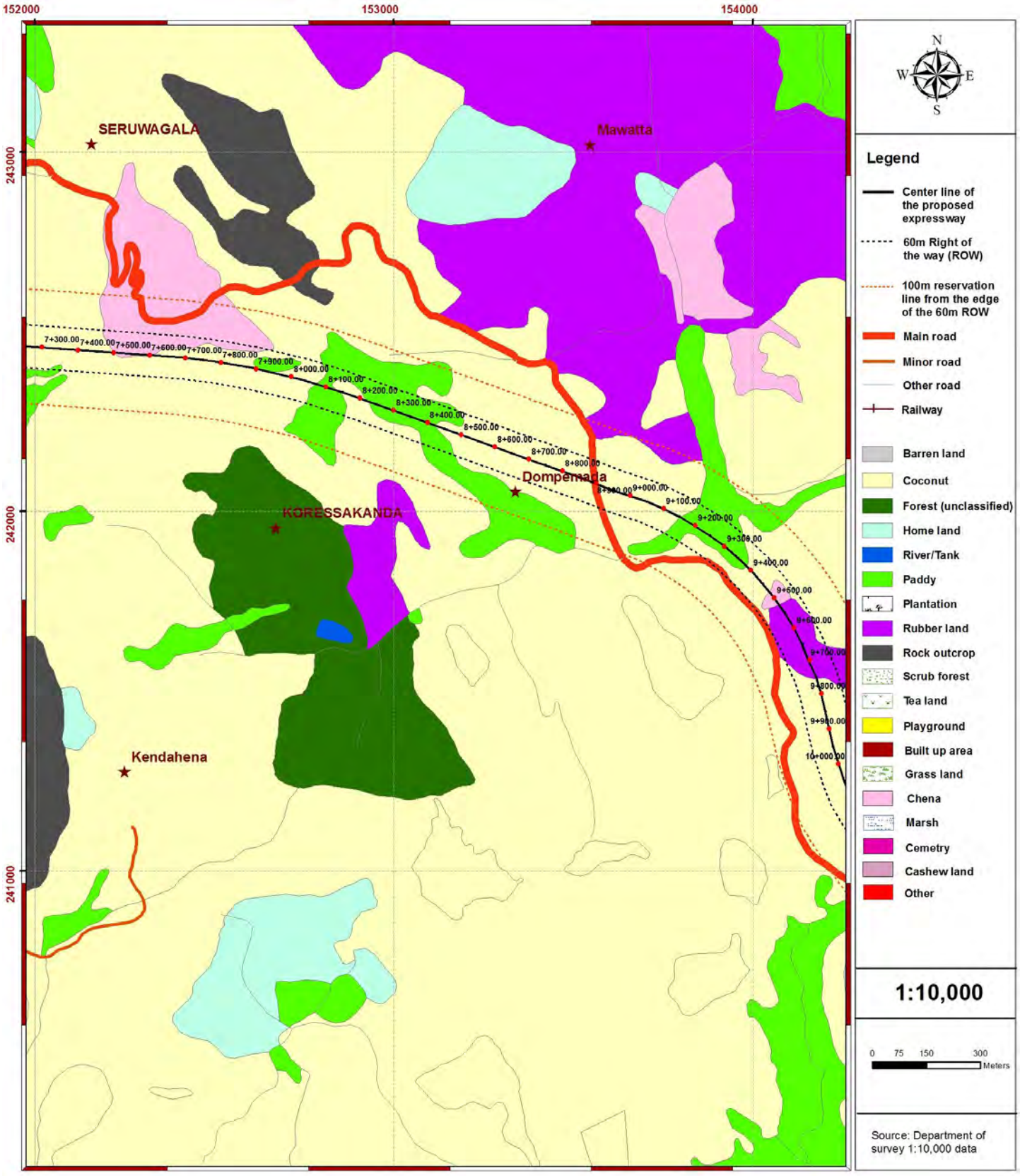
Annex 3.2.2

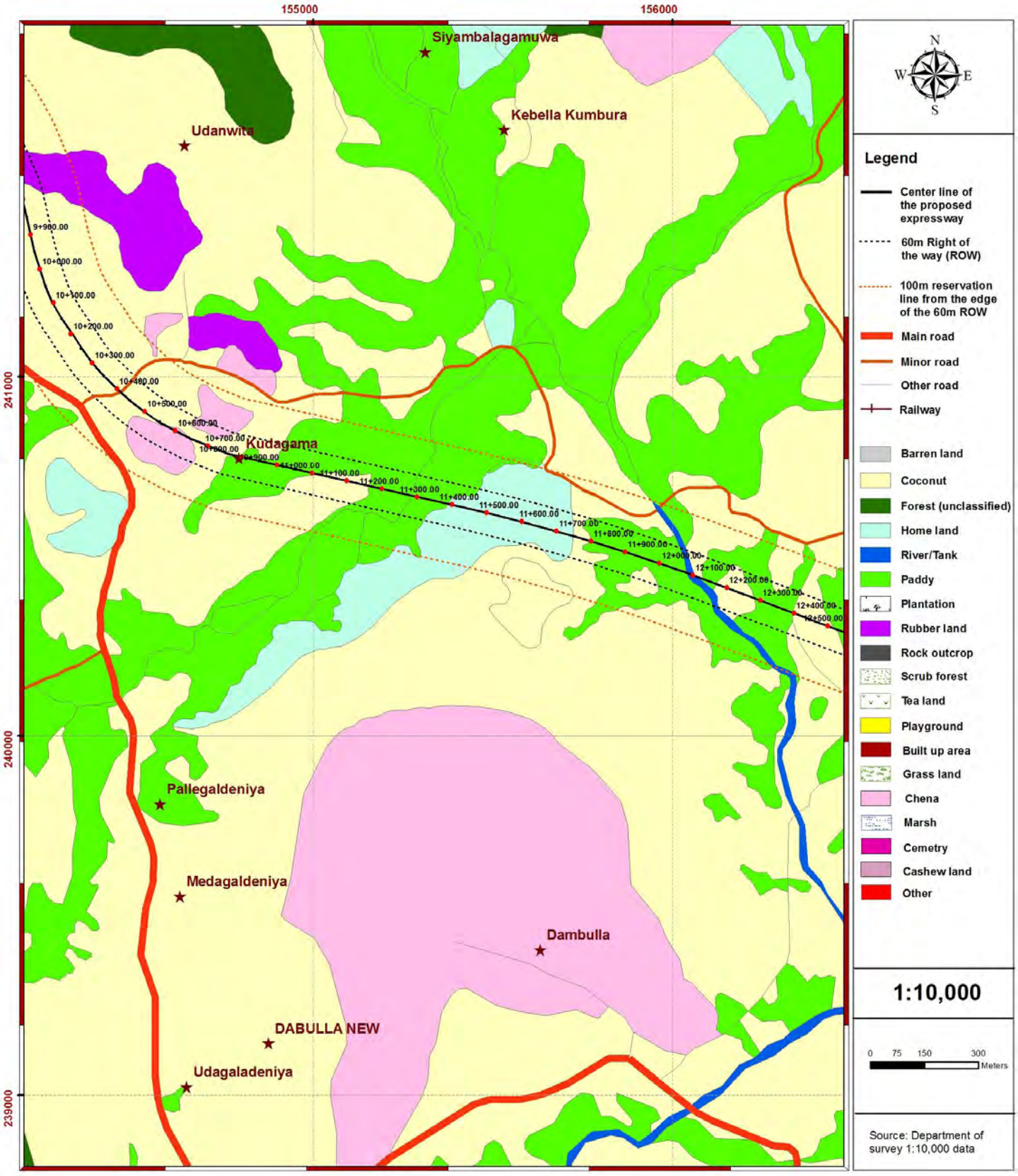
Land use Map

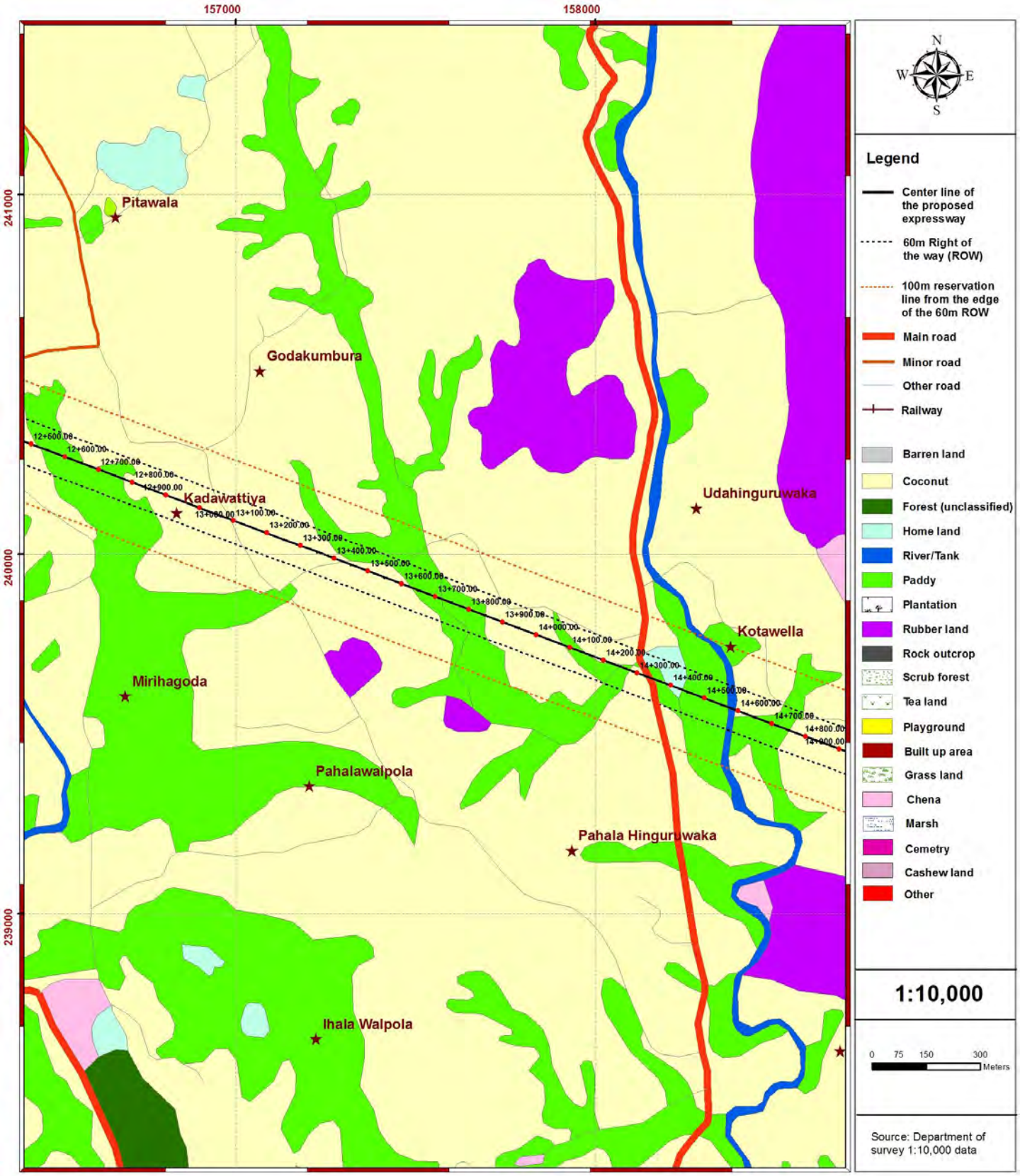

146000
147000
247000
246000
245000
244000
Medagamagedara
Kalundagedara
ALGAMA
Algama
Pothuhara
Henapola
Lihinigiriya
Polwattegedara
Doradeniya
Hiripathwela
Kambakawuwa
Lolugaspitiya
Embalawatta
Hettigedara
Galgoda
Kalegedara
Panningedara
Thalgaspitiya
Imbulana
N
W
E
S
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0 75 150 300
Meters
Source: Department of survey 1:10,000 data

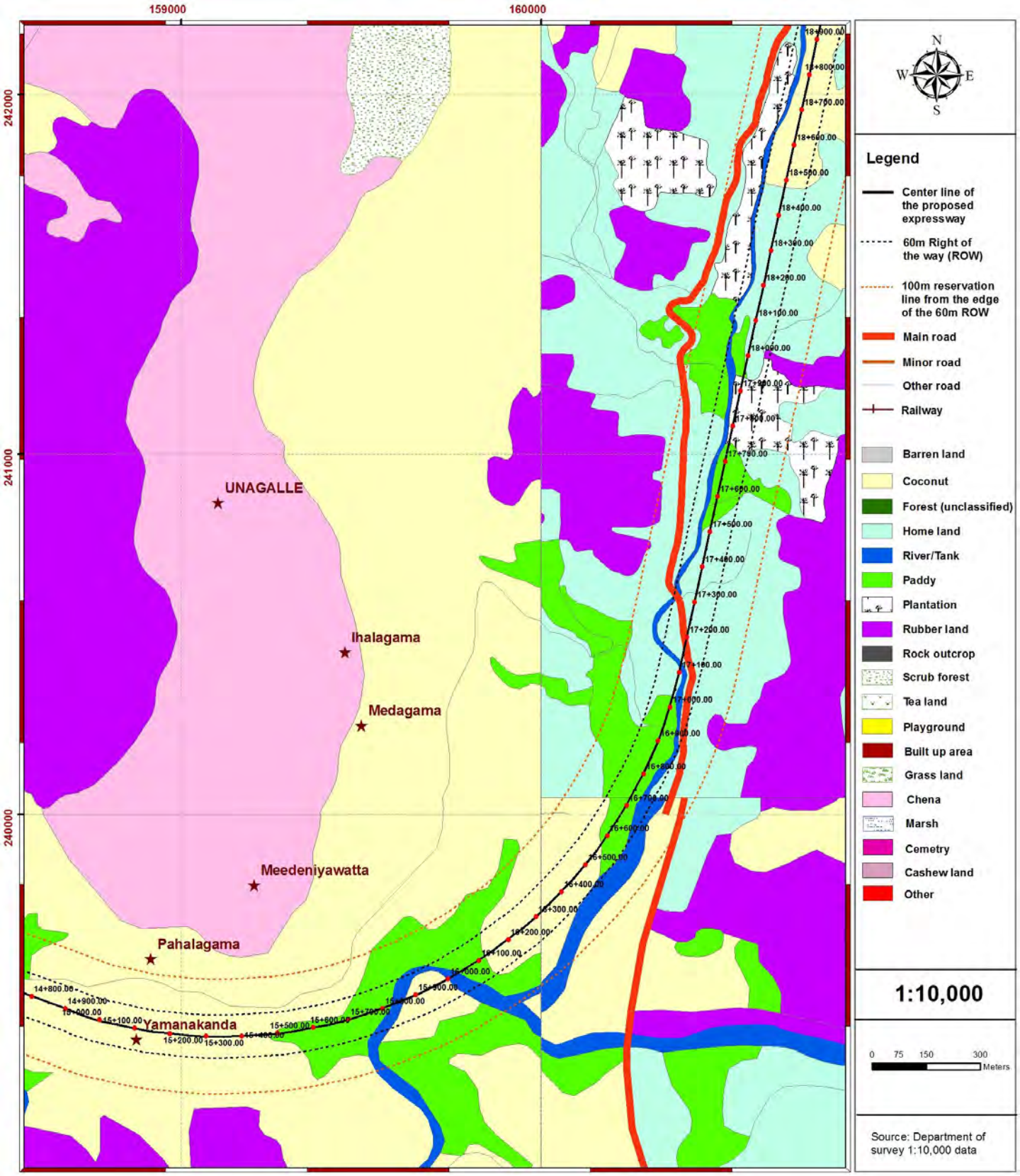

148000
149000
245000
244000
243000
Yatihena
Degalassegedara
Lihinigiriya
Maningamuwa
Mawathagama
Galatombuwa
Kalugomuwa
Dembegoda
Neboruwa
Bodagammana
Pidiwilla
Kolabalamulla
Kohodapola
Parabewila
N
S
E
W
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0 75 150 300
Meters
Source: Department of survey 1:10,000 data

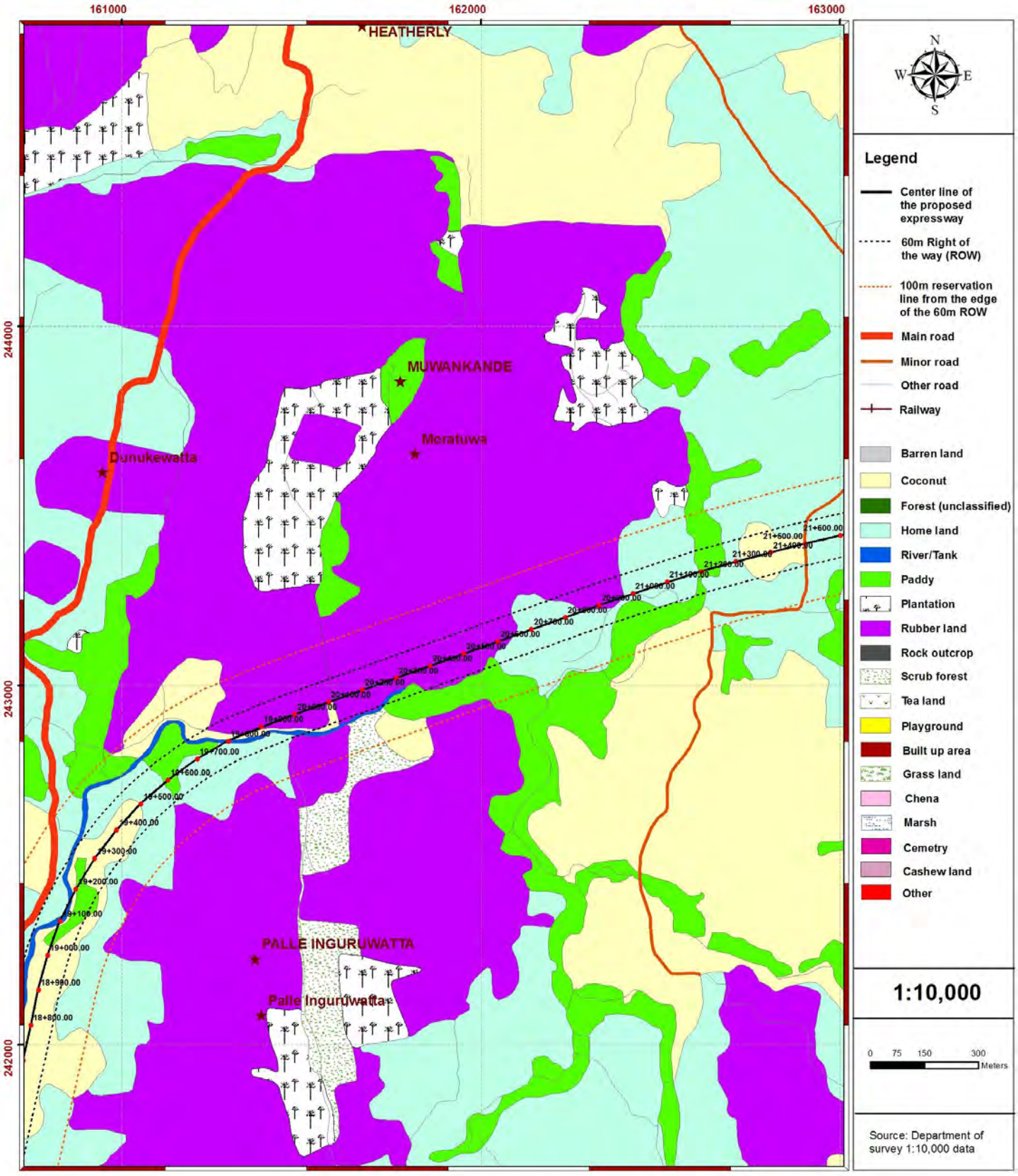

150000
151000
152000
244000
243000
242000
Baewilgomuwa
Handugala
Walpola
Bulugolla Junction
Wewala
Koradoluwa
Walagamulla
Rajagune
Hubathgamuwa
Pujapitiya
Polpitiya
4+900.00
5+000.00
5+100.00
5+200.00
5+300.00
5+400.00
5+500.00
5+600.00
5+700.00
5+800.00
5+900.00
6+000.00
6+100.00
6+200.00
6+300.00
6+400.00
6+500.00
6+600.00
6+700.00
6+800.00
6+900.00
7+000.00
7+100.00
7+200.00
7+300.00
N
W
E
S
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0 75 150 300
Meters
Source: Department of survey 1:10,000 data

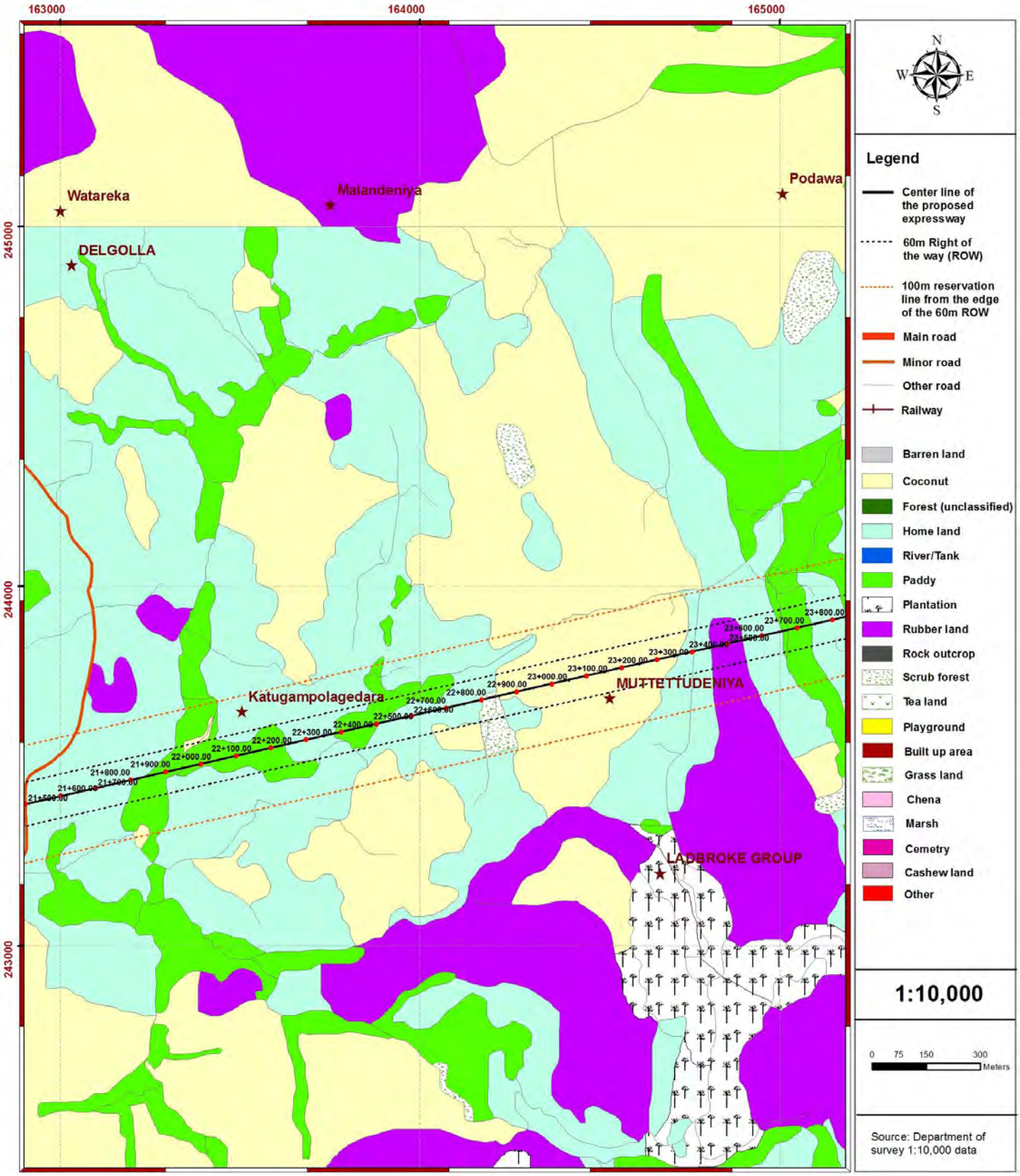

152000
153000
154000
243000
242000
241000
SERUWAGALA
Mawatta
Dompemaria
KORESSAKANDA
Kendahena
7+300.00
7+400.00
7+500.00
7+600.00
7+700.00
7+800.00
7+900.00
8+000.00
8+100.00
8+200.00
8+300.00
8+400.00
8+500.00
8+600.00
8+700.00
8+800.00
8+900.00
9+000.00
9+100.00
9+200.00
9+300.00
9+400.00
9+500.00
9+600.00
9+700.00
9+800.00
9+900.00
10+000.00
N
W
E
S
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0 75 150 300
Meters
Source: Department of survey 1:10,000 data

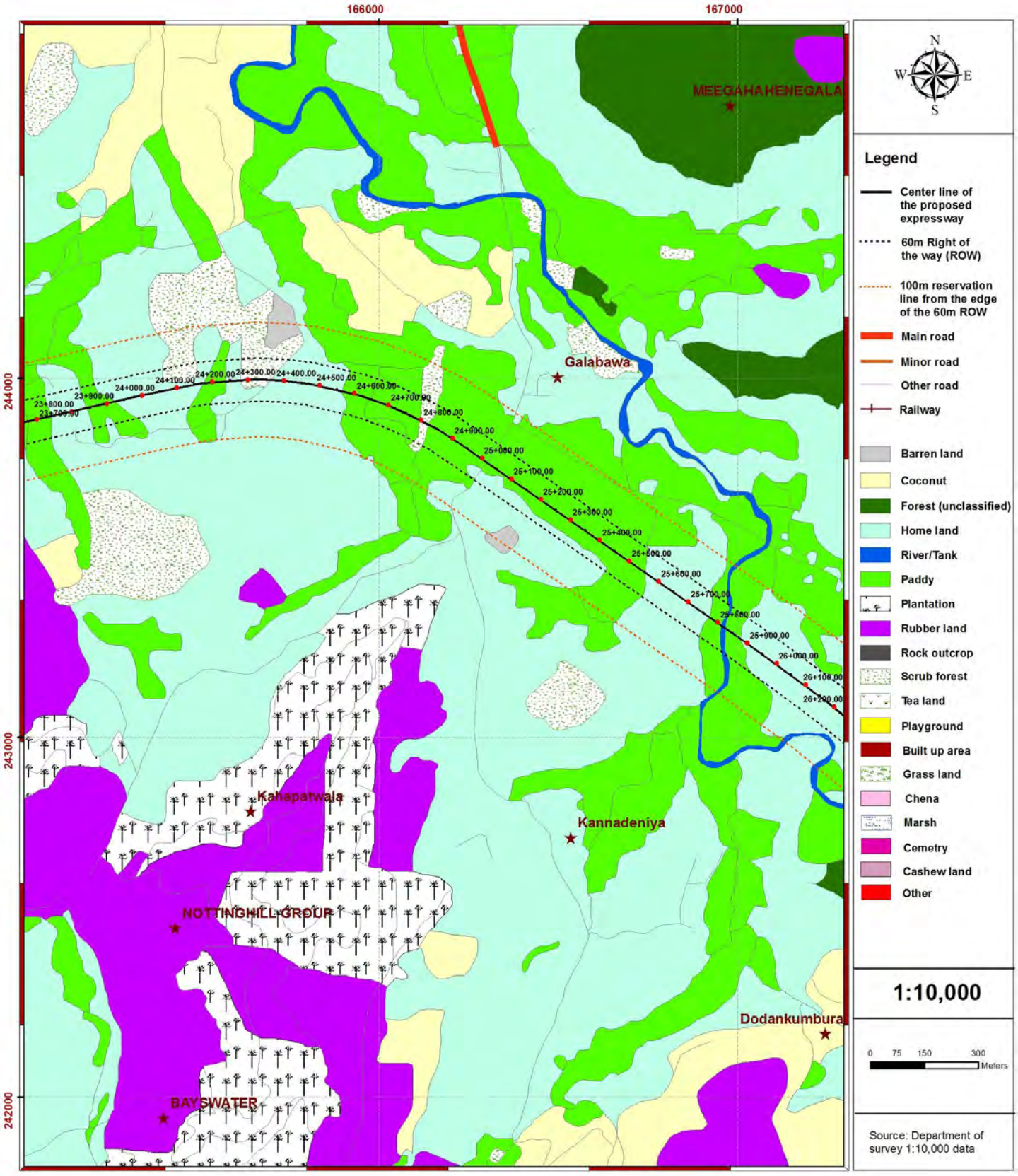

155000
156000
241000
240000
239000
Siyambalagamuwa
Udanwita
Kebella Kumbura
Kudagama
Pallegaldeniya
Medagaldeniya
Dambulla
DABULLA NEW
Udagaladeniya
9+900.00
10+000.00
10+100.00
10+200.00
10+300.00
10+400.00
10+500.00
10+600.00
10+700.00
10+800.00
10+900.00
11+000.00
11+100.00
11+200.00
11+300.00
11+400.00
11+500.00
11+600.00
11+700.00
11+800.00
11+900.00
12+000.00
12+100.00
12+200.00
12+300.00
12+400.00
12+500.00
N
W
E
S
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0 75 150 300
Meters
Source: Department of survey 1:10,000 data

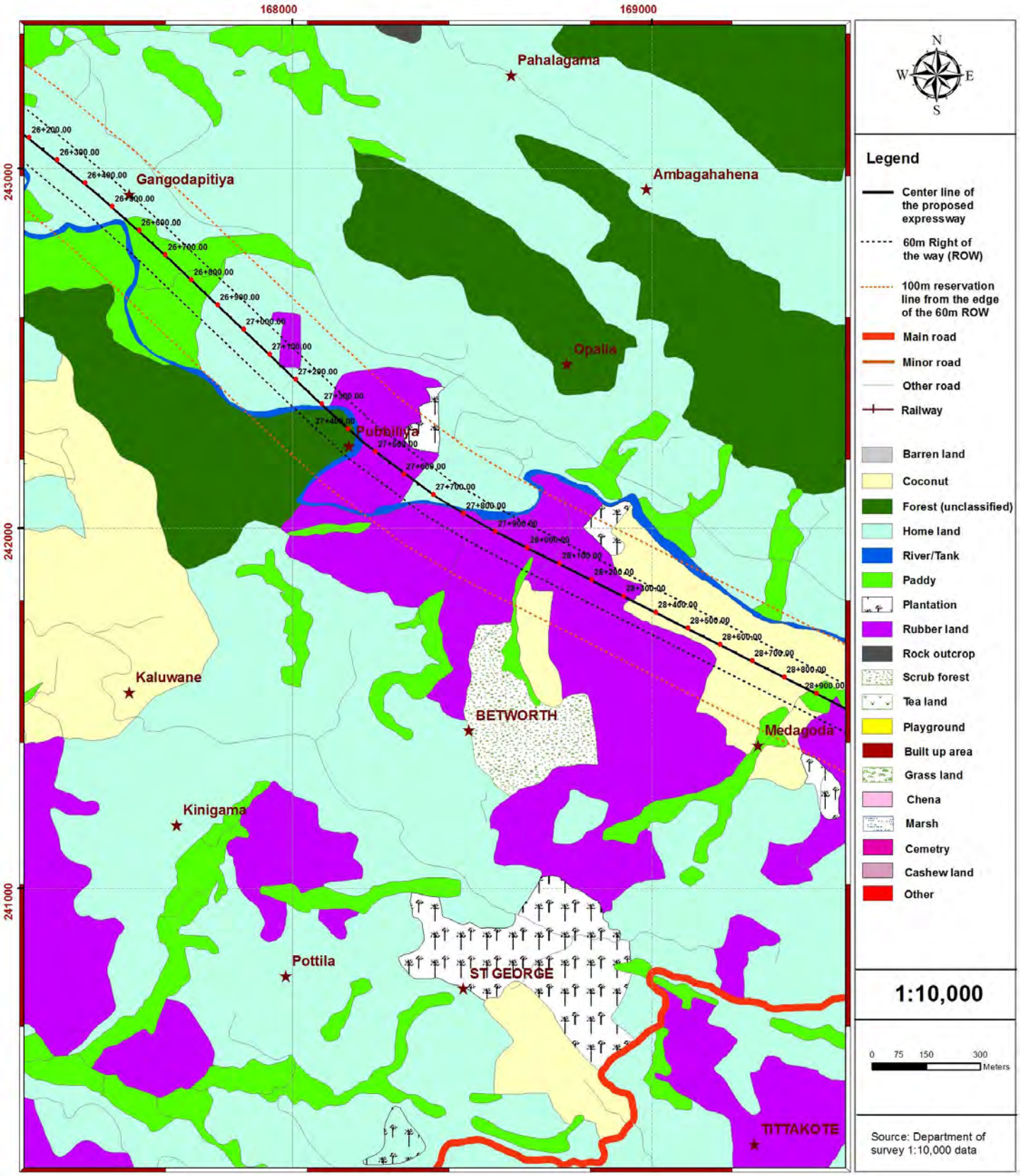

157000
158000
241000
240000
239000
Pitawala
Godakumbura
Kadawattiya
Udahinguruwaka
Kotawella
Mirihagoda
Pahalawalpola
Pahala Hinguruwaka
Ihala Walpola
12+600.00
12+700.00
12+800.00
12+900.00
13+000.00
13+100.00
13+200.00
13+300.00
13+400.00
13+500.00
13+600.00
13+700.00
13+800.00
13+900.00
14+000.00
14+100.00
14+200.00
14+300.00
14+400.00
14+500.00
14+600.00
14+700.00
14+800.00
14+900.00
N
W
E
S
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0 75 150 300
Meters
Source: Department of survey 1:10,000 data

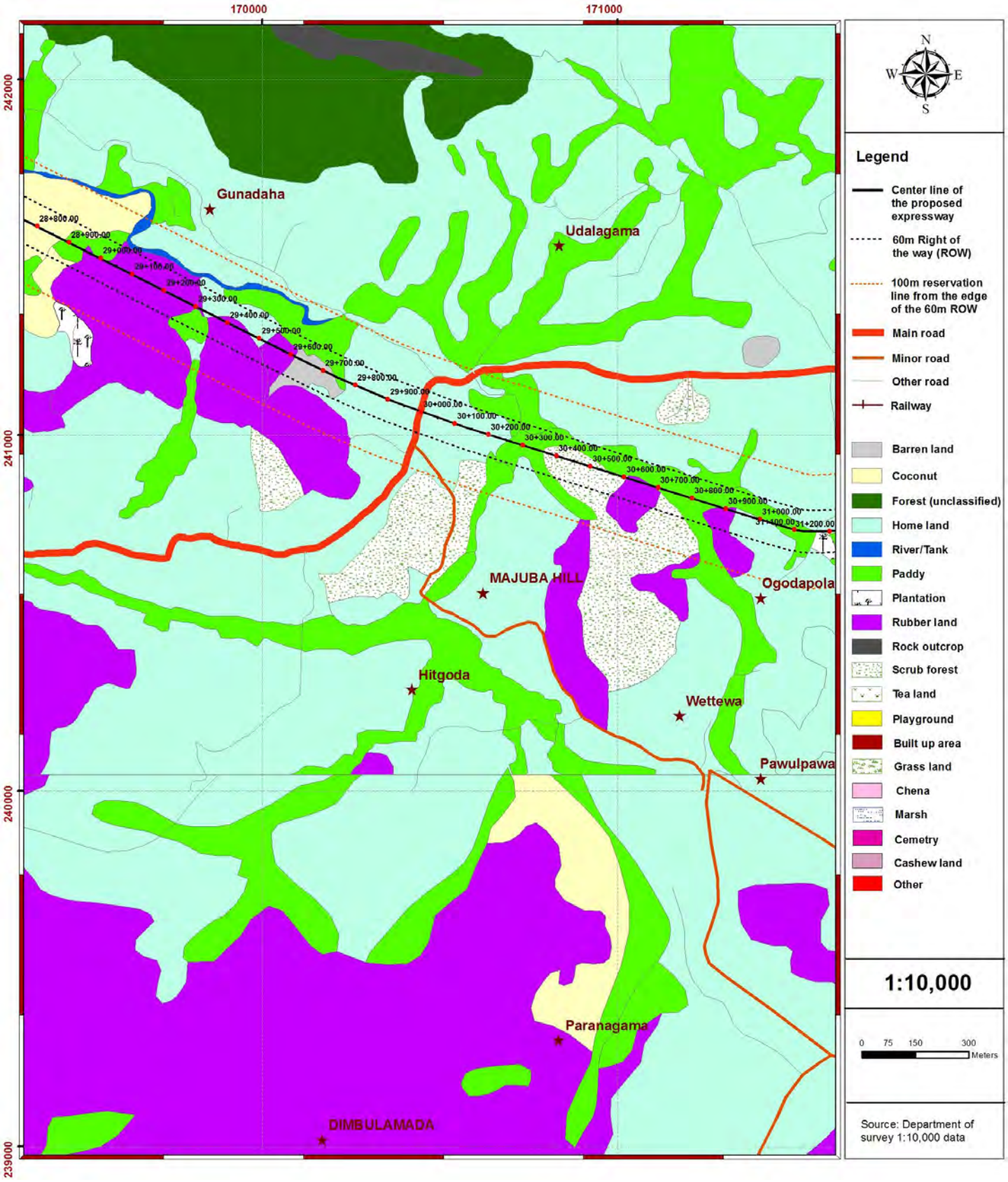

159000
160000
242000
241000
240000
UNAGALLE
Ihalagama
Medagama
Meedeniyawatta
Pahalagama
Yamanakanda
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0 75 150 300
Meters
Source: Department of survey 1:10,000 data

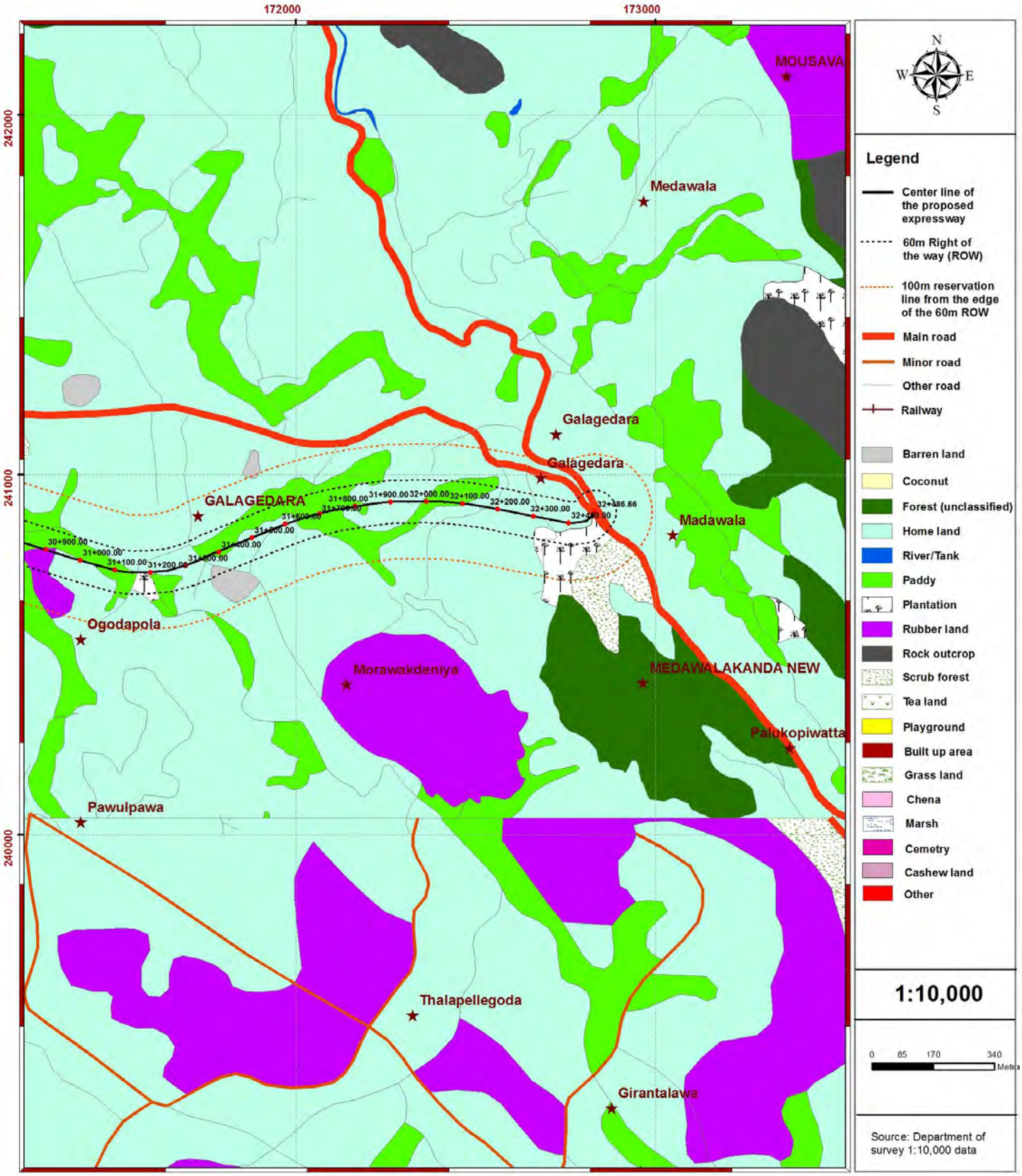

161000
162000
163000
244000
243000
242000
HEATHERLY
MUWANKANDE
Moratuwa
Dunukewatta
PALLE INGURUWATTA
Palle Ingurúwatta
N
W
E
S
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0 75 150 300
Meters
Source: Department of survey 1:10,000 data


163000
164000
165000
245000
244000
243000
Watareka
Malandeniya
Podawa
DELGOLLA
Katugampolagedara
MUTTETTUDENIYA
LADBROKE GROUP
N
W
E
S
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0 75 150 300
Meters
Source: Department of survey 1:10,000 data


166000
167000
244000
243000
242000
MEEGAHAHENEGALA
Galabawa
Kahapatwala
Kannadeniya
NOTTINGHILL GROUP
BAYSWATER
Dodankumbura
23+800.00
23+700.00
24+000.00
24+100.00
24+200.00
24+300.00
24+400.00
24+500.00
24+600.00
24+700.00
24+800.00
24+900.00
25+000.00
25+100.00
25+200.00
25+300.00
25+400.00
25+500.00
25+600.00
25+700.00
25+800.00
25+900.00
26+000.00
26+100.00
26+200.00
N
W
E
S
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0 75 150 300
Meters
Source: Department of survey 1:10,000 data

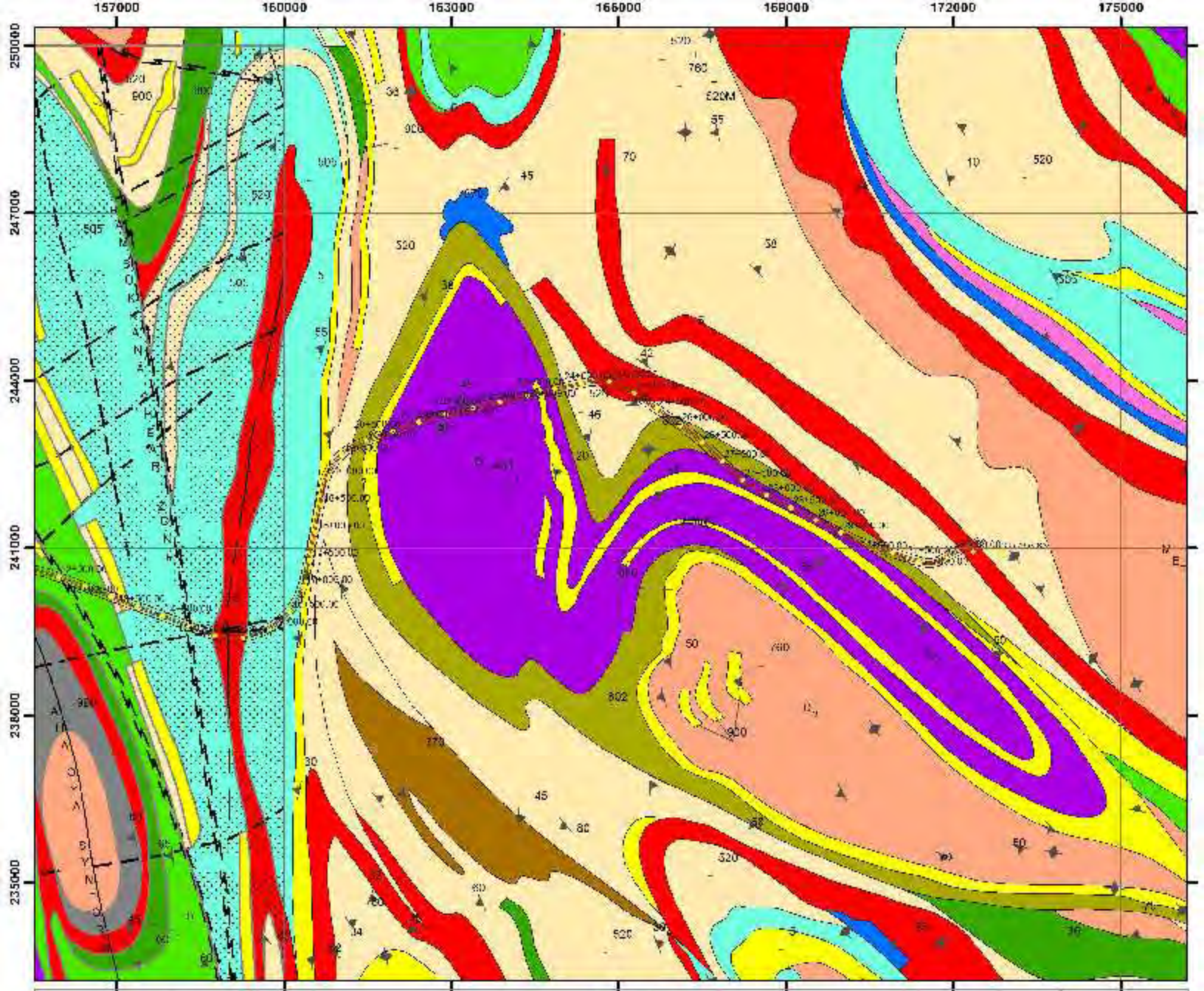

168000
169000
243000
242000
241000
Pahalagama
Ambagahahena
Gangodapitiya
Opalia
Pubbiliya
Kaluwane
BETWORTH
Medagoda
Kinigama
Pottila
ST GEORGE
TITTAKOTE
N
S
E
W
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0 75 150 300
Meters
Source: Department of survey 1:10,000 data


170000
171000
242000
241000
240000
239000
Gunadaha
Udalagama
MAJUBA HILL
Ogodapola
Hitgoda
Wettewa
Pawulpawa
Paranagama
DIMBULAMADA
28+800.00
28+900.00
29+000.00
29+100.00
29+200.00
29+300.00
29+400.00
29+500.00
29+600.00
29+700.00
29+800.00
29+900.00
30+000.00
30+100.00
30+200.00
30+300.00
30+400.00
30+500.00
30+600.00
30+700.00
30+800.00
30+900.00
31+000.00
31+100.00
31+200.00
N
W
E
S
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0 75 150 300
Meters
Source: Department of survey 1:10,000 data


172000
173000
242000
241000
240000
MOUSAVA
Medawala
Galagedara
Galagedara
GALAGEDARA
Madawala
Ogodapola
Morawakdeniya
MEDAWALAKANDA NEW
Palukopiwatta
Pawulpawa
Thalapellegoda
Girantalawa
30+900.00
31+000.00
31+100.00
31+200.00
31+300.00
31+400.00
31+500.00
31+600.00
31+700.00
31+800.00
31+900.00
32+000.00
32+100.00
32+200.00
32+300.00
32+386.66
N
S
E
W
Legend
Center line of the proposed expressway
60m Right of the way (ROW)
100m reservation line from the edge of the 60m ROW
Main road
Minor road
Other road
Railway
Barren land
Coconut
Forest (unclassified)
Home land
River/Tank
Paddy
Plantation
Rubber land
Rock outcrop
Scrub forest
Tea land
Playground
Built up area
Grass land
Chena
Marsh
Cemetry
Cashew land
Other
1:10,000
0
85
170
340
Source: Department of survey 1:10,000 data

Annex 3.2.3

Geology Map



500 m interval location

Center line of proposed expressway

Dip and strike

Fault inferred from ari photograph

Shear zone inferred from ari photograph

Axial trace of fold

60 m right of the way (ROW)

100 m reservation from the edge of the 60m ROW

Charnockitic gneiss u

Marble

Undifferentiated gneiss

Calc gneisses

Quartzo-feldspathic gneiss

Cordierite gneiss

Alkali feldspar granite

Hornblende-biotite gneiss

Hornblend gneiss

Biotite-hornblende gneiss

Impure quartzite

Quartzite

Metagabro

Undifferentiated felsic gneiss

Granite gneiss

Pegmatitic granitoid gneiss

Charnockitic gneiss (Undifferentiated)

Garnet-silimanite-biotite gneiss

N

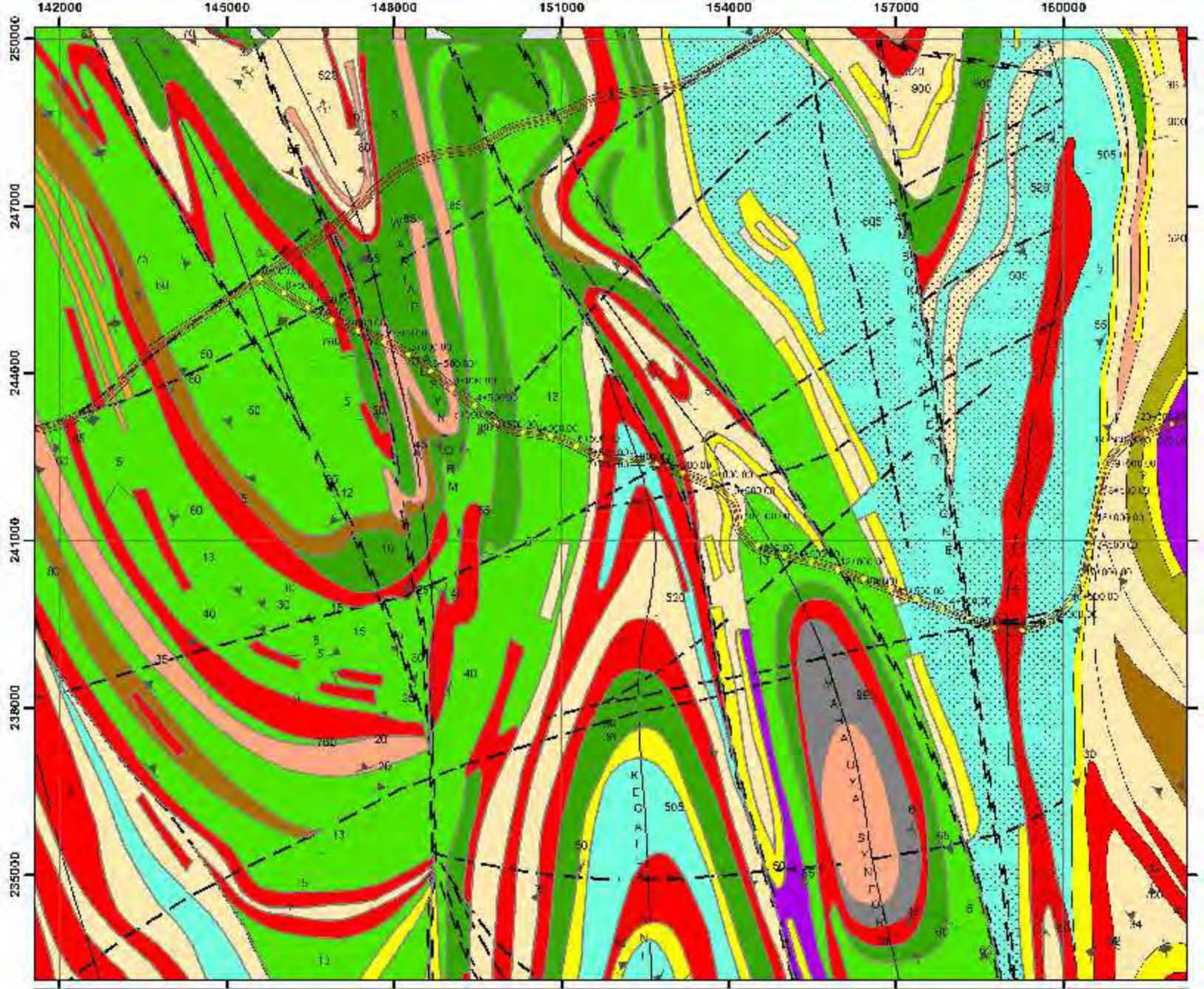
W

T.

S

1:100 000

Source: 1:60 000 maps of geological surveys and mins bureau



500 m interval location

Center line of proposed expressway

Dip and strike

Fault inferred from ari photograph

Shear zone inferred from ari photograph

Axial trace of fold

60 m right of the way (ROW)

100 m reservation from the edge of the 60m ROW

Charnockitic gneiss u

Marble

Undifferentiated gneiss

Calc gneisses

Quartzo-feldspathic gneiss

Cordierite gneiss

Alkali feldspar granite

Hornblende-biotite gneiss

Hornblend gneiss

Biotite-hornblende gneiss

Impure quartzite

Quartzite

Metagabro

Undifferentiated felsic gneiss

Granite gneiss

Pegmatitic granitoid gneiss

Charnockitic gneiss (Undifferentiated)

Garnet-silimanite-biotite gneiss

N

W

T.

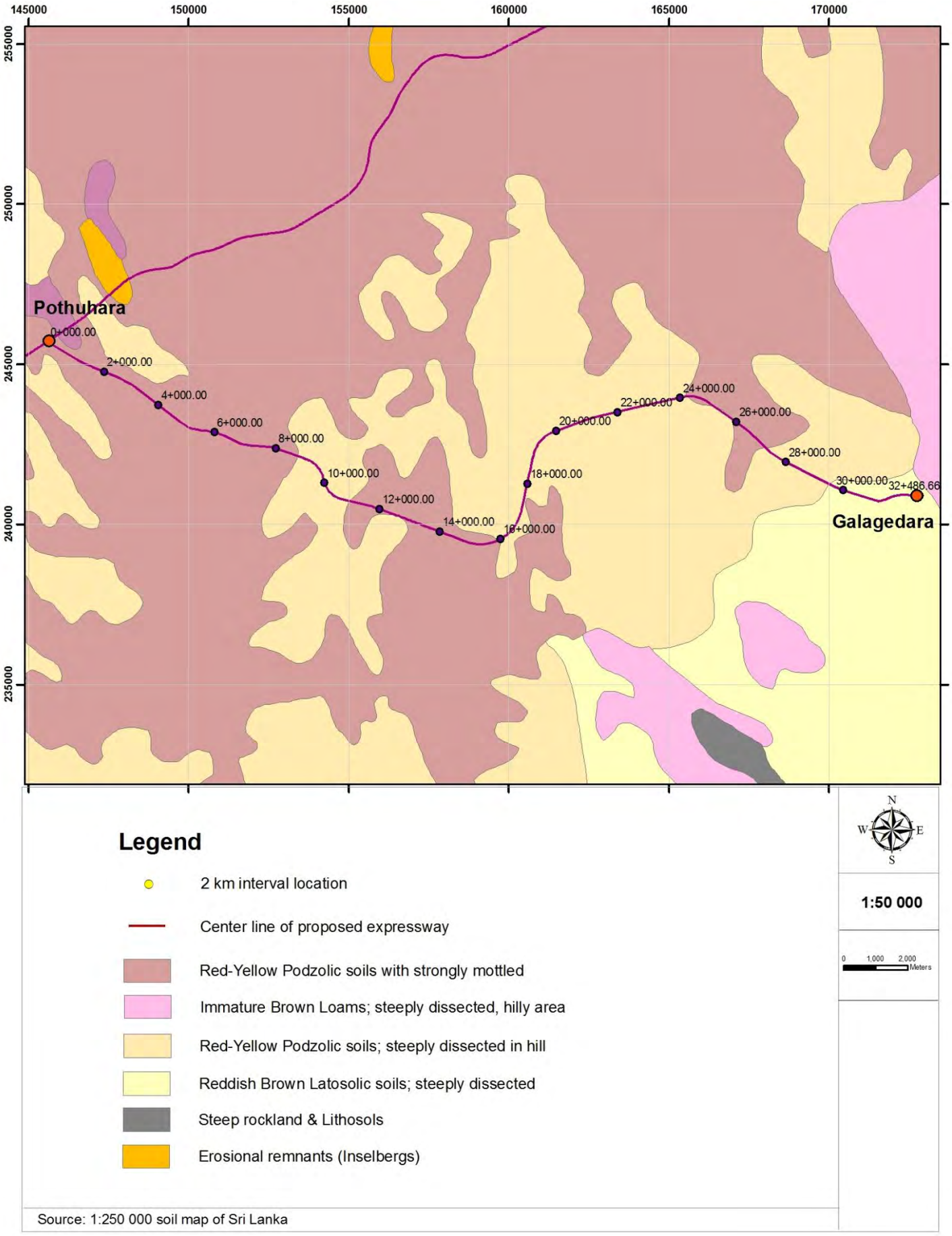
S

1:100 000

Source: 1:60 000 maps of geological surveys and mins bureau

Annex 3.2.4

Soil Map


145000
150000
155000
160000
165000
170000
255000
250000
245000
240000
235000
Pothuhara
0+000.00
2+000.00
4+000.00
6+000.00
8+000.00
10+000.00
12+000.00
14+000.00
16+000.00
18+000.00
20+000.00
22+000.00
24+000.00
26+000.00
28+000.00
30+000.00
32+486.66
Galagedara
Legend
2 km interval location
Center line of proposed expressway
Red-Yellow Podzolic soils with strongly mottled
Immature Brown Loams; steeply dissected, hilly area
Red-Yellow Podzolic soils; steeply dissected in hill
Reddish Brown Latosolic soils; steeply dissected
Steep rockland & Lithosols
Erosional remnants (Inselbergs)
N
W
E
S
1:50 000
0 1,000 2,000
Meters
Source: 1:250 000 soil map of Sri Lanka

Annex 3.3.1

List of flora

Details of the flora recorded along the proposed express way trace

Uses : **mp** - medicinal plant, **o**- ornamental, **f** -food, **t** - timber

TS – Taxonomic Status : N-**E** – Endemic, **N** – Native, **Ex** –Exotic, **IAS** - Invasive alien species

N**CS** – National Conservation Status : **CR**- Critically Endangered, **EN**-Endangered, **VU** – Vulnerable, **NT** – Near Threatened, **LC -** Least Concerned

H – Habit : **T** – Tree, **S** – Shrub, **H** – Herbaceous, **C** – Climber or Creeper, **Ep** – Epiphyte, **Aq** - Aquatic

Family	Species	Sinhala Name	English name	Uses	TS	NCS	H
Acanthaceae	*Crossandra* sp.		Firecracker flower	o	Ex		S
Acanthaceae	*Dipteracanthus prostratus*	Nil-puruk		mp	N	LC	H
Acanthaceae	*Elytraria acaulis*	Heen eththadi		mp	N	LC	H
Acanthaceae	*Thunbergia grandiflora*		Benghal trumpet	o	Ex		C
Achariaceae	***Hydnocarpus venenata***	Makulu	Marothi tree	mp	N-E	LC	T
Alismataceae	*Limnocharis flava*	Diya Gova	Yellow velvetleaf		Ex-N		H
Amaranthaceae	*Achyranthes aspera*	Karal haba	Pickly chaff flower	mp	N	LC	H
Amaranthaceae	*Aerva lanata*	Polpala	Aerva	mp,f	N	LC	H
Amaranthaceae	*Alternanthera sessilis*	Mukunuwenna	Tangle mat	mp,f	N	LC	H
Amaranthaceae	*Amaranthus viridis*	Kura-thampala		mp,f	N	LC	H
Anacardiaceae	*Anacardium occidentale*	Kaju	Cashew nut	mp,f	Ex		T
Anacardiaceae	*Lannea coromandelica*	Hik	Wodier Jhingam	mp	N	LC	T
Anacardiaceae	*Mangifera indica*	Amba	Mango	mp,f,t	Ex		T
Anacardiaceae	*Nothopegia beddomei*	Bala		mp	N	LC	T
Anacardiaceae	***Semicarpus nigro-viridis***	Geta badulla		mp	N-E	LC	T
Anacardiaceae	*Spondias dulcis*	Amberella	Bile tree	mp,f	Ex		T
Annonaceae	*Annona muricata*	Katu-Anoda	Soursop	mp,f	Ex		T
Annonaceae	*Artabotrys zeylanicus*	Kalu-Bambara-wel		mp	N	LC	C
Annonaceae	*Cananga odorata*	Rata-Sapu	Macassar oil	mp,t	Ex-N		T
Annonaceae	*Polyalthia korinti*	Ul-Kenda		mp	N	LC	T
Annonaceae	*Polyalthia longifolia*	Owila		mp,o	N	LC	T
Annonaceae	*Polyalthia suberosa*	Kalati		mp	N	EN	T
Apiaceae	*Centella asiatica*	Gotukola	Indian penywort	mp,f	N	LC	H
Apocynaceae	*Allamanda cathartica*	Wal-Ruk-Attana	Yellow allamanda	mp,o	Ex-N		C
Apocynaceae	*Alstonia macrophylla*	Hawari-Nuga	Wig banyan	mp,t	IAS		T
Apocynaceae	*Alstonia scholaris*	Ruk-Attana	Devil tree	mp,t	N	LC	T
Apocynaceae	*Ichnocarpus frutescens*	Kiri-wel	Ichnocarpus	mp	N	LC	C
Apocynaceae	*Pagiantha dichotoma*	Divi-Kaduru	Eve's apple	mp#	N	LC	T
Apocynaceae	*Plumeria obusta*	Sudu araliya	Temple tree	mp,o	Ex		T
Apocynaceae	*Tabernaemontana divaricata*	Wathusudda	Grape jasmine	mp,o	Ex		S
Apocynaceae	*Thevetia peruviana*	Kaha kaneru	Lucky-nut	mp,o	Ex		T
Apocynaceae	*Dregea volubilis*	Kiri-Anguna		mp	N	LC	C
Araceae	*Alocasia macrorrhizos*	Habarala	Giant taro	mp	IAS		H

Family	Species	Sinhala Name	English name	Uses	TS	NCS	H
Araceae	*Anthurium anderaeanum*	Anthurium		o	Ex		H
Araceae	*Colocasia esculenta*	Gahala	Coco yam	mp,f	N	LC	H
Araceae	*Lasia spinosa*	Kohila		mp,f	N	LC	H
Araceae	*Pothos scandens*	Pota-Wel		mp	N	LC	C
Araceae	*Syngonium angustatum*	Wel-kohila	Fivefingers	mp,f	Ex-N		C
Araceae	*Xanthosoma sagittifolium*	Desi-ala	Coco yam	mp,f	Ex-N		H
Araceae	*Lagenandra sp.*	Ketala			N		H
Araliaceae	*Schefflera stellata*	Itta-wel		mp	N	LC	C
Arecaceae	*Areca catechu*	Puwak	Areca-nut	mp,f	Ex		T
Arecaceae	*Calamus thwaitesii*	Ma-wewel			N	VU	C
Arecaceae	*Caryota urens*	Kithul	Fish-tail palm	mp,f	N	LC	T
Arecaceae	*Cocos nucifera*	Pol	Coconut	mp,f	Ex		T
Arecaceae	*Corypha umbraculifera*	Thala	Talipot palm	mp	Ex		T
Arecaceae	*Elaeis guineensis*	Katu pol	African oil palm		Ex		T
Aristolochiaceae	*Thottea siliquosa*	Thapasara Bulath			N	LC	S
Asperagaceae	*Agave vera-cruz*	Kasete gaha	American aloe	mp	Ex-N		S
Asteraceae	*Ageratum conyzoides*	Hulantala	Goat weed	mp	IAS		H
Asteraceae	*Chromolaena odorata*	Podi-singno-maran	Siam Weed	mp	IAS		S
Asteraceae	*Cosmos sulphureus*	Atapethiya	Orange cosmos	o	Ex		H
Asteraceae	*Eclipta prostrata*	Kikirindi	Marsh Daisy	mp	N	LC	H
Asteraceae	*Elephantopus scaber*	Eth-adi	Elephant foot	mp	N	LC	H
Asteraceae	*Mikania cordata*	Gam-palu	Mile-a-minute	mp	IAS		C
Asteraceae	*Sphagneticola trilobata*	Udaya kumari	Trailing daisy		IAS		H
Asteraceae	*Struchium sparganophorum*				Ex-N		H
Asteraceae	*Synedrella nodiflora*		Nodeweed		Ex-N		H
Asteraceae	*Tridax procumbens*	Tridax	Kurunagala daisy	mp	Ex-N		H
Asteraceae	*Vernonia cinerea*	Monorakudumbiya	Little iron weed	mp	N	LC	H
Asteraceae	*Xanthium indicum*	Uru-kossa	Rough cocklebur	mp	N	LC	H
Balsaminaceae	*Hydrocera triflora*	Diya kudalu	Marsh henna	mp	N	LC	H
Balsaminaceae	*Impatiens balsamina*	Kudalu	Common Balsam	mp	Ex		H
Basellaceae	*Basella alba*	Niviti	Malabar spinach	mp,o	N		H
Bignoniaceae	*Oroxylum indicum*	Totila	Indian trumpet tree	mp	N	LC	T
Bignoniaceae	*Spathodea campanulata*	Kudella gas	Fountain tree	mp,o	IAS		T
Boraginaceae	*Cordia dichotoma*	Lolu	Sebesten plum	mp	N	LC	T
Bromeliaceae	*Ananas comosus*	Annasi	Pine apple	mp,o	Ex		S
Cannabaceae	*Celtis philippensis*	Meditella		mp	N	LC	T
Cannabaceae	*Trema orientalis*	Gadumba	Charcoal tree	mp	N	LC	T
Cannaceae	*Canna hybrids*			o	Ex		H
Caricaceae	*Carica papaya*	Gas-Labu	Papaw	mp,o	Ex		T
Cleomaceae	*Cleome viscosa*	Ran-manissa	Yellow spider flower	mp	N	LC	H
Clusiaceae	***Garcinia quaesita***	Rat Gorka		mp,o	N-E	LC	T

Family	Species	Sinhala Name	English name	Uses	TS	NCS	H
Colchicaceae	*Gloriosa superba*	Niyagala	Glory lily	mp	N	LC	C
Combretaceae	*Terminalia arjuna*	Kumbuk	Arjun	mp,t	N	LC	T
Combretaceae	*Terminalia catappa*	Kottamba	Country almond	mp,t	Ex-N		T
Commelinaceae	*Commelina benghalensis*	Diya-meneriya	Benghal dayflower	mp	N	LC	H
Commelinaceae	*Commelina diffusa*	Gira-pala		mp,f	N	LC	H
Commelinaceae	*Cyanotis axillaris*				N	LC	H
Commelinaceae	*Cyanotis obtusa*	Maha-namba		mp	N	EN	H
Commelinaceae	*Murdannia spirata*				N	LC	H
Connaraceae	*Connarus monocarpus*	Radaliya		mp	N	LC	S
Connvolvulaceae	***Argyreia populifolia***	Girithilla		mp	N-E	LC	C
Connvolvulaceae	*Evolvulus alsinoides*	Visnu-kranthi	Little glory	mp	N	LC	H
Connvolvulaceae	*Ipomoea asarifolia*	Bin-tamburu		mp	Ex-N		C
Connvolvulaceae	*Merremia tridentata*	Heen-madu	African morning vine	mp	N	LC	C
Crassulaceae	*Kalanchoe pinnata*	Akkapana	Airplant	mp	Ex-N		H
Cucurbitaceae	*Coccinia grandis*	Kowakka	Ivy gourd	mp	N	LC	C
Cucurbitaceae	*Momordica charantia*	Karavila	Bitter gourd	mp,f	N	LC	C
Cyperaceae	*Cyperus alternifolius*				Ex-N		Gl
Cyperaceae	*Cyperus difformis*				N	LC	Gl
Cyperaceae	*Cyperus haspan*	Hal-pan		mp	N	LC	Gl
Cyperaceae	*Cyperus iria*	Thunessa		mp	N	LC	Gl
Cyperaceae	*Cyperus kyllingia*	Mottu-tana		mp	N	LC	Gl
Cyperaceae	*Cyperus pilosus*				N	LC	Gl
Cyperaceae	*Cyperus rotundus*	Kaladuru	Nut grass	mp	N	LC	Gl
Cyperaceae	*Cyperus tenuispica*				N	LC	Gl
Cyperaceae	*Fimbristylis dichotoma*				N	LC	Gl
Cyperaceae	*Fimbristylis miliacea*	Mudu-hal-pan		mp	N	LC	Gl
Cyperaceae	*Fimbristylis schoenoides*				N	LC	Gl
Cyperaceae	*Pycreus polystachyos*				N	LC	Gl
Cyperaceae	*Schoenoplectus juncoides*	Geta pan		mp	N	LC	Gl
Dilleniaceae	*Dillenia indica*	Hondapara		mp	N	LC	T
Elaeocarpaceae	*Elaeocarpus serratus*	Weralu	Ceylon olive	mp,f	N	LC	T
Euphorbiaceae	*Acalypha wilkensiana*		Copper leaf	o	Ex		S
Euphorbiaceae	*Codiaeum variegatum*		Croton	o	Ex		S
Euphorbiaceae	*Croton aromaticus*	Wel-Keppetiya		mp	N	LC	S
Euphorbiaceae	*Croton hirtus*	Gan-veda			Ex-N		H
Euphorbiaceae	*Croton laccifer*	Gas-Keppetiya		mp	N	LC	S
Euphorbiaceae	*Euphorbia antiquorum*	Daluk	Spurge cactus	mp	N	LC	T
Euphorbiaceae	*Euphorbia heterophylla*	Wal Rabber	Mexican fireweed		Ex-N		H
Euphorbiaceae	*Euphorbia hirta*	Bu-dada-kiriya	Snake weed	mp	N	LC	H
Euphorbiaceae	*Hevea brasiliensis*	Rubber		t	Ex		T
Euphorbiaceae	*Jatropha curcas*	Weta endaru	Physic nut	mp	Ex-N		T
Euphorbiaceae	*Macaranga peltata*	Kenda	Roxburgh's lotus croton	mp	N	LC	T

Family	Species	Sinhala Name	English name	Uses	TS	NCS	H
Euphorbiaceae	*Mallotus philippensis*	Molabe	Monkey face	mp	N	LC	T
Euphorbiaceae	*Mallotus tetracoccus*	Bu-kenda		mp	N	LC	T
Euphorbiaceae	*Manihot esculenta*	Maiokka	Cassva	mp,f	Ex		T
Euphorbiaceae	*Ricinus communis*	Endaru	Castor oil plant	mp	Ex-N		S
Euphorbiaceae	*Baccaurea metleyana*	Gaduguda	Rambeh	mp,f	Ex		T
Fabaceae	*Acacia caesia*	Hinguru	Soap bark	mp	N	LC	C
Fabaceae	*Adenanthera pavonina*	Madithiya	Saga seed	mp	N	LC	T
Fabaceae	*Aeschynomene americana*		Thornless mimosa		Ex		S
Fabaceae	*Albizia odoratissima*	Huri Mara	Ceylon rosewood	mp,f	N	LC	T
Fabaceae	*Albizia saman*	Para Mara	Rain tree	mp,f	Ex		T
Fabaceae	*Alysicarpus vaginalis*	Aswenna	Alice clover	mp	N	LC	H
Fabaceae	*Centrosema pubescens*		Butterfly pea		Ex-N		C
Fabaceae	*Chamaecrista absus*	Bu-tora	Pig's senna	mp	N	LC	H
Fabaceae	*Clitoria ternatea*	Nil-katarolu	Butterfly pea	mp,o	N	LC	C
Fabaceae	*Crotalaria pallida*		Smooth rattle box		N	LC	H
Fabaceae	*Crotalaria verrucosa*	Nil-andana-hiriya	Blue andana	mp	N	LC	H
Fabaceae	*Dalbergia pseudo-sissoo*	Bambara-wel	Hornet creeper	mp	N	LC	S
Fabaceae	*Delonix regia*	Mei- Mara	Flamboyant	mp	Ex		T
Fabaceae	***Derris parviflora***	Kala-wel		mp	N-E	LC	C
Fabaceae	*Derris scandens*	Kala-wel	Forest beanstalk	mp	N	LC	C
Fabaceae	*Desmodium heterocarpon*	Et-Undupiyaliya	Asian tickrefoil		N	LC	H
Fabaceae	*Desmodium triflorum*	Heen-undupiyaliya	Tick clover	mp	N	LC	H
Fabaceae	*Entada rheedii*	Pus wel, Us-wel	Mackay Bean	mp#	N	LC	C
Fabaceae	*Erythrina fusca*	Yak-Earabadu	Coral Bean	mp	N	NT	T
Fabaceae	*Gliricidia sepium*	Ginisooriya	Mexican lilac	mp	Ex		T
Fabaceae	*Humboldtia laurifolia*	Gal-Karanada		mp	N	LC	T
Fabaceae	*Leucaena leucocephala*	Ipil-Ipil	Ipil ipil	IAS	Ex-N		T
Fabaceae	*Mimosa invisa*	Wel Nidikumba	Giant false sensitve plant	IAS	Ex-N		C
Fabaceae	*Mimosa pigra*	Yoda nidikumba	Giant sensitive plant	IAS	Ex-N		S
Fabaceae	*Mimosa pudica*	Nidi-kumba	Sensitive plant	mp	Ex-N		H
Fabaceae	*Peltophorum pterocarpum*		Copper-pod	o	N		T
Fabaceae	*Pongamia pinnata*	Karanda	Indian beech	mp	N	LC	T
Fabaceae	*Psophocarpus tetragonolous*	Dara-dambala	Winged bean	mp,f	Ex		C
Fabaceae	*Pueraria phaseoloides*		Tropical kudzu		Ex-N		C
Fabaceae	*Saraca asoka*	Ashoka, Asoka	Ashoka	mp	N	VU	T
Fabaceae	*Senna alata*	Eth tora	Candle bush	mp	Ex		S
Fabaceae	*Senna occidentalis*	Peni-Tora	Coffee-senna	mp	N	LC	H
Fabaceae	*Senna spectabilis*	Kaha-Kona	Spectacular senna	mp	Ex		T
Fabaceae	*Sesbania grandiflora*	Katuru-murunga	Swamp pea	mp,f	Ex		T
Fabaceae	*Tamarindus indica*	Siyambala	Tamarind	mp,f	Ex		T

Family	Species	Sinhala Name	English name	Uses	TS	NCS	H
Fabaceae	*Tephrosia purpurea*	Katuru pila	Purple tephrosia	mp	N	LC	S
Hypoxidaceae	*Curculigo orchioides*	Heen-bin-tal	Black musli	mp	N	LC	H
Lamiaceae	*Clerodendrum infortunatum*	Pinna,		mp	N	LC	S
Lamiaceae	*Clerodendrum quadriloculare*	Valantine	Vakebtine		Ex		T
Lamiaceae	*Anisochilus carnosus*	Gal-kapuru-walliya	Thick leaved lavender	mp	N	LC	H
Lamiaceae	*Gmelina asiatica*	Demata	Asiatic beech berry	mp	N	LC	S
Lamiaceae	*Hyptis suaveolens*	Ali thala	American mint	mp	Ex-N		S
Lamiaceae	*Leucas zeylanica*	Geta-Thumba	Thumbe	mp	N	LC	H
Lamiaceae	*Ocimum gratissimum*	Gas-tala	Shrubby basil	mp	N	LC	S
Lamiaceae	*Premna tomentosa*	Bu-Sera			N	LC	T
Lamiaceae	*Vitex altissima*	Milla		t	N	NT	T
Lauraceae	*Cinnamomum cassia*	Dawul-Kurundu	Wild cinnamon	mp	N	LC	T
Lauraceae	***Cinnamomum verum***	Kurundu	Cinnamom tree	mp,f	N-E	VU	T
Lauraceae	*Litsea glutinosa*	Bombi, Bomi	Common Tallow Laurel	mp	N	LC	T
Lauraceae	***Litsea longifolia***	Rat-Keliya		mp	N-E	LC	T
Lauraceae	*Persea americana*	Aligeta-pera	Avacado	mp,f	Ex		T
Lecythidaceae	*Barringtonia racemosa*	Goda-Midella		mp	N	LC	T
Lecythidaceae	*Careya arborea*	Kahata	Pathana-oak	mp	N	LC	T
Linaceae	*Hugonia ferruginea*				N	VU	S
Linaceae	*Hugonia mystax*	Bu-Getiya	Climbing flax	mp	N	LC	S
Loganiaceae	*Strychnos nux-vomica*	Goda-Kaduru	Nux-vomica	mp	N	VU	T
Loranthaceae	*Dendrophthoe falcata*	Delum pilia		mp	N	LC	Ep
Lythraceae	*Lagerstroemia speciosa*	Muruta	Queen's flower	mp	N	NT	T
Lythraceae	*Lawsonia inermis*	Marathodi	Henna	mp	N	LC	S
Magnoliaceae	*Michelia champaca*	Gini sapu	Champak	mp,t	Ex-N		T
Malpighiaceae	*Hiptage benghalensis*	Puwak-Gediya-wel	Bengal Hiptage	mp	N	LC	L
Malvaceae	*Abelmoschus esculentus*	Bandakka	Lady's fingers	mp,f	Ex		S
Malvaceae	*Hibiscus furcatus*	Napiriththa		mp	N	LC	S
Malvaceae	*Hibiscus rosa-sinensis*	Wada	Shoeflower	mp,o	Ex		S
Malvaceae	*Hibiscus subdariffa*	Rata-Bilincha	Jamaican sorell		Ex-N		S
Malvaceae	*Hibiscus vitifolius*	Maha-epala	Tropical rose-mallow	mp	N	LC	S
Malvaceae	*Sida acuta*	Gas-Bevila	Common wireweed	mp	N	LC	S
Malvaceae	*Sida rhombifolia*	Kotican-Bevila	Paddy's luceme	mp	N	LC	S
Malvaceae	*Thespesia populnea*	Gansuriya	Tulip tree	mp	N	LC	T
Malvaceae	*Urena lobata*	Patta-epala	Caesar weed	mp	N	LC	S
Malvaceae	*Urena sinuata*	Heen-epala	Bur mallow	mp	N	LC	S
Malvaceae	*Berrya coridifolia*	Halmilla	Trincomalee wood	mp,t	N	LC	T
Malvaceae	*Ceiba pentandra*	Pulun	Kapok tree	mp	N	LC	T
Malvaceae	*Durio zibethinus*	Durian	Durian	mp,f	Ex		T

Family	Species	Sinhala Name	English name	Uses	TS	NCS	H
Malvaceae	*Grewia carpinifolia*	Wel-mediya		mp	N	LC	S
Malvaceae	*Grewia damine*	Daminiya	Dhaman	mp	N	LC	S
Malvaceae	*Grewia orientalis*	Wel-keliya			N	LC	S
Malvaceae	*Helicteras isora*	Liniya	Screw tree	mp	N	NT	S
Malvaceae	*Melochia corchorifolia*	Gas-kura		mp#	N	LC	S
Malvaceae	*Microcos paniculata*	Kohu-kirilla	Microcos	mp	N	LC	S
Malvaceae	*Muntingia calabura*	Jam	Jam-tree	mp,f	Ex-N		T
Malvaceae	*Pterospermum suberifolium*	Welang	Fishing rod tree	mp	N	LC	T
Malvaceae	*Sterculia balanghas*	Nava		mp	N	LC	T
Malvaceae	*Theobroma cacao*	Kokova	Cacoa	mp,f	Ex		T
Malvaceae	*Triumfetta pentandra*	Epala			N	LC	S
Melastomataceae	*Clidemia hirta*	Katakalu-Bovotiya	Soap bush		IAS		S
Melastomataceae	*Memecylon umbellatum*	Kora-Kaha	Blue mist	mp	N	LC	S
Melastomataceae	*Osbeckia aspera*	Bowitiya			N	NT	S
Meliaceae	*Azadirachta indica*	Kohomba	Neem	mp	Ex		T
Meliaceae	*Cipadessa baccifera*	Hal-Bembiya		mp	N	LC	S
Meliaceae	*Melia azadarach*	Kiri-kohomba	Indian lilac	mp,t	N		T
Meliaceae	*Swietenia macrophylla*	Mahogani	Honduras mahogany	t	IAS		T
Menispermaceae	*Anamirta cocculus*	Titta-wel	Fish berry	mp	N	LC	L
Menispermaceae	*Cissampelos pareira*	Diya-Mitta	Abuta, Velvet leaf	mp#	N	LC	C
Menyanthaceae	*Nymphoides indica*	Kumudu		mp	N	LC	Aq
Moraceae	*Artocarpus heterophyllus*	Kos	Jak	mp,t	Ex		T
Moraceae	*Artocarpus incisus*	Rata-Del	Bread fruit tree	mp	Ex		T
Moraceae	***Artocarpus nobilis***	Bedi-Del	Wild bread fruit	mp,t	N-E	LC	T
Moraceae	*Castilla elastica*		Panama-Rubber		Ex		T
Moraceae	*Ficus benghalensis*	Maha-Nuga	Banyan	mp	N	LC	T
Moraceae	*Ficus callosa*	Gonna		mp	N	LC	T
Moraceae	*Ficus elastica*		Assam India rubber		Ex		T
Moraceae	*Ficus exasperata*	Bu-Thediya	Furniture lear	mp	N	LC	T
Moraceae	*Ficus hispida*	Kota-Dimbula	Wild fig	mp	N	LC	T
Moraceae	*Ficus racemosa*	Attikka	Cluster fig	mp#	N	LC	T
Moraceae	*Ficus tinctoria*	Gas-Anguna		mp	N	LC	T
Moraceae	*Streblus asper*	Geta-Netul	Crooked rough-bush	mp	N	LC	T
Moraceae	*Streblus taxoides*	Gongotu	Fig-lime	mp	N	LC	T
Moringaceae	*Moringa oleifera*	Murunga	Drumstic tree	mp	Ex		T
Muscaceae	*Musa x paradisaca*	Kehel	Banana	mp,f	Ex		H
Myristicaceae	***Horsfieldia iryaghedhi***	Ruk		mp	N-E	VU	T
Myristicaceae	*Myristica fragrans*	Sadikka	Mace, Nutmeg	mp,f	Ex		T
Myrtaceae	*Psidium cattleianum*	Jam Pera	Strawbary guava	f	IAS		T
Myrtaceae	*Psidium guajava*	Pera	Guava	mp,f	Ex		T
Myrtaceae	*Syzygium aqueum*	Wal-jambu	Water apple	mp,f	N		T

Family	Species	Sinhala Name	English name	Uses	TS	NCS	H
Myrtaceae	*Syzygium aromaticum*	Karambu	Clove	mp,f	Ex		T
Myrtaceae	*Syzygium caryophyllatum*	Heen dan		mp,f	N	LC	T
Myrtaceae	*Syzygium cumini*	Ma-Dan	Java plum	mp,f	N	LC	T
Nyctaginaceae	*Boerhavia diffusa*	Pita-sudu-pala	Red spiderling	mp	N	LC	H
Nyctaginaceae	*Bougainvillea spectabilis*	Bouganvilla		mp	Ex		S
Nymphaeaceae	*Nymphaea pubescens*	Et-olu	Water lily	mp	N	LC	Aq
Ochnaceae	*Gomphia serrata*	Go-kera		mp	N	LC	T
Olacaceae	*Olax imbricata*	Telatiya			N	NT	T
Olacaceae	*Olax zeylanica*	Mella		mp	N	LC	T
Oleaceae	*Chionanthus zeylanicus*	Dambu		mp	N	LC	S
Oleaceae	*Jasminum angustifolium*	Wal pichcha		mp	N	LC	C
Oleaceae	*Jasminum flexile*				N	LC	C
Oleaceae	*Nyctanthes arbor-tristis*	Sepalica	Coral jasmine	mp	Ex		S
Onagraceae	*Ludwigia perennis*	Piduruwella			N	LC	H
Onagraceae	*Ludwigia peruviana*	Wel karabu	Primrose	mp	IAS		S
Onagraceae	*Ludwigia sp.*				N		H
Orchidaceae	*Eulophia epidendraea*				N	LC	Or
Oxalidaceae	*Averrhoa bilimbi*	Billing	Bimlimbi cucumber	mp,t	Ex		T
Oxalidaceae	*Oxalis barrelieri*		Barrelier's woodsorrel		Ex-N		H
Pandanaceae	*Pandanus amaryllifolius*	Rampha		mp	Ex		S
Pandanaceae	***Pandanus ceylanicus***	O-keyiya	Indian sorrl	mp	N-E	VU	S
Passifloraceae	*Passiflora edulis*	Wel dodam	Passion fruit	mp,t	Ex		C
Passifloraceae	*Passiflora foetida*	Pada wel	Common Passion Flower	mp	Ex-N		C
Phyllanthaceae	*Phyllanthus debilis*	Ela pitawakka		mp	N	LC	H
Phyllanthaceae	*Phyllanthus emblica*	Nelli	Indian gooseberry	mp,t	N	VU	T
Phyllanthaceae	***Phyllanthus myrtifolius***	Gangawerella			N-E	VU	S
Phyllanthaceae	*Phyllanthus polyphyllus*	Kuratiya		mp	N	LC	S
Phyllanthaceae	*Sauropus androgynus*	Mella-Dum-Kola, Mella dumkola, Japan batu, Japanbatu	Star gooseberry		N	LC	S
Phyllanthaceae	*Aporosa cardiosperma*	Maput-Kebella		mp	N	LC	T
Phyllanthaceae	***Aporosa lanceolata***	Hin-Kebella		mp	N-E	LC	T
Phyllanthaceae	*Breynia retusa*	Wal-Murunga			N	LC	S
Phyllanthaceae	*Bridelia retusa*	Keta-Kela		mp	N,t	LC	T
Phyllanthaceae	*Flueggea leucopyrus*	Heen Katu pila	Water caltrop	mp	N	LC	S
Phyllanthaceae	*Margaritaria indica*	Maha karawu		mp	N	VU	T
Phyllanthaceae	*Pedilanthus tithymaloides*	Garunda raja	Zigzag plant	mp	Ex		S
Piperaceae	*Piper betle*	Bulath	Betel	mp	Ex,f		C
Piperaceae	*Piper nigrum*	Gam-Miris	Black pepper	mp	Ex-N		C
Piperaceae	*Piper sylvestre*	Wal-Gammiris	Cubeb	mp	N	LC	C

Family	Species	Sinhala Name	English name	Uses	TS	NCS	H
Plantaginaceae	*Scoparia dulcis*	Wal koththamalli	Sweet broom weed	mp	Ex-N		H
Poaceae	*Axonopus compressus*	Potu-tana	Carpet grass	mp	Ex-N		G
Poaceae	*Axonopus fissifolius*	Heen pothu wel	Carpet grass	mp	Ex-N		G
Poaceae	*Bambusa vulgaris*	Kaha una	Bambos	mp			G
Poaceae	*Chloris barbata*	Mayuru-tana		mp	Ex-N		G
Poaceae	*Chrysopogon aciculatus*	Tuttiri	Love grass	mp	N	LC	G
Poaceae	*Coix lacryma-jobi*	Kirindi	Job's tear	mp	N	VU	G
Poaceae	*Cynodon dactylon*	E thana	Bermuda grass	mp	N	LC	G
Poaceae	*Dactyloctenium aegyptium*	Putu-tana		mp	N	LC	G
Poaceae	*Digitaria ciliaris*	Guru-tana		mp	N	LC	G
Poaceae	*Digitaria longiflora*				N	LC	G
Poaceae	*Echinochloa colona*	Giri-tana		mp	N	LC	G
Poaceae	*Echinochloa crusgalli*	Wel-marukk	Barnyard grass	mp	N	LC	G
Poaceae	*Echinochloa stagnina*	Wel-maratu			N	LC	G
Poaceae	*Eleusine indica*	Bela-tana		mp	N	LC	G
Poaceae	*Eragrostis unioloides*				N	LC	G
Poaceae	*Imperata cylindrica*	Iluk		mp	N	LC	G
Poaceae	*Isachne globosa*	Bata-della		mp	N	LC	G
Poaceae	*Ischaemum rugosum*	Kudu-kedu		mp	N	LC	G
Poaceae	*Ischaemum timorense*	Rila-rat-tana		mp	N	LC	G
Poaceae	*Leersia hexandra*	Lev		mp	N	LC	G
Poaceae	*Leptochloa chinensis*				N	LC	G
Poaceae	***Ochlandra stridula***	Bata		mp	N-E	LC	G
Poaceae	*Oryza sativa*	Uru-vi	Rice	mp,f	Ex		G
Poaceae	*Panicum maximum*	Gini tana	Guinea grass	mp	IAS		G
Poaceae	*Paspalum conjugatum*				Ex-N		G
Poaceae	*Pennisetum polystachion*				IAS		G
Poaceae	*Saccharum officinarum*	Uk	Sugar-cane	mp	Ex		G
Poaceae	*Saccharum spontaneum*	Wal-uk	Thatch grass	mp	N	LC	G
Poaceae	*Zea mays*	Bada Iringu	Maize	mp	Ex		G
Polygonaceae	*Antigonon leptopus*		Coral vine		Ex-N		C
Pontederiaceae	*Monochoria vaginalis*	Jabara	Pickerel weed	mp	N	LC	H
Portulacaceae	*Talinum paniculatum*	Gas-niviti	Fame flower		Ex-N		H
Primulaceae	*Ardisia missionis*	Lunupan			N	LC	S
Punicaceae	*Punica granatum*	Delum	Pomergranate	mp,f	Ex		S
Rhamnaceae	*Ventilago maderaspatana*	Patambara		mp	N	LC	C
Rhamnaceae	*Zizyphus oenopila*	Hin-Eraminia	Jujube	mp	N	LC	S
Rhamnaceae	*Zizyphus rugosa*	Maha-Eraminia		mp	N	NT	S
Rhizophoraceae	*Carallia brachiata*	Dawata		mp	N	NT	T
Rubiaceae	*Coffea arabica*	Kopi	Coffee	mp,f	Ex		T
Rubiaceae	*Hedyotis fruticosa*	Weraniya		mp	N	LC	S
Rubiaceae	*Ixora coccinea*	Rath-mal	Jungle fame	mp	N	LC	S

Family	Species	Sinhala Name	English name	Uses	TS	NCS	H
Rubiaceae	*Morinda coreia*	Ahu	Morinda tree	mp	N	LC	T
Rubiaceae	*Morinda umbellata*	Kiri-wel	Common Indian mulberry	mp	N	LC	S
Rubiaceae	*Mussaenda frondosa*	Wel-Butsarana	White mussaenda	mp	N	LC	S
Rubiaceae	*Nauclea orientalis*	Bak-Mi		mp	N	LC	T
Rubiaceae	*Richardia brasiliensis*		Brazil pusley, Maxican clover		Ex-N		H
Rubiaceae	*Spermacoce assurgens*		Woodland false buttonweed		Ex-N		H
Rubiaceae	*Tarenna asiatica*	Tarana		mp	N	LC	S
Rutaceae	*Acronychia pedunculata*	Ankenda		mp	N	LC	T
Rutaceae	*Atalantia ceylanica*	Yakinaran		mp	N	LC	S
Rutaceae	*Chloroxyclon swietania*	Burutha	Satinwood	mp	N	VU	T
Rutaceae	*Glycosmis mauritiana*				N	LC	S
Rutaceae	*Glycosmis pentaphylla*	Dodan-Pana		mp	N	LC	S
Rutaceae	*Limonia acidissima*	Divul	Wood-apple	mp,f	N	LC	T
Rutaceae	*Murraya koenigii*	Karapincha	Curry leaf	mp,f	N	LC	T
Rutaceae	*Murraya paniculata*	Etteriya	Orange jessamine	mp	N	LC	T
Sapindaceae	*Allophylus cobbe*	Kobbe		mp	N	LC	S
Sapindaceae	*Cardiospermum halicacabum*	Wel penela	Ballon vine	mp	N	LC	C
Sapindaceae	*Dimocarpus longan*	Mora	Dragon eye	mp,f	N	LC	T
Sapindaceae	*Filicium decipiens*	Pihimbiya	Fern tree	mp,t	N	LC	T
Sapindaceae	*Nephelium lappaceum*	Rambutan	Rambutan	mp,f	Ex		T
Sapindaceae	*Schleichera oleosa*	Kon	Ceylon oak	mp,t	N	LC	T
Sapotaceae	*Chrysophyllum cainito*	Kos-eta-lawalu	Star apple	mp,f	Ex		T
Sapotaceae	*Chrysophyllum roxburghii*	Lawalu		mp,f	N	NT	T
Sapotaceae	*Madhuca longifolia*	Mi	South Indian Mahua	mp,t	N	NT	T
Simaroubacea	*Ailanthus triphysa*	Wal-Biling	White siris	mp	N	CR	T
Smilacaceae	*Smilax zeylanica*	Heen kabarossa	Rough bind weed	mp	N	LC	S
Solanaceae	*Solanum americanum*	Kalukammeriya	American black nightshde	mp	Ex-N		H
Solanaceae	*Solanum torvum*	Gonabatu	Turkey berry	mp	N	LC	S
Symplocaceae	*Symplocos cochinchinensis*	Bobu		mp	N	LC	T
Thymelaeaceae	*Gyrinops walla*	Walla patta	Sri Lankan Agarwood	mp	N	VU	T
Urticaceae	*Pilea microphylla*	Parippu Gas	Artillery plant		Ex-N		H
Verbanaceae	*Duranta repens*		White heliotrope	o	Ex		S
Verbenaceae	*Lantana camera*	Rata-hinguru	Common lantana	mp	IAS		S
Verbenaceae	*Stachytarpheta jamaicensis*	Balu-nakuta	Berbena		Ex-N		S
Verbenaceae	*Tectona grandis*	Thekka	Teak	mp,t	Ex		T
Vitaceae	***Cissus lonchiphylla***				N-E	NT	C
Vitaceae	*Leea indica*	Gurulla	Bandicoot berry	mp	N	LC	S
Zingiberaceae	*Alpinia calcarata*	Heen araththa	Indina ginger	mp	Ex		S

Family	Species	Sinhala Name	English name	Uses	TS	NCS	H
Zingiberaceae	*Zingiber officinale*	Inguru	Giger	mp	Ex		H

Recorded flora in different habitats found along the proposed expressway trace.

CZ - Climatic Zone, W - Found Wet zone only, I - Found Intermediate zone only, B - Found both wet and intermediate Zone

HG – Home Gardens, PF – Paddy fields, RO – Rock Outcrops and Associate Vegetation, , SV – Secondary Vegetation and Abandon Lands, RV – Riverine Vegetation (including streams), RS – Roadsides, CL – Coconut Lands, RL – Rubber Lands, OAG – Other Agriculture Lands

Family	Species	CZ	HG	PF	RO	SV	RV	RS	CL	RL	OAL
Acanthaceae	*Crossandra sp.*	B	+								
Acanthaceae	*Dipteracanthus prostratus*	B	+	+		+		+	+	+	+
Acanthaceae	*Elytraria acaulis*	B		+		+	+				
Acanthaceae	*Thunbergia grandiflora*	B	+								
Achariaceae	***Hydnocarpus venenata***	B					+				
Alismataceae	*Limnocharis flava*	B	+	+							
Amaranthaceae	*Achyranthes aspera*	B	+	+				+	+	+	+
Amaranthaceae	*Aerva lanata*	B	+						+		
Amaranthaceae	*Alternanthera sessilis*	B	+	+							
Amaranthaceae	*Amaranthus viridis*	B	+	+				+	+		
Anacardiaceae	*Anacardium occidentale*	B	+								
Anacardiaceae	*Lannea coromandelica*	B	+		+						
Anacardiaceae	*Mangifera indica*	B	+								
Anacardiaceae	*Nothopegia beddomei*	B				+	+				
Anacardiaceae	***Semicarpus nigro-viridis***	B				+	+				
Anacardiaceae	*Spondias dulcis*	B	+								
Annonaceae	*Annona muricata*	B	+								
Annonaceae	*Artabotrys zeylanicus*	B				+					
Annonaceae	*Cananga odorata*	B				+					+
Annonaceae	*Polyalthia korinti*	B				+	+				
Annonaceae	*Polyalthia longifolia*	B		+		+					
Annonaceae	*Polyalthia suberosa*	B				+					
Apiaceae	*Centella asiatica*	B	+	+				+	+	+	
Apocynaceae	*Allamanda cathartica*	B	+								
Apocynaceae	*Alstonia macrophylla*	B			+	+					
Apocynaceae	*Alstonia scholaris*	B				+					+
Apocynaceae	*Ichnocarpus frutescens*	B									+
Apocynaceae	*Pagiantha dichotoma*	B				+					
Apocynaceae	*Plumeria obusta*	B	+								
Apocynaceae	*Tabernaemontana divaricata*	B	+								
Apocynaceae	*Thevetia peruviana*	B	+								
Apocynaceae	*Dregea volubilis*	B	+								
Araceae	*Alocasia macrorrhizos*	B		+			+				
Araceae	*Anthurium anderaeanum*	B	+								
Araceae	*Colocasia esculenta*	B		+			+				
Araceae	*Lasia spinosa*	B	+	+							
Araceae	*Pothos scandens*	B				+	+		+	+	
Araceae	*Syngonium angustatum*	B	+				+				+
Araceae	*Xanthosoma sagittifolium*	B	+								
Araceae	*Lagenandra sp.*	B		+			+				
Araliaceae	*Schefflera stellata*	B	+				+				
Arecaceae	*Areca catechu*	B	+				+		+		
Arecaceae	*Calamus thwaitesii*	B				+	+				+
Arecaceae	*Caryota urens*	B	+			+	+				+
Arecaceae	*Cocos nucifera*	B	+						+		
Arecaceae	*Corypha umbraculifera*	B	+								
Arecaceae	*Elaeis guineensis*	B					+				

Family	Species	CZ	HG	PF	RO	SV	RV	RS	CL	RL	OAL
Aristolochiaceae	*Thottea siliquosa*	B				+					+
Asperagaceae	*Agave vera-cruz*	B			+						
Asteraceae	*Ageratum conyzoides*	B	+	+	+	+	+	+	+	+	
Asteraceae	*Chromolaena odorata*	B	+			+	+	+	+	+	+
Asteraceae	*Cosmos sulphureus*	B	+								
Asteraceae	*Eclipta prostrata*	B		+			+				
Asteraceae	*Elephantopus scaber*	B	+					+	+		+
Asteraceae	*Mikania cordata*	B	+	+	+	+	+	+	+	+	
Asteraceae	*Sphagneticola trilobata*	B	+	+			+		+	+	
Asteraceae	*Struchium sparganophorum*	B				+			+		
Asteraceae	*Synedrella nodiflora*	B	+			+		+			
Asteraceae	*Tridax procumbens*	B	+	+				+	+	+	
Asteraceae	*Vernonia cinerea*	B	+	+		+	+	+	+	+	+
Asteraceae	*Xanthium indicum*	B		+							
Balsaminaceae	*Hydrocera triflora*	B		+							
Balsaminaceae	*Impatiens balsamina*	B	+								
Basellaceae	*Basella alba*	B	+								
Bignoniaceae	*Oroxylum indicum*	B		+							
Bignoniaceae	*Spathodea campanulata*	W				+					+
Boraginaceae	*Cordia dichotoma*	I		+		+					
Bromeliaceae	*Ananas comosus*	B	+						+		
Cannabaceae	*Celtis philippensis*	B				+					+
Cannabaceae	*Trema orientalis*	B	+			+					+
Cannaceae	*Canna hybrids*	B	+								
Caricaceae	*Carica papaya*	B	+						+		
Cleomaceae	*Cleome viscosa*	B		+			+			+	
Clusiaceae	***Garcinia quaesita***	B	+				+				
Colchicaceae	*Gloriosa superba*	B	+								+
Combretaceae	*Terminalia arjuna*	B					+				
Combretaceae	*Terminalia catappa*	B	+								+
Commelinaceae	*Commelina benghalensis*	B		+			+		+	+	
Commelinaceae	*Commelina diffusa*	B	+	+							
Commelinaceae	*Cyanotis axillaris*	B		+							
Commelinaceae	*Cyanotis obtusa*	I			+						
Commelinaceae	*Murdannia spirata*	B		+							
Connaraceae	*Connarus monocarpus*	I		+		+	+				
Connvolvulaceae	***Argyreia populifolia***	B	+		+						
Connvolvulaceae	*Evolvulus alsinoides*	I							+		
Connvolvulaceae	*Ipomoea asarifolia*	B			+						
Connvolvulaceae	*Merremia tridentata*	B			+						
Crassulaceae	*Kalanchoe pinnata*	B	+		+						
Cucurbitaceae	*Coccinia grandis*	B	+								
Cucurbitaceae	*Momordica charantia*	B	+								+
Cyperaceae	*Cyperus alternifolius*	B		+							
Cyperaceae	*Cyperus difformis*	B		+							
Cyperaceae	*Cyperus haspan*	B		+							
Cyperaceae	*Cyperus iria*	B		+							
Cyperaceae	*Cyperus kyllingia*	B	+	+			+		+		
Cyperaceae	*Cyperus pilosus*	B		+							
Cyperaceae	*Cyperus rotundus*	B		+							
Cyperaceae	*Cyperus tenuispica*	B		+							
Cyperaceae	*Fimbristylis dichotoma*	B		+							
Cyperaceae	*Fimbristylis miliacea*	B		+							
Cyperaceae	*Fimbristylis schoenoides*	B		+							
Cyperaceae	*Pycreus polystachyos*	B		+							
Cyperaceae	*Schoenoplectus juncoides*	B		+							

Family	Species	CZ	HG	PF	RO	SV	RV	RS	CL	RL	OAL
Dilleniaceae	*Dillenia indica*	B					+				
Elaeocarpaceae	*Elaeocarpus serratus*	B	+								
Euphorbiaceae	*Acalypha wilkensiana*	B	+			+					
Euphorbiaceae	*Codiaeum variegatum*	B	+								
Euphorbiaceae	*Croton aromaticus*	B		+	+						
Euphorbiaceae	*Croton hirtus*	B	+		+						
Euphorbiaceae	*Croton laccifer*	B			+	+					+
Euphorbiaceae	*Euphorbia antiquorum*	B			+						
Euphorbiaceae	*Euphorbia heterophylla*	B	+		+	+	+	+	+	+	
Euphorbiaceae	*Euphorbia hirta*	B			+	+	+				
Euphorbiaceae	*Hevea brasiliensis*	B								+	
Euphorbiaceae	*Jatropha curcas*	B	+								
Euphorbiaceae	*Macaranga peltata*	B	+			+			+		+
Euphorbiaceae	*Mallotus philippensis*	B	+			+			+		
Euphorbiaceae	*Mallotus tetracoccus*	B				+					
Euphorbiaceae	*Manihot esculenta*	B	+				+				
Euphorbiaceae	*Ricinus communis*	B				+					
Euphorbiaceae	*Baccaurea metleyana*	W	+			+					
Fabaceae	*Acacia caesia*	B			+	+	+	+	+		
Fabaceae	*Adenanthera pavonina*	B	+			+					
Fabaceae	*Aeschynomene americana*	B	+	+							
Fabaceae	*Albizia odoratissima*	B			+	+					
Fabaceae	*Albizia saman*	B	+					+			
Fabaceae	*Alysicarpus vaginalis*	B	+	+				+			
Fabaceae	*Centrosema pubescens*	B	+		+	+		+			
Fabaceae	*Chamaecrista absus*	B		+					+	+	
Fabaceae	*Clitoria ternatea*	B	+	+							
Fabaceae	*Crotalaria pallida*	B						+	+		
Fabaceae	*Crotalaria verrucosa*	B	+					+	+		
Fabaceae	*Dalbergia pseudo-sissoo*	B		+							
Fabaceae	*Delonix regia*	B						+			+
Fabaceae	***Derris parviflora***	B				+				+	
Fabaceae	*Derris scandens*	B	+	+	+		+				
Fabaceae	*Desmodium heterocarpon*	B		+	+		+				
Fabaceae	*Desmodium triflorum*	B	+	+			+		+		+
Fabaceae	*Entada rheedii*	B					+				
Fabaceae	*Erythrina fusca*	W					+				
Fabaceae	*Gliricidia sepium*	B	+		+				+		+
Fabaceae	*Humboldtia laurifolia*	B					+				
Fabaceae	*Leucaena leucocephala*	B	+						+		
Fabaceae	*Mimosa invisa*	B	+	+					+		
Fabaceae	*Mimosa pigra*	B						+			
Fabaceae	*Mimosa pudica*	B	+	+	+			+	+	+	+
Fabaceae	*Peltophorum pterocarpum*	B						+			
Fabaceae	*Pongamia pinnata*	B					+				+
Fabaceae	*Psophocarpus tetragonolous*	B	+								+
Fabaceae	*Pueraria phaseoloides*	B							+	+	
Fabaceae	*Saraca asoka*	B					+				
Fabaceae	*Senna alata*	B	+	+				+			
Fabaceae	*Senna occidentalis*	B		+				+			
Fabaceae	*Senna spectabilis*	B	+								
Fabaceae	*Sesbania grandiflora*	B	+					+			
Fabaceae	*Tamarindus indica*	B	+						+		
Fabaceae	*Tephrosia purpurea*	B			+				+		+
Hypoxidaceae	*Curculigo orchioides*	B	+				+		+		
Lamiaceae	*Clerodendrum infortunatum*	B			+	+					+

Family	Species	CZ	HG	PF	RO	SV	RV	RS	CL	RL	OAL
Lamiaceae	*Clerodendrum quadriloculare*	B	+								
Lamiaceae	*Anisochilus carnosus*	B			+						
Lamiaceae	*Gmelina asiatica*	B			+	+					
Lamiaceae	*Hyptis suaveolens*	B			+			+	+	+	
Lamiaceae	*Leucas zeylanica*	B		+	+						
Lamiaceae	*Ocimum gratissimum*	B		+				+	+	+	
Lamiaceae	*Premna tomentosa*	B			+				+		
Lamiaceae	*Vitex altissima*	B	+		+	+	+				
Lauraceae	*Cinnamomum cassia*	B			+				+		
Lauraceae	***Cinnamomum verum***	B	+								
Lauraceae	*Litsea glutinosa*	B	+		+						
Lauraceae	***Litsea longifolia***	B				+	+				
Lauraceae	*Persea americana*	B	+								
Lecythidaceae	*Barringtonia racemosa*	B	+				+				
Lecythidaceae	*Careya arborea*	B			+				+		
Linaceae	*Hugonia ferruginea*	B			+		+				
Linaceae	*Hugonia mystax*	B			+						
Loganiaceae	*Strychnos nux-vomica*	B			+	+					
Loranthaceae	*Dendrophthoe falcata*	B			+	+			+		
Lythraceae	*Lagerstroemia speciosa*	B	+				+				
Lythraceae	*Lawsonia inermis*	B	+								
Magnoliaceae	*Michelia champaca*	B	+			+					
Malpighiaceae	*Hiptage benghalensis*	B			+	+					
Malvaceae	*Abelmoschus esculentus*	B			+						
Malvaceae	*Hibiscus furcatus*	B			+						
Malvaceae	*Hibiscus rosa-sinensis*	B	+								
Malvaceae	*Hibiscus subdariffa*	B	+		+						
Malvaceae	*Hibiscus vitifolius*	B	+		+		+				
Malvaceae	*Sida acuta*	B	+	+	+	+	+	+	+	+	+
Malvaceae	*Sida rhombifolia*	B	+	+	+	+	+	+	+	+	+
Malvaceae	*Thespesia populnea*	B	+								
Malvaceae	*Urena lobata*	B		+	+	+	+	+	+	+	+
Malvaceae	*Urena sinuata*	B	+	+	+	+	+	+	+	+	+
Malvaceae	*Berrya coridifolia*	B	+			+					
Malvaceae	*Ceiba pentandra*	B	+			+					
Malvaceae	*Durio zibethinus*	W	+								
Malvaceae	*Grewia carpinifolia*	B		+			+				
Malvaceae	*Grewia damine*	B			+	+					
Malvaceae	*Grewia orientalis*	B		+	+						
Malvaceae	*Helicteras isora*	I			+	+					
Malvaceae	*Melochia corchorifolia*	B					+	+			
Malvaceae	*Microcos paniculata*	B	+			+					
Malvaceae	*Muntingia calabura*	B	+					+			
Malvaceae	*Pterospermum suberifolium*	B			+	+					
Malvaceae	*Sterculia balanghas*	B	+			+					
Malvaceae	*Theobroma cacao*	W	+								+
Malvaceae	*Triumfetta pentandra*	B			+		+		+		
Melastomataceae	*Clidemia hirta*	B			+			+	+	+	
Melastomataceae	*Memecylon umbellatum*	B						+			
Melastomataceae	*Osbeckia aspera*	B			+				+		
Meliaceae	*Azadirachta indica*	B	+			+			+		
Meliaceae	*Cipadessa baccifera*	B			+	+					
Meliaceae	*Melia azadarach*	B	+			+			+		+
Meliaceae	*Swietenia macrophylla*	B	+		+						
Menispermaceae	*Anamirta cocculus*	B	+		+	+	+				
Menispermaceae	*Cissampelos pareira*	B	+		+			+			

Family	Species	CZ	HG	PF	RO	SV	RV	RS	CL	RL	OAL
Menyanthaceae	*Nymphoides indica*	B					+				
Moraceae	*Artocarpus heterophyllus*	B	+								
Moraceae	*Artocarpus incisus*	B	+								
Moraceae	***Artocarpus nobilis***	B	+				+				
Moraceae	*Castilla elastica*	B	+					+			
Moraceae	*Ficus benghalensis*	B					+				
Moraceae	*Ficus callosa*	B	+			+	+				
Moraceae	*Ficus elastica*	B						+			
Moraceae	*Ficus exasperata*	B						+			
Moraceae	*Ficus hispida*	B					+		+		
Moraceae	*Ficus racemosa*	B					+	+			
Moraceae	*Ficus tinctoria*	B				+					
Moraceae	*Streblus asper*	B				+	+				
Moraceae	*Streblus taxoides*	B				+	+				
Moringaceae	*Moringa oleifera*	B	+								
Muscaceae	*Musa x paradisaca*	B	+								
Myristicaceae	***Horsfieldia iryaghedhi***	W					+				
Myristicaceae	*Myristica fragrans*	W	+								
Myrtaceae	*Psidium cattleianum*	B	+								
Myrtaceae	*Psidium guajava*	B	+			+					
Myrtaceae	*Syzygium aqueum*	B	+								
Myrtaceae	*Syzygium aromaticum*	W	+								
Myrtaceae	*Syzygium caryophyllatum*	B				+	+		+		
Myrtaceae	*Syzygium cumini*	B	+				+		+		
Nyctaginaceae	*Boerhavia diffusa*	B		+				+			
Nyctaginaceae	*Bougainvillea spectabilis*	B	+								
Nymphaeaceae	*Nymphaea pubescens*	B					+				
Ochnaceae	*Gomphia serrata*	B					+				
Olacaceae	*Olax imbricata*	B					+	+			
Olacaceae	*Olax zeylanica*	B	+								
Oleaceae	*Chionanthus zeylanicus*	B			+						
Oleaceae	*Jasminum angustifolium*	B			+						
Oleaceae	*Jasminum flexile*	B			+	+					
Oleaceae	*Nyctanthes arbor-tristis*	B	+								
Onagraceae	*Ludwigia perennis*	B		+							
Onagraceae	*Ludwigia peruviana*	B		+			+				
Onagraceae	*Ludwigia sp.*	B		+							
Orchidaceae	*Eulophia epidendraea*	B			+						
Oxalidaceae	*Averrhoa bilimbi*	B	+								
Oxalidaceae	*Oxalis barrelieri*	B	+						+	+	
Pandanaceae	*Pandanus amaryllifolius*	B	+								
Pandanaceae	***Pandanus ceylanicus***	B					+				
Passifloraceae	*Passiflora edulis*	B	+								
Passifloraceae	*Passiflora foetida*	B			+	+					
Phyllanthaceae	*Phyllanthus debilis*	B						+	+	+	
Phyllanthaceae	*Phyllanthus emblica*	B	+								
Phyllanthaceae	***Phyllanthus myrtifolius***	B	+								
Phyllanthaceae	*Phyllanthus polyphyllus*	I			+	+					
Phyllanthaceae	*Sauropus androgynus*	B	+				+		+		
Phyllanthaceae	*Aporosa cardiosperma*	B				+					
Phyllanthaceae	***Aporosa lanceolata***	B				+	+				
Phyllanthaceae	*Breynia retusa*	B			+						
Phyllanthaceae	*Bridelia retusa*	B	+			+					
Phyllanthaceae	*Flueggea leucopyrus*	B	+		+	+					
Phyllanthaceae	*Margaritaria indica*	B			+	+	+				
Phyllanthaceae	*Pedilanthus tithymaloides*	B				+					

Family	Species	CZ	HG	PF	RO	SV	RV	RS	CL	RL	OAL
Piperaceae	*Piper betle*	B	+								
Piperaceae	*Piper nigrum*	B	+						+		
Piperaceae	*Piper sylvestre*	B				+	+				
Plantaginaceae	*Scoparia dulcis*	B			+		+		+		
Poaceae	*Axonopus compressus*	B	+	+	+	+	+	+	+	+	+
Poaceae	*Axonopus fissifolius*	B		+	+	+					
Poaceae	*Bambusa vulgaris*	B	+		+		+				
Poaceae	*Chloris barbata*	B				+		+			
Poaceae	*Chrysopogon aciculatus*	B	+	+					+	+	+
Poaceae	*Coix lacryma-jobi*	B		+				+			
Poaceae	*Cynodon dactylon*	B		+							
Poaceae	*Dactyloctenium aegyptium*	B		+							
Poaceae	*Digitaria ciliaris*	B		+				+			
Poaceae	*Digitaria longiflora*	B		+							
Poaceae	*Echinochloa colona*	B		+							
Poaceae	*Echinochloa crusgalli*	B		+							
Poaceae	*Echinochloa stagnina*	B		+							
Poaceae	*Eleusine indica*	B		+			+	+	+	+	+
Poaceae	*Eragrostis unioloides*	B		+				+			
Poaceae	*Imperata cylindrica*	B		+							
Poaceae	*Isachne globosa*	B		+				+			
Poaceae	*Ischaemum rugosum*	B		+					+		
Poaceae	*Ischaemum timorense*	B		+							
Poaceae	*Leersia hexandra*	B		+							
Poaceae	*Leptochloa chinensis*	B		+							
Poaceae	***Ochlandra stridula***	B	+								
Poaceae	*Oryza sativa*	B		+							
Poaceae	*Panicum maximum*	B	+	+	+	+	+	+	+	+	+
Poaceae	*Paspalum conjugatum*	B	+				+				
Poaceae	*Pennisetum polystachion*	B	+	+	+	+	+	+	+	+	+
Poaceae	*Saccharum officinarum*	B		+			+				
Poaceae	*Saccharum spontaneum*	B		+		+	+				
Poaceae	*Zea mays*	B	+	+							
Polygonaceae	*Antigonon leptopus*	B	+		+			+	+		
Pontederiaceae	*Monochoria vaginalis*	B		+							
Portulacaceae	*Talinum paniculatum*	B	+						+		
Primulaceae	*Ardisia missionis*	B				+					
Punicaceae	*Punica granatum*	B	+								
Rhamnaceae	*Ventilago maderaspatana*	B			+	+					
Rhamnaceae	*Zizyphus oenopila*	I	+		+	+	+				
Rhamnaceae	*Zizyphus rugosa*	B				+	+				
Rhizophoraceae	*Carallia brachiata*	B				+					
Rubiaceae	*Coffea arabica*	B	+						+		
Rubiaceae	*Hedyotis fruticosa*	B						+	+		
Rubiaceae	*Ixora coccinea*	B					+				
Rubiaceae	*Morinda coreia*	B					+	+			
Rubiaceae	*Morinda umbellata*	B	+						+		
Rubiaceae	*Mussaenda frondosa*	B				+	+		+		
Rubiaceae	*Nauclea orientalis*	B			+		+				
Rubiaceae	*Richardia brasiliensis*	B	+	+	+	+		+			
Rubiaceae	*Spermacoce assurgens*	B		+				+		+	
Rubiaceae	*Tarenna asiatica*	B			+		+				
Rutaceae	*Acronychia pedunculata*	B	+		+	+					
Rutaceae	*Atalantia ceylanica*	B	+			+					
Rutaceae	*Chloroxyclon swietania*	B	+								
Rutaceae	*Glycosmis mauritiana*	B				+		+			

Family	Species	CZ	HG	PF	RO	SV	RV	RS	CL	RL	OAL
Rutaceae	*Glycosmis pentaphylla*	B	+			+					
Rutaceae	*Limonia acidissima*	B	+								
Rutaceae	*Murraya koenigii*	B	+								
Rutaceae	*Murraya paniculata*	B	+			+					
Sapindaceae	*Allophylus cobbe*	B	+			+			+		
Sapindaceae	*Cardiospermum halicacabum*	B	+						+		
Sapindaceae	*Dimocarpus longan*	B	+			+					
Sapindaceae	*Filicium decipiens*	B	+								
Sapindaceae	*Nephelium lappaceum*	B	+								
Sapindaceae	*Schleichera oleosa*	B	+			+					
Sapotaceae	*Chrysophyllum cainito*	B	+								
Sapotaceae	*Chrysophyllum roxburghii*	B	+								
Sapotaceae	*Madhuca longifolia*	B	+				+				+
Simaroubacea	*Ailanthus triphysa*	I	+					+			
Smilacaceae	*Smilax zeylanica*	B			+			+			
Solanaceae	*Solanum americanum*	B	+				+	+			
Solanaceae	*Solanum torvum*	B	+						+		
Symplocaceae	*Symplocos cochinchinensis*	B				+					
Thymelaeaceae	*Gyrinops walla*	B	+			+	+				
Urticaceae	*Pilea microphylla*	B	+								
Verbanaceae	*Duranta repens*	B	+								
Verbenaceae	*Lantana camera*	B	+	+		+	+	+	+	+	+
Verbenaceae	*Stachytarpheta jamaicensis*	B	+					+	+	+	
Verbenaceae	*Tectona grandis*	B	+					+			+
Vitaceae	***Cissus lonchiphylla***	B				+	+				
Vitaceae	*Leea indica*	B				+	+				
Zingiberaceae	*Alpinia calcarata*	B	+								
Zingiberaceae	*Zingiber officinale*	B	+								

Annex 3.3.2

List of Fauna

Detailed list of Fauna (animal species) recorded along the proposed expressway trace.

The list of faunal species that may be affected as a result of the proposed project. Those recorded during the field surveys in each of the different habitats are indicated by √ whilst other species are those that have been recorded in similar habitats falling within the broader project area.
Abbreviations: TS – Taxonomic Status (N – Native, BR – Breeding Residence, E – Endemic, PE- Proposed Endemic) EX – Exotic, IN – Invasive, BR – Breeding resident, MG – Migrant, DD- Data Deficient , CS – Conservation Status (LC - Least Concerned VU – Vulnerable, NT- Near Threatened, EN-
Endangered), NF – Natural Forest, FP – Forest Plantation, Riparian strips, SF – Sparse Forest, RO – Rock Outcrops, GP – Grassy plains, PF – Paddy Fields, CO – Coconut plantations, AG – Agricultural Plantations (other than paddy and coconut) , HG – Home Gardens, AQ – Aquatic Habitats (rivers, streams and canals)

BUTTERFLIES

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG	AQ
Hesperiidae	*Pelopidas mathias*	Small Branded Swift	Thudu Iri-sariya	N	NT						√			√	√	
Hesperiidae	*Potanthus confuscius*	Tropic Dart	Gim-sara	N	LC						√			√	√	
Hesperiidae	*Potanthus pseudomaesa*	Common Dart	Hela-sara	N	VU						√					
Hesperiidae	*Suastus gremius*	Indian Palm Bob	Indu-thala Bobaya	N	LC	√	√				√				√	
Lycaenidae	*Amblypodia anita*	Purple Leafblue	Dam-path Neelaya	N	NT	√	√				√					
Lycaenidae	*Castalius rosimon*	Common pierrot	Konangiya	N	LC	√	√				√		√	√	√	
Lycaenidae	*Catochrysops strabo*	Forget me not	Sadasiya	N	LC		√	√	√		√	√	√	√	√	
Lycaenidae	*Jamides bochus*	Dark Cerulean	Anduru Seruliya	N	LC	√	√	√			√			√	√	
Lycaenidae	*Jamides celeno*	Common Cerulean	Seruliya	N	LC	√	√				√		√	√	√	
Lycaenidae	*Jamides lacteata*	Sri Lanka Milky Cerulean	Sri Lanka Ela Seruliya	E	VU	√	√							√	√	
Lycaenidae	*Lampides boeticus*	Pea Blue	Munneelaya	N	LC						√				√	
Lycaenidae	*Rathinda amor*	Monkey-puzzle	Rathinda	N	LC	√	√							√	√	
Lycaenidae	*Spalgis epeus*	Apefly	Hanuman Samanalaya	N	LC						√		√	√	√	
Lycaenidae	*Talicada nyseus*	Red Pierrot	Rathu Konangiya	N	LC						√		√	√	√	
Lycaenidae	*Zizeeria karsandra*	Dark Grass Blue	Neela Kasandra	N	LC						√			√	√	

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG	AQ
Lycaenidae	*Zizina otis*	Lesser Grass blue	Thuru-thana neelaya	N	LC		√	√	√		√	√	√	√	√	
Lycaenidae	*Zizula hylax*	Tiny Grass Blue	Heen-thana Neelaya	N	LC						√		√	√	√	
Nymphalidae	*Acraea violae*	Tawny costor	Thambily panduru- boraluwa	N	LC	√	√									
Nymphalidae	*Ariadne ariadne*	Angled Castor	Naw-Risiya	N	LC						√		√	√	√	
Nymphalidae	*Cupha erymanthis*	Rustic	Raththiya	N	LC	√									√	√
Nymphalidae	*Danaus chrysippus*	Plain tiger	Podu koti- thambiliya	N	LC	√	√				√		√	√	√	
Nymphalidae	*Danaus genutia*	Common tiger	Iri Koti-thambiliya	N	LC	√	√	√	√		√	√	√	√	√	
Nymphalidae	*Elymnias hypermnestra*	Common Palmfly	Ramba-thaliya	N	LC	√		√							√	
Nymphalidae	*Euploea core*	Common crow	Indu kakaya	N	LC	√	√	√	√			√				
Nymphalidae	*Euploea klugii*	Brown King Crow	Raja Kaka-kotithiya	N	LC						√				√	
Nymphalidae	*Euthalia aconthea*	Baron	Sitano	N	LC	√	√						√	√	√	
Nymphalidae	*Hypolimnas bolina*	Great Eggfly	Maha-siwwa	N	LC	√	√	√						√	√	
Nymphalidae	*Ideopsis similis*	Blue Glassy Tiger	Maha Nil-kotithiya	N	VU						√		√		√	
Nymphalidae	*Junonia almana*	Peacock Pansy	Mayura Pansaya	N	LC						√	√	√	√	√	
Nymphalidae	*Junonia atlites*	Grey pansy	Alu pansaya	N	LC	√	√	√							√	
Nymphalidae	*Junonia iphita*	Chocolate soldier	Miguru lewa	N	LC	√	√		√							
Nymphalidae	*Junonia lemonias*	Lemon Pansy	Pangiri Pansaya	N	LC						√		√	√	√	
Nymphalidae	*Melanitis leda*	Common Evening Brown	Gomman-guruwa	N	LC	√		√			√			√	√	
Nymphalidae	*Mycalesis mineus*	Dark-Brand Bushbrown	Anduru-lapa panduru Guruwa	N	LC	√		√			√				√	
Nymphalidae	*Mycalesis perseus*	Common Bushbrown	Panduru Guruwa	N	LC	√	√	√			√		√	√	√	
Nymphalidae	*Neptis hylas*	Common sailor	Selaruwa	N	LC	√	√	√					√	√	√	
Nymphalidae	*Neptis jumbah*	Chestnut-streaked Sailor	Wairan Selaruwa	N	LC	√		√							√	
Nymphalidae	*Orsotriaena medus*	Medus Brown	Iri Siw-mudda	N	LC			√			√				√	
Nymphalidae	*Pantoporia hordonia*	Common Lascar	Kaha Selaruwa	N	NT	√		√								
Nymphalidae	*Parantica aglea*	Glassy tiger	Palingu gomara	N	LC	√	√		√		√					
Nymphalidae	*Phalanta phalantha*	Leopard	Maha Diwi-Pulliya	N	LC						√			√	√	
Nymphalidae	*Tirumala limniace*	Blue Tiger	Neela Gomara	N	LC						√			√	√	

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG	AQ
Nymphalidae	*Tirumala septentrionis*	Dark Blue Tiger	Anduruwan Nil-kotithiya	N	NT						√			√	√	
Nymphalidae	*Ypthima ceylonica*	White four-ring	Sithiri siwwa	N	LC	√	√		√		√	√	√	√	√	
Papilionidae	*Graphium agamemnon*	Tailed Jay	Thudanga Pralapani	N	LC	√	√						√	√	√	
Papilionidae	*Pachliopta aristolochiae*	Common Rose	Sewwandiya	N	LC	√	√				√	√	√	√	√	
Papilionidae	*Pachliopta hector*	Crimson rose	Arunu sewwandiya	N	LC	√	√									
Papilionidae	*Papilio clytia*	Common Mime	Rawana Papiliya	N	LC	√	√								√	
Papilionidae	*Papilio demoleus*	Lime butterfly	Dehirisiya	N	LC	√	√									
Papilionidae	*Papilio polymnestor*	Blue mormon	Neela parindaya	N	LC		√					√			√	
Papilionidae	*Papilio polytes*	Common mormon	Wesgaththi	N	LC	√	√								√	
Papilionidae	*Troides darsius*	Sri Lanka Birdwing	Sri Lanka Maha Kurulu Piya Paliliya	E	LC	√	√								√	
Pieridae	*Appias albina*	common albatross	Dingupath samanalaya	N	LC	√	√									
Pieridae	*Appias lyncida*	Chocolate Albatross	Dumburuwan Sudana	N	LC						√			√	√	
Pieridae	*Catopsilia pomona*	Lemon emigrant	Dehi seriya	N	LC	√	√	√		√				√	√	
Pieridae	*Catopsilia pyranthe*	mottled emigrant	Lapa seriya	N	LC						√		√	√	√	
Pieridae	*Delias eucharis*	Jezebel	Pilila Risiya	N	LC	√	√	√	√	√			√	√	√	
Pieridae	*Eurema blanda*	Three-spot Grass Yellow	Thun pulli Thruna Pithaya	N	LC	√	√				√		√	√	√	
Pieridae	*Eurema brigitta*	Small Grass Yellow	Rubella Thruna pithaya	N	LC						√			√	√	
Pieridae	*Eurema hecabe*	Common grass yellow	Thruna pithaya	N	LC	√	√				√					
Pieridae	*Leptosia nina*	Psyche	Manahari	N	LC	√		√					√		√	

DRAGONFLIES

Family	Scientific Name	English Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG	AQ
Calopterygidae	*Neurobasis chinensis*	Oriental Greenwing	N	VU	√		√								
Calopterygidae	*Vestalis apicalis*	Black-tipped Flashwing	N	VU	√		√								
Chlorocyphidae	*Libellago adami*	Sri Lanka Adam's Gem	E	VU			√				√				√
Coenagrionidae	*Agriocnemis pygmaea*	Wandering Wisp	N	LC							√				√
Coenagrionidae	*Ceriagrion cerinorubellum*	Painted Waxtail	N	VU			√				√				√
Coenagrionidae	*Ceriagrion coromandelianum*	Yellow Waxtail	N	LC			√				√				√
Coenagrionidae	*Pseudagrion rubriceps*	Sri Lanka Orange-faced Sprite	N	LC	√		√				√		√		√
Libellulidae	*Acisoma panorpoides*	Asian Pintail	N	LC			√							√	√
Libellulidae	*Brachythemis contaminata*	Asian Groundling	N	LC							√		√		√
Libellulidae	*Crocothemis servilia*	Oriental Scarlet	N	LC							√				√
Libellulidae	*Diplacodes trivialis*	Blue Percher	N	LC							√				√
Libellulidae	*Neurothemis tullia*	Pied Parasol	N	LC			√				√		√		√
Libellulidae	*Orthetrum sabina*	Green Skimmer	N	LC							√			√	√
Libellulidae	*Pantala flavescens*	Wandering Glider	N	LC			√				√			√	√
Libellulidae	*Rhyothemis variegata*	Variegate Flutterer	N	LC							√			√	√
Libellulidae	*Trithemis aurora*	Crimson Dropwing	N	LC							√				√
Libellulidae	*Urothemis signata*	Scarlet Basker	N	LC			√				√		√		√
Platycnemididae	*Copera marginipes*	Yellow Featherleg	N	LC	√		√								√

FISH

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG	AQ
Adrianichthyidae	*Oryzias dancena*	Common blue eye	Handi hadaya	DD	LC											√
Bagridae	*Mystus vittatus*	Striped dwarf catfish	Iri ankutta	N	LC											√
Channidae	*Channa gachua*	Brown Snakehead	Paradal kanaya	N	LC							√				√
Channidae	*Channa punctata*	Spotted Snakehead	Mada kanaya	N	LC							√				√
Cichlidae	*Etroplus suratensis*	Green chromide	Koraliya	N	LC											√
Cichlidae	*Oreochromis mosambicus*	Tilapia	Tilapia/ Japan batta/ Batta	EX	NE											√
Cichlidae	*Oreochromis niloticus*	Tilapia	Tilapia/ Koraliya	EX	NE											√
Cobitidae	*Lepidocephalichthys thermalis*	Common Spiny Loach	Ahirava	N	LC							√				√
Cyprinidae	*Amblypharyngodon melettinus*	Silver Carplet	Soraya	N	LC							√				√
Cyprinidae	*Dawkinsia sinhala*	Sri Lankan Filamented barb	Dankola pethiya	E	LC											√
Cyprinidae	*Devarion malabaricus*	Giant Danio	Damkola saalaya	N	LC											√
Cyprinidae	*Esomus thermoicos*	Sri Lanka Flying Barb	Ravul dandiya, Thatu dandiya	E	LC							√				√
Cyprinidae	*Puntius bimaculatus*	Redside Barb	Ipili kadaya	N	LC							√				√
Cyprinidae	*Puntius kamalika*	Scarlet banded barb	Mada ipilla/ Ipili kadaya	E	EN											√
Cyprinidae	*Puntius vetticulus*	Silver barb	Bandi thiththaya	N	LC											√
Cyprinidae	Rasbora dandiya	Board line strip rasbora	dandiya	N	LC											√
Cyprinidae	*Systomus species* earlier known *Puntius sarana*	Olive barb	Sri Lanka mas pethiya	N	LC											√
Gobiidae	*Awaous melanocephalus*	Scribbled goby / Largesnout goby	Bali Weligouva	N	LC											√
Gobiidae	*Glossogobius giuris*	Bar Eyed Goby	Maha gan weligouva	N	LC											√
Heteropneustidae	*Heteropneustes fossilis*	Stinging catfish	Hunga	N	LC											√
Loricaridaedae	*Pterygoplichthys multiradiatus*	Sucker mouth cat fish	Scavenger / tank cleaner	EX	NE											√

AMPHIBIANS

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG	AQ
Bufonidae	*Duttaphrynus melanostictus*	Common house toad	Sulaba geai gemba	N	LC	√	√	√	√			√	√	√	√	
Dicroglossidae	*Euphlyctis cyanophlyctis*	Indian Skipper frog	Utpatana madiya	N	LC							√				√
Dicroglossidae	*Euphlyctis hexadactylus*	Indian Green Frog	Sayangili pala madiya	N	LC			√				√				√
Dicroglossidae	*Fejervarya syhadrensissyhadrensis*	Common paddy field frog	Vel madiya	N	LC							√				√
Dicroglossidae	*Hoplobatrachus* crassus	Jurdon's bullfrog	Jurdonge diya madiya	N	LC			√				√			√	√
Dicroglossidae	*Hoplobatrachus tigerinus*	Indian bullfrog	Indiya diya madiya	N	LC			√				√			√	√
Microhylidae	*Microhyla ornata*	Ornate narrow mouthed frog	Visithuru muva patu madiya	N	LC							√				
Microhylidae	*Microhyla rubra*	Red narrow mouthed frog	Rathu muva patu madiya	N	LC							√				
Nyctibatrachidae	*Lankanectes corrugatus*	Corrugated water frog	Vaka reli diya madiya	E	VU			√							√	√
Ranidae	*Hylarana gracilis*	Sri Lanka wood frog	Lanka diya madiya	E	LC			√							√	√
Rhacophoridae	*Polypedates cruciger*	Common hourglass tree frog	Sulabha pahimbu gas madiya	E	LC	√	√	√						√	√	
Rhacophoridae	*Polypedates maculatus*	Spotted tree frog	Pulli gas madiya	N	LC	√	√							√	√	

REPTILES

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG
Agamidae	*Calotes calotes*	Green garden lizard	Pala katussa	N	LC	√	√	√	√	√		√	√	√	√
Agamidae	*Calotes versicolor*	Common garden lizard	Gara katussa	N	LC	√	√	√	√		√	√	√	√	√
Agamidae	*Otocryptis wiegmanni*	Sri Lankan kangaroo lizard	Kala katussa	N	LC								√	√	√
Bataguridae	*Melanochelys trijuga*	Black turtle	Gal ibba	N	LC							√			
Colubridae	*Ahaetulla nasuta*	Green vine snake	ahaetulla	N	LC										√
Colubridae	*Amphiesma stolatum*	Buff striped keelback	Aharukuka	N	LC		√	√				√			√
Colubridae	*Boiga barnesii*	Barnes's cat snake	Panduru mapila	E	VU	√	√								
Colubridae	*Boiga trigonata*	Common Cat Snake	Garandi mapila	N	LC		√							√	√
Colubridae	*Chrysopelea ornata*	Ornate flying snake	Polmal karawala	N	VU								√		
Colubridae	*Coeloganthus helena*	Trinket snake	Katakaluwa	N	LC		√								√
Colubridae	*Dendralaphis tristis*	Common bronze back	Tura haldanda	N	LC		√								
Colubridae	*Lycodon aulicus*	Wolf snake, house snake	Alu radanakaya	N	LC		√							√	√
Colubridae	*Oligodon arnensis*	Common kukri snake	Arani dath ketiya	N	LC	√	√							√	√
Colubridae	*Ptyas mucosa*	Rat snake	Gerandiya	N	LC								√	√	√
Elapidae	*Bungarus caeruleus*	The common krait	Thel karawala/ Maga maruwa	N	LC	√	√	√						√	√
Elapidae	*Bungarus ceylonicus*	Sri Lanka krait	Mudu karawala	E	VU	√	√	√							
Elapidae	*Naja naja*	Cobra	Naya	N	LC	√	√	√	√			√	√	√	√
Gekkonidae	*Cnemaspis podihuna*	Dwarf day gecko	Kuda divasarihuna	E	VU	√	√								
Gekkonidae	*Hemidactylus frenatus*	Common house-gecko	Geval huna	N	LC								√		√
Natricidae	*Aspidura brachyorrhos*	Boie's roughside	Le madilla	E	VU	√	√								√
Natricidae	*Atretium schistosum*	The Olive keelback watersnake	Diyawarna	N	LC			√				√			
Natricidae	*Xenochrophis asperrimus*	Sri Lanka Keelback	Diya polonga / Diya bariya	E	LC			√				√			
Natricidae	*Xenochrophis piscator*	Checkered Keelback	Diya bariya	N	LC			√				√			
Scincidae	*Eutropis carinata*	Common skink	Sulaba hikanala	N	LC	√	√			√			√	√	√
Scincidae	*Eutropis macularia*	Bronzegreen little skink	Pingu hikanala	N	LC					√					
Scincidae	*Lankascincus fallax*	Common lankaskink	Sulaba lakhikanala	E	LC	√	√			√			√	√	√

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG
Trionychidae	*Lissemys ceylonensis*	Flapshell turtle	Kiri ibba	E	LC			√				√		√	
Varanidae	*Varanus bengalensis*	Land monitor	Talagoya	N	LC								√	√	√
Varanidae	*Varanus salvator*	Water monitor	Kabaragoya	N	LC					√					√
Viperidae	*Daboia russelii*	Russels viper	Tith polonga	N	LC	√	√						√	√	√
Viperidae	*Hypnale hypnale*	Hump nose viper	polonthelissa	N	LC								√	√	√
Viperidae	*Trimeresurus trigonocephalus*	Green pit viper	Pala polonga	E	LC	√	√	√							√

BIRDS

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG	AQ
Accipitridae	*Accipiter badius*	Shikra	Kurulugoya	N	LC		√							√	√	
Accipitridae	*Haliaeetus leucogaster*	White bellied sea eagle	Kusa alli muhudukussa	N	LC											√
Accipitridae	*Haliaster indus*	Brahminy kite	Bamunu piyakussa	N	LC	√	√	√	√	√	√	√	√	√	√	√
Accipitridae	*Ictinaetus malayensis*	Black Eagle	Kalukussa	N	LC			√								√
Accipitridae	*Spilornis cheela*	Crested Serpent Eagle	Silu Sarapakussa	N	LC								√			
Accipitridae	*Spizaetus cirrhatus*	Changeable hawk eagle	Konda rajaliya	N	LC											√
Aegithinidae	*Aegithina tiphia*	Common iora	Podu Iorawa	N	LC	√	√								√	
Alcedinidae	*Alcedo atthis*	Common Kingfisher	Mal pilihuduwa	N	LC											√
Alcedinidae	*Ceryle rudis*	Pied kingfisher	Gomara-pilihuduwa	N	LC											√
Alcedinidae	*Halcyon smyrnensis*	White-throated Kingfisher	Layasudu Madi-pilihuduwa	N	LC											√
Alcedinidae	*Pelargopsis capensis*	Stork billed King fisher	Manathudu maha pilihuduwa	N	LC											√
Anatidae	*Dendrocygna javanica*	Lesser whistling duck	Heen Thamba- seruwa	N	LC											√
Anhingidae	*Anhinga melanogaster*	Oriental Darter	Abikava	N	LC											√
Apodidae	*Apus affinis*	House Swift	Punchi Thurithaya	N	LC						√				√	
Apodidae	*Cypsiurus balasiensis*	Asian Palm Swift	Asiaa Thal-thurithaya	N	LC		√	√								
Ardeidae	*Ardea cinerea*	Grey Heron	Alu Koka	N	LC											√
Ardeidae	*Ardea purpurea*	Purple Heron	Karawal Koka	N	LC											√
Ardeidae	*Ardeola grayii*	Indian Pond Heron	Kana-koka	N	LC											√
Ardeidae	*Bubulcus ibis*	Cattle Egret	Geri-koka	N	LC							√				
Ardeidae	*Casmerodius albus*	Great Egret	Sudu maha-koka	N	LC							√				
Ardeidae	*Egretta garzetta*	Little Egret	Punchi Anu-koka	N	LC							√				
Ardeidae	*IxoNychus flavicollis*	Black Bittern	Kalu Mati-koka	N	LC											√
Ardeidae	*Mesophoyx intermedia*	Intermediate Egret	Sudu medi-kokka	N	LC			√								√

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG	AQ
Artamidae	*Artamus fuscus*	Ashy Woodswallow	Alu vanalihiniya	N	LC	√	√									
Bucerotidae	*Ocyceros gingalensis*	Sri Lanka Grey hornbill	Sri Lanka Alu Kandaththa	E	LC	√										
Campephagidae	*Tephrodornis pondicerianus*	Common wood shrike	Podu Wana- saratiththa	PE	LC		√	√								
Charadriidae	*Vanellus indicus*	Red-wattled Lapwing	Rath-yatimal Kirella	N	LC							√				
Charadriidae	*Vanellus malarbaricus*	Yellow-Wattled lapwing	Kaha-yatimal Kirella	N	LC							√				
Ciconiidae	*Anastomus oscitans*	Asian Openbill	Vivarathuduwa	N	LC							√				√
Ciconiidae	*Ciconia episcopus*	Woolly necked stork	Padili Manawa	N	LC											√
Ciconiidae	*Mycteria leucocephala*	Painted Stork	Lathuwakiya	N	LC							√				√
Cisticolidae	*Cisticola juncidis*	Zitting Cisticola	Iri Pavansariya	N	LC	√	√								√	
Cisticolidae	*Prinia inornata*	Plain Prinia	Sarala Priniya	N	LC						√					
Rallidae	*Gallicrex cinerea*	Watercock	Korawa	N	NT							√				√
Cisticolidae	*Prinia socialis*	Ashy Prinia	Alu Priniya	N	LC						√					
Columbidae	*Columba livia*	Rock Pigeon	Podu Paraviya	N	LC										√	
Strigidae	*Glaucidium radiatum*	Jungle Owlet	Wana Upabassa	N	NT		√					√			√	
Columbidae	*Streptopelia chinensis*	Spotted Dove	Alu Kobeiyya	N	LC		√	√	√						√	
Coraciidae	*Coracias benghalensis*	Indian Roller	Dumbonna	N	LC							√				
Corvidae	*Corvus levaillantii*	Large-billed Crow	Kalu Kaputa	N	LC										√	
Corvidae	*Corvus splendens*	House Crow	Kolamba Kaputa	N	LC										√	
Cuculidae	*Centropus sinensis*	Greater Coucal	Ati-kukula	N	LC										√	
Cuculidae	*Eudynamys scolopacea*	Asian Koel	Kowula	N	LC										√	
Hirundinidae	*Hirundo rustica*	Barn swallow		EX	NE							√	√	√		
Cuculidae	*Phaenicophaeus viridirostris*	Blue-faced Malkoha	Wathanil Malkoha	N	LC	√										
Ardeidae	*Ixobrychus cinnamomeus*	Cinnamon Bittern	Kurundu meti-koka	N	NT			√								√

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG	AQ
Dicaeidae	*Dicaeum erythrorhynchos*	Pale-billed Flowerpecker	Lathudu Pililichcha	N	LC	√									√	
Dicruridae	*Dicrurus caerulescens*	White-bellied Drongo	Kawuda	N	LC		√	√							√	
Estrididae	*Lonchura punctulata*	Scaly-Neasted Munia	Laya Kayuru Weekurulla	N	LC							√				
Estrididae	*Lonchura striata*	White rumped munia	Nithamba Sudu Weekurulla	N	LC							√				
Hirundinidae	*Hirundo hyperithra*	Red rumped swallow	Nithamba rathu Wahilihiniya	PE	LC										√	
Meropidae	*Merops leschenaulti*	Chestnut-headed Beeeater	Thambalahis binguharaya	N	LC							√	√			
Meropidae	*Merops orientalis*	Green Bee-eater	Punchi Binguharaya	N	LC							√				
Monarchidae	*Terpsiphone paradisi*	Asian paradise flycatcher	Asia Rahanmara	N	LC										√	
Motacillidae	*Anthus rufulus*	Paddyfield Pipit	Keth Varatichcha	N	LC							√				
Muscicapidae	*Copsychus saularis*	Oriental Magpie Robin	Polkichcha	N	LC										√	
Muscicapidae	*Saxicoloides fulicata*	Indian Robin	Indu Kalukichcha	N	LC			√							√	
Nectariniidae	*Nectarina asiatica*	Purple Sunbird	Dam Sutikka	N	LC										√	
Nectariniidae	*Nectarina zeylonica*	Purple-rumped Sunbird	Nithamba Dam Sutikka	N	LC										√	
Oriolidae	*Oriolus xanthornus*	Black-hooded Oriole	Kahakurulla	N	LC				√						√	
Passeridae	*Passer domesticus*	House sparrow	Gekurulla	N	LC										√	
Pelecanidae	*Pelecanus philippensis*	Spot-billed Pelican	Thithhota Pasthuduwa	N	LC											√
Phalacrocoracidae	*Phalacrocorax fuscicollis*	Indian Cormorant	Indu Diyakava	N	LC											√
Phalacrocoracidae	*Phalacrocorax niger*	Little Cormorant	Punchi Diyakava	N	LC											√
Phasianidae	*Gallus lafayetii*	Sri Lanka Junglefowl	Sri Lanka Wali-kukula	E	LC	√										
Phasianidae	*Pavo cristatus*	Indian Peafowl	Monara	N	LC							√			√	
Picidae	*Chrysocolaptes lucidus*	Greater flameback	Lepita Maha-karela	PE	LC		√	√								

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG	AQ
Picidae	*Dinopium benghalense*	Black-rumped Flameback	Rath-karela	N	LC		√								√	
Psittacidae	*Loriculus beryllinus*	Sri Lankan Hanging parrot	Sri Lanka Giramaliththa	E	LC								√			
Psittacidae	*Psittacula eupatria*	Alexandrine parakeet	Labu Girawa	N	LC		√	√							√	
Psittacidae	*Psittacula krameri*	Rose-ringed Parakeet	Rana Girawa	N	LC										√	
Pycnonotidae	*Pycnonotus cafer*	Red-vented Bulbul	Kondaya	N	LC		√	√					√		√	
Pycnonotidae	*Pycnonotus luteolus*	White-Nowed Bulbul	Bamasudu Kondaya	N	LC		√						√		√	
Psittacidae	*Psittacula cyanocephala*	Plum-headed Parakeet	Pandu girawa	N	NT	√	√									
Pycnonotidae	*Pycnonotus melanicterus*	Black crested bulbul	Kalu Hisasi Kondaya	PE	LC	√										
Rallidae	*Amaurornis phoenicurus*	White-breasted waterhen	Laya-sudu Korawakka	N	LC											√
Rallidae	*Gallinula chloropus*	Common Moorhen	Podu galinuwa	N	LC							√				
Rallidae	*Porphyrio porphyrio*	Purple swamp hen	Dam Medi-kithala	N	LC											√
Ramphastidae	*Megalaima haemacephala*	Copper smith	Rathlaye Kottoruwa	N	LC		√									
Ramphastidae	*Megalaima zeylanica*	Nown-headed Barbet	Polos Kottoruwa	N	LC										√	
Recurvirostridae	*Himantopus himantopus*	Black-winged Stilt	Kalupiya Ipalpawa	N	LC											√
Rhipiduridae	*Rhipidura aureola*	White-Nowed Fantail	Bama-sudu Pawanpenda	N	LC		√								√	
Strigidae	*Otus bakkamoena*	Otus bakkamoena	Karapati Kanbassa	N	LC		√					√			√	
Larridae	*Sterna nilotica*	Gull-billed Tern	Galuthudu muhudulihiniya	N	CR											√
Sturnidae	*Acridotheres tristis*	Common Myna	Mayna	N	LC								√		√	
Sturnidae	*Gracula religiosa*	Hill myna	Salalihiniya	N	LC	√							√			
Sylviidae	*Orthotomus sutorius*	Common tailor bird	Battichcha	N	LC		√								√	

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG	AQ
Threskiornithidae	*Threskiornis melanocephalus*	Black-headed Ibis	Hisakalu Dakaththa	N	LC							√				√
Scolopacidae	*Tringa glareola*	Wood sandpiper	Silawatuwa	EX	NE							√				
Scolopacidae	*Tringa hypoleucos*	Common sandpiper	Podu Silawatuwa	EX	NE							√				
Timalidae	*Chrysomma sinense*	Yellow eyed babbler	Nethkaha Thana-demalichcha	N	LC	√										
Timalidae	*Pellorneum fuscocapillum*	Sri Lanka Nown-capped Babbler	Sri Lanka Boraga-demalichcha	E	LC	√										
Timalidae	*Turdoides affinis*	Yellow-billed Babbler	Demalichcha	N	LC										√	
Zosteropidae	*Zosterops palpeNosus*	Oriental white eye	Peradigu Sithasiya	N	LC		√	√							√	

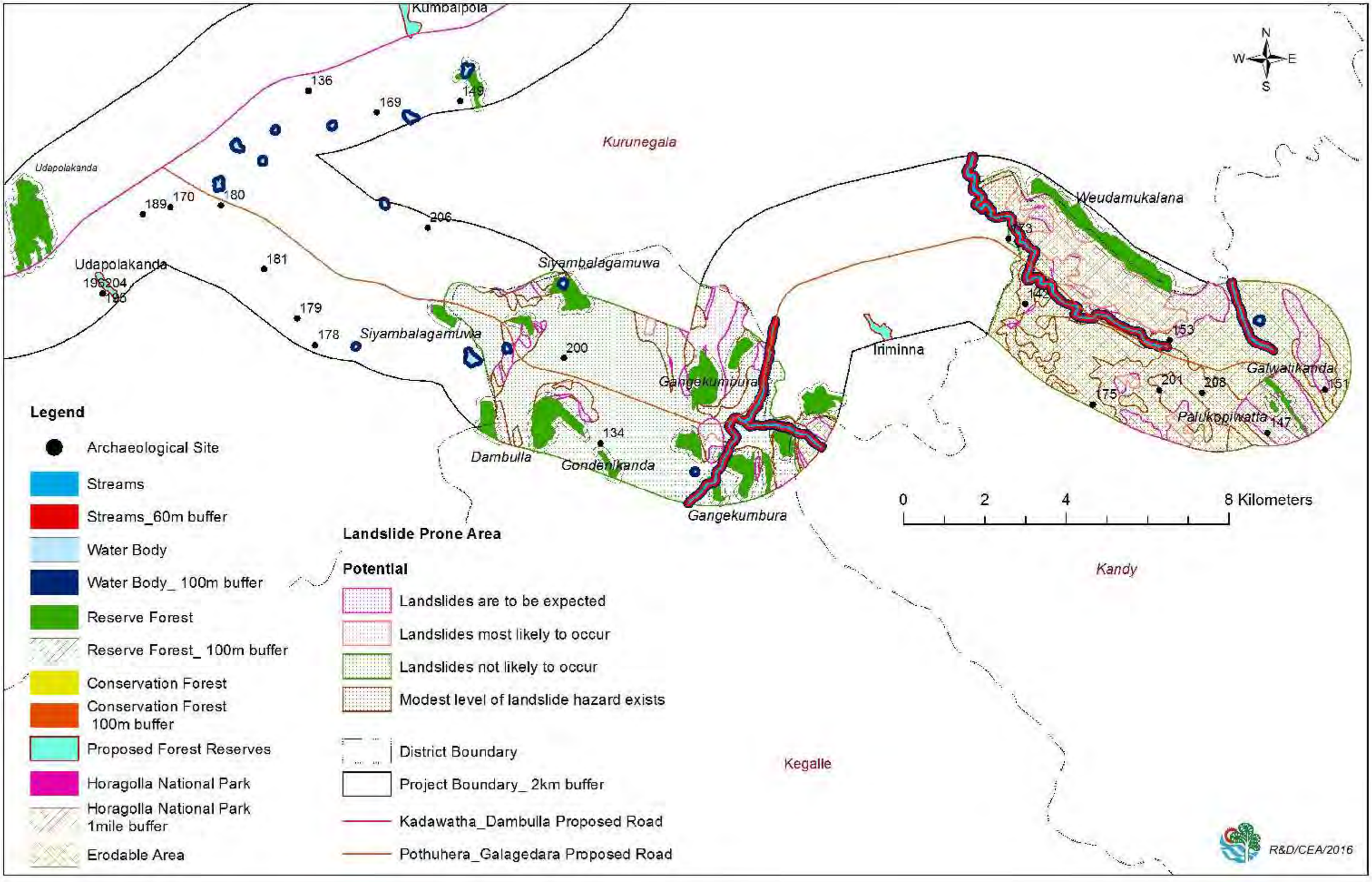
MAMMALS

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG
Canidae	*Canis aureus*	Jackal	Nariya / Hiwala	N	LC	√	√								
Cercopithecidae	*Macaca sinica*	Sri Lanka toque monkey	Sri Lanka Rilawa	E	LC		√								
Cercopithecidae	*Semnopithecus priam*	Grey langur	Eli-wdura	N	LC	√	√								
Felidae	*Prionailurus viverrinus*	Fishing cat	Handun divuya	N	EN	√	√	√							
Herpestidae	*Herpestes edwardsii*	Grey mongoose	Alu mugatiya	N	LC	√	√	√				√			
Herpestidae	*Herpestes smithii*	Ruddy mongoose	Rath Mugatiya/ Hothambuwa	N	LC	√	√								
Hystricudae	*Hystrix indica*	Indian porcpine	Iththawa	N	LC	√	√								
Leporidae	*Lepus nigricollis*	Black-naped hare	Wal Hawa	N	LC	√	√								
Lorisidae	*Loris lydekkerianus*	Grey slender loris	Alu Unahapuluwa	N	NT	√	√								
Muridae	*Bandicota bengalensis*	Mole rat	Heen Uru-miya	N	LC							√			√
Muridae	*Rattus rattus*	Common rat	Podu Ge Miya	N	LC							√			√
Mustellidae	*Lutra lutra*	Otter	Diyaballa	N	VU							√			
Pteropodidae	*Cynopterus sphinx*	Short-nosed fruit bat	Thala vavula	N	LC	√		√							
Rhinolophidae	*Rhinolophus rouxii*	Rufous horseshoe bat	Borath Ashladan - vavula	N	LC	√	√								
Sciuridae	*Funambulus palmarum*	Palm squirrel	Leena	N	NT	√	√								
Sciuridae	*Ratufa macroura*	Giant squirrel	Dandu-leena	N	NT	√	√								

Family	Scientific Name	English Name	Sinhala Name	TS	CS	NF	FP	RI	SF	RO	GP	PF	CO	AG	HG
Soricidae	*Suncus murinus*	Common musk shrew	Podhu Hik-miya	N	LC							√			
Suidae	*Sus scrofa*	WIldboar	Wal ura	N	LC	√	√								
Tragulidae	*Moschiola meminna*	Mouse deer	Sri Lanka meeminna	N	LC	√	√								
Tragulidae	*Muntiacus muntjak*	Barking deer	Olu muwa / weli muwa	N	NT	√	√								
Viveridae	*Paradoxurus hermaphoditus*	Palm cat	Uguduwa	N	LC							√			√

Annex 3.3.3

Map of Sensitive Areas


Kumbalpola
136
169
149
Kurunegala
Udapolakanda
189
170
180
206
Udapolakanda
181
196
204
195
179
178
Siyambalagamuwa
Siyambalagamuwa
200
Gangekumbura
Dambulla
134
Gondenikanda
Gangekumbura
Iriminna
Weudamukalana
73
142
153
Galwatikanda
151
75
201
208
Palukopiwatta
147
0
2
4
8 Kilometers
N
W
E
S
Kandy
Kegalle
Legend
Archaeological Site
Streams
Streams_60m buffer
Water Body
Water Body_ 100m buffer
Reserve Forest
Reserve Forest_ 100m buffer
Conservation Forest
Conservation Forest 100m buffer
Proposed Forest Reserves
Horagolla National Park
Horagolla National Park 1mile buffer
Erodable Area
Landslide Prone Area
Potential
Landslides are to be expected
Landslides most likely to occur
Landslides not likely to occur
Modest level of landslide hazard exists
District Boundary
Project Boundary_ 2km buffer
Kadawatha_Dambulla Proposed Road
Pothuhera_Galagedara Proposed Road
R&D/CEA/2016

Annex 3.4

Socio-economic Data

Table 3.14.1: Population by GN division and Gender

DSD	Local Authority	GND	GND No.	Male	Female	Total
Polgahawela	Polgahawela PS	Ginneriya	957	197	196	**393**
		Hiripathwella	886	374	384	**758**
		Dewategedara	888	136	144	**280**
		Lihinigiriya	889	232	279	**511**
		Embalanwatta	887	192	224	**416**
		Medalassa Kalugamuwa	881	203	226	**429**
		Dembagoda	959	207	219	**426**
		Thiyador watta	894	254	316	**570**
		Parabavila	893	673	719	**1392**
		Koraldoluwa	912	341	382	**723**
		Handungala	898	594	642	**1236**
		Walagammulla	907	321	346	**667**
		Polpitiya North	914	173	199	**372**
Rambukkana	Rambukkana PS	Dombemada East	1B	240	280	**520**
		Kudagama North	2A	286	340	**626**
		Kudagama South	2D	278	290	**568**
		Nattambura	3	324	401	**725**
		Kotawella	3G	561	662	**1223**
		Parape South	3F	433	550	**983**
		Kossinna	7C	310	373	**683**
		Kanugolla	3I	408	465	**873**
		Parape North	3B	322	334	**656**
Mawathagama	Mawathagama PS	Kandehena	665	192	212	**404**
		Kalugamuwa	660	440	491	**931**
		Watareka	663	625	693	**1318**
		Katugampalagedara	664	249	279	**528**
		Malandeniya	656	520	591	**1111**
		Kahapathwala North	655	379	434	**813**
		Kahapathwala	654	562	586	**1148**
Thumpane	Thumpane PS	Kannadeniya	319	239	274	**513**
		Gangodapitiya	320	233	234	**467**
		Pubbiliya	321	162	189	**351**
		Barandara	322	303	349	**652**
		Kaluwana	318	296	327	**623**
		Madagoda Pahala	406	252	304	**556**
		Gunadaha	372	409	487	**896**
		Galagedara West	301	507	536	**1043**
		Udupitiya	311	161	173	**334**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.2: Population by GN division and age

GND	0 – 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 - 94	95<	Total
Ginneriya	33	26	30	29	21	24	33	26	23	31	15	31	26	15	8	12	6	1	0	3	**393**
Hiripathwella	49	51	41	51	37	60	62	53	46	73	47	47	42	47	19	15	11	5	1	1	**758**
Dewategedara	29	20	20	14	17	28	15	20	27	18	16	14	12	8	8	8	4	2	0	0	**280**
Lihinigiriya	43	44	31	38	37	32	40	39	26	34	34	27	32	20	10	16	6	1	1	0	**511**
Embalanwatta	30	35	31	34	23	27	29	30	27	32	26	27	28	13	13	7	2	2	0	0	**416**
Medalassa Kalugamuwa	32	29	21	34	23	37	33	29	35	21	29	32	36	18	4	9	3	3	1	0	**429**
Dembagoda	25	29	28	28	30	24	35	25	25	24	41	28	34	24	11	8	6	1	0	0	**426**
Thiyador watta	55	44	50	48	34	38	46	43	47	40	29	23	27	21	14	5	4	2	0	0	**570**
Parabavila	109	122	102	103	97	78	136	88	82	102	93	99	83	40	17	19	11	6	3	2	**1392**
Koraldoluwa	53	52	45	67	33	46	61	48	59	61	62	47	33	16	15	10	10	2	3	0	**723**
Handungala	103	102	98	80	59	79	99	109	79	106	82	82	63	34	24	21	12	3	1	0	**1236**
Walagammulla	45	43	48	51	42	43	39	49	54	49	46	40	39	32	19	14	7	5	1	1	**667**
Polpitiya North	19	24	24	20	26	26	29	25	23	22	27	32	33	17	11	5	3	3	3	0	**372**
Dombemada East	25	50	34	26	29	35	44	29	27	33	39	45	35	20	27	7	9	5	1	0	**520**
Kudagama North	33	37	53	45	34	47	34	37	35	50	49	41	39	45	21	9	7	5	2	3	**626**
Kudagama South	48	46	41	40	37	41	29	44	33	40	45	41	28	18	20	7	7	3	0	0	**568**
Nattambura	76	77	55	30	31	39	55	60	48	54	39	37	42	23	24	17	7	7	2	2	**725**
Kotawella	110	134	92	72	67	85	85	85	94	70	96	57	64	52	26	17	9	6	2	0	**1223**
Parape South	115	98	80	61	54	72	75	56	58	62	64	59	53	29	21	16	4	2	2	2	**983**
Kossinna	57	65	51	52	35	42	51	44	47	48	49	43	28	20	19	13	12	4	2	1	**683**
Kanugolla	71	84	80	74	43	39	60	68	52	64	47	49	40	40	30	18	6	5	2	1	**873**
Parape North	45	47	60	43	42	35	42	47	45	50	50	46	34	22	19	16	10	2	1	0	**656**
Kandehena	18	43	29	28	26	23	24	31	25	24	37	26	21	16	13	8	4	4	4	0	**404**
Kalugamuwa	61	74	66	68	63	71	66	55	60	67	79	71	44	28	18	22	6	9	2	1	**931**
Watareka	94	88	82	103	93	115	101	67	72	98	105	89	75	49	40	21	14	6	6	0	**1318**

GND	0 – 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 - 94	95<	Total
Katugampalagedara	48	35	34	46	39	37	52	30	29	46	32	33	32	8	12	6	6	3	0	0	**528**
Malandeniya	92	68	84	85	80	98	85	64	75	65	79	78	63	41	27	20	3	2	2	0	**1111**
Kahapathwala North	79	65	53	39	70	64	75	39	49	50	64	41	46	32	25	15	5	1	1	0	**813**
Kahapathwala	92	92	82	74	74	79	72	78	90	92	89	80	47	42	29	23	8	3	2	0	**1148**
Kannadeniya	40	39	36	24	32	45	47	41	24	26	39	34	35	18	17	10	3	2	1	0	**513**
Gangodapitiya	30	28	35	21	32	38	40	30	31	30	40	33	34	23	7	10	1	1	1	2	**467**
Pubbiliya	24	25	21	20	20	36	30	23	22	21	19	37	21	13	9	6	3	1	0	0	**351**
Barandara	56	67	55	42	35	54	50	51	45	36	42	42	34	17	13	7	4	1	1	0	**652**
Kaluwana	60	43	42	38	53	40	52	32	52	48	45	34	25	23	15	10	6	2	3	0	**623**
Madagoda Pahala	45	39	51	35	24	39	45	37	31	38	41	32	26	33	15	12	9	4	0	0	**556**
Gunadaha	76	88	69	69	65	53	62	66	71	58	51	44	42	36	18	9	10	7	1	1	**896**
Galagedara West	76	97	90	73	66	47	80	84	88	78	68	44	52	33	30	23	10	3	0	1	**1043**
Udupitiya	34	27	28	18	16	26	25	16	25	18	14	28	27	14	9	5	1	1	2	0	**334**
GND	33	26	30	29	21	24	33	26	23	31	15	31	26	15	8	12	6	1	0	3	**393**
Ginneriya	49	51	41	51	37	60	62	53	46	73	47	47	42	47	19	15	11	5	1	1	**758**
Hiripathwella	29	20	20	14	17	28	15	20	27	18	16	14	12	8	8	8	4	2	0	0	**280**
Dewategedara	43	44	31	38	37	32	40	39	26	34	34	27	32	20	10	16	6	1	1	0	**511**
Lihinigiriya	30	35	31	34	23	27	29	30	27	32	26	27	28	13	13	7	2	2	0	0	**416**
Embalanwatta	32	29	21	34	23	37	33	29	35	21	29	32	36	18	4	9	3	3	1	0	**429**
Medalassa Kalugamuwa	25	29	28	28	30	24	35	25	25	24	41	28	34	24	11	8	6	1	0	0	**426**
Dembagoda	55	44	50	48	34	38	46	43	47	40	29	23	27	21	14	5	4	2	0	0	**570**
Thiyador watta	109	122	102	103	97	78	136	88	82	102	93	99	83	40	17	19	11	6	3	2	**1392**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.3: Population by ethnicity and GN divisions

DSD	Sinhalese	Sri Lankan Tamil	Indian Tamil	Sri Lankan Moor	Burgher	Other	Total
Polgahawela	57,441	888	924	5,757	20	126	**65,156**
Rambukkana	78,949	802	186	2,752	16	64	**82,769**
Mawathagama	53,915	3,069	261	7,538	67	54	**64,904**
Thumpane	34,736	254	35	2,517	51	49	**37,642**

Source: Household income and expenditure survey 2012/13, Department and census and statistics

Table 3.14.4: Population by Religion and GN divisions

DSD	Buddhist	Hindu	Islam	Roman Catholic	Other Christian	Other	Total
Polgahawela	56,492	1,285	6,013	888	475	3	**65,156**
Rambukkana	75.323	811	2,851	1,326	2,453	5	**82,769**
Mawathagama	52,637	2,711	7,694	898	951	13	**64,904**
Thumpane	34,574	191	2,610	118	148	1	**37,642**

Source: Household income and expenditure survey 2012/13, Department and census and statistics

Table 3.14.5. Housing units by type of structure and GN Division

GND	Single 1 story	Single 2 story	Single 2+ story	Attached house / Annex	Twin house	Row/ Line room	Hut/ Shanty	Total
Ginneriya	106	2	0	0	0	0	0	**108**
Hiripathwella	203	1	0	0	0	0	0	**204**
Dewategedara	72	1	0	0	0	0	0	**73**
Lihinigiriya	120	5	0	0	0	0	0	**125**
Embalanwatta	114	2	0	0	0	0	1	**117**
Medalassa Kalugamuwa	110	3	0	0	0	0	0	**113**
Dembagoda	116	1	0	0	0	0	1	**118**
Thiyador watta	149	0	0	0	0	0	4	**153**
Parabavila	282	71	1	2	0	0	7	**363**
Koraldoluwa	198	7	0	0	0	0	1	**206**
Handungala	303	18	0	0	0	0	0	**321**
Walagammulla	181	3	0	0	0	0	0	**184**
Polpitiya North	101	4	0	0	0	0	0	**105**
Dombemada East	138	5	0	0	0	0	0	**143**
Kudagama North	164	13	0	0	0	0	0	**177**
Kudagama South	129	11	0	0	0	0	0	**140**
Nattambura	192	4	0	0	0	0	0	**196**
Kotawella	300	14	0	0	0	0	2	**316**
Parape South	262	12	0	0	0	1	4	**279**
Kossinna	166	11	0	0	0	0	0	**177**
Kanugolla	215	20	1	3	0	0	0	**239**
Parape North	162	12	2	0	0	0	0	**176**
Kandehena	113	2	0	0	0	0	0	**115**
Kalugamuwa	248	2	0	0	0	5	7	**262**
Watareka	335	20	0	0	0	1	0	**356**
Katugampalagedara	146	2	0	0	0	0	0	**148**
Malandeniya	289	9	0	0	0	8	2	**308**
Kahapathwala North	170	6	0	0	4	53	2	**235**
Kahapathwala	310	12	0	0	4	0	0	**326**
Kannadeniya	123	11	0	2	2	0	3	**141**
Gangodapitiya	129	9	0	0	0	0	0	**138**
Pubbiliya	97	4	0	0	0	0	3	**104**
Barandara	167	9	0	0	0	0	0	**176**
Kaluwana	163	8	0	0	0	0	0	**171**
Madagoda Pahala	123	15	1	0	0	0	0	**139**
Gunadaha	203	22	0	0	0	0	2	**227**
Galagedara West	184	53	2	12	7	3	3	**264**
Udupitiya	72	5	0	0	0	0	1	**78**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.6. Population (5 years and over) by educational attainment and GN division

GND	Primary	Secondary	G.C.E. (O/L)	G.C.E. (A/L)	Degree and above	No Schooling	Total
Ginneriya	81	111	92	59	5	12	**360**
Hiripathwella	123	283	141	126	27	9	**709**
Dewategedara	55	97	49	32	14	4	**251**
Lihinigiriya	78	81	154	129	21	5	**468**
Embalanwatta	79	127	95	70	5	10	**386**
Medalassa Kalugamuwa	77	184	62	51	10	13	**397**
Dembagoda	61	169	93	56	13	9	**401**
Thiyador watta	113	307	58	11	1	25	**515**
Parabavila	213	477	224	265	83	21	**1283**
Koraldoluwa	112	248	173	96	22	19	**670**
Handungala	187	462	220	200	38	26	**1133**
Walagammulla	108	267	121	95	18	13	**622**
Polpitiya North	64	134	73	63	11	8	**353**
Dombemada East	97	106	144	113	29	6	**495**
Kudagama North	75	232	138	109	36	3	**593**
Kudagama South	106	225	81	72	24	12	**520**
Nattambura	127	194	167	120	29	12	**649**
Kotawella	278	358	264	165	17	31	**1113**
Parape South	241	423	86	74	12	32	**868**
Kossinna	149	253	109	86	12	17	**626**
Kanugolla	214	329	109	89	22	39	**802**
Parape North	133	241	106	83	25	23	**611**
Kandehena	108	166	62	24	5	21	**386**
Kalugamuwa	225	397	121	72	18	37	**870**
Watareka	228	472	241	191	71	21	**1224**
Katugampalagedara	128	183	90	53	13	13	**480**
Malandeniya	213	507	134	102	40	23	**1019**
Kahapathwala North	202	327	86	66	12	41	**734**
Kahapathwala	224	406	200	163	36	27	**1056**
Kannadeniya	110	179	83	60	25	16	**473**
Gangodapitiya	95	157	81	67	25	12	**437**
Pubbiliya	92	148	35	33	6	13	**327**
Barandara	182	296	43	34	11	30	**596**
Kaluwana	131	244	95	44	6	43	**563**
Madagoda Pahala	98	170	122	92	18	11	**511**
Gunadaha	150	285	176	166	30	13	**820**
Galagedara West	150	304	236	216	48	13	**967**
Udupitiya	54	83	86	61	7	9	**300**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.7. Households by ownership of housing units

GND	Owned by a household member	Rent/ Lease Government owned	Rent/ Lease Privately owned	Rent free occupied	Encroached	Other	Total
Ginneriya	103	1	3	1	0	0	**108**
Hiripathwella	199	0	4	0	0	2	**205**
Dewategedara	62	0	1	10	0	0	**73**
Lihinigiriya	121	0	3	0	0	4	**128**
Embalanwatta	115	1	1	0	0	2	**119**
Medalassa Kalugamuwa	105	1	0	6	1	0	**113**
Dembagoda	115	0	0	1	0	3	**119**
Thiyador watta	152	0	2	0	0	0	**154**
Parabavila	335	0	17	7	1	8	**368**
Koraldoluwa	183	1	1	24	0	1	**210**
Handungala	305	1	7	5	0	4	**322**
Walagammulla	183	0	2	0	0	0	**185**
Polpitiya North	89	0	0	15	0	1	**105**
Dombemada East	138	0	0	1	0	4	**143**
Kudagama North	173	0	0	4	0	0	**177**
Kudagama South	137	1	0	2	0	0	**140**
Nattambura	193	0	0	3	0	0	**196**
Kotawella	309	0	2	7	2	0	**320**
Parape South	251	3	0	29	0	4	**287**
Kossinna	151	13	1	12	0	0	**177**
Kanugolla	223	13	1	0	0	7	**244**
Parape North	167	0	10	0	0	0	**177**
Kandehena	100	1	0	0	0	17	**118**
Kalugamuwa	258	1	1	1	0	7	**268**
Watareka	351	2	4	0	0	1	**358**
Katugampalagedara	149	1	2	0	0	0	**152**
Malandeniya	299	2	7	0	0	1	**309**
Kahapathwala North	169	55	15	1	0	0	**240**
Kahapathwala	311	2	10	4	0	1	**328**
Kannadeniya	129	0	2	10	0	0	**141**
Gangodapitiya	139	1	0	0	0	1	**141**
Pubbiliya	100	0	3	1	0	0	**104**
Barandara	134	2	0	37	4	0	**177**
Kaluwana	153	1	3	19	0	0	**176**
Madagoda Pahala	122	0	3	19	0	0	**144**
Gunadaha	216	1	13	0	0	0	**230**
Galagedara West	206	11	21	22	6	1	**267**
Udupitiya	55	7	4	8	4	0	**78**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.8. Housing units by principal materials of construction of Floor and GN Division

GND	Cement	Tile/ Granite	Mud	Concrete	Other	Total
Ginneriya	96	5	4	3	0	**108**
Hiripathwella	174	11	7	12	0	**204**
Dewategedara	53	3	10	7	0	**73**
Lihinigiriya	104	7	5	9	0	**125**
Embalanwatta	86	5	12	13	1	**117**
Medalassa Kalugamuwa	94	1	10	8	0	**113**
Dembagoda	84	7	12	14	1	**118**
Thiyador watta	100	8	8	37	0	**153**
Parabavila	212	80	14	55	2	**363**
Koraldoluwa	150	12	22	22	0	**206**
Handungala	232	38	9	41	1	**321**
Walagammulla	152	10	7	13	2	**184**
Polpitiya North	91	3	5	6	0	**105**
Dombemada East	126	6	8	3	0	**143**
Kudagama North	119	24	18	15	1	**177**
Kudagama South	113	6	16	5	0	**140**
Nattambura	140	20	20	16	0	**196**
Kotawella	239	28	15	29	5	**316**
Parape South	208	17	23	18	13	**279**
Kossinna	128	13	10	26	0	**177**
Kanugolla	177	27	19	16	0	**239**
Parape North	148	8	11	1	8	**176**
Kandehena	102	0	9	1	3	**115**
Kalugamuwa	209	6	36	10	1	**262**
Watareka	266	39	19	28	4	**356**
Katugampalagedara	130	3	8	6	1	**148**
Malandeniya	229	12	23	39	5	**308**
Kahapathwala North	173	1	31	30	0	**235**
Kahapathwala	268	15	34	8	1	**326**
Kannadeniya	117	1	4	14	5	**141**
Gangodapitiya	109	8	7	10	4	**138**
Pubbiliya	80	2	13	8	1	**104**
Barandara	139	9	24	3	1	**176**
Kaluwana	134	3	26	5	3	**171**
Madagoda Pahala	110	14	8	7	0	**139**
Gunadaha	165	28	4	27	3	**227**
Galagedara West	208	40	6	4	6	**264**
Udupitiya	65	6	1	3	3	**78**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.9. Housing units by principal materials of construction of Roof and GN Divisions

GND	Tile	Asbestos	Concrete	Zink Aluminum Sheet	Metal Sheet	Cadjan/ Palmyragh/ Straw	Other	Total
Ginneriya	94	4	2	4	3	1	0	**108**
Hiripathwella	184	11	2	0	6	1	0	**204**
Dewategedara	61	2	1	0	7	2	0	**73**
Lihinigiriya	111	7	1	0	5	1	0	**125**
Embalanwatta	95	10	0	1	9	2	0	**117**
Medalassa Kalugamuwa	83	16	1	1	10	2	0	**113**
Dembagoda	84	21	1	0	9	3	0	**118**
Thiyador watta	114	22	0	0	15	2	0	**153**
Parabavila	223	108	18	0	12	1	1	**363**
Koraldoluwa	162	26	3	1	11	2	1	**206**
Handungala	231	73	4	0	11	2	0	**321**
Walagammulla	147	24	0	1	11	1	0	**184**
Polpitiya North	91	6	1	0	5	2	0	**105**
Dombemada East	121	14	0	0	6	2	0	**143**
Kudagama North	137	20	2	0	18	0	0	**177**
Kudagama South	111	11	1	0	16	1	0	**140**
Nattambura	135	41	2	6	8	4	0	**196**
Kotawella	247	34	11	0	23	1	0	**316**
Parape South	227	32	6	0	8	6	0	**279**
Kossinna	122	42	5	0	7	1	0	**177**
Kanugolla	174	42	8	2	11	2	0	**239**
Parape North	142	15	3	0	15	1	0	**176**
Kandehena	97	8	0	1	7	2	0	**115**
Kalugamuwa	210	25	0	0	26	1	0	**262**
Watareka	279	52	6	1	17	1	0	**356**
Katugampalagedara	112	22	0	0	14	0	0	**148**
Malandeniya	193	70	3	0	39	3	0	**308**
Kahapathwala North	98	54	1	44	37	1	0	**235**
Kahapathwala	235	52	3	4	29	3	0	**326**
Kannadeniya	107	21	2	2	9	0	0	**141**
Gangodapitiya	104	24	2	3	5	0	0	**138**
Pubbiliya	62	23	3	0	16	0	0	**104**
Barandara	105	47	4	5	15	0	0	**176**
Kaluwana	102	57	1	1	10	0	0	**171**
Madagoda Pahala	63	54	10	0	12	0	0	**139**
Gunadaha	54	122	40	0	11	0	0	**227**
Galagedara West	92	141	17	3	9	2	0	**264**
Udupitiya	30	34	2	0	12	0	0	**78**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.10. Housing units by principal materials of construction of Walls and GN Division.

GND	Brick	Cement block / Stone	Cabook	Soil bricks	Mud	Cadjan/ Palmyrah	Plank / Metal Sheet	Other	Total
Ginneriya	102	2	0	0	4	0	0	0	**108**
Hiripathwella	197	2	0	1	3	0	1	0	**204**
Dewategedara	65	1	0	0	7	0	0	0	**73**
Lihinigiriya	118	1	0	1	3	0	2	0	**125**
Embalanwatta	106	1	0	0	10	0	0	0	**117**
Medalassa Kalugamuwa	101	2	0	1	9	0	0	0	**113**
Dembagoda	103	2	0	4	8	0	1	0	**118**
Thiyador watta	102	35	0	5	7	1	3	0	**153**
Parabavila	313	40	0	2	5	0	3	0	**363**
Koraldoluwa	191	3	0	0	11	0	0	1	**206**
Handungala	279	26	1	3	9	0	1	2	**321**
Walagammulla	175	2	0	0	5	0	1	1	**184**
Polpitiya North	98	1	0	0	5	0	1	0	**105**
Dombemada East	126	10	0	0	7	0	0	0	**143**
Kudagama North	156	9	0	0	10	0	2	0	**177**
Kudagama South	120	4	0	0	14	0	2	0	**140**
Nattambura	179	4	0	1	11	0	1	0	**196**
Kotawella	291	7	0	5	10	0	2	1	**316**
Parape South	200	34	0	35	9	0	1	0	**279**
Kossinna	151	14	0	5	6	0	1	0	**177**
Kanugolla	202	13	0	6	18	0	0	0	**239**
Parape North	122	22	0	15	17	0	0	0	**176**
Kandehena	103	1	0	7	4	0	0	0	**115**
Kalugamuwa	226	9	1	2	23	0	0	1	**262**
Watareka	311	20	0	2	22	1	0	0	**356**
Katugampalagedara	122	8	0	3	15	0	0	0	**148**
Malandeniya	253	28	0	5	21	0	1	0	**308**
Kahapathwala North	143	50	0	7	34	0	1	0	**235**
Kahapathwala	270	16	0	4	36	0	0	0	**326**
Kannadeniya	114	16	0	2	9	0	0	0	**141**
Gangodapitiya	126	7	0	1	4	0	0	0	**138**
Pubbiliya	62	31	0	0	9	0	2	0	**104**
Barandara	140	16	0	4	13	0	3	0	**176**
Kaluwana	151	2	2	3	13	0	0	0	**171**
Madagoda Pahala	115	14	0	1	8	0	1	0	**139**
Gunadaha	162	57	0	1	6	0	1	0	**227**
Galagedara West	235	13	2	4	6	3	0	1	**264**
Udupitiya	59	8	0	2	9	0	0	0	**78**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.11. Housing units by type of unit and GN Division

GND	Permanent	Semi-Permanent	Improvised	Total
Ginneriya	100	8	0	**108**
Hiripathwella	193	10	1	**204**
Dewategedara	62	11	0	**73**
Lihinigiriya	117	7	1	**125**
Embalanwatta	97	20	0	**117**
Medalassa Kalugamuwa	98	15	0	**113**
Dembagoda	101	16	1	**118**
Thiyador watta	135	16	2	**153**
Parabavila	338	24	1	**363**
Koraldoluwa	178	28	0	**206**
Handungala	300	21	0	**321**
Walagammulla	166	18	0	**184**
Polpitiya North	97	7	1	**105**
Dombemada East	131	12	0	**143**
Kudagama North	151	24	2	**177**
Kudagama South	117	21	2	**140**
Nattambura	168	28	0	**196**
Kotawella	280	35	1	**316**
Parape South	238	41	0	**279**
Kossinna	157	20	0	**177**
Kanugolla	211	28	0	**239**
Parape North	149	27	0	**176**
Kandehena	102	13	0	**115**
Kalugamuwa	210	52	0	**262**
Watareka	317	38	1	**356**
Katugampalagedara	124	24	0	**148**
Malandeniya	248	59	1	**308**
Kahapathwala North	170	64	1	**235**
Kahapathwala	270	56	0	**326**
Kannadeniya	127	14	0	**141**
Gangodapitiya	127	11	0	**138**
Pubbiliya	85	17	2	**104**
Barandara	144	31	1	**176**
Kaluwana	138	33	0	**171**
Madagoda Pahala	123	15	1	**139**
Gunadaha	211	16	0	**227**
Galagedara West	243	21	0	**264**
Udupitiya	63	15	0	**78**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.12 : Occupational pattern of household heads

Occupational Category	Frequency	%
Farming Own Land	56	18
Agricultural Labour	2	0.6
Non-Agriculture Labour (Skilled)	27	8.7
Non-Agriculture Labour (Unskilled)	9	2.9
Animal Husbandry	3	1
Commercial Activities	26	8.4
Government Services/ Executive	4	1.3
Government Services/ Other Grades	21	6.8
Private Sector/ Other Grades	19	6.1
Armed Forces	12	3.9
Police, Home guard/ Private Security Services	5	1.6
Housewife	19	6.1
Retired Person	43	13.8
Unemployed	6	1.9
Other	59	19
Total	**311**	**100**

Source: SIA Data

Table 3.14.13 : Occupational Pattern of Household Member of SIA

Occupational Category	Frequency	%
Farming Own Land	75	6
Agricultural Labour	10	0.8
Non-Agriculture Labour (Skilled)	53	4.3
Non-Agriculture Labour (Unskilled)	21	1.7
Animal Husbandry	4	0.3
Commercial Activities	37	3
Government Services/ Executive	13	1
Government Services/ Other Grades	76	6.1
Private Sector/ Executive	2	0.2
Private Sector/ Other Grades	66	5.3
Armed Forces	33	2.6
Police, Homeguard/ Private Security Services	11	0.9
Housewife	209	16.8
Retired Person	64	5.1
Student	279	22.4
Child (0-5 Age)	91	7.3
Unemployed	76	6.1
Other	126	10.1
Total	**1246**	**100**

Source: SIA Data

Table 3.14.14. Population aged 15 years and above by GN division and economic activity status

DSD	Local Authority	GND	Employed	Unemployed	Economically not Active	Total
Polgahawela	Polgahawela PS	Ginneriya	101	19	184	**304**
		Hiripathwella	280	43	294	**617**
		Dewategedara	110	3	98	**211**
		Lihinigiriya	142	17	234	**393**
		Embalanwatta	122	12	186	**320**
		Medalassa Kalugamuwa	175	17	155	**347**
		Dembagoda	146	12	186	**344**
		Thiyador watta	188	2	231	**421**
		Parabavila	535	43	481	**1059**
		Koraldoluwa	258	16	299	**573**
		Handungala	432	32	469	**933**
		Walagammulla	196	11	324	**531**
		Polpitiya North	140	14	151	**305**
Rambukkana	Rambukkana PS	Dombemada East	169	34	208	**411**
		Kudagama North	222	16	265	**503**
		Kudagama South	228	14	191	**433**
		Nattambura	262	21	234	**517**
		Kotawella	421	19	447	**887**
		Parape South	416	21	253	**690**
		Kossinna	247	7	256	**510**
		Kanugolla	322	12	304	**638**
		Parape North	289	13	202	**504**
Mawathagama	Mawathagama PS	Kandehena	147	12	155	**314**
		Kalugamuwa	355	17	358	**730**
		Watareka	486	32	536	**1054**
		Katugampalagedara	218	16	177	**411**
		Malandeniya	393	38	436	**867**
		Kahapathwala North	293	21	302	**616**
		Kahapathwala	412	14	456	**882**
Thumpane	Thumpane PS	Kannadeniya	181	9	208	**398**
		Gangodapitiya	183	26	165	**374**
		Pubbiliya	201	10	70	**281**
		Barandara	320	5	149	**474**
		Kaluwana	291	9	178	**478**
		Madagoda Pahala	201	12	208	**421**
		Gunadaha	355	16	292	**663**
		Galagedara West	415	10	355	**780**
		Udupitiya	128	11	106	**245**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.15 : Communication Instruments and Appliances Available among the Sample Community

Instrument	Available		Not Available	
	Frequency	Percent	Frequency	Percent
Land phone	153	48.90	160	51.10
Mobile phone	266	85.00	47	15.00
Internet facility	28	8.90	285	91.00
IT-computer	64	20.40	249	79.50
TV	290	92.70	23	7.30
Radio	190	60.70	123	39.30
Satellite TV cable	18	5.80	295	94.20
DVD player	113	36.10	200	63.90
Play Station	4	1.30	309	98.70
Email	14	4.50	299	95.50
News Papers	169	54.00	144	46.00
Journals	74	23.60	239	76.30
Hi-fi Setup	4	1.30	309	98.70
Home theater	1	0.30	312	99.70
Postal services	131	41.90	182	58.10

Source: SIA Data

Table 3.14.16: Mean household income and expenditure

District	Income	Expenditure
Sri Lanka	**45,878**	**30,814**
Kurunegala	43,624	29,286
Kegalle	37,665	28,524
Kandy	43,138	30,371

Source: Household income and expenditure survey 2012/13, Department and census and statistics

Table 3.14.17: Monthly Family Income among SIA Sample

Category Rs.	Frequency	Percent
Below 5000	4	1.3
5001-7500	1	0.3
7501-10000	4	1.3
10001-15000	28	9.3
15001-25000	71	23.6
25001-50000	116	38.5
50001-100000	60	19.9
100001-200000	17	5.6
Total	**301**	**100**

Source: SIA Data

Table 3.14.18: Family Monthly Expenditure among SIA Sample

Category Rs.	Frequency	Percent
Below 5000	4	1.33
5001-7500	1	0.33
7501-10000	9	2.99
10001-15000	27	8.97
15001-25000	75	24.92
25001-50000	125	41.53
50001-100000	46	15.28
100001-200000	14	4.65
Total	**301**	**100**

Source: SIA Data

Table 3.14.19: Infrastructure Facilities- Access Roads

Category	Frequency	Percent
No Road	1	0.3
Footpath (width less than 5 feet)	63	20.1
Gravel Road	93	29.7
Concreted Road	82	26.2
Tar Road	60	19.2
Carpet Road	6	1.9
Public Road	8	2.6
Total	**313**	**100**

Source: SIA Data

Table 3.14.20: Infrastructure facilities- Quality of Access Roads

Category	**Frequency**	**Percent**
Very Good	13	4.2
Good	133	42.5
Normal	104	33.2
Bad	54	17.3
Very Bad	9	2.9
Total	**313**	**100**

Source: SIA Data

Table 3.14.21. Households by source of drinking water and GN Division

GND	Protected well within premises	Protected well outside premises	Unprotected well	Tap within unit (main line)	Tap within premises but outside unit (main line)	Tap outside premises (main line)	Rural water projects	Tube well	Other	Total
Ginneriya	74	27	4	1	0	0	2	0	0	**108**
Hiripathwella	131	37	14	17	4	1	1	0	0	**205**
Dewategedara	38	31	4	0	0	0	0	0	0	**73**
Lihinigiriya	100	24	0	0	2	0	0	2	0	**128**
Embalanwatta	85	28	3	1	0	0	0	2	0	**119**
Medalassa Kalugamuwa	75	25	10	0	1	0	0	2	0	**113**
Dembagoda	81	17	6	0	3	3	0	9	0	**119**
Thiyador watta	25	47	13	56	10	3	0	0	0	**154**
Parabavila	264	83	5	8	1	0	0	5	2	**368**
Koraldoluwa	140	53	16	0	1	0	0	0	0	**210**
Handungala	181	72	35	1	0	0	32	1	0	**322**
Walagammulla	58	49	47	2	3	0	23	2	1	**185**
Polpitiya North	19	32	11	42	1	0	0	0	0	**105**
Dombemada East	97	32	14	0	0	0	0	0	0	**143**
Kudagama North	79	47	39	0	0	0	12	0	0	**177**
Kudagama South	80	53	5	0	0	0	0	2	0	**140**
Nattambura	140	47	5	1	0	0	0	2	1	**196**
Kotawella	183	81	18	0	1	2	34	0	1	**320**
Parape South	94	107	69	0	0	0	8	0	9	**287**
Kossinna	107	57	13	0	0	0	0	0	0	**177**
Kanugolla	99	141	2	0	0	0	2	0	0	**244**
Parape North	52	48	0	13	22	14	28	0	0	**177**
Kandehena	43	24	4	0	2	3	42	0	0	**118**
Kalugamuwa	114	131	1	0	3	19	0	0	0	**268**
Watareka	173	82	10	11	2	1	78	0	1	**358**
Katugampalagedara	61	80	6	4	0	1	0	0	0	**152**
Malandeniya	141	97	48	0	7	3	13	0	0	**309**
Kahapathwala North	68	104	4	16	5	22	19	2	0	**240**
Kahapathwala	193	91	23	2	4	1	0	1	13	**328**
Kannadeniya	61	66	7	1	0	0	6	0	0	**141**
Gangodapitiya	79	22	2	1	0	4	12	21	0	**141**
Pubbiliya	32	55	12	0	0	0	3	2	0	**104**
Barandara	41	37	4	0	0	3	73	18	1	**177**
Kaluwana	42	123	11	0	0	0	0	0	0	**176**
Madagoda Pahala	63	69	3	0	0	1	0	8	0	**144**
Gunadaha	94	24	9	51	25	10	0	7	10	**230**
Galagedara West	32	12	5	148	54	4	8	1	3	**267**
Udupitiya	7	7	2	42	0	0	16	4	0	**78**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.22: Infrastructure Facilities- Source of Water

Category	Frequency	Percent
NWSDB	37	11.8
Well Water	264	84.3
Tube Well	7	2.2
Public Well	4	1.3
Water Stream	1	0.3
Total	313	100

Source: SIA Data

Table 3.14.24: Infrastructure Facilities- Source of Energy (For Cooking)

Category	Frequency	Percent
LP Gas	12	3.8
Bio Gas	4	1.3
Firewood	295	94.2
Electricity	2	0.6
Total	313	100

Source: SIA Data

Table 3.14.26: Infrastructure facilities: Source of Power Supply (For illumination)

Category	Frequency	Percent
National Grid	307	98.1
Generator	4	1.3
Kerosene Oil	2	0.6
Total	313	100

Source: SIA Data

Table 3.14.23. Principle type of cooking fuel

Source: Census of Population and Housing 2012, Department of census and statistics

GND	Fire wood	Kerosene	Gas	Electricity	Other	Total
Ginneriya	105	0	3	0	0	**108**
Hiripathwella	203	0	2	0	0	**205**
Dewategedara	70	0	3	0	0	**73**
Lihinigiriya	124	0	4	0	0	**128**
Embalanwatta	119	0	0	0	0	**119**
Medalassa Kalugamuwa	110	0	3	0	0	**113**
Dembagoda	115	1	2	0	1	**119**
Thiyador watta	145	0	6	0	0	**154**
Parabavila	291	0	77	0	0	**368**
Koraldoluwa	209	0	1	0	0	**210**
Handungala	299	0	21	1	1	**322**
Walagammulla	179	0	6	0	0	**185**
Polpitiya North	105	0	0	0	0	**105**
Dombemada East	136	0	6	1	0	**143**
Kudagama North	171	0	6	0	0	**177**
Kudagama South	132	0	8	0	0	**140**
Nattambura	189	0	7	0	0	**196**
Kotawella	318	1	1	0	0	**320**
Parape South	287	0	0	0	0	**287**
Kossinna	175	0	2	0	0	**177**
Kanugolla	240	0	4	0	0	**244**
Parape North	175	0	2	0	0	**177**
Kandehena	118	0	0	0	0	**118**
Kalugamuwa	264	0	3	1	0	**268**
Watareka	351	0	7	0	0	**358**
Katugampalagedara	152	0	0	0	0	**152**
Malandeniya	304	0	5	0	0	**309**
Kahapathwala North	236	0	4	0	0	**240**
Kahapathwala	319	0	9	0	0	**328**
Kannadeniya	139	0	2	0	0	**141**
Gangodapitiya	136	0	5	0	0	**141**
Pubbiliya	101	0	2	0	1	**104**
Barandara	170	6	1	0	0	**177**
Kaluwana	175	0	1	0	0	**176**
Madagoda Pahala	134	0	10	0	0	**144**
Gunadaha	193	0	35	1	1	**230**
Galagedara West	183	1	83	0	0	**267**
Udupitiya	63	0	15	0	0	**78**

Table 3.14.25. Principal type of lighting

GND	Electricity - National Electricity Network	Kerosene	Solar Power	Other	Total
Ginneriya	101	7	0	0	**108**
Hiripathwella	196	9	0	0	**205**
Dewategedara	60	13	0	0	**73**
Lihinigiriya	126	2	0	0	**128**
Embalanwatta	109	10	0	0	**119**
Medalassa Kalugamuwa	101	12	0	0	**113**
Dembagoda	110	9	0	0	**119**
Thiyador watta	139	15	0	0	**154**
Parabavila	359	9	0	0	**368**
Koraldoluwa	194	16	0	0	**210**
Handungala	310	12	0	0	**322**
Walagammulla	167	18	0	0	**185**
Polpitiya North	98	7	0	0	**105**
Dombemada East	132	11	0	0	**143**
Kudagama North	164	13	0	0	**177**
Kudagama South	130	10	0	0	**140**
Nattambura	176	18	2	0	**196**
Kotawella	298	22	0	0	**320**
Parape South	268	19	0	0	**287**
Kossinna	164	13	0	0	**177**
Kanugolla	230	14	0	0	**244**
Parape North	168	9	0	0	**177**
Kandehena	105	12	1	0	**118**
Kalugamuwa	231	37	0	0	**268**
Watareka	344	14	0	0	**358**
Katugampalagedara	138	13	1	0	**152**
Malandeniya	256	53	0	0	**309**
Kahapathwala North	207	32	1	0	**240**
Kahapathwala	284	44	0	0	**328**
Kannadeniya	123	18	0	0	**141**
Gangodapitiya	138	3	0	0	**141**
Pubbiliya	94	9	1	0	**104**
Barandara	161	16	0	0	**177**
Kaluwana	161	15	0	0	**176**
Madagoda Pahala	135	9	0	0	**144**
Gunadaha	224	6	0	0	**230**
Galagedara West	260	7	0	0	**267**
Udupitiya	77	1	0	0	**78**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.27. Principle Method of Solid Waste Disposal

GND	Collected by local authorities	Burn by Occupants	Bury by Occupants	Composting by Occupants	Other	Total
Ginneriya	1	106	0	1	0	**108**
Hiripathwella	11	134	19	41	0	**205**
Dewategedara	0	54	9	10	0	**73**
Lihinigiriya	0	55	60	13	0	**128**
Embalanwatta	5	102	8	4	0	**119**
Medalassa Kalugamuwa	1	41	67	4	0	**113**
Dembagoda	0	28	79	12	0	**119**
Thiyador watta	0	118	24	12	0	**154**
Parabavila	6	251	80	31	0	**368**
Koraldoluwa	1	109	56	44	0	**210**
Handungala	10	242	49	21	0	**322**
Walagammulla	0	93	68	20	4	**185**
Polpitiya North	0	0	78	27	0	**105**
Dombemada East	0	93	31	19	0	**143**
Kudagama North	1	144	8	24	0	**177**
Kudagama South	1	97	37	5	0	**140**
Nattambura	1	39	152	4	0	**196**
Kotawella	26	166	98	30	0	**320**
Parape South	0	101	129	57	0	**287**
Kossinna	0	85	84	8	0	**177**
Kanugolla	1	72	161	10	0	**244**
Parape North	10	58	64	45	0	**177**
Kandehena	1	78	36	3	0	**118**
Kalugamuwa	7	153	103	5	0	**268**
Watareka	0	250	75	32	1	**358**
Katugampalagedara	3	42	88	19	0	**152**
Malandeniya	1	206	32	70	0	**309**
Kahapathwala North	0	120	95	25	0	**240**
Kahapathwala	14	234	72	8	0	**328**
Kannadeniya	0	103	25	13	0	**141**
Gangodapitiya	4	51	74	12	0	**141**
Pubbiliya	0	64	34	6	0	**104**
Barandara	0	152	14	11	0	**177**
Kaluwana	0	46	126	4	0	**176**
Madagoda Pahala	0	82	61	1	0	**144**
Gunadaha	3	128	44	54	1	**230**
Galagedara West	101	46	85	35	0	**267**
Udupitiya	5	10	46	17	0	**78**

Source: Census of Population and Housing 2012, Department of census and statistics

Table 3.14.28: Available Health Services in Project Influenced areas

Hospital	Frequency	%
Army Hospital Narahenpita	1	0.32
Balugolla Dispensary	1	0.32
Barigama Regional Hospital	7	2.24
Galagadara District hospital	42	13.42
General Hospital- Kurunegala	105	33.55
Hadadeniya Private Medical Center	2	0.64
Kandy General Hospital	1	0.32
Kandy Suwa Sewana	1	0.32
Mawathagama Regional Hospital	32	10.22
Navinna Channel Center	1	0.32
Peradeniya General Hospital	1	0.32
Polgahawela Hospital	9	2.88
Pothuhera District Hospital	6	1.92
Rambukkana District Hospital	92	29.39
Thambuththegema Regional Hospital	3	0.96
Thiththapajjala Regional Hospital	6	1.92
Valigalla Dispensary	1	0.32
Wadakada Hospital	2	0.64
Total	**313**	**100**

Source: SIA Data

Annex 4.1

Impact Identification Matrix

Table 4.1: Impact Matrix

Impact	Pre Construction Phase									Construction Phase																						Post Construction Phase								Impact Value
Activities ->	Feasibility studies	Site Surveying	Collection of Ownership records	Appraisal of real Property	Negotiations with land owners	Land acquisition	Resettlement	Securing Access	Soil Investigations	Migration of workers	Worker Camps	Land Clearing	Demolition	Reclamation of land	Excavation	Blasting & Drilling	Tunneling	Dredging	Transport of construction material	Compaction	Barriers - Fencing	Soil stabilization	Traffic diversion	Deep foundations and piles	Culverts & bridges	Underground structures	Embankments & retaining walls	Storm water outlets, cannels, pipes	Lighting	Waste disposal	Landscaping	Provision of power, lighting and other Utilities	Underground structures	Spills	Road maintenance	Secondary developments by the roadway	Changes in accessibility	Traffic management activities		
Parameters																																						
Earth																																						***Earth***
Soil erosion/ Landslides								-2			-1	-3	-2	-2	-3	-3	-3	-3		1		2		-3	-1	-2	-2	-1		-1	2				-2				-29	
Land form								-2			-1	-3	-2	1	-3	-3	-3	-3		1		2		-3	-1	-3	-1	-1		-1	2		-1						-25	
Deposition												-3	-2		-3	-3	-3	-3						-3	-1	-2	-1	-1		-1	1								-25	
Stability								-1				-3	-2	1	-3	-3	-3	-3		2		1		-3		-2	-1								-2				-22	
Consolidation & settling												-3	-2	1	-3	-3	-3	-3		2		1		-3	-1	-2					1								-18	
																																						-119	**-119**
Water																																						***Water***
BOD											-1																		-1						-1			-3	
Fecal coliform											-1																								-1			-2	
Turbidity												-1	-1		-1	-1	-2	-1				-1			-1	-1	-1	-1		-1	-1			-1	-1	-1			-17	
Color												-1	-1		-1			-1							-1		-1	-1		-1				-1	-1	-1			-11	
Toxic substances													-1																-1				-1	-1	-1			-5	
Floating materials													-1					-1											-1					-1			-4	
Odor																																	-1		-1			-2	
Ground water quality											-1				-1			-1								-2		-1						-1				-7	
																																						-51	**-51**
Air																																						***Air***
Particulate matter and dust												-1	-2		-1	-2	-2		-1	-1		-1		-1	-1	-1		-1		-1	-1				-1	-1		-1	-20	
Hydrocarbons																																							0	

Impact	Pre Construction Phase									Construction Phase																						Post Construction Phase								Impact Value
Activities -> Parameters	Feasibility studies	Site Surveying	Collection of Ownership records	Appraisal of real Property	Negotiations with land owners	Land acquisition	Resettlement	Securing Access	Soil Investigations	Migration of workers	Worker Camps	Land Clearing	Demolition	Reclamation of land	Excavation	Blasting & Drilling	Tunneling	Dredging	Transport of construction material	Compaction	Barriers - Fencing	Soil stabilization	Traffic diversion	Deep foundations and piles	Culverts & bridges	Underground structures	Embankments & retaining walls	Storm water outlets, cannels, pipes	Lighting	Waste disposal	Landscaping	Provision of power, lighting and other Utilities	Underground structures	Spills	Road maintenance	Secondary developments by the roadway	Changes in accessibility	Traffic management activities		
Sulfur oxides																																						0	
Nitrogen oxides																																						0	
Noise and vibrations								-1	-1	-1	-1	-1	-2	-1	-1	-2	-2		-1					-2													-1	-1	-18	
Micro climate												-1	-1																									-2	
Odour																													-1									-1	
																																					-41	-41
Hydrology																																							***Hydrology***
Flooding												-2		-2	-2		-1	-2		-2	-2	-2		-2	-2		-3	-2		-2	-2					-1			-29	
Ground water levels															-2			-2						-2		-2												-8	
Stream flow												-2		-2	-2			-2			-2				-2		-1	-2		-2	-2		-2						-21	
Recharge															-1									-2		-2													-5	
Drainage patterns												-2	-2	-3	-2		-2	-2		-3	-2	-2		-2	-2	-2	-3	-2		-2	-2		-2			-1			-38	
																																					-101	-101
Fauna-Terrestrial																																						0	***Fauna-Terrestrial***
Species diversity												-1		-1	-1	-1	-1													-1									-6	
Rare & endangered species												-1																											-1	
Habitats								-1				-2			-1	-1	-1													-1	-1								-9	
Migration patterns															-1		-1							-1				-1								-1			-5	
Food chains																																							0	
Corridors												-1			-2			-2						-1			-2	-1			-1					-1	-2		-13	
																																						-34	-34

Impact	Pre Construction Phase									Construction Phase																						Post Construction Phase								Impact Value
Activities -> Parameters	Feasibility studies	Site Surveying	Collection of Ownership records	Appraisal of real Property	Negotiations with land owners	Land acquisition	Resettlement	Securing Access	Soil Investigations	Migration of workers	Worker Camps	Land Clearing	Demolition	Reclamation of land	Excavation	Blasting & Drilling	Tunneling	Dredging	Transport of construction material	Compaction	Barriers - Fencing	Soil stabilization	Traffic diversion	Deep foundations and piles	Culverts & bridges	Underground structures	Embankments & retaining walls	Storm water outlets, cannels, pipes	Lighting	Waste disposal	Landscaping	Provision of power, lighting and other Utilities	Underground structures	Spills	Road maintenance	Secondary developments by the roadway	Changes in accessibility	Traffic management activities		
Fauna - Aquatic																																						***Fauna - Aquatic***
Species Diversiity																								-1					-1	-1							-3	
Rare & Endangedred												-1																		-1							-2	
Commercial fisheries																																					0	
Food chains												-1																	-1	-1							-3	
Habitats											-1	-1												-1					-1	-1			-1	-1			-7	
Migration Pattern												-1												-1													-2	
																																					-17	***-17***
Flora-Terrestrial																																					0	***Flora-Terrestrial***
Species diversity												-1																		-1							-2	
Rare & Endangered												-1																									-1	
Natural vegetation								-1			-1	-2		-1	-1		-1							-1		-1		-1		-1	-1					-1	-1	-14	
Crops								-1			-1	-2		-1	-1		-1							-1		-1		-1		-1				-1		-1	-1	-14	
																																					-31	-31
Flora - Aquatic																																						***Flora - Aquatic***
Species diversity																								-1					-1								-2	
Rare & Enadangered																																					0	
Natural Vegetation																								-1					-1				-1	-1			-4	
																																					-6	-6
Land Use																																						***Land Use***

Impact	Pre Construction Phase									Construction Phase																							Post Construction Phase								Impact Value
Activities -> Parameters	Feasibility studies	Site Surveying	Collection of Ownership records	Appraisal of real Property	Negotiations with land owners	Land acquisition	Resettlement	Securing Access	Soil Investigations	Migration of workers	Worker Camps	Land Clearing	Demolition	Reclamation of land	Excavation	Blasting & Drilling	Tunneling	Dredging	Transport of construction material	Compaction	Barriers - Fencing	Soil stabilization	Traffic diversion	Deep foundations and piles	Culverts & bridges	Underground structures	Embankments & retaining walls	Storm water outlets, cannels, pipes	Lighting	Waste disposal	Landscaping	Provision of power, lighting and other Utilities	Underground structures	Spills	Road maintenance	Secondary developments by the roadway	Changes in accessibility	Traffic management activities		
Residential									-1	-1	-1	-2	-2		-1	-2	-2		-1		-2		-2	-1	-1	-1	-1	-1	1	-2		3	-1	-1	-1	2	2	1	-18	
Commercial											-1	-2	-2		-1	-2	-2		-1		-2		-2	-1	-1		-1	-1	1	-2		3	-1		-1	2	2	1	-14	
Agricultural									-1			-2	-1	-2	-1	-1	-2		-1	-1	-1	-1		-1	-1	-1	-1	-1		-1	-2	1	-1	-1	-1	-1	2		-23	
Wetlands												-1		-1	-1	-1	-1			-1				-1			-1	-1		-1	-2		-1	-1					-14	
Industry												-1	-1		-1	-1	-1				-1		-1		-1		-1		1	-1		3	-1		-1		2		-6	
Recreational uses											-1	-1	-1		-1	-1	-1				-1		-1		-1		-1		1	-1	-1	3			-1	1			-8	
																																						-83	-83
Aesthetics																																							***Aesthetics***
Scenic views & sites										-1	-1	-2	1		-1	-1	-1		-1		-1			-1	-1	-1	-1	-1	1	-2	2	2			1	-1			-10	
Open space qualities											-2	-2	1		-1	-1	-1		-1		-1			-1	-1	-1	-1	-1	-1	-2	1	1			1	-1			-14	
Landscape design											-2	-2	1		-1		-1				-1	1		-1	-1	-1	-1	-1		-2	1								-11	
Unique physical features												-2	-2				-1														-1								-6	
Monuments												-1	-1		-1																								-3	
Appearance of water											-1	-1	-1		-1	-1	-1													-1				-1					-8	
Topographic character													-1		-1	-1	-1			-1		1		-1							-1								-6	
																																						-58	-58
Human Interest																																						0	***Human Interest***
Housing											-1	-1	-2		-1	-2	-2				-2		-1	-1		-1		-1	-1	-1		1				2	2		-12	
Social interactions	-1	-1	-2	-2	-3	-3	-3	-1	-1	-1	-1	-1	-2		-1	-3	-1		-1		-2		-1				-1		1			1				2	2		-26	

Impact	Pre Construction Phase									Construction Phase																							Post Construction Phase								Impact Value
Activities -> Parameters	Feasibility studies	Site Surveying	Collection of Ownership records	Appraisal of real Property	Negotiations with land owners	Land acquisition	Resettlement	Securing Access	Soil Investigations	Migration of workers	Worker Camps	Land Clearing	Demolition	Reclamation of land	Excavation	Blasting & Drilling	Tunneling	Dredging	Transport of construction material	Compaction	Barriers - Fencing	Soil stabilization	Traffic diversion	Deep foundations and piles	Culverts & bridges	Underground structures	Embankments & retaining walls	Storm water outlets, cannels, pipes	Lighting	Waste disposal	Landscaping	Provision of power, lighting and other Utilities	Underground structures	Spills	Road maintenance	Secondary developments by the roadway	Changes in accessibility	Traffic management activities		
Cultural patterns/life styles	-1	-1	-1	-1		-2	-2	-1	-1	-1	-2	-1	-2		-1	-1	-1				-1		-1				-1		1	-1		1				2	2		-17	
Health and safety						-2	-2			-2	-2	-1	-2		-1	-2	-2		-2		-1		-2	-1	-1	-1	-1		1	-2		1	-1	1	-1	2	2	2	-20	
Population density										-1	-1																									2	1		1	
Utility networks													-1		-1	-2	-2							-1		-1			1			3			-1	1	1		-3	
Water uses										-1	-1		-1		-1	-1	-1												1			1		-2	-1	1	1		-5	
Historical/ religious/ archeological sites												-1	-2		-1	-2	-1							-1		-1													-9	
Education						-2	-2						-2		-1	-1	-1						-1									3					1		-6	
																																							-97	-97
Economic																																								***Economic***
Land values	-1	-1	-1	-1		-1	-1	-1	-1			1	-1	2		-1	-2				-1	1		-1		-1	-1		1	-1		2				3	3	1	-3	
Employment opportunities										2	2	1	-1	1	1	-1	2	1	1	1		1	1	2	1	-1	2				2	1	-2		2	3	3		25	
Livelihood						-1	-1			1	1	1			1	-1	-1				-1				1											3	3		6	
Local income levels						-1	-2			2	2	1		1	1	-1		1	1	1	-1		1	2	1		2		1		2	2				3	2		21	
Tourism																																					1		1	
Local economic conditions						-1	-2			1	1	1								1	-1				1				1			2				3	3		10	
Regional economic conditions							-2																													3	3		4	

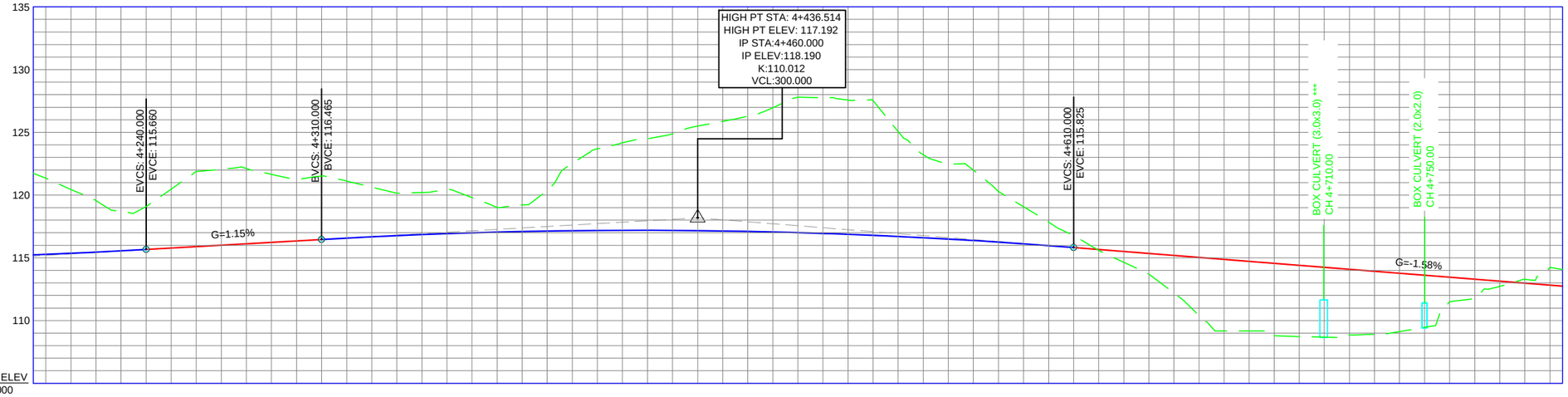
Impact	Pre Construction Phase									Construction Phase																						Post Construction Phase								Impact Value
Activities -> Parameters	Feasibility studies	Site Surveying	Collection of Ownership records	Appraisal of real Property	Negotiations with land owners	Land acquisition	Resettlement	Securing Access	Soil Investigations	Migration of workers	Worker Camps	Land Clearing	Demolition	Reclamation of land	Excavation	Blasting & Drilling	Tunneling	Dredging	Transport of construction material	Compaction	Barriers - Fencing	Soil stabilization	Traffic diversion	Deep foundations and piles	Culverts & bridges	Underground structures	Embankments & retaining walls	Storm water outlets, cannels, pipes	Lighting	Waste disposal	Landscaping	Provision of power, lighting and other Utilities	Underground structures	Spills	Road maintenance	Secondary developments by the roadway	Changes in accessibility	Traffic management activities		
National economic conditions																																				3		3	
																																					67	67
Transportation																																						***Transportation***
Transportation/ accessibility/ movement							-2	-1	-1			-1	-1	-1	-1	-1	-1		-1		-2		-2	-1	-1	-1	-1						-1		3	3	-15	
Existing transportation systems								-1									-1		-1		-2		-2	-1	-1	-1									3		-7	
Existing parking facilities																					-1														-1	3	3	4	
Traffic hazards																	-1		-1		-1		-1	-1	-1	-1					2		-1		-2	2	3	-3	
																																					-21	-21

Annex 4.2

Plan and Profile of Major Road Cuts

PLAN

SCALE 1: 2000



CHAINAGE	FINISHED GROUND LEVEL	EXSISTING GROUND LEVEL
Ch4+200	115.277	121.347
Ch4+210	115.358	120.454
Ch4+220	115.449	119.560
Ch4+230	115.550	118.685
Ch4+240	115.660	119.084
Ch4+250	115.775	120.478
Ch4+260	115.890	121.868
Ch4+270	116.005	122.063
Ch4+280	116.120	122.119
Ch4+290	116.235	121.648
Ch4+300	116.350	121.218
Ch4+310	116.465	121.512
Ch4+320	116.575	121.120
Ch4+330	116.677	120.633
Ch4+340	116.769	120.148
Ch4+350	116.852	120.204
Ch4+360	116.926	120.471
Ch4+370	116.991	119.806
Ch4+380	117.047	119.023
Ch4+390	117.094	119.208
Ch4+400	117.132	120.375
Ch4+410	117.161	122.518
Ch4+420	117.180	123.686
Ch4+430	117.191	124.169
Ch4+440	117.192	124.486
Ch4+450	117.184	124.882
Ch4+460	117.167	125.500
Ch4+470	117.141	125.877
Ch4+480	117.107	126.284
Ch4+490	117.062	126.957
Ch4+500	117.009	127.798
Ch4+510	116.947	127.767
Ch4+520	116.876	127.581
Ch4+530	116.795	127.524
Ch4+540	116.706	125.061
Ch4+550	116.607	123.217
Ch4+560	116.499	122.454
Ch4+570	116.383	121.986
Ch4+580	116.257	120.285
Ch4+590	116.122	119.074
Ch4+600	115.978	117.864
Ch4+610	115.825	116.765
Ch4+620	115.667	115.591
Ch4+630	115.509	114.644
Ch4+640	115.351	113.702
Ch4+650	115.194	112.197
Ch4+660	115.036	110.401
Ch4+670	114.878	109.165
Ch4+680	114.721	109.169
Ch4+690	114.563	108.798
Ch4+700	114.405	108.721
Ch4+710	114.248	108.681
Ch4+720	114.090	108.860
Ch4+730	113.932	108.901
Ch4+740	113.774	109.122
Ch4+750	113.617	109.461
Ch4+760	113.459	111.503
Ch4+770	113.301	111.737
Ch4+780	113.144	112.744
Ch4+790	112.986	113.286
Ch4+800	112.828	114.236

HORIZONTAL GEOMETRY

VERTICAL GEOMETRY: V.C.L.=200.00, K=103.66 | G=1.15% | V.C.L.=300.00, K=110.01 | G=-1.58%

LONGITUDINAL SECTION

SCALE : HORIZONTAL 1: 2000
VERTICAL 1: 400

NOTE:-STRUCTURES AND STRUCTURE LOCATIONS ARE GIVEN FOR INDICATION ONLY.

PRELIMINARY

Employer

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF HIGHER EDUCATION & HIGHWAYS

ROAD DEVELOPMENT AUTHORITY
PROJECT DIRECTOR - CENTRAL EXPRESSWAY
3rd Floor, Sethsiripaya , Battaramulla.
Tel : 0112877708 Fax : 0112877708 Email : rdapdcep@gmail.com

Designer

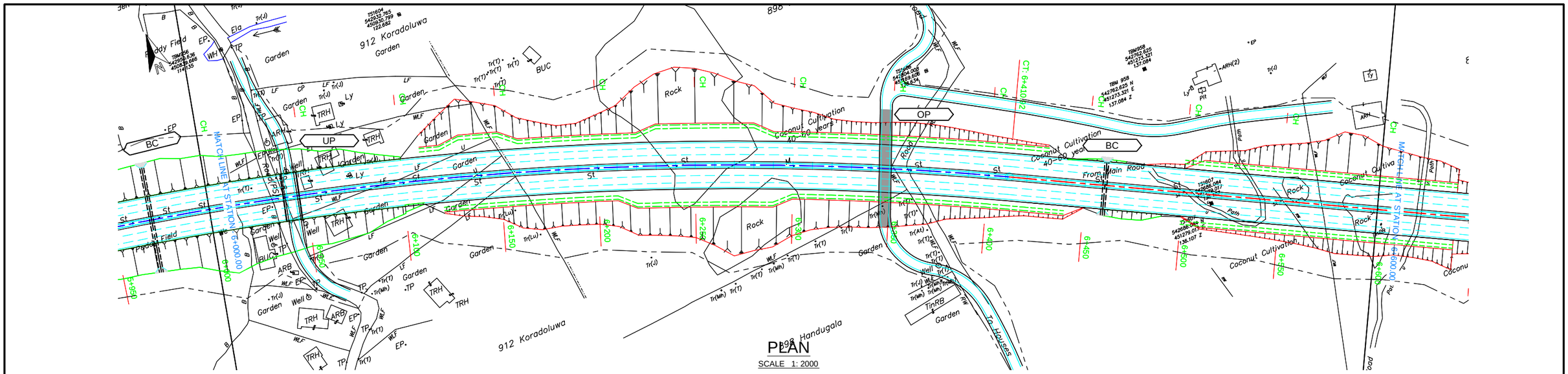
ROAD DEVELOPMENT AUTHORITY
DEPUTY DIRECTOR -HIGHWAY DESIGN
Design Office -(Geometrical Design)
S.W.R.D. Bandaranayake Mawatha
Kandy
Tel : 0812054992 Fax : 0812054992
Email : docpkandy@gmail.com

REV.	DESCRIPTION	BY.	DATE

Project Title

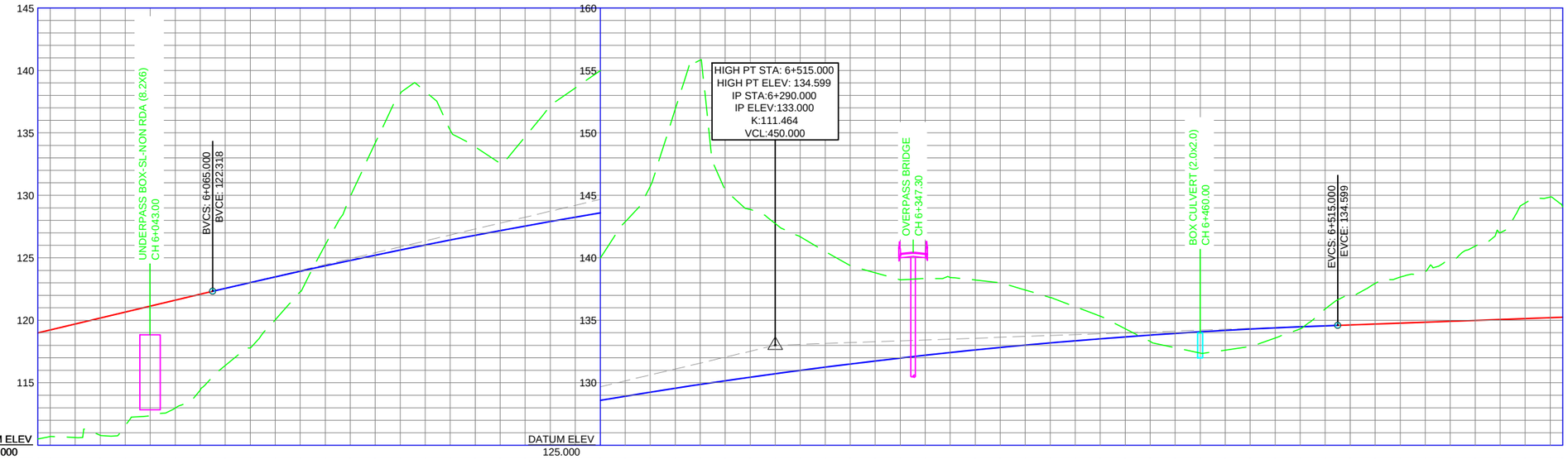
CENTRAL EXPRESSWAY PROJECT (CEP)
SECTION - 3 FROM POTHUHERA TO GALAGEDARA
PACKAGE - I FROM POTHUHERA TO PARAPE
(CH. 0+000 - CH. 16+700)

Drawing Title : PLAN & PROFILE (4+200.00-4+800.00)			
Designed : T.A.SANJEEWANI	Drawn : NISANSALA DHARMARATHNA	Checked : K.W.U.MUNASINGHE	
C.E. (Design) : A.G.ARIYAWANSHA	D.D.(Design) : L.V.S.WEERAKOON		
Drawing No : RDA-CEP-GE-PD-PKI-PP-07	Scale : 1:2000	Date : 06-05-2016	Sheet No: 07 of 34



PLAN

SCALE 1: 2000



CHAINAGE	FINISHED GROUND LEVEL	EXSISTING GROUND LEVEL
Ch6+000	119.232	110.699
Ch6+010	119.706	110.618
Ch6+020	120.181	110.796
Ch6+030	120.656	111.559
Ch6+040	121.131	112.472
Ch6+050	121.605	112.977
Ch6+060	122.080	114.430
Ch6+070	122.554	116.380
Ch6+080	123.020	117.784
Ch6+090	123.476	120.030
Ch6+100	123.924	122.289
Ch6+110	124.363	126.024
Ch6+120	124.793	129.886
Ch6+130	125.214	134.190
Ch6+140	125.626	138.144
Ch6+150	126.029	138.318
Ch6+160	126.423	135.228
Ch6+170	126.808	133.871
Ch6+180	127.184	132.564
Ch6+190	127.551	134.696
Ch6+200	127.909	137.135
Ch6+210	128.259	138.593
Ch6+220	128.599	139.985
Ch6+230	128.930	142.893
Ch6+240	129.252	145.724
Ch6+250	129.566	151.883
Ch6+260	129.870	155.819
Ch6+270	130.165	145.419
Ch6+280	130.452	143.876
Ch6+290	130.729	142.744
Ch6+300	130.998	141.695
Ch6+310	131.257	140.513
Ch6+320	131.507	139.378
Ch6+330	131.749	138.803
Ch6+340	131.982	138.252
Ch6+350	132.205	138.335
Ch6+360	132.420	138.425
Ch6+370	132.625	138.221
Ch6+380	132.822	138.007
Ch6+390	133.010	137.427
Ch6+400	133.188	136.832
Ch6+410	133.358	136.085
Ch6+420	133.519	135.333
Ch6+430	133.671	134.329
Ch6+440	133.814	133.304
Ch6+450	133.947	132.810
Ch6+460	134.072	132.383
Ch6+470	134.188	132.608
Ch6+480	134.295	132.897
Ch6+490	134.393	133.583
Ch6+500	134.482	134.313
Ch6+510	134.562	135.910
Ch6+520	134.634	136.872
Ch6+530	134.705	137.954
Ch6+540	134.776	138.457
Ch6+550	134.848	138.914
Ch6+560	134.919	139.780
Ch6+570	134.990	140.940
Ch6+580	135.061	142.013
Ch6+590	135.132	144.378
Ch6+600	135.203	144.867

HORIZONTAL GEOMETRY	VERTICAL GEOMETRY
R=1600.00 5+848.19 6+410.92	G=4.75% V.C.L.=450.00 K=111.46 G=0.71%

LONGITUDINAL SECTION

SCALE : HORIZONTAL 1: 2000
VERTICAL 1: 400

NOTE:-STRUCTURES AND STRUCTURE LOCATIONS ARE GIVEN FOR INDICATION ONLY.

PRELIMINARY

Employer

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF HIGHER EDUCATION & HIGHWAYS

ROAD DEVELOPMENT AUTHORITY
PROJECT DIRECTOR - CENTRAL EXPRESSWAY
3rd Floor, Sethsiripaya , Battaramulla.
Tel : 0112877708 Fax : 0112877708 Email : rdapdcep@gmail.com

Designer

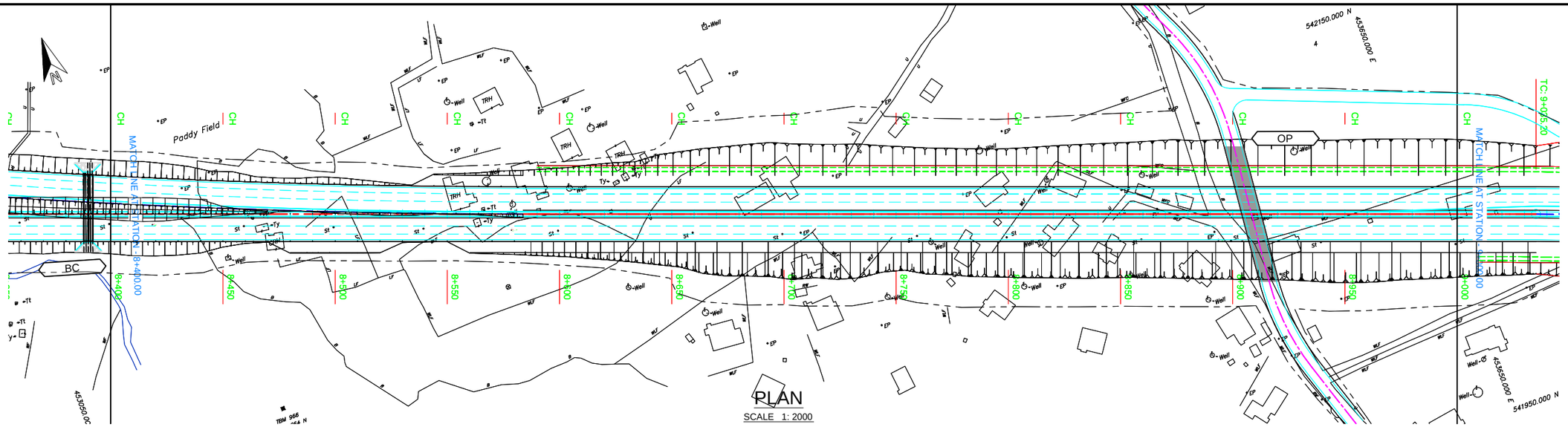
ROAD DEVELOPMENT AUTHORITY
DEPUTY DIRECTOR -HIGHWAY DESIGN
Design Office -(Geometrical Design)
S.W.R.D. Bandaranayake Mawatha
Kandy
Tel : 0812054992 Fax : 0812054992
Email : docpkandy@gmail.com

REV.	DESCRIPTION	BY.	DATE

Project Title

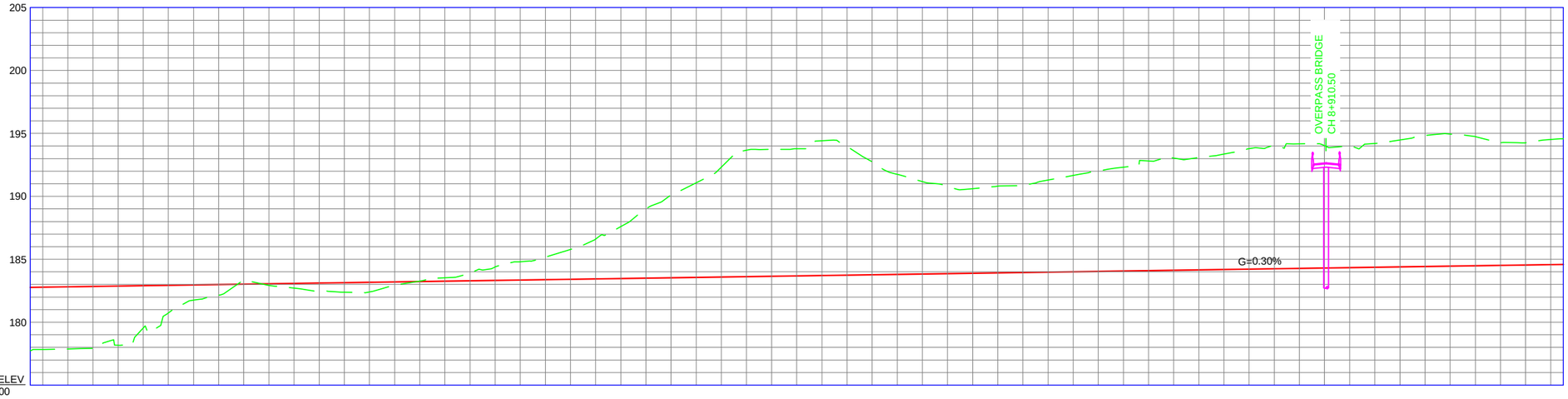
CENTRAL EXPRESSWAY PROJECT (CEP)
SECTION - 3 FROM POTHUHERA TO GALAGEDARA
PACKAGE - I FROM POTHUHERA TO PARAPE
(CH. 0+000 - CH. 16+700)

Drawing Title : PLAN & PROFILE (6+000.00-6+600.00)			
Designed : T.A.SANJEEWANI	Drawn : NISANSALA DHARMARATHNA	Checked : K.W.U.MUNASINGHE	
C.E. (Design) : A.G.ARIYAWANSHA		D.D.(Design) : L.V.S.WEERAKOON	
Drawing No : RDA-CEP-GE-PD-PKI-PP-10	Scale : 1:2000	Date : 06-05-2016	Sheet No: 10 of 34



PLAN

SCALE 1: 2000



CHAINAGE	FINISHED GROUND LEVEL	EXSISTING GROUND LEVEL
Ch8+400	182.775	177.829
Ch8+410	182.805	177.876
Ch8+420	182.835	177.915
Ch8+430	182.865	178.168
Ch8+440	182.895	179.546
Ch8+450	182.925	180.734
Ch8+460	182.955	181.752
Ch8+470	182.985	182.151
Ch8+480	183.015	183.350
Ch8+490	183.045	182.926
Ch8+500	183.075	182.710
Ch8+510	183.105	182.470
Ch8+520	183.135	182.382
Ch8+530	183.165	182.402
Ch8+540	183.195	182.935
Ch8+550	183.225	183.265
Ch8+560	183.255	183.529
Ch8+570	183.285	183.877
Ch8+580	183.315	184.395
Ch8+590	183.345	184.798
Ch8+600	183.375	185.173
Ch8+610	183.405	185.786
Ch8+620	183.435	186.608
Ch8+630	183.465	187.603
Ch8+640	183.495	189.014
Ch8+650	183.525	190.111
Ch8+660	183.555	191.079
Ch8+670	183.585	192.316
Ch8+680	183.615	193.665
Ch8+690	183.645	193.728
Ch8+700	183.675	193.787
Ch8+710	183.705	194.417
Ch8+720	183.735	193.949
Ch8+730	183.765	192.750
Ch8+740	183.795	191.753
Ch8+750	183.825	191.171
Ch8+760	183.855	190.805
Ch8+770	183.885	190.609
Ch8+780	183.915	190.808
Ch8+790	183.945	190.865
Ch8+800	183.975	191.292
Ch8+810	184.005	191.655
Ch8+820	184.035	192.022
Ch8+830	184.065	192.317
Ch8+840	184.095	192.818
Ch8+850	184.125	193.047
Ch8+860	184.155	193.072
Ch8+870	184.185	193.369
Ch8+880	184.215	193.788
Ch8+890	184.245	194.024
Ch8+900	184.275	194.170
Ch8+910	184.305	194.023
Ch8+920	184.335	193.972
Ch8+930	184.365	194.201
Ch8+940	184.395	194.475
Ch8+950	184.425	194.833
Ch8+960	184.455	194.949
Ch8+970	184.485	194.744
Ch8+980	184.515	194.267
Ch8+990	184.545	194.254
Ch9+000	184.575	194.522

HORIZONTAL GEOMETRY

VERTICAL GEOMETRY: G=0.30%

LONGITUDINAL SECTION

SCALE : HORIZONTAL 1: 2000

VERTICAL 1: 400

NOTE:-STRUCTURES AND STRUCTURE LOCATIONS ARE GIVEN FOR INDICATION ONLY.

PRELIMINARY

Employer

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF HIGHER EDUCATION & HIGHWAYS

ROAD DEVELOPMENT AUTHORITY

PROJECT DIRECTOR - CENTRAL EXPRESSWAY
3rd Floor, Sethsiripaya , Battaramulla.
Tel : 0112877708 Fax : 0112877708 Email : rdapdcep@gmail.com

Designer

ROAD DEVELOPMENT AUTHORITY

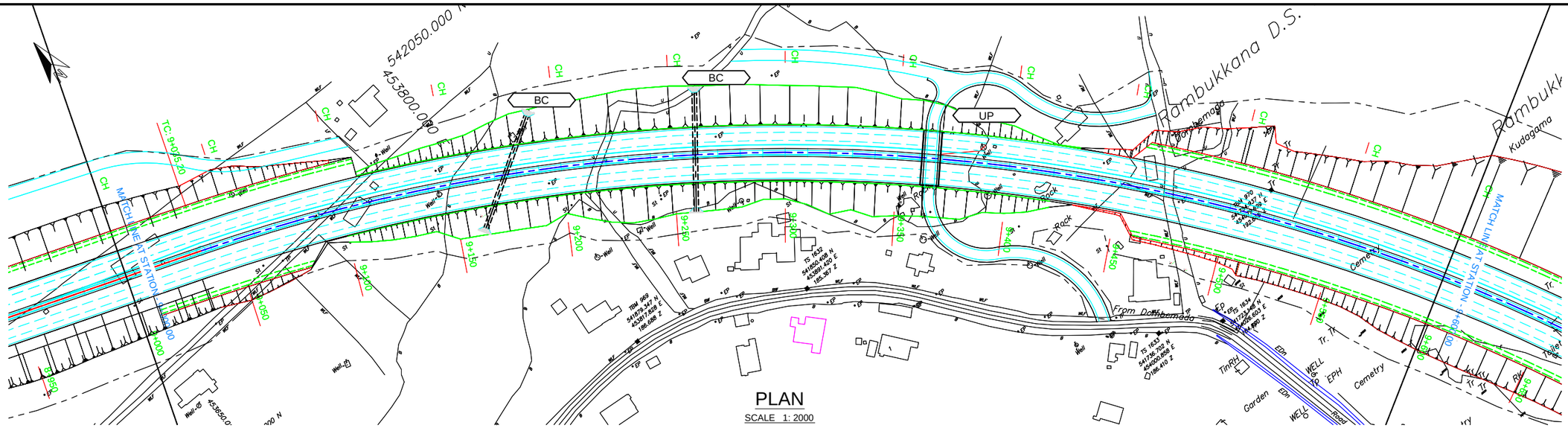
DEPUTY DIRECTOR -HIGHWAY DESIGN
Design Office -(Geometrical Design)
S.W.R.D. Bandaranayake Mawatha
Kandy
Tel : 0812054992 Fax : 0812054992
Email : docpkandy@gmail.com

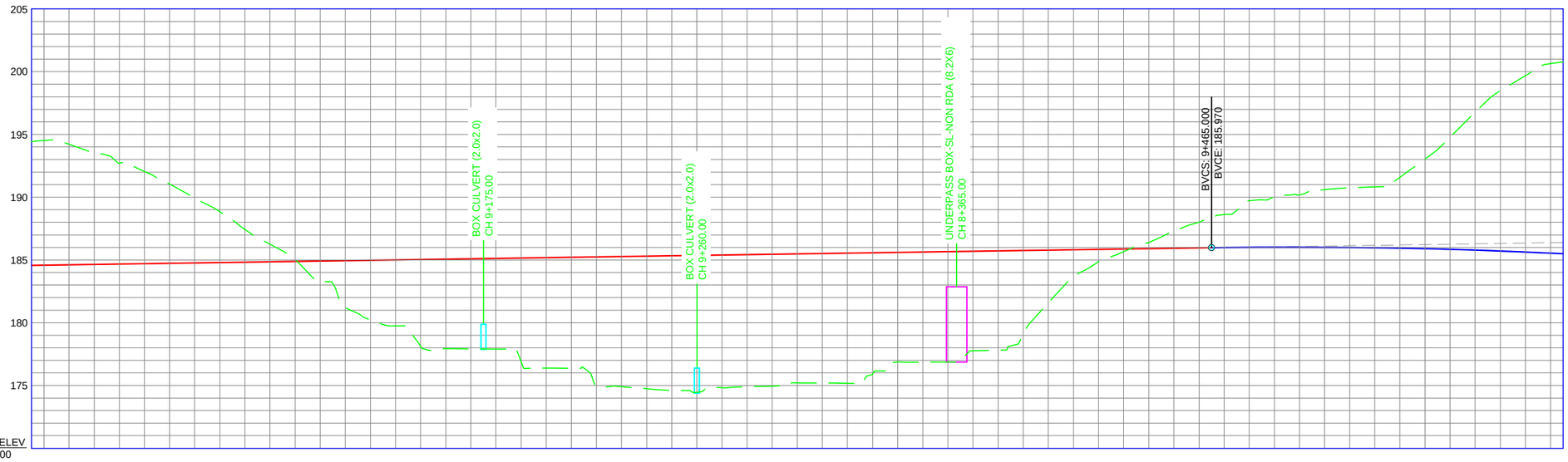
REV.	DESCRIPTION	BY.	DATE

Project Title

CENTRAL EXPRESSWAY PROJECT (CEP)
SECTION - 3 FROM POTHUHERA TO GALAGEDARA
PACKAGE - I FROM POTHUHERA TO PARAPE
(CH. 0+000 - CH. 16+700)

Drawing Title : PLAN & PROFILE - RHS (8+400.00-9+000.00)			
Designed : T.A.SANJEEWANI	Drawn : NISANSALA DHARMARATHNA	Checked : K.W.U.MUNASINGHE	
C.E. (Design) : A.G.ARIYAWANSHA	D.D.(Design) : L.V.S.WEERAKOON		
Drawing No : RDA-CEP-GE-PD-PKI-PP-16	Scale : 1:2000	Date : 06-05-2016	Sheet No: 16 of 34





CHAINAGE	Ch9+000	Ch9+010	Ch9+020	Ch9+030	Ch9+040	Ch9+050	Ch9+060	Ch9+070	Ch9+080	Ch9+090	Ch9+100	Ch9+110	Ch9+120	Ch9+130	Ch9+140	Ch9+150	Ch9+160	Ch9+170	Ch9+180	Ch9+190	Ch9+200	Ch9+210	Ch9+220	Ch9+230	Ch9+240	Ch9+250	Ch9+260	Ch9+270	Ch9+280	Ch9+290	Ch9+300	Ch9+310	Ch9+320	Ch9+330	Ch9+340	Ch9+350	Ch9+360	Ch9+370	Ch9+380	Ch9+390	Ch9+400	Ch9+410	Ch9+420	Ch9+430	Ch9+440	Ch9+450	Ch9+460	Ch9+470	Ch9+480	Ch9+490	Ch9+500	Ch9+510	Ch9+520	Ch9+530	Ch9+540	Ch9+550	Ch9+560	Ch9+570	Ch9+580	Ch9+590	Ch9+600
FINISHED GROUND LEVEL	184.575	184.605	184.635	184.665	184.695	184.725	184.755	184.785	184.815	184.845	184.875	184.905	184.935	184.965	184.995	185.025	185.055	185.085	185.115	185.145	185.175	185.205	185.235	185.265	185.295	185.325	185.355	185.385	185.415	185.445	185.475	185.505	185.535	185.565	185.595	185.625	185.655	185.685	185.715	185.745	185.775	185.805	185.835	185.865	185.895	185.925	185.955	185.984	186.005	186.016	186.019	186.013	185.997	185.972	185.938	185.895	185.843	185.782	185.712	185.632	185.543
EXSISTING GROUND LEVEL	194.522	194.217	193.523	192.706	192.050	191.050	189.943	188.855	187.429	186.251	185.050	183.275	181.184	180.226	179.740	178.101	177.929	177.916	177.904	176.915	176.382	176.373	174.991	174.912	174.742	174.611	174.460	174.823	174.913	174.943	175.206	175.194	175.177	175.907	176.873	176.855	176.870	177.769	177.810	179.126	181.616	183.722	184.891	185.662	186.379	187.351	188.014	188.619	189.716	190.018	190.190	190.602	190.750	190.815	191.574	193.037	194.788	196.771	198.479	199.686	200.635

HORIZONTAL GEOMETRY: R=800.00 | 9+035.20 | 9+878.26

VERTICAL GEOMETRY: G=0.30% | V.C.L.=800.00, K=109.59

LONGITUDINAL SECTION

SCALE : HORIZONTAL 1: 2000
VERTICAL 1: 400

NOTE:-STRUCTURES AND STRUCTURE LOCATIONS ARE GIVEN FOR INDICATION ONLY.

PRELIMINARY

Employer

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF HIGHER EDUCATION & HIGHWAYS

ROAD DEVELOPMENT AUTHORITY
PROJECT DIRECTOR - CENTRAL EXPRESSWAY
3rd Floor, Sethsiripaya , Battaramulla.
Tel : 0112877708 Fax : 0112877708 Email : rdapdcep@gmail.com

Designer

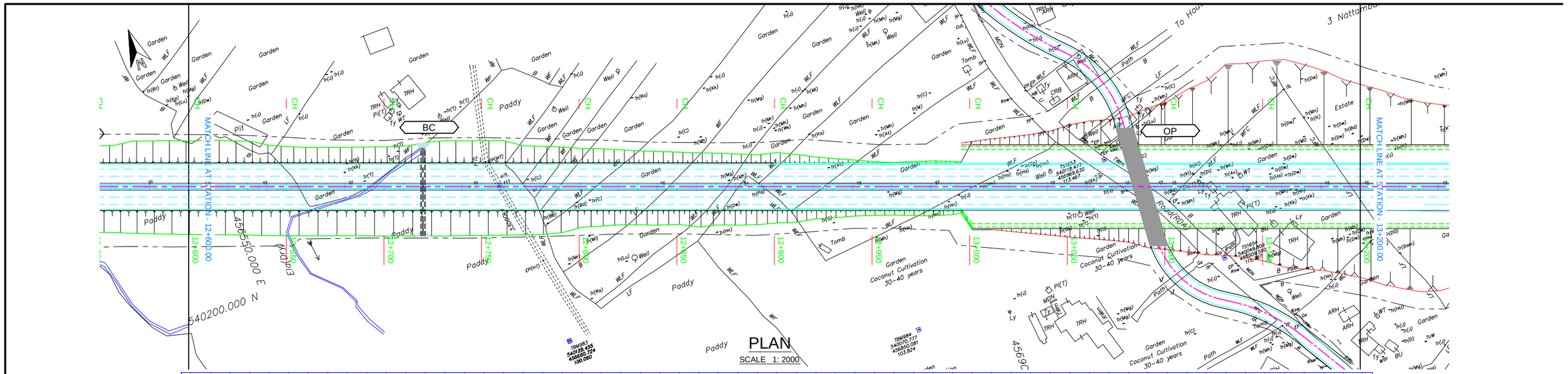
ROAD DEVELOPMENT AUTHORITY
DEPUTY DIRECTOR -HIGHWAY DESIGN
Design Office -(Geometrical Design)
S.W.R.D. Bandaranayake Mawatha
Kandy
Tel : 0812054992 Fax : 0812054992
Email : docpkandy@gmail.com

REV.	DESCRIPTION	BY.	DATE

Project Title

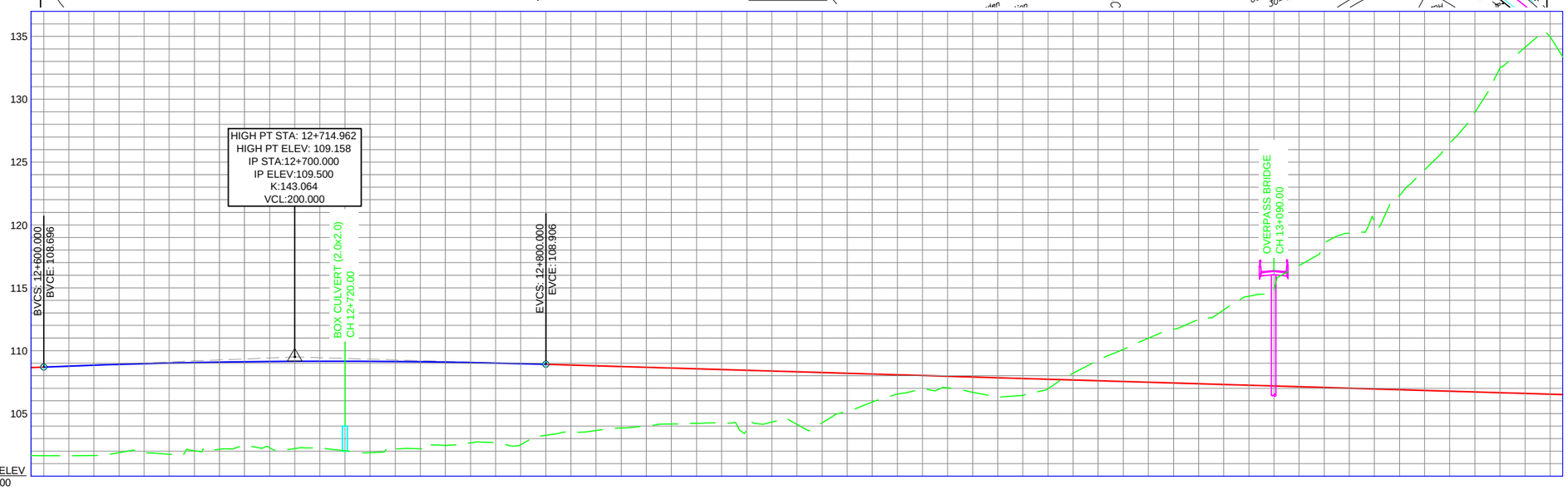
CENTRAL EXPRESSWAY PROJECT (CEP)
SECTION - 3 FROM POTHUHERA TO GALAGEDARA
PACKAGE - I FROM POTHUHERA TO PARAPE
(CH. 0+000 - CH. 16+700)

Drawing Title : PLAN & PROFILE (9+000.00-9+600.00)			
Designed : T.A.SANJEEWANI	Drawn : NISANSALA DHARMARATHNA	Checked : K.W.U.MUNASINGHE	
C.E. (Design) : A.G.ARIYAWANSHA	D.D.(Design) : L.V.S.WEERAKOON		
Drawing No : RDA-CEP-GE-PD-PKI-PP-18	Scale : 1:2000	Date : 06-05-2016	Sheet No: 18 of 34



PLAN

SCALE 1: 2000



CHAINAGE	FINISHED GROUND LEVEL	EXSISTING GROUND LEVEL
Ch12+600	108.696	101.648
Ch12+610	108.773	101.645
Ch12+620	108.843	101.660
Ch12+630	108.906	101.881
Ch12+640	108.962	101.863
Ch12+650	109.011	101.754
Ch12+660	109.053	102.038
Ch12+670	109.088	102.160
Ch12+680	109.116	102.484
Ch12+690	109.137	102.271
Ch12+700	109.151	102.210
Ch12+710	109.157	102.249
Ch12+720	109.157	102.027
Ch12+730	109.150	101.883
Ch12+740	109.136	102.197
Ch12+750	109.115	102.187
Ch12+760	109.087	102.455
Ch12+770	109.052	102.665
Ch12+780	109.010	102.685
Ch12+790	108.962	102.514
Ch12+800	108.906	103.270
Ch12+810	108.846	103.547
Ch12+820	108.787	103.647
Ch12+830	108.727	103.836
Ch12+840	108.668	103.963
Ch12+850	108.608	104.156
Ch12+860	108.549	104.220
Ch12+870	108.490	104.243
Ch12+880	108.430	103.729
Ch12+890	108.371	104.313
Ch12+900	108.311	104.130
Ch12+910	108.252	104.259
Ch12+920	108.192	105.158
Ch12+930	108.133	105.907
Ch12+940	108.073	106.548
Ch12+950	108.014	106.938
Ch12+960	107.955	107.039
Ch12+970	107.895	106.693
Ch12+980	107.836	106.301
Ch12+990	107.776	106.437
Ch13+000	107.717	106.972
Ch13+010	107.657	108.202
Ch13+020	107.598	109.291
Ch13+030	107.538	110.097
Ch13+040	107.479	110.997
Ch13+050	107.420	111.702
Ch13+060	107.360	112.488
Ch13+070	107.301	113.244
Ch13+080	107.241	114.330
Ch13+090	107.182	114.807
Ch13+100	107.122	116.767
Ch13+110	107.063	118.580
Ch13+120	107.003	119.353
Ch13+130	106.944	120.223
Ch13+140	106.885	122.346
Ch13+150	106.825	124.369
Ch13+160	106.766	126.521
Ch13+170	106.706	128.972
Ch13+180	106.647	132.466
Ch13+190	106.587	134.131
Ch13+200	106.528	134.968

HORIZONTAL GEOMETRY

VERTICAL GEOMETRY: G=0.80% | V.C.L.=200.00, K=143.06 | G=-0.59%

LONGITUDINAL SECTION

SCALE : HORIZONTAL 1: 2000
VERTICAL 1: 400

NOTE:-STRUCTURES AND STRUCTURE LOCATIONS ARE GIVEN FOR INDICATION ONLY.

PRELIMINARY

Employer

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF HIGHER EDUCATION & HIGHWAYS

ROAD DEVELOPMENT AUTHORITY

PROJECT DIRECTOR - CENTRAL EXPRESSWAY
3rd Floor, Sethsiripaya , Battaramulla.
Tel : 0112877708 Fax : 0112877708 Email : rdapdcep@gmail.com

Designer

ROAD DEVELOPMENT AUTHORITY

DEPUTY DIRECTOR -HIGHWAY DESIGN
Design Office -(Geometrical Design)
S.W.R.D. Bandaranayake Mawatha
Kandy
Tel : 0812054992 Fax : 0812054992
Email : docpkandy@gmail.com

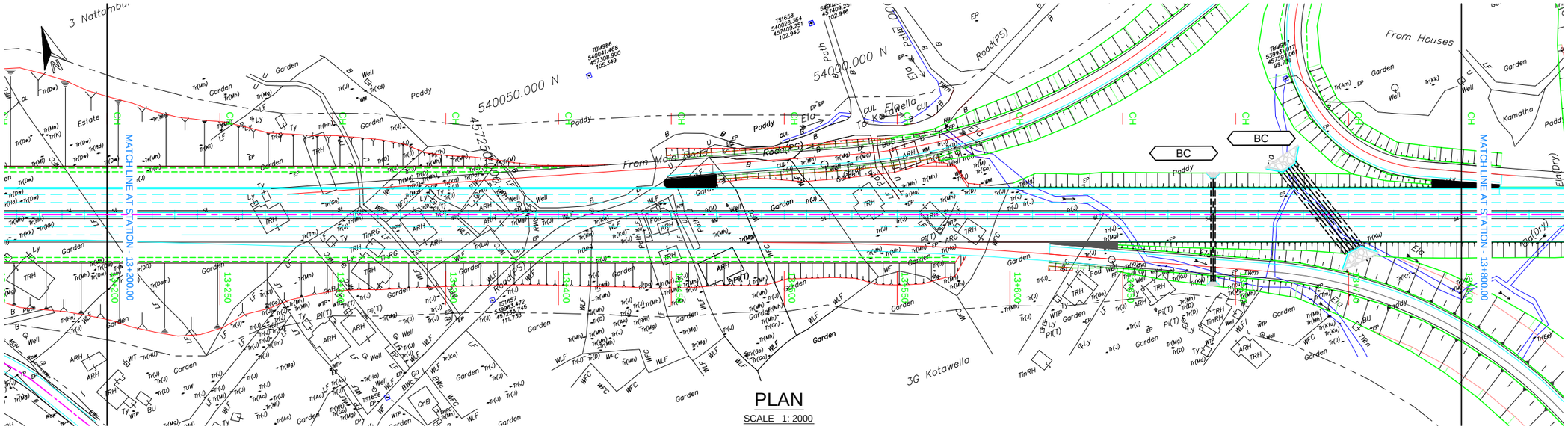
REV.	DESCRIPTION	BY.	DATE

Project Title

CENTRAL EXPRESSWAY PROJECT (CEP)

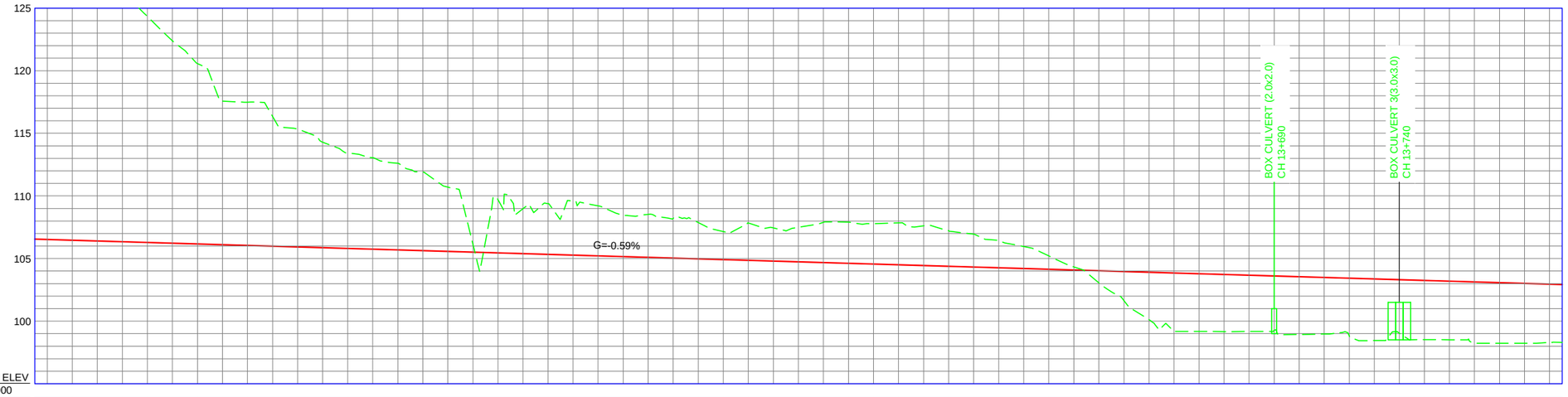
SECTION - 3 FROM POTHUHERA TO GALAGEDARA
PACKAGE - I FROM POTHUHERA TO PARAPE
(CH. 0+000 - CH. 16+700)

Drawing Title : PLAN & PROFILE (12+600.00-13+200.00)			
Designed : T.A.SANJEEWANI	Drawn : NISANSALA DHARMARATHNA	Checked : K.W.U.MUNASINGHE	
C.E. (Design) : A.G.ARIYAWANSHA	D.D.(Design) : L.V.S.WEERAKOON		
Drawing No : RDA-CEP-GE-PD-PKI-PP-24	Scale : 1:2000	Date : 06-05-2016	Sheet No: 24 of 34



PLAN

SCALE 1: 2000



CHAINAGE	FINISHED GROUND LEVEL	EXSISTING GROUND LEVEL
Ch13+200	106.528	134.968
Ch13+210	106.469	131.825
Ch13+220	106.409	128.889
Ch13+230	106.350	126.315
Ch13+240	106.290	124.337
Ch13+250	106.231	122.394
Ch13+260	106.171	120.579
Ch13+270	106.112	117.575
Ch13+280	106.052	117.483
Ch13+290	105.993	116.351
Ch13+300	105.934	115.336
Ch13+310	105.874	114.292
Ch13+320	105.815	113.430
Ch13+330	105.755	113.056
Ch13+340	105.696	112.612
Ch13+350	105.636	111.900
Ch13+360	105.577	110.710
Ch13+370	105.517	106.135
Ch13+380	105.458	109.714
Ch13+390	105.399	108.971
Ch13+400	105.339	109.384
Ch13+410	105.280	109.597
Ch13+420	105.220	109.211
Ch13+430	105.161	108.463
Ch13+440	105.101	108.529
Ch13+450	105.042	108.213
Ch13+460	104.983	107.874
Ch13+470	104.923	107.163
Ch13+480	104.864	107.843
Ch13+490	104.804	107.446
Ch13+500	104.745	107.497
Ch13+510	104.685	107.892
Ch13+520	104.626	107.916
Ch13+530	104.566	107.789
Ch13+540	104.507	107.848
Ch13+550	104.448	107.614
Ch13+560	104.388	107.225
Ch13+570	104.329	106.946
Ch13+580	104.269	106.454
Ch13+590	104.210	105.956
Ch13+600	104.150	105.208
Ch13+610	104.091	104.339
Ch13+620	104.031	103.058
Ch13+630	103.972	101.638
Ch13+640	103.913	100.136
Ch13+650	103.853	99.181
Ch13+660	103.794	99.174
Ch13+670	103.734	99.168
Ch13+680	103.675	99.172
Ch13+690	103.615	99.279
Ch13+700	103.556	98.940
Ch13+710	103.497	98.970
Ch13+720	103.437	98.827
Ch13+730	103.378	98.453
Ch13+740	103.318	99.049
Ch13+750	103.259	98.529
Ch13+760	103.199	98.510
Ch13+770	103.140	98.242
Ch13+780	103.080	98.234
Ch13+790	103.021	98.236
Ch13+800	102.962	98.302

HORIZONTAL GEOMETRY

VERTICAL GEOMETRY G=-0.59%

LONGITUDINAL SECTION

SCALE : HORIZONTAL 1: 2000

VERTICAL 1: 400

NOTE:-STRUCTURES AND STRUCTURE LOCATIONS ARE GIVEN FOR INDICATION ONLY.

PRELIMINARY

Employer

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF HIGHER EDUCATION & HIGHWAYS

ROAD DEVELOPMENT AUTHORITY

PROJECT DIRECTOR - CENTRAL EXPRESSWAY
3rd Floor, Sethsiripaya , Battaramulla.
Tel : 0112877708 Fax : 0112877708 Email : rdapdcep@gmail.com

Designer

ROAD DEVELOPMENT AUTHORITY

DEPUTY DIRECTOR -HIGHWAY DESIGN
Design Office -(Geometrical Design)
S.W.R.D. Bandaranayake Mawatha
Kandy
Tel : 0812054992 Fax : 0812054992
Email : docpkandy@gmail.com

REV.	DESCRIPTION	BY.	DATE

Project Title

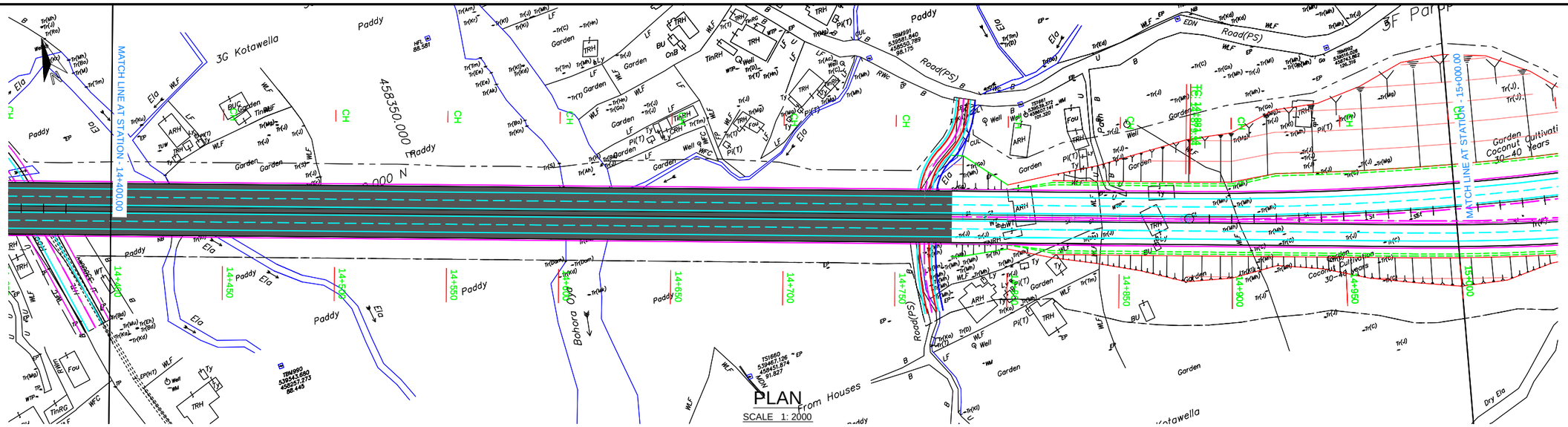
CENTRAL EXPRESSWAY PROJECT (CEP)

SECTION - 3 FROM POTHUHERA TO GALAGEDARA

PACKAGE - I FROM POTHUHERA TO PARAPE

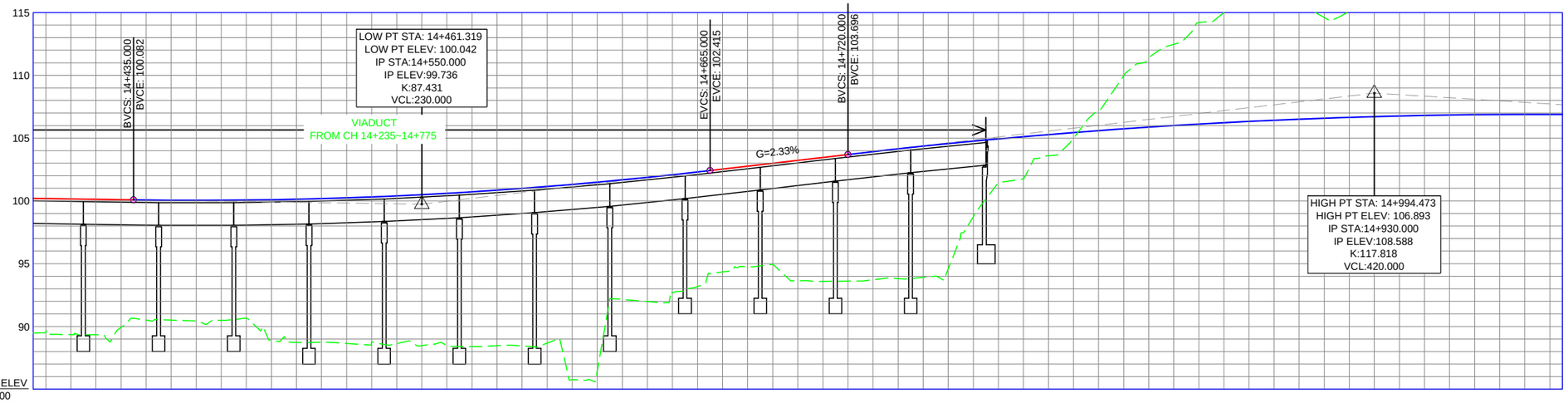
(CH. 0+000 - CH. 16+700)

Drawing Title : PLAN & PROFILE (CH13+200.00 - CH13+800.00)			
Designed : S.K.LIYANAGE	Drawn : W.K.KAPPAGODA	Checked : K.W.U.MUNASINGHE	
C.E. (Design) : A.G.ARIYAWANSHA	D.D.(Design) : L.V.S.WEERAKOON		
Drawing No : RDA-CEP-GE-PD-PKI-PP-25	Scale : 1:2000	Date : 06-05-2016	Sheet No: 25 of 34

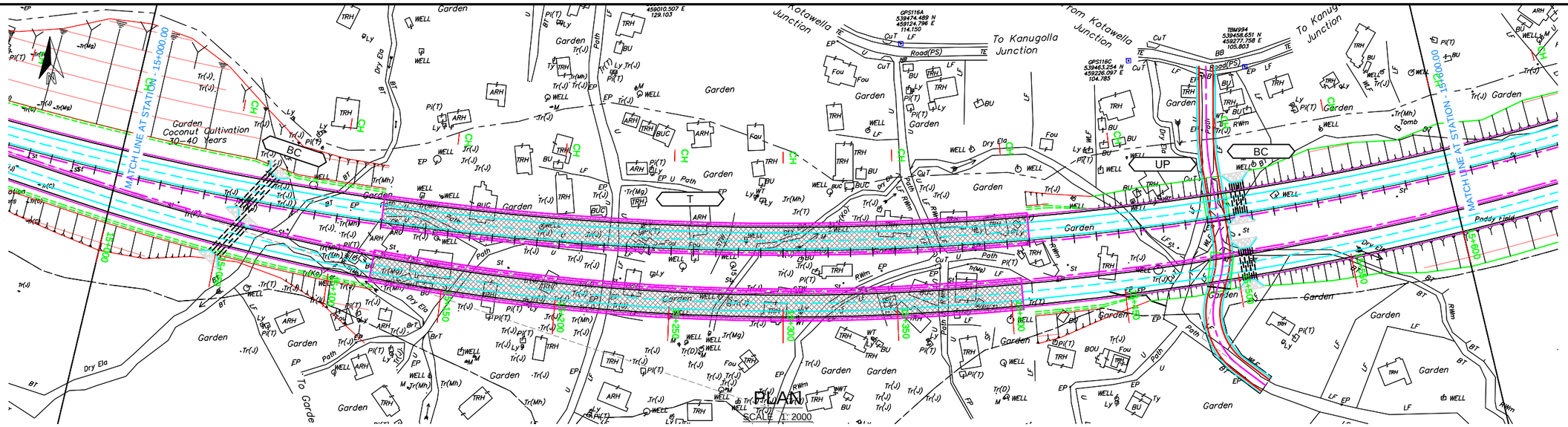


PLAN

SCALE 1: 2000



CHAINAGE	Ch14+400	Ch14+410	Ch14+420	Ch14+430	Ch14+440	Ch14+450	Ch14+460	Ch14+470	Ch14+480	Ch14+490	Ch14+500	Ch14+510	Ch14+520	Ch14+530	Ch14+540	Ch14+550	Ch14+560	Ch14+570	Ch14+580	Ch14+590	Ch14+600	Ch14+610	Ch14+620	Ch14+630	Ch14+640	Ch14+650	Ch14+660	Ch14+670	Ch14+680	Ch14+690	Ch14+700	Ch14+710	Ch14+720	Ch14+730	Ch14+740	Ch14+750	Ch14+760	Ch14+770	Ch14+780	Ch14+790	Ch14+800	Ch14+810	Ch14+820	Ch14+830	Ch14+840	Ch14+850	Ch14+860	Ch14+870	Ch14+880	Ch14+890	Ch14+900	Ch14+910	Ch14+920	Ch14+930	Ch14+940	Ch14+950	Ch14+960	Ch14+970	Ch14+980	Ch14+990	Ch15+000
FINISHED GROUND LEVEL	100.187	100.157	100.127	100.097	100.068	100.050	100.042	100.047	100.062	100.089	100.128	100.178	100.239	100.312	100.396	100.492	100.599	100.718	100.848	100.989	101.142	101.306	101.482	101.669	101.868	102.078	102.300	102.531	102.764	102.997	103.230	103.463	103.696	103.925	104.145	104.357	104.560	104.755	104.941	105.119	105.288	105.449	105.601	105.745	105.880	106.007	106.126	106.236	106.337	106.430	106.514	106.590	106.658	106.717	106.767	106.809	106.843	106.868	106.884	106.892	106.892
EXSISTING GROUND LEVEL	89.544	89.346	89.332	89.914	90.496	90.508	90.433	90.485	90.652	88.879	88.732	88.733	88.639	88.763	88.630	88.467	88.417	88.396	88.458	88.453	88.669	85.769	86.474	92.150	91.987	92.672	93.179	94.338	94.751	94.946	93.636	93.584	93.611	93.713	93.802	93.907	94.575	98.726	101.448	101.749	103.597	105.003	107.170	109.956	111.332	112.468	114.195	115.000	116.775	116.661	115.532	114.610	115.090	115.487	115.988	117.187	119.538	120.816	122.414	123.708	123.552
HORIZONTAL GEOMETRY	R=1290.00 14+881.14 17+020.84																																																																																
VERTICAL GEOMETRY	G=-0.30%																		



CHAINAGE	FINISHED GROUND LEVEL	EXSISTING GROUND LEVEL
Ch15+000	106.892	123.552
Ch15+010	106.883	122.572
Ch15+020	106.865	121.169
Ch15+030	106.840	120.298
Ch15+040	106.805	118.860
Ch15+050	106.762	116.028
Ch15+060	106.711	113.030
Ch15+070	106.651	111.346
Ch15+080	106.583	109.315
Ch15+090	106.506	109.425
Ch15+100	106.421	111.046
Ch15+110	106.327	113.792
Ch15+120	106.224	114.494
Ch15+130	106.114	115.743
Ch15+140	105.994	118.872
Ch15+150	105.871	120.215
Ch15+160	105.747	122.794
Ch15+170	105.624	123.408
Ch15+180	105.500	125.980
Ch15+190	105.377	128.027
Ch15+200	105.253	130.360
Ch15+210	105.130	132.246
Ch15+220	105.006	134.696
Ch15+230	104.883	136.697
Ch15+240	104.759	136.409
Ch15+250	104.636	133.985
Ch15+260	104.512	130.274
Ch15+270	104.389	128.432
Ch15+280	104.265	123.917
Ch15+290	104.142	120.804
Ch15+300	104.018	119.777
Ch15+310	103.895	118.645
Ch15+320	103.771	119.290
Ch15+330	103.648	120.833
Ch15+340	103.524	119.831
Ch15+350	103.401	117.293
Ch15+360	103.277	116.930
Ch15+370	103.153	117.245
Ch15+380	103.030	116.774
Ch15+390	102.906	116.116
Ch15+400	102.783	115.285
Ch15+410	102.659	113.907
Ch15+420	102.536	110.221
Ch15+430	102.411	107.821
Ch15+440	102.279	103.783
Ch15+450	102.138	99.224
Ch15+460	101.988	95.754
Ch15+470	101.829	96.056
Ch15+480	101.661	95.983
Ch15+490	101.484	95.490
Ch15+500	101.299	95.035
Ch15+510	101.104	93.577
Ch15+520	100.901	92.945
Ch15+530	100.689	92.591
Ch15+540	100.468	91.955
Ch15+550	100.238	91.904
Ch15+560	100.000	90.941
Ch15+570	99.752	90.806
Ch15+580	99.496	90.707
Ch15+590	99.231	90.711
Ch15+600	98.957	90.715

HORIZONTAL GEOMETRY	VERTICAL GEOMETRY
R=1290.00 14+881.14 17+020.84	V.C.L.=420.00 K=117.82
	G=-1.24%
	V.C.L.=250.00 K=112.95

LONGITUDINAL SECTION

SCALE : HORIZONTAL 1: 2000
VERTICAL 1: 400

NOTE:-STRUCTURES AND STRUCTURE LOCATIONS ARE GIVEN FOR INDICATION ONLY.

PRELIMINARY

Employer
DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF HIGHER EDUCATION & HIGHWAYS

ROAD DEVELOPMENT AUTHORITY
PROJECT DIRECTOR - CENTRAL EXPRESSWAY
3rd Floor, Sethsiripaya , Battaramulla.
Tel : 0112877708 Fax : 0112877708 Email : rdapdcep@gmail.com

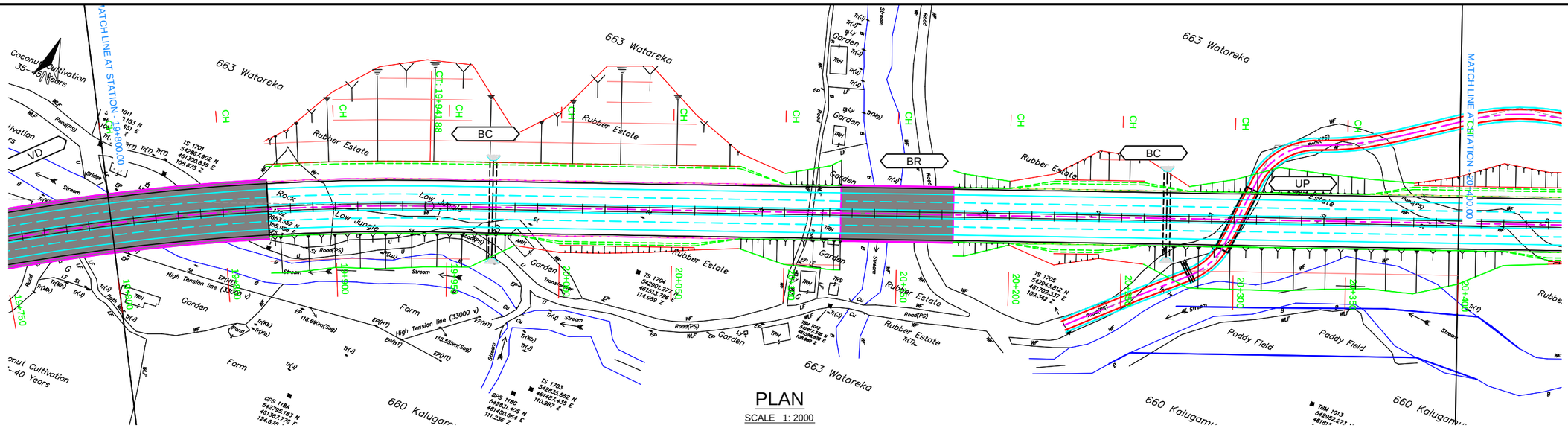
Designer
ROAD DEVELOPMENT AUTHORITY
DEPUTY DIRECTOR -HIGHWAY DESIGN
Design Office -(Geometrical Design)
S.W.R.D. Bandaranayake Mawatha
Kandy
Tel : 0812054992 Fax : 0812054992
Email : docpkandy@gmail.com

REV.	DESCRIPTION	BY.	DATE

Project Title

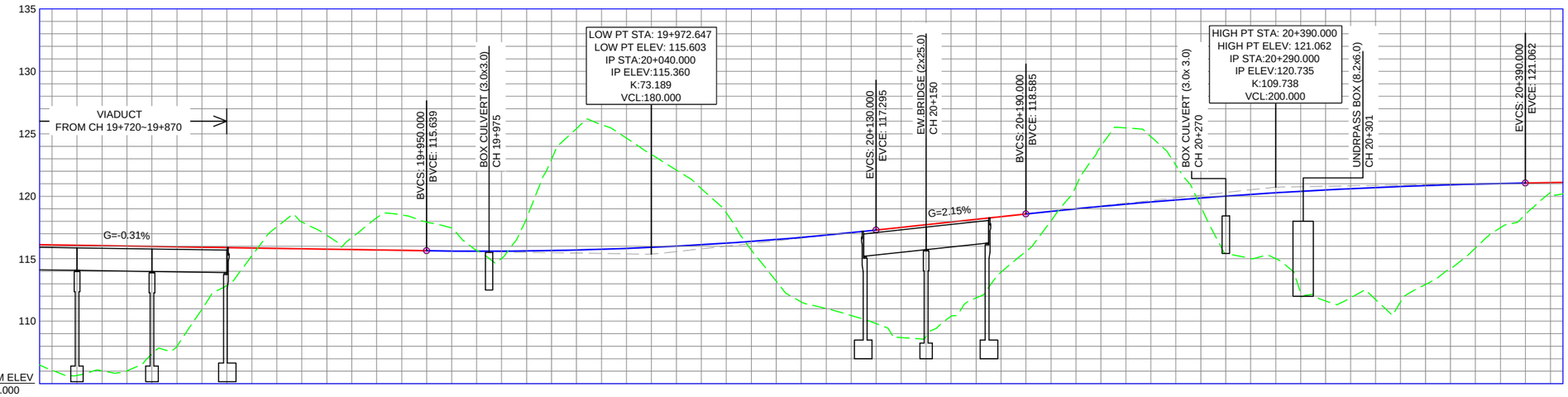
CENTRAL EXPRESSWAY PROJECT (CEP)
SECTION - 3 FROM POTHUHERA TO GALAGEDARA
PACKAGE - I FROM POTHUHERA TO PARAPE
(CH. 0+000 - CH. 16+700)

Drawing Title : PLAN & PROFILE (CH15+000.00 - CH15+600.00)			
Designed : S.K.LIYANAGE	Drawn : W.K.KAPPAGODA	Checked : K.W.U.MUNASINGHE	
C.E. (Design) : A.G.ARIYAWANSHA	D.D.(Design) : L.V.S.WEERAKOON		
Drawing No : RDA-CEP-GE-PD-PKI-PP-29	Scale : 1:2000	Date : 06-05-2016	Sheet No: 29 of 34



PLAN

SCALE 1: 2000



CHAINAGE	FINISHED GROUND LEVEL	EXSISTING GROUND LEVEL
Ch19+800	116.103	106.068
Ch19+810	116.072	105.665
Ch19+820	116.041	106.031
Ch19+830	116.010	106.034
Ch19+840	115.979	107.382
Ch19+850	115.948	107.979
Ch19+860	115.917	110.950
Ch19+870	115.886	112.875
Ch19+880	115.855	115.239
Ch19+890	115.824	117.549
Ch19+900	115.793	117.936
Ch19+910	115.762	116.882
Ch19+920	115.731	116.692
Ch19+930	115.700	118.280
Ch19+940	115.669	118.505
Ch19+950	115.639	117.927
Ch19+960	115.614	117.463
Ch19+970	115.604	115.681
Ch19+980	115.607	115.025
Ch19+990	115.624	118.239
Ch20+000	115.655	122.965
Ch20+010	115.699	125.414
Ch20+020	115.757	125.731
Ch20+030	115.828	124.653
Ch20+040	115.913	123.330
Ch20+050	116.012	122.100
Ch20+060	116.125	120.607
Ch20+070	116.251	118.685
Ch20+080	116.391	115.701
Ch20+090	116.544	113.196
Ch20+100	116.711	111.540
Ch20+110	116.892	111.018
Ch20+120	117.087	110.459
Ch20+130	117.295	109.805
Ch20+140	117.510	108.694
Ch20+150	117.725	108.796
Ch20+160	117.940	110.395
Ch20+170	118.155	111.866
Ch20+180	118.370	113.925
Ch20+190	118.585	115.585
Ch20+200	118.795	118.024
Ch20+210	118.997	120.802
Ch20+220	119.189	123.994
Ch20+230	119.372	125.469
Ch20+240	119.546	124.773
Ch20+250	119.711	122.505
Ch20+260	119.867	119.147
Ch20+270	120.013	115.420
Ch20+280	120.151	115.020
Ch20+290	120.279	115.012
Ch20+300	120.399	112.195
Ch20+310	120.509	111.626
Ch20+320	120.610	111.881
Ch20+330	120.702	111.740
Ch20+340	120.785	111.560
Ch20+350	120.858	112.941
Ch20+360	120.923	114.229
Ch20+370	120.979	115.867
Ch20+380	121.025	117.487
Ch20+390	121.062	118.548
Ch20+400	121.095	120.304

HORIZONTAL GEOMETRY	R=1010.00 18+919.12 19+941.88
VERTICAL GEOMETRY	G=-0.31% V.C.L.=180.00 K=73.19 G=2.15% V.C.L.=200.00 K=109.74 G=0.33%

LONGITUDINAL SECTION

SCALE : HORIZONTAL 1: 2000

VERTICAL 1: 400

NOTE:-STRUCTURES AND STRUCTURE LOCATIONS ARE GIVEN FOR INDICATION ONLY.

PRELIMINARY

Employer

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF HIGHER EDUCATION & HIGHWAYS

ROAD DEVELOPMENT AUTHORITY

PROJECT DIRECTOR - CENTRAL EXPRESSWAY
3rd Floor, Sethsiripaya , Battaramulla.
Tel : 0112877708 Fax : 0112877708 Email : rdapd@gmail.com

Designer

ROAD DEVELOPMENT AUTHORITY

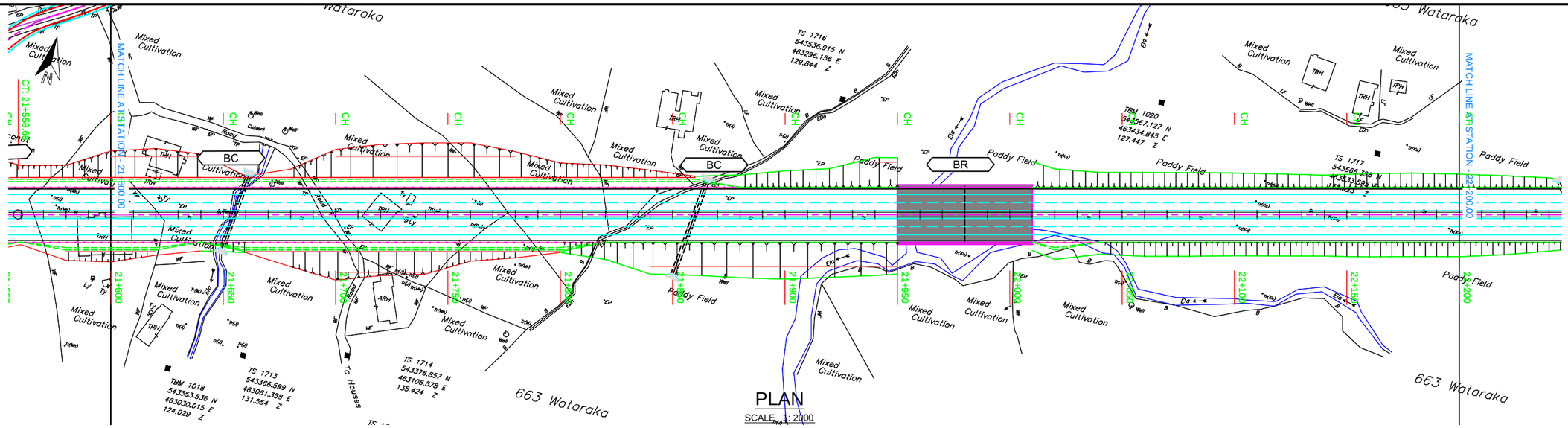
DEPUTY DIRECTOR -HIGHWAY DESIGN
Design Office -(Geometrical Design)
S.W.R.D. Bandaranayake Mawatha
Kandy
Tel : 0812054992 Fax : 0812054994
Email : docpkandy@gmail.com

REV.	DESCRIPTION	BY.	DATE

Project Title

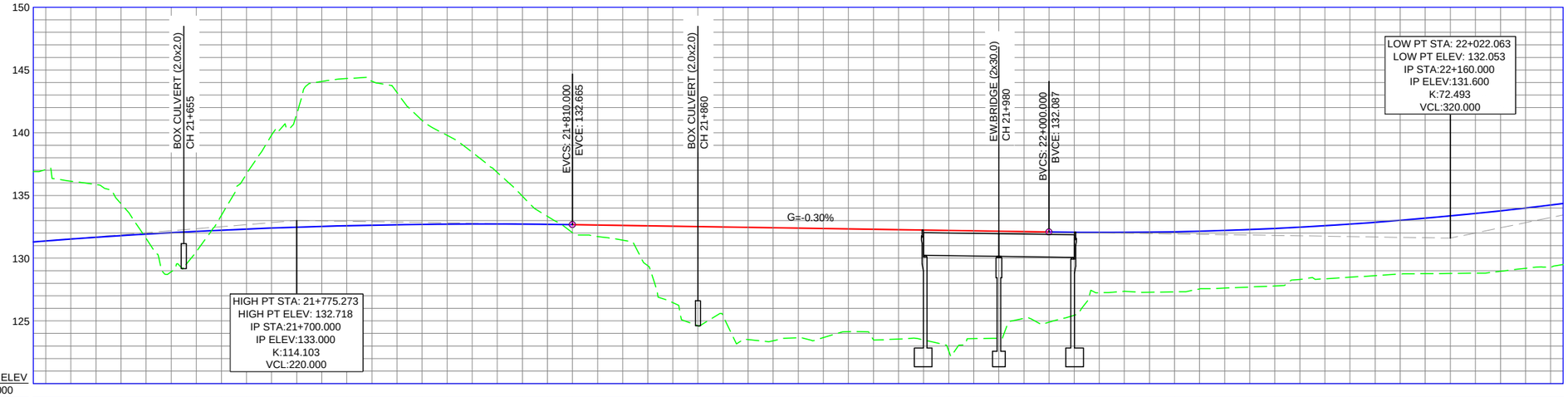
CENTRAL EXPRESSWAY PROJECT (CEP)
SECTION - 3 FROM POTHUHERA TO GALAGEDARA
PACKAGE - II FROM PARAPE TO GALAGEDARA
(CH. 16+700 - CH. 32+500)

Drawing Title : PLAN & PROFILE (CH19+800.00 - CH20+400.00)			
Designed : S.K.LIYANAGE	Drawn : W.K.KAPPAGODA	Checked : K.W.U.MUNASINGHE	
C.E. (Design) : A.G.ARIYAWANSHA	D.D.(Design) : L.V.S.WEERAKOON		
Drawing No : RDA-CEP-GE-PD-PKII-PP-09	Scale : 1:2000	Date : 06-05-2016	Sheet No: 09 of 36

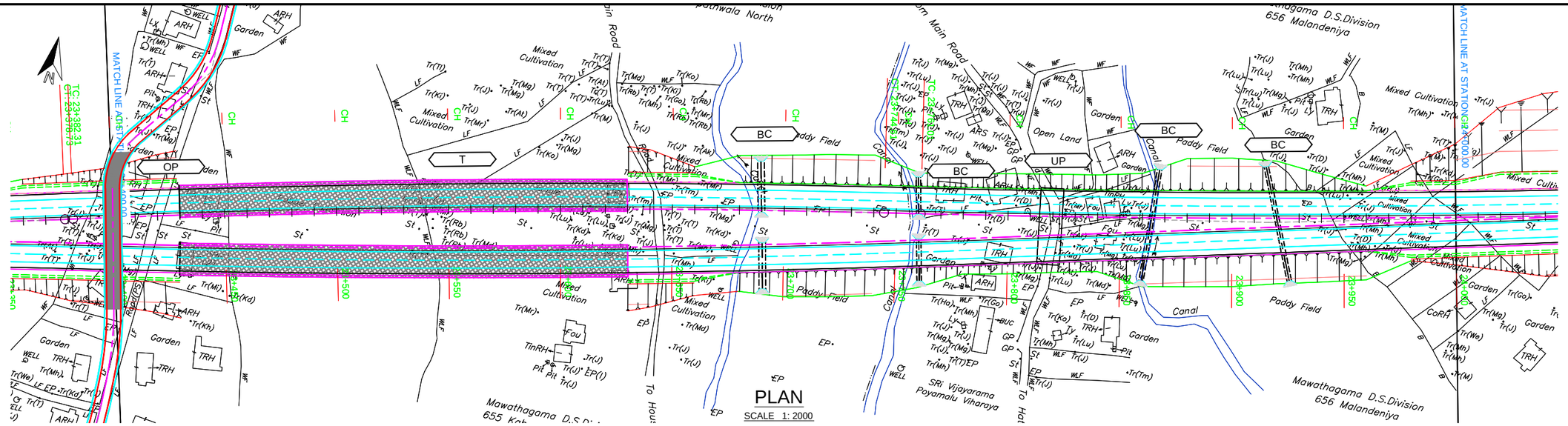


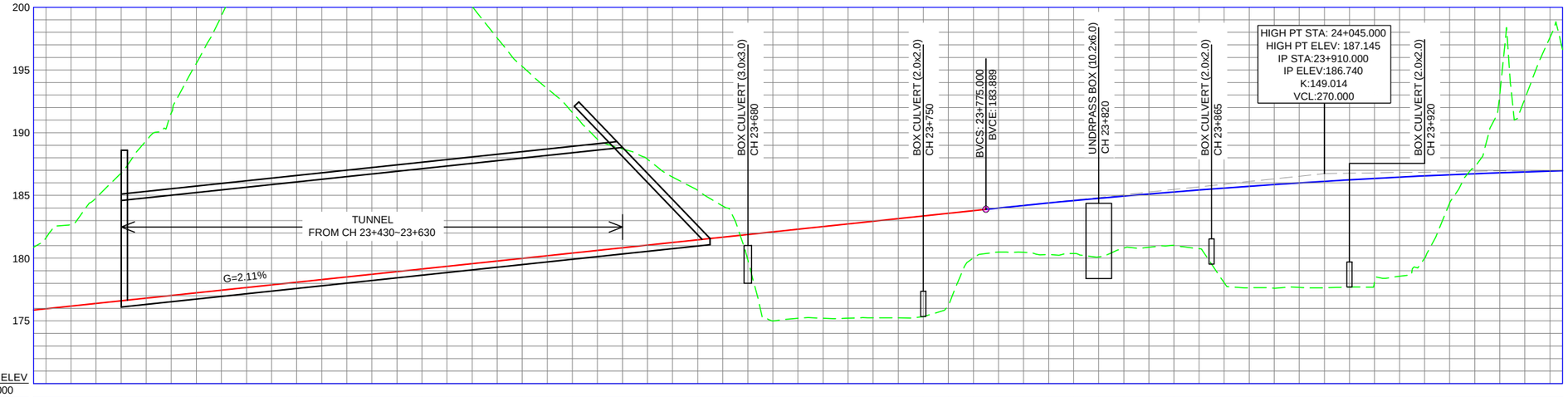
PLAN

SCALE : 1: 2000

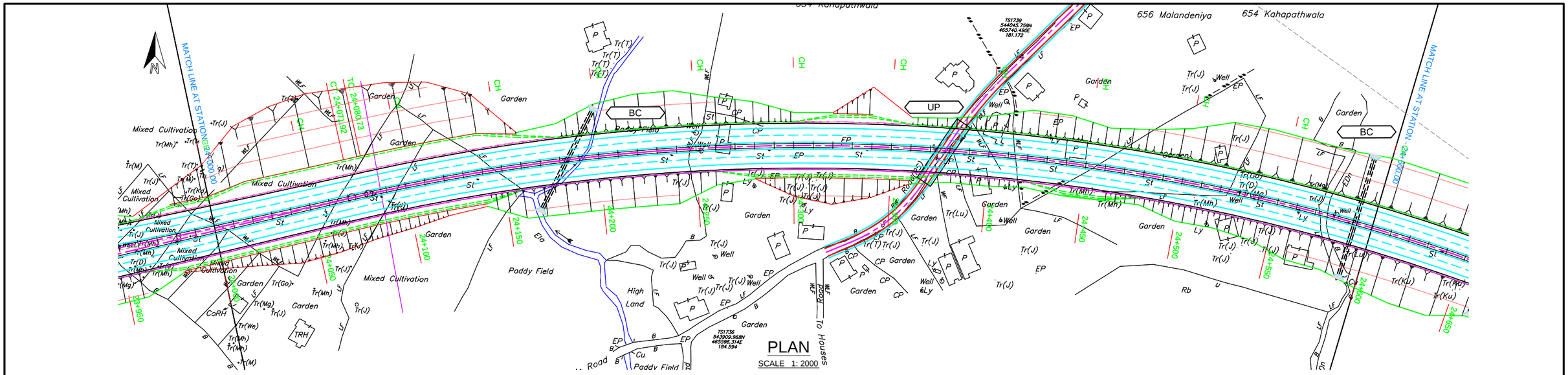


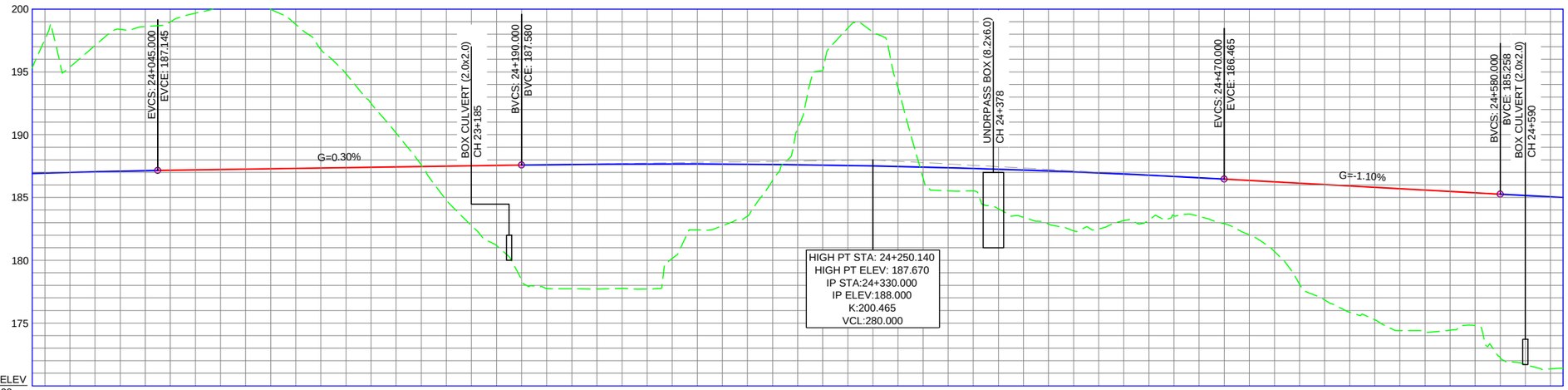
CHAINAGE	Ch21+600	Ch21+610	Ch21+620	Ch21+630	Ch21+640	Ch21+650	Ch21+660	Ch21+670	Ch21+680	Ch21+690	Ch21+700	Ch21+710	Ch21+720	Ch21+730	Ch21+740	Ch21+750	Ch21+760	Ch21+770	Ch21+780	Ch21+790	Ch21+800	Ch21+810	Ch21+820	Ch21+830	Ch21+840	Ch21+850	Ch21+860	Ch21+870	Ch21+880	Ch21+890	Ch21+900	Ch21+910	Ch21+920	Ch21+930	Ch21+940	Ch21+950	Ch21+960	Ch21+970	Ch21+980	Ch21+990	Ch22+000	Ch22+010	Ch22+020	Ch22+030	Ch22+040	Ch22+050	Ch22+060	Ch22+070	Ch22+080	Ch22+090	Ch22+100	Ch22+110	Ch22+120	Ch22+130	Ch22+140	Ch22+150	Ch22+160	Ch22+170	Ch22+180	Ch22+190	Ch22+200
FINISHED GROUND LEVEL	131.372	131.521	131.662	131.793	131.916	132.030	132.136	132.232	132.320	132.399	132.470	132.531	132.584	132.628	132.664	132.690	132.708	132.717	132.717	132.709	132.691	132.665	132.635	132.604	132.574	132.543	132.513	132.483	132.452	132.422	132.391	132.361	132.330	132.300	132.270	132.239	132.209	132.178	132.148	132.117	132.087	132.063	132.054	132.058	132.076	132.107	132.153	132.212	132.285	132.372	132.472	132.587	132.715	132.857	133.013	133.182	133.366	133.563	133.774	133.999	134.237
EXSISTING GROUND LEVEL	137.063	136.138	135.867	134.325	131.563	128.915	130.524	133.421	136.706	139.816	141.461	144.089	144.314	144.108	143.203	140.983	139.787	138.436	136.833	134.946	133.330	132.027	131.720	131.431	129.400	126.453	124.608	125.415	123.518	123.419	123.662	123.666	124.137	123.474	123.550	123.483	122.599	123.592	123.610	125.205	124.902	125.439	127.239	127.351	127.278	127.316	127.545	127.611	127.699	127.787	128.302	128.356	128.482	128.608	128.734	128.765	128.784	128.803	128.956	129.195	129.265
HORIZONTAL GEOMETRY		



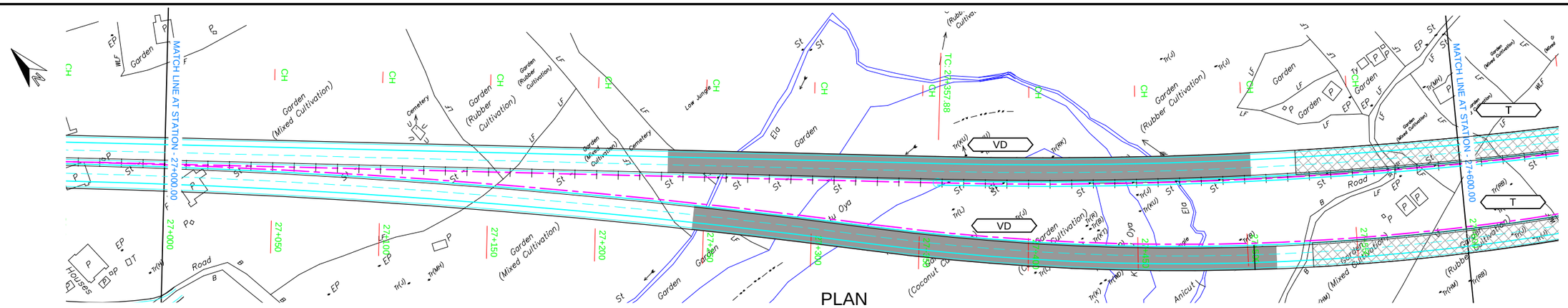


CHAINAGE	Ch23+400	Ch23+410	Ch23+420	Ch23+430	Ch23+440	Ch23+450	Ch23+460	Ch23+470	Ch23+480	Ch23+490	Ch23+500	Ch23+510	Ch23+520	Ch23+530	Ch23+540	Ch23+550	Ch23+560	Ch23+570	Ch23+580	Ch23+590	Ch23+600	Ch23+610	Ch23+620	Ch23+630	Ch23+640	Ch23+650	Ch23+660	Ch23+670	Ch23+680	Ch23+690	Ch23+700	Ch23+710	Ch23+720	Ch23+730	Ch23+740	Ch23+750	Ch23+760	Ch23+770	Ch23+780	Ch23+790	Ch23+800	Ch23+810	Ch23+820	Ch23+830	Ch23+840	Ch23+850	Ch23+860	Ch23+870	Ch23+880	Ch23+890	Ch23+900	Ch23+910	Ch23+920	Ch23+930	Ch23+940	Ch23+950	Ch23+960	Ch23+970	Ch23+980	Ch23+990	Ch24+000
FINISHED GROUND LEVEL	175.969	176.180	176.392	176.603	176.814	177.025	177.236	177.448	177.659	177.870	178.081	178.292	178.504	178.715	178.926	179.137	179.348	179.560	179.771	179.982	180.193	180.404	180.615	180.827	181.038	181.249	181.460	181.671	181.883	182.094	182.305	182.516	182.727	182.939	183.150	183.361	183.572	183.783	183.994	184.198	184.396	184.587	184.771	184.949	185.120	185.284	185.442	185.592	185.736	185.874	186.005	186.128	186.246	186.356	186.460	186.557	186.648	186.731	186.808	186.878	186.942
EXSISTING GROUND LEVEL	181.606	182.688	184.810	186.768	189.377	191.579	195.532	199.316	204.322	209.120	212.872	214.582	215.393	213.357	211.048	207.462	203.696	200.066	197.554	195.283	193.513	191.615	189.473	188.709	187.886	186.458	185.389	184.158	179.855	174.981	175.215	175.210	175.219	175.244	175.242	175.341	176.214	180.004	180.486	180.468	180.293	180.368	180.106	180.808	180.864	181.012	180.757	178.047	177.636	177.609	177.663	177.639	177.703	178.070	178.563	179.993	184.410	187.266	193.132	192.709	197.581
HORIZONTAL GEOMETRY	R=5500.00 23+382.31 23+744.61		



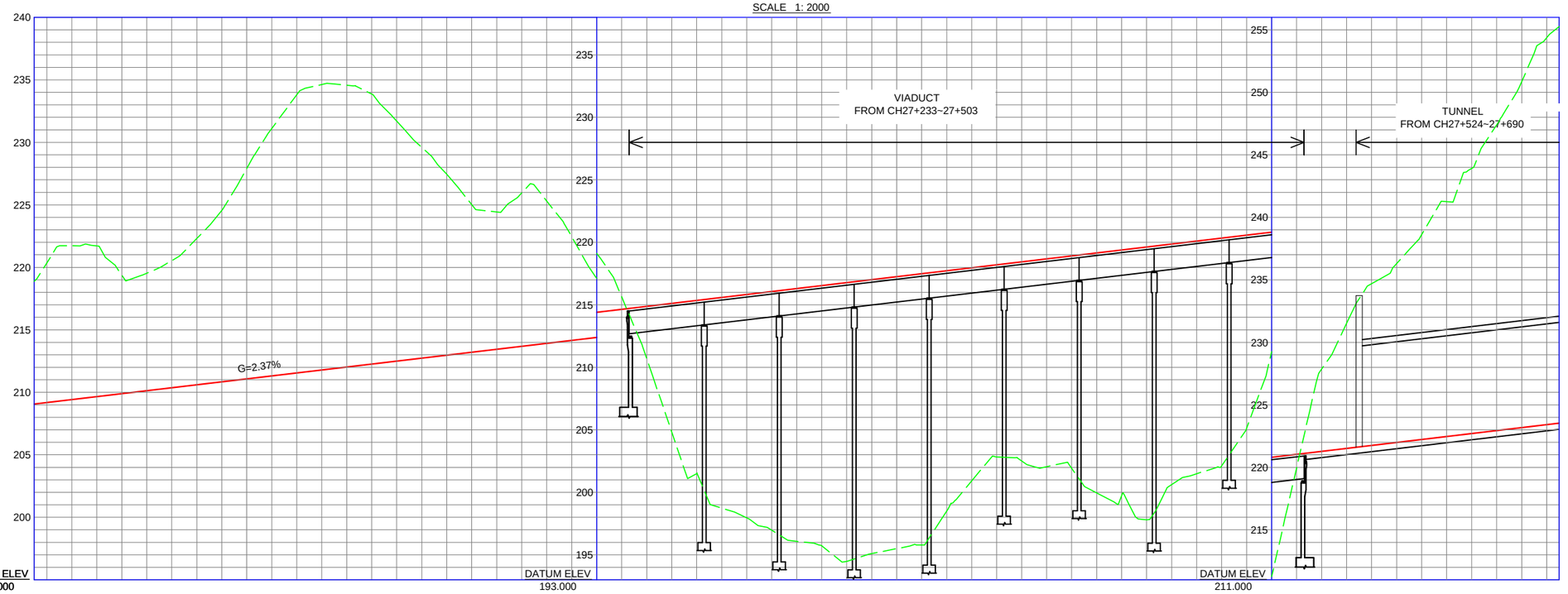


CHAINAGE	Ch24+000	Ch24+010	Ch24+020	Ch24+030	Ch24+040	Ch24+050	Ch24+060	Ch24+070	Ch24+080	Ch24+090	Ch24+100	Ch24+110	Ch24+120	Ch24+130	Ch24+140	Ch24+150	Ch24+160	Ch24+170	Ch24+180	Ch24+190	Ch24+200	Ch24+210	Ch24+220	Ch24+230	Ch24+240	Ch24+250	Ch24+260	Ch24+270	Ch24+280	Ch24+290	Ch24+300	Ch24+310	Ch24+320	Ch24+330	Ch24+340	Ch24+350	Ch24+360	Ch24+370	Ch24+380	Ch24+390	Ch24+400	Ch24+410	Ch24+420	Ch24+430	Ch24+440	Ch24+450	Ch24+460	Ch24+470	Ch24+480	Ch24+490	Ch24+500	Ch24+510	Ch24+520	Ch24+530	Ch24+540	Ch24+550	Ch24+560	Ch24+570	Ch24+580	Ch24+590	Ch24+600
FINISHED GROUND LEVEL	186.942	186.999	187.049	187.092	187.129	187.160	187.190	187.220	187.250	187.280	187.310	187.340	187.370	187.400	187.430	187.460	187.490	187.520	187.550	187.580	187.608	187.630	187.648	187.660	187.668	187.670	187.668	187.660	187.648	187.631	187.608	187.581	187.548	187.511	187.469	187.421	187.369	187.312	187.250	187.182	187.110	187.033	186.951	186.863	186.771	186.674	186.572	186.465	186.355	186.245	186.136	186.026	185.916	185.806	185.697	185.587	185.477	185.368	185.258	185.152	185.052
EXSISTING GROUND LEVEL	197.581	195.398	197.108	198.387	198.609	198.984	199.676	200.143	200.501	199.976	198.786	196.797	194.857	192.479	190.129	187.591	184.775	182.765	181.176	178.467	177.741	177.726	177.714	177.753	177.708	180.137	182.426	182.751	183.512	186.351	190.478	195.119	198.483	198.166	193.763	186.523	185.530	185.523	184.106	183.423	182.888	182.340	182.486	183.151	183.216	183.545	183.493	182.918	182.018	180.706	178.095	176.846	175.857	175.273	174.392	174.310	174.435	174.815	172.256	171.703	171.348
HORIZONTAL GEOMETRY	R=6500.00 23+761.01 24+071.92		



PLAN

SCALE 1: 2000



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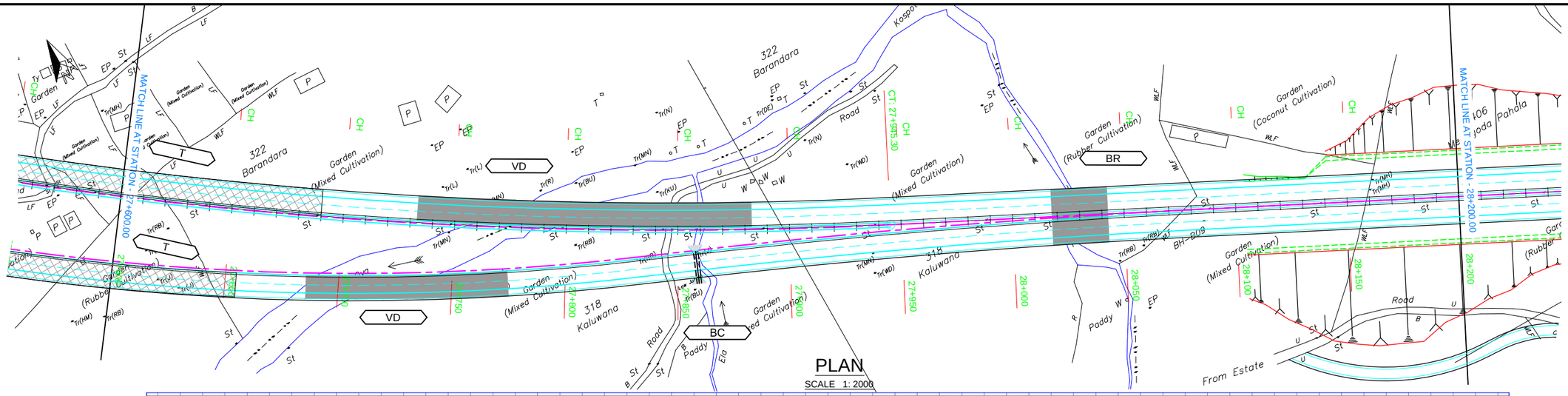

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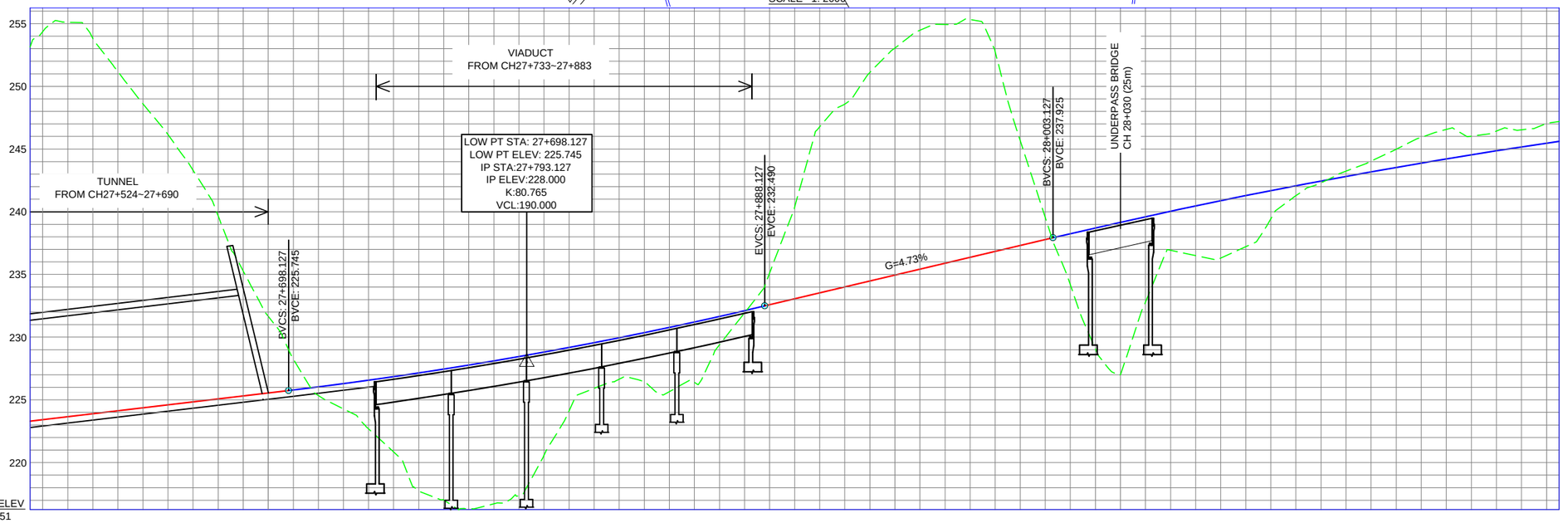


CHAINAGE	FINISHED GROUND LEVEL	EXSISTING GROUND LEVEL
Ch27+600	223.416	254.363
Ch27+610	223.653	255.113
Ch27+620	223.890	253.810
Ch27+630	224.128	251.164
Ch27+640	224.365	248.614
Ch27+650	224.602	246.142
Ch27+660	224.840	243.308
Ch27+670	225.077	239.665
Ch27+680	225.315	235.274
Ch27+690	225.552	231.662
Ch27+700	225.790	228.254
Ch27+710	226.035	225.349
Ch27+720	226.294	224.272
Ch27+730	226.564	222.688
Ch27+740	226.847	220.858
Ch27+750	227.143	217.757
Ch27+760	227.451	217.013
Ch27+770	227.771	216.323
Ch27+780	228.103	216.711
Ch27+790	228.448	217.369
Ch27+800	228.806	220.593
Ch27+810	229.175	224.124
Ch27+820	229.557	225.917
Ch27+830	229.952	226.650
Ch27+840	230.359	226.468
Ch27+850	230.778	225.658
Ch27+860	231.210	226.393
Ch27+870	231.654	229.387
Ch27+880	232.110	231.943
Ch27+890	232.579	235.109
Ch27+900	233.051	240.351
Ch27+910	233.524	246.774
Ch27+920	233.996	248.583
Ch27+930	234.469	251.105
Ch27+940	234.942	253.046
Ch27+950	235.414	254.470
Ch27+960	235.887	254.939
Ch27+970	236.360	255.337
Ch27+980	236.832	252.771
Ch27+990	237.305	245.665
Ch28+000	237.777	239.530
Ch28+010	238.248	234.175
Ch28+020	238.710	229.067
Ch28+030	239.162	227.033
Ch28+040	239.606	232.823
Ch28+050	240.040	236.925
Ch28+060	240.466	236.506
Ch28+070	240.882	236.316
Ch28+080	241.289	237.216
Ch28+090	241.687	239.454
Ch28+100	242.076	241.287
Ch28+110	242.456	242.304
Ch28+120	242.827	243.240
Ch28+130	243.188	244.034
Ch28+140	243.541	244.984
Ch28+150	243.884	245.933
Ch28+160	244.218	246.563
Ch28+170	244.543	246.022
Ch28+180	244.859	246.423
Ch28+190	245.166	246.532
Ch28+200	245.464	247.042

HORIZONTAL GEOMETRY: R=2000.00, 27+357.88, 27+945.30

VERTICAL GEOMETRY: G=2.37%; V.C.L.=190.00, K=80.76; G=4.73%; V.C.L.=720.00, K=109.72

LONGITUDINAL SECTION

SCALE : HORIZONTAL 1: 2000

VERTICAL 1: 400

NOTE:-STRUCTURES AND STRUCTURE LOCATIONS ARE GIVEN FOR INDICATION ONLY.

PRELIMINARY

Employer

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF HIGHER EDUCATION & HIGHWAYS

ROAD DEVELOPMENT AUTHORITY

PROJECT DIRECTOR - CENTRAL EXPRESSWAY
3rd Floor, Sethsiripaya , Battaramulla.
Tel : 0112877708 Fax : 0112877708 Email : rdapd@gmail.com

Designer

ROAD DEVELOPMENT AUTHORITY

DEPUTY DIRECTOR -HIGHWAY DESIGN
Design Office -(Geometrical Design)
S.W.R.D. Bandaranayake Mawatha
Kandy
Tel : 0812054992 Fax : 0812054994
Email : docpkandy@gmail.com

REV.	DESCRIPTION	BY.	DATE

Project Title

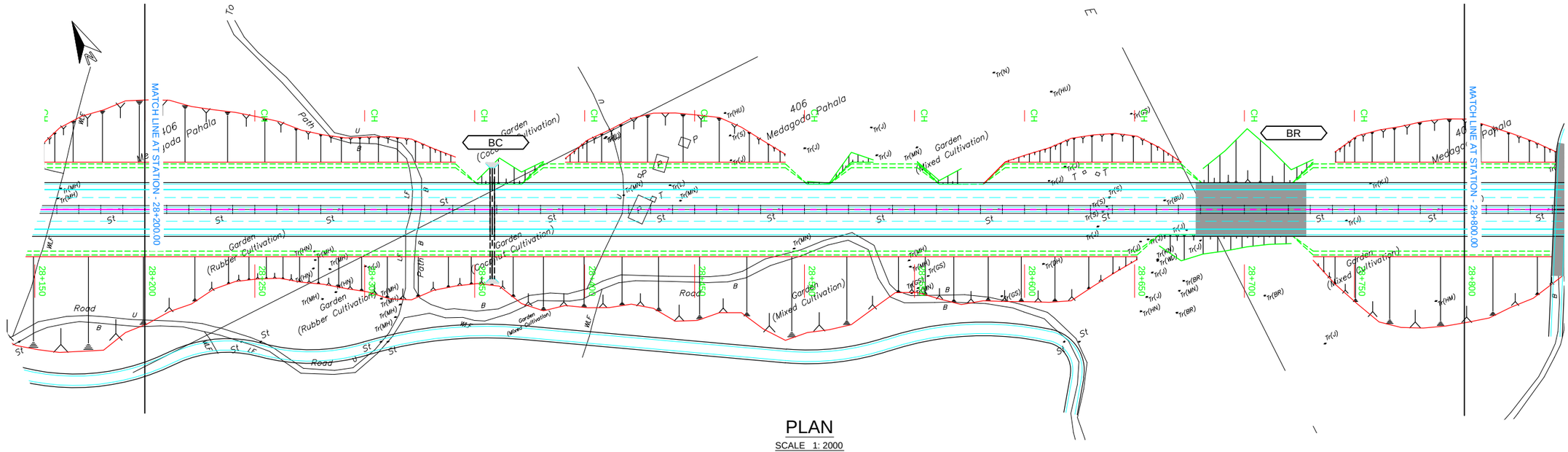
CENTRAL EXPRESSWAY PROJECT (CEP)

SECTION - 3 FROM POTHUHERA TO GALAGEDARA

PACKAGE - II FROM PARAPE TO GALAGEDARA

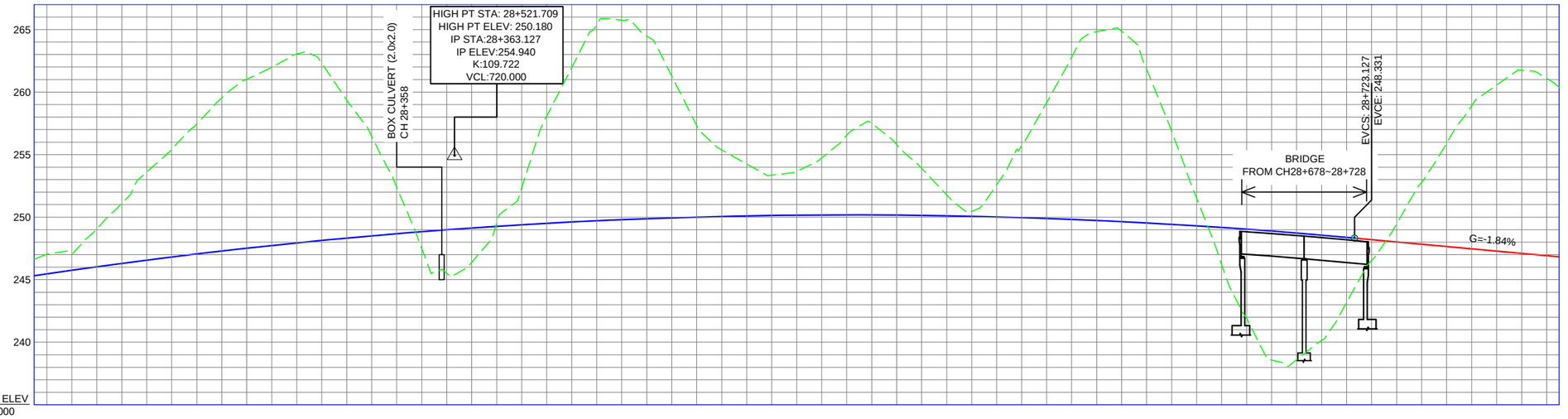
(CH. 16+700 - CH. 32+500)

Drawing Title : PLAN & PROFILE (CH27+600.00 - CH28+200.00)			
Designed : T.A.SANJEEWANI	Drawn : D.K.N.K.DELGAHAPELA	Checked : K.W.U.MUNASINGHE	
C.E. (Design) : A.G.ARIYAWANSHA	D.D.(Design) : L.V.S.WEERAKOON		
Drawing No : RDA-CEP-GE-PD-PKII-PP-27	Scale : 1:2000	Date : 06-05-2016	Sheet No: 27 of 36



PLAN

SCALE 1: 2000



CHAINAGE	FINISHED GROUND LEVEL	EXSISTING GROUND LEVEL
Ch28+200	245.464	247.042
Ch28+210	245.753	247.126
Ch28+220	246.032	249.054
Ch28+230	246.302	251.096
Ch28+240	246.564	253.612
Ch28+250	246.816	255.432
Ch28+260	247.059	257.439
Ch28+270	247.293	259.530
Ch28+280	247.518	261.029
Ch28+290	247.734	261.979
Ch28+300	247.940	263.033
Ch28+310	248.138	262.315
Ch28+320	248.326	259.359
Ch28+330	248.505	256.465
Ch28+340	248.676	252.386
Ch28+350	248.837	247.502
Ch28+360	248.989	245.516
Ch28+370	249.131	246.389
Ch28+380	249.265	249.545
Ch28+390	249.390	252.349
Ch28+400	249.505	258.083
Ch28+410	249.612	261.941
Ch28+420	249.709	265.400
Ch28+430	249.797	265.744
Ch28+440	249.876	264.468
Ch28+450	249.946	261.285
Ch28+460	250.007	257.323
Ch28+470	250.058	255.374
Ch28+480	250.101	254.253
Ch28+490	250.134	253.356
Ch28+500	250.159	253.654
Ch28+510	250.174	254.738
Ch28+520	250.180	256.550
Ch28+530	250.177	257.500
Ch28+540	250.165	255.785
Ch28+550	250.144	253.903
Ch28+560	250.113	251.781
Ch28+570	250.074	250.475
Ch28+580	250.025	252.586
Ch28+590	249.968	255.687
Ch28+600	249.901	259.172
Ch28+610	249.825	262.792
Ch28+620	249.740	264.831
Ch28+630	249.646	264.861
Ch28+640	249.543	261.829
Ch28+650	249.430	256.860
Ch28+660	249.309	251.507
Ch28+670	249.178	246.209
Ch28+680	249.038	241.878
Ch28+690	248.890	238.573
Ch28+700	248.732	238.605
Ch28+710	248.565	240.153
Ch28+720	248.388	243.181
Ch28+730	248.205	246.541
Ch28+740	248.022	249.461
Ch28+750	247.838	252.779
Ch28+760	247.655	255.905
Ch28+770	247.471	258.893
Ch28+780	247.287	260.560
Ch28+790	247.104	261.741
Ch28+800	246.920	261.104

HORIZONTAL GEOMETRY

VERTICAL GEOMETRY: V.C.L.=720.00, K=109.72; G=-1.84%

LONGITUDINAL SECTION

SCALE : HORIZONTAL 1: 2000
VERTICAL 1: 400

NOTE:-STRUCTURES AND STRUCTURE LOCATIONS ARE GIVEN FOR INDICATION ONLY.

PRELIMINARY

Employer
DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF HIGHER EDUCATION & HIGHWAYS

ROAD DEVELOPMENT AUTHORITY
PROJECT DIRECTOR - CENTRAL EXPRESSWAY
3rd Floor, Sethsiripaya , Battaramulla.
Tel : 0112877708 Fax : 0112877708 Email : rdapd@gmail.com

Designer
ROAD DEVELOPMENT AUTHORITY
DEPUTY DIRECTOR -HIGHWAY DESIGN
Design Office -(Geometrical Design)
S.W.R.D. Bandaranayake Mawatha
Kandy
Tel : 0812054992 Fax : 0812054994
Email : docpkandy@gmail.com

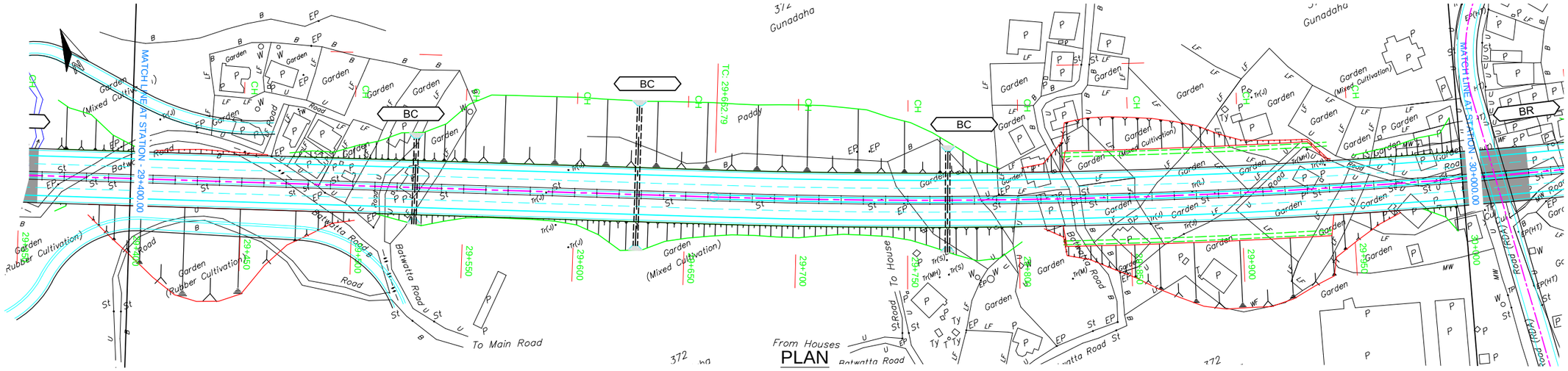
REV.	DESCRIPTION	BY.	DATE

Project Title

CENTRAL EXPRESSWAY PROJECT (CEP)

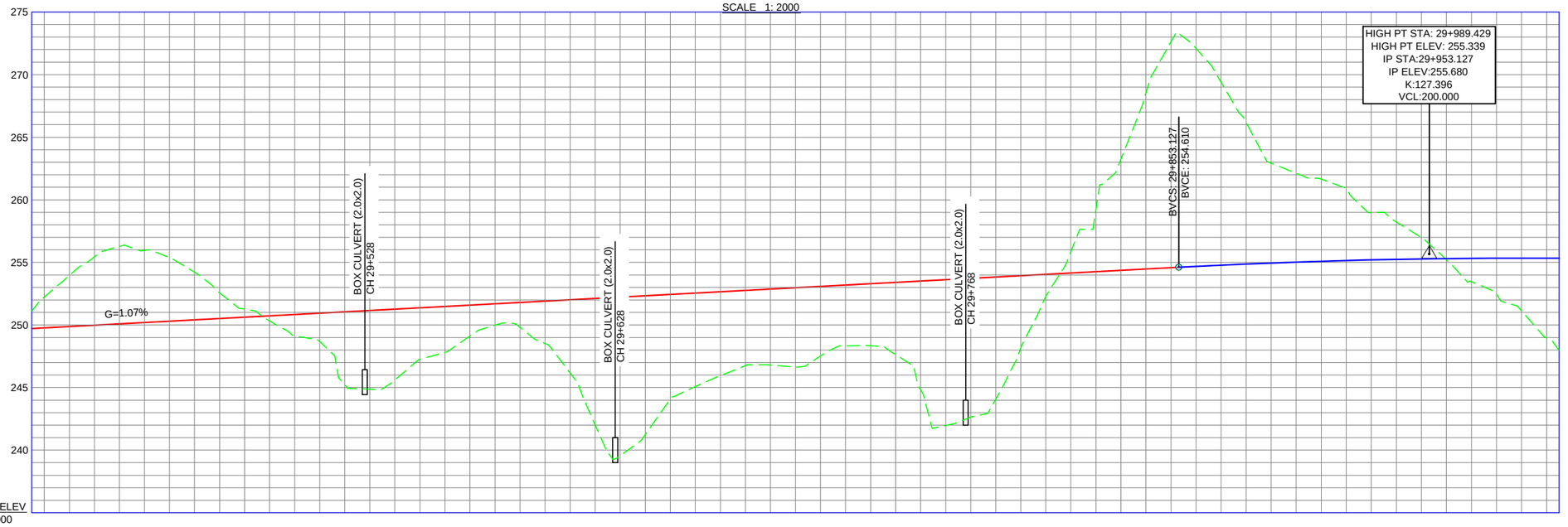
SECTION - 3 FROM POTHUHERA TO GALAGEDARA
PACKAGE - II FROM PARAPE TO GALAGEDARA
(CH. 16+700 - CH. 32+500)

Drawing Title : PLAN & PROFILE (CH28+200.00 - CH28+800.00)			
Designed : T.A.SANJEEWANI	Drawn : D.K.N.K.DELGAHAPELA	Checked : K.W.U.MUNASINGHE	
C.E. (Design) : A.G.ARIYAWANSHA	D.D.(Design) : L.V.S.WEERAKOON		
Drawing No : RDA-CEP-GE-PD-PKII-PP-29	Scale : 1:2000	Date : 06-05-2016	Sheet No: 29 of 36

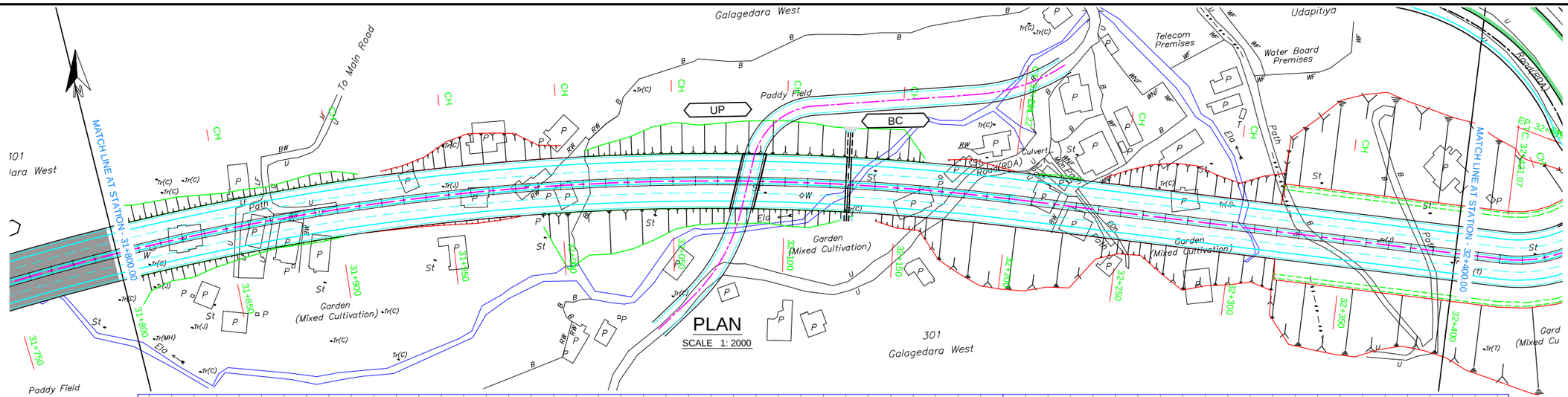


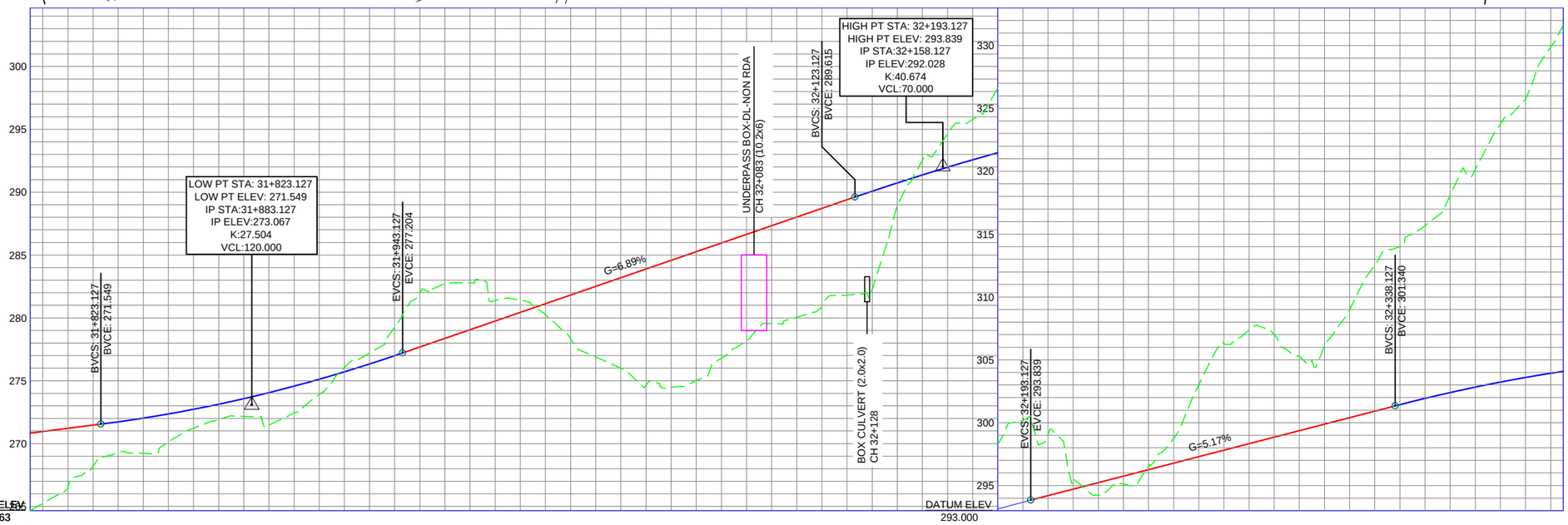
PLAN

SCALE 1: 2000



CHAINAGE	Ch29+400	Ch29+410	Ch29+420	Ch29+430	Ch29+440	Ch29+450	Ch29+460	Ch29+470	Ch29+480	Ch29+490	Ch29+500	Ch29+510	Ch29+520	Ch29+530	Ch29+540	Ch29+550	Ch29+560	Ch29+570	Ch29+580	Ch29+590	Ch29+600	Ch29+610	Ch29+620	Ch29+630	Ch29+640	Ch29+650	Ch29+660	Ch29+670	Ch29+680	Ch29+690	Ch29+700	Ch29+710	Ch29+720	Ch29+730	Ch29+740	Ch29+750	Ch29+760	Ch29+770	Ch29+780	Ch29+790	Ch29+800	Ch29+810	Ch29+820	Ch29+830	Ch29+840	Ch29+850	Ch29+860	Ch29+870	Ch29+880	Ch29+890	Ch29+900	Ch29+910	Ch29+920	Ch29+930	Ch29+940	Ch29+950	Ch29+960	Ch29+970	Ch29+980	Ch29+990	Ch30+000
FINISHED GROUND LEVEL	249.762	249.869	249.976	250.083	250.190	250.297	250.404	250.511	250.618	250.725	250.832	250.939	251.046	251.153	251.260	251.367	251.474	251.581	251.688	251.795	251.902	252.009	252.116	252.223	252.330	252.437	252.544	252.651	252.758	252.865	252.972	253.079	253.186	253.293	253.400	253.507	253.614	253.721	253.828	253.935	254.042	254.149	254.256	254.363	254.470	254.577	254.682	254.779	254.869	254.951	255.025	255.092	255.150	255.201	255.243	255.278	255.305	255.324	255.336	255.339	255.335
EXSISTING GROUND LEVEL	252.228	253.953	255.436	256.269	255.968	255.389	254.214	252.574	251.269	250.316	249.121	248.674	245.236	244.875	245.604	247.257	247.803	249.113	249.980	249.816	248.523	246.165	242.017	239.561	241.247	244.068	245.072	245.956	246.742	246.800	246.649	247.521	248.340	248.340	247.648	244.832	241.973	242.644	244.072	248.171	252.310	255.849	259.206	263.232	268.531	272.624	272.080	269.395	266.167	262.918	262.122	261.646	260.850	258.983	258.233	256.971	255.201	253.459	252.488	251.131	248.960
HORIZONTAL GEOMETRY		





CHAINAGE	FINISHED GROUND LEVEL	EXSISTING GROUND LEVEL
Ch31+800	270.963	265.251
Ch31+810	271.216	266.585
Ch31+820	271.469	268.210
Ch31+830	271.731	269.312
Ch31+840	272.027	269.215
Ch31+850	272.360	270.132
Ch31+860	272.729	271.231
Ch31+870	273.135	271.888
Ch31+880	273.576	272.164
Ch31+890	274.054	271.485
Ch31+900	274.569	272.459
Ch31+910	275.120	273.902
Ch31+920	275.707	276.059
Ch31+930	276.330	277.204
Ch31+940	276.990	279.271
Ch31+950	277.678	281.847
Ch31+960	278.368	282.748
Ch31+970	279.057	282.778
Ch31+980	279.746	281.384
Ch31+990	280.436	281.435
Ch32+000	281.125	280.267
Ch32+010	281.815	278.361
Ch32+020	282.504	276.886
Ch32+030	283.194	275.997
Ch32+040	283.883	274.633
Ch32+050	284.573	274.467
Ch32+060	285.262	275.000
Ch32+070	285.952	276.793
Ch32+080	286.641	278.188
Ch32+090	287.331	279.543
Ch32+100	288.020	280.049
Ch32+110	288.710	280.931
Ch32+120	289.399	281.806
Ch32+130	290.083	282.253
Ch32+140	290.743	288.924
Ch32+150	291.379	292.552
Ch32+160	291.990	294.639
Ch32+170	292.576	295.785
Ch32+180	293.138	298.276
Ch32+190	293.676	300.153
Ch32+200	294.194	299.092
Ch32+210	294.711	295.540
Ch32+220	295.229	294.248
Ch32+230	295.746	295.117
Ch32+240	296.264	296.557
Ch32+250	296.781	298.743
Ch32+260	297.298	303.009
Ch32+270	297.816	306.299
Ch32+280	298.333	307.396
Ch32+290	298.850	307.004
Ch32+300	299.368	305.270
Ch32+310	299.885	306.106
Ch32+320	300.402	308.985
Ch32+330	300.920	312.509
Ch32+340	301.437	314.007
Ch32+350	301.932	315.673
Ch32+360	302.396	318.074
Ch32+370	302.828	320.135
Ch32+380	303.229	323.762
Ch32+390	303.597	325.739
Ch32+400	303.934	329.883

HORIZONTAL GEOMETRY: R=1100.00, 31+537.61, 32+201.22

VERTICAL GEOMETRY: G=2.53% | V.C.L.=120.00, K=27.50 | G=6.89% | V.C.L.=70.00, K=40.67 | G=5.17% | V.C.L.=150.00, K=31.53

LONGITUDINAL SECTION

SCALE : HORIZONTAL 1: 2000
VERTICAL 1: 400

NOTE:-STRUCTURES AND STRUCTURE LOCATIONS ARE GIVEN FOR INDICATION ONLY.

PRELIMINARY

Employer
DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF HIGHER EDUCATION & HIGHWAYS

ROAD DEVELOPMENT AUTHORITY
PROJECT DIRECTOR - CENTRAL EXPRESSWAY
3rd Floor, Sethsiripaya , Battaramulla.
Tel : 0112877708 Fax : 0112877708 Email : rdapd@gmail.com

Designer
ROAD DEVELOPMENT AUTHORITY
DEPUTY DIRECTOR -HIGHWAY DESIGN
Design Office -(Geometrical Design)
S.W.R.D. Bandaranayake Mawatha
Kandy
Tel : 0812054992 Fax : 0812054994
Email : docpkandy@gmail.com

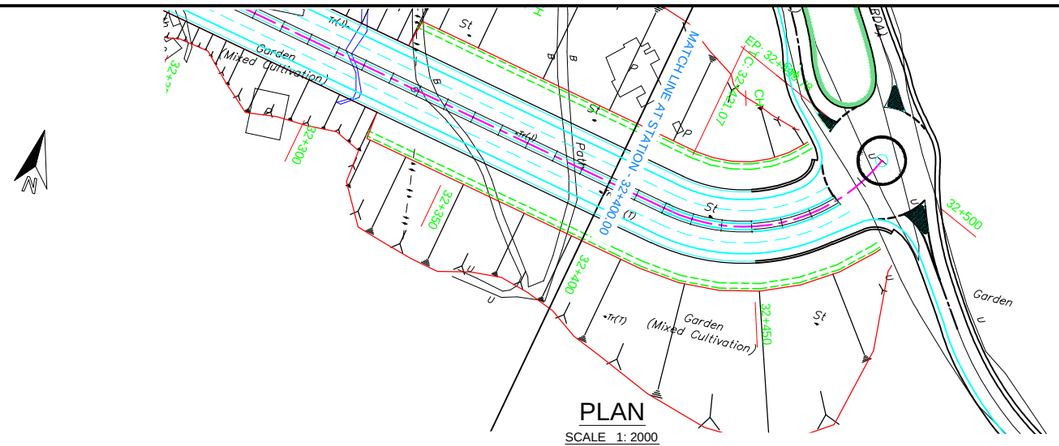
REV.	DESCRIPTION	BY.	DATE

Project Title

CENTRAL EXPRESSWAY PROJECT (CEP)

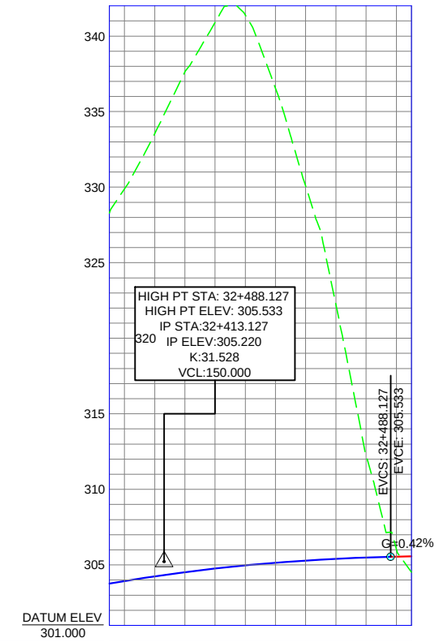
SECTION - 3 FROM POTHUHERA TO GALAGEDARA
PACKAGE - II FROM PARAPE TO GALAGEDARA
(CH. 16+700 - CH. 32+500)

Drawing Title : PLAN & PROFILE (CH31+800.00 - CH32+400.00)			
Designed : T.A.SANJEEWANI	Drawn : D.K.N.K.DELGAHAPELA	Checked : K.W.U.MUNASINGHE	
C.E. (Design) : A.G.ARIYAWANSHA	D.D.(Design) : L.V.S.WEERAKOON		
Drawing No : RDA-CEP-GE-PD-PKII-PP-35	Scale : 1:2000	Date : 06-05-2016	Sheet No: 35 of 36



PLAN

SCALE 1: 2000



CHAINAGE	Ch32+400	Ch32+410	Ch32+420	Ch32+430	Ch32+440	Ch32+450	Ch32+460	Ch32+470	Ch32+480	Ch32+490
FINISHED GROUND LEVEL	303.934	304.239	304.513	304.755	304.965	305.143	305.290	305.405	305.488	305.540
EXSISTING GROUND LEVEL	329.883	333.546	337.629	340.899	341.385	336.555	330.053	322.223	312.241	306.074
HORIZONTAL GEOMETRY	R=59.04 32+421.07 32+499.78									
VERTICAL GEOMETRY	V.C.L.=150.00 K=31.53 G=0.42%									

LONGITUDINAL SECTION

SCALE : HORIZONTAL 1: 2000
VERTICAL 1: 400

NOTE:-STRUCTURES AND STRUCTURE LOCATIONS ARE GIVEN FOR INDICATION ONLY.

PRELIMINARY

Employer

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF HIGHER EDUCATION & HIGHWAYS

ROAD DEVELOPMENT AUTHORITY

PROJECT DIRECTOR - CENTRAL EXPRESSWAY
3rd Floor, Sethsiripaya , Battaramulla.
Tel : 0112877708 Fax : 0112877708 Email : rdapd@gmail.com

Designer

ROAD DEVELOPMENT AUTHORITY

DEPUTY DIRECTOR -HIGHWAY DESIGN
Design Office -(Geometrical Design)
S.W.R.D. Bandaranayake Mawatha
Kandy
Tel : 0812054992 Fax : 0812054994
Email : docpkandy@gmail.com

REV.	DESCRIPTION	BY.	DATE

Project Title

CENTRAL EXPRESSWAY PROJECT (CEP)

SECTION - 3 FROM POTHUHERA TO GALAGEDARA

PACKAGE - II FROM PARAPE TO GALAGEDARA

(CH. 16+700 - CH. 32+500)

Drawing Title : PLAN & PROFILE (CH32+400.00 - CH32+500.00)			
Designed : T.A.SANJEEWANI	Drawn : D.K.N.K.DELGAHAPELA	Checked : K.W.U.MUNASINGHE	
C.E. (Design) : A.G.ARIYAWANSHA	D.D.(Design) : L.V.S.WEERAKOON		
Drawing No : RDA-CEP-GE-PD-PKII-PP-36	Scale : 1:2000	Date : 06-05-2016	Sheet No: 36 of 36

Annex 4.3

Resettlement Sites

072-3113678

D.P.A.S. ජයවර්ධන.
823- තයිලිය.
සංවර්ධන නිලධාරී.
ආර්ථික සංවර්ධන නිලධාරී,
ප්‍රාදේශීය ලේකම් කාර්යාලය,
කුරුණෑගල.
2014.02.26.

ප්‍රාදේශීය ලේකම්තුමා,
කුරුණෑගල ප්‍රාදේශීය ලේකම් කාර්යාලය,
කුරුණෑගල.

ගරු ප්‍රාදේශීය ලේකම්තුමනි,

උතුරු අධිවේගී මාර්ග ව්‍යාපෘතිය නිසා නිවාස අහිමි වන ජනතාව පදිංචිය සඳහා සුදුසු ඉඩම් පිළිබඳව දැනුම් දීම.

823 - තයිලිය ග්‍රාම සේවා වසම ප්‍රදේශය හරහා උතුරු අධිවේගී මාර්ගය දිවයන බැවින් නිවාස අහිමි වන ජනතාව නැවත පදිංචි කිරීම සඳහා යෝග්‍ය ඉඩම් මෙම ප්‍රදේශයට තදාසන්නව පවතී. ඒ අනුව.

(i) මධුරාවතී නිශ්ශංක වත්ත.
තිරගම - බෝගමුව විදුහල අසු කර 2 km පමණ දුරින් මෙම වත්ත පිහිටා ඇත. විශාල පොල් ඉඩමක්ය. අක්කර 200 බිම් ප්‍රමාණයකින් යුක්තය. පෞද්ගලික ඉඩමකි.

(ii) තේක්ක කැලය
තෝරවතුර වැව ඉස්මත්තට වන්නට පිහිටා ඇත. රජය සතු ඉඩමකි.

(iii) මෙරගොල්ල වත්ත.
තයිලිය ඇඹිරියවල සිට දිවයන වත්තකි. අක්කර 50 පමණ බිම් ප්‍රමාණයකින් යුක්තය. පෞද්ගලික ඉඩමකි.

(iv) වලිපාන වත්ත.
තලකොට ගමට ආසන්නව පවතී. අක්කර 1.50 ක බිම් ප්‍රමාණය-කින් යුක්තය. පෞද්ගලික ඉඩමකි.

ඉහත තොරතුරු ව්‍යාපෘතිය නිසා නිවාස අහිමි වන ජනතාව නැවත පදිංචි කිරීමේ ඉදිරි කටයුතු සඳහා යොදා ගන්නා ලෙස දැනුම් දෙමි.

ස්තූතියි!

මීට විශ්වාසී

ඩී.පී.ඒ.එස්. ජයවර්ධන
ආර්ථික සංවර්ධන නිලධාරි
823 තයිලිය
කුරුණෑගල ප්‍රාදේශීය මහ ලේකම් කාර්යාලය

ප්‍රාදේශීය ලේකම් කාර්යාලය - පොල්ගහවෙල
பிரதேச செயலகம் - பொல்கஹவெல
DIVISIONAL SECRETARIAT - POLGAHAWELA

අංකය 7/2

දිනය 2014-03- ١٧

ව්‍යාපෘති අධ්‍යක්ෂ,
උතුරු අධිවේගී මාර්ග ව්‍යාපෘතිය,
මහා මාර්ග ,වරාය හා නාවික අමාත්‍යාංශය,
බත්තරමුල්ල.

<u>උතුරු අධිවේගී මාර්ග ව්‍යාපෘතියේ බලපෑම් මඟින් ඉඩම් හා නිවාස දේපල අහිමිවන්නන් නැවත පදිංචි කිරීම.</u>

උක්ත කරුණ සම්බන්ධයෙන් ඔබගේ අංක RDA/NEP/PD/ES/11 හා 2013.01.31 දිනැති ලිපිය හා බැඳේ.

2. ඒ අනුව මෙම කොට්ඨාශය තුල යෝජිත උතුරු අධිවේගී මාර්ගයට හසුවන ඉඩම් වෙනුවෙන් එම ඉඩම් හිමිකරුවන්ට මෙම කොට්ඨාශයෙන්ම ඉඩම් ලබා දීමට කැමැත්ත පල කල මෙම කොට්ඨාශයේ පදිංචි පෞද්ගලික ඉඩම් හිමියන්ගේ තොරතුරු පහත ආකෘතියට අනුව ඉදිරිපත් කරමි. තවද මෙම කොට්ඨාශය තුළ මෙම ව්‍යාපෘතියට ලබා දීමට එකඟත්වය පළ කළ රජයට අයත් ඉඩම් නොමැති බවද දන්වමි.

අනු අංකය	ග්‍රාම නිලධාරී වසම	ඉඩමේ නම	පෞද්ගලික ඉඩමක් නම් අයිතිකරුගේ නම හා ලිපිනය	ඉඩමේ ප්‍රමාණය
01	936-ගලබඩගම	ගලබඩගම වත්ත	නිහාල් පාලිත ගුණතිලක මයා, ගලබඩගම වත්ත, අලවි පාර, පොල්ගහවෙල.	අක්කර.03
02.	896-තලවත්තේගෙදර	වදකොටුව වත්ත	එච්.එම්.කරුණාරත්න මයා, කුලුහෙන්දිවල. තලවත්තේගෙදර.	අක්කර.01 පර්චස් 70
03.	896-තලවත්තේගෙදර	මහකැලේවත්ත එස්ටේට්	එස්.ජී.ආරියතිලක මයා, මාවත්ත පාර.බන්දාව, පොල්ගහවෙල.	පර්චස් 50.නිවස සමග

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ප්‍රාදේශීය ලේකම්
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එල්.එච්.රම්‍යාඩිරි,
ප්‍රාදේශීය ලේකම්,
පොල්ගහවෙල.

Resettlement Sites in CEP – Section 3

1. Harakgalewatte, Weligama , Rambukkana (7.3 acr.)
2. Mahakumburawatte, Meedeniya, Mawathagama (7 acr.)

Annex 5.1

Proposed EM

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
A. Loss of Agricultural Land (Low land and high land)/Non Agriculture Lands					
A1	Loss of Agricultural land	Owner with title deed or registration certificate	Preference will be given to PAPs for land option (similar location and productive quality), subject to availability of such land. Or cash payment for loss of land at full **replacement cost.** In case of only a section of land being acquired and if the remaining portion is economically not viable for continued use as per the LAA, the remainder land will be acquired or injury will be paid at **replacement cost** if opted by PAP. In either case reasonable time will be given to harvest the crops or payment will be made at **market value** as indicated by item F1 The Livelihood Restoration Allowance (G3.1) and Special allowance (H2.2)	Payment for lost assets and restoration of livelihood. Payment for loss of income based on entitlement under Land Acquisition Act [46 1 (iii)] or as determined by the CV as per Regulations 2014 (Special Gazette Notification published on 30.05.2014).	RDA, CV, DS.
A2	Loss of Agricultural land	Collective owners through the inheritance from their parents	Preference will be given to PAPs for land for land option (similar location and productive quality), subject to availability of such land. Or cash payment for loss of land at full **replacement cost.** In case of only a section of land being acquired and if the remaining portion is economically not viable for continued use as per the LAA the remainder land will be acquired or injury will be paid at **replacement cost** if opted by PAP. In either case reasonable time will be given to harvest the crops or payment will be made at **market value** as indicated by item F1 The Livelihood Restoration Allowance (G3.1) and Special allowance (H2.2)	Payment for lost assets and restoration of livelihood. Payment for loss of income based on entitlement under Land Acquisition Act [46 1 (iii)] or as determined by the CV as per Regulations 2014 (Special Gazette Notification published on 30.05.2014). When deciding the actual land holder (legal), it can be changed due to the type of deed (Jayaboomi or Swarnaboomi – inheritance goes to elder son of the family after the parents) and scheme of land granted such as colonization scheme lands (inheritance goes to	RDA, CV, DS.

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
				younger son of the family after the parents), Kandyan heritage lands (inheritance goes to elder son after the parents), etc. However, if the father or after the father, mother has given equal rights to all children, all children get equal share of the property. Culturally, there are different practices on a regional basis. Therefore, the practice should not be violated during the acquisition process.	
A3	Loss of access to agricultural land	Tenant, user with lease or renter, *Ande* farmer	No payment for land. If cultivated by tenant, user with lease, renter or *Ande* farmer payment of compensation for standing crops and/ or trees as indicated in item F1. In either case reasonable time will be given to harvest the crops or payment will be made at **market value** as indicated by item F1 Cash payment for loss of net income for portion of land affected for the remaining leased/assigned period. The Livelihood Restoration Allowance (G3.1) and Special allowance (H2.2)	Payment to cover lost crops and restoration of livelihood.	RDA, CV, DS.
A4	Loss of access to agricultural land	Sharecropper	No payment for land. Reasonable time will be given to harvest the crops or payment will be made at **market value** as indicated by item F1 if cultivated by the sharecropper.	Payment to cover lost crops and restoration of livelihood.	RDA, CV, DS.

<table>
<tr><th></th><th>Type of Loss</th><th>Entitled Persons</th><th>Entitlements</th><th>Justification for Payment</th><th>Responsibility</th></tr>
<tr><td></td><td></td><td></td><td>The Livelihood Restoration Allowance (G3.1) and Special allowance (H2.2)</td><td></td><td></td></tr>
<tr><td>A5</td><td>Loss of access to agricultural land</td><td>Non-title user or encroacher on private land or state land</td><td>No payment for land.

Reasonable time will be given to harvest the crops or payment will be made at market value as indicated by item F1 if cultivated by the non-title owner.

The Livelihood Restoration Allowance (G3.1) and Special allowance (H2.2)</td><td>Payment to cover lost crops and restoration of livelihood.</td><td>RDA, CV, DS.</td></tr>
<tr><td>A6</td><td>Loss of access to agricultural land</td><td>Non-title user who is occupied on Temple and Devalegam Lands</td><td>Payment of compensation on lands according to the following criteria:

<table><tr><th rowspan="2">Period of Occupation</th><th colspan="2">% Payment</th></tr><tr><th>Occupant</th><th>Owner</th></tr><tr><td>Over 20 years</td><td>75</td><td>25</td></tr><tr><td>10-20 years</td><td>50</td><td>50</td></tr><tr><td>05-10 years</td><td>25</td><td>75</td></tr><tr><td>Less than 05 years</td><td>10</td><td>90</td></tr></table>
Reasonable time will be given to harvest the crops or payment will be made at market value as indicated by item F1 if cultivated by the non-title owner.

The Livelihood Restoration Allowance (G3.1) and Special allowance (H2.2)</td><td>Payment to cover all investment to develop the land, lost crops and restoration of livelihood.</td><td>RDA, CV, DS and the Department of Trustees</td></tr>
<tr><td colspan="6">B. Residential Land and Structures</td></tr>
<tr><td>B1</td><td>Loss of residential land and structure</td><td>Owner with title deed or registration certificate or other ownership documents recognized under the</td><td>Partial loss of land and structure
All payments for land and structure in material and/ or cash at full replacement cost (provisions under LAA and Regulations 2008 - Special Gazette Notification published on 2009.04.07), WITHOUT deduction for depreciation or salvageable materials to repair or rebuild the structure to original or better condition when remaining land area is</td><td>Payment for lost assets, assistance to reorganize on existing land or relocate on alternate land and support for transition period.</td><td>RDA, CV, DS, Assistance from NHDA would be required if resettlement sites are to be developed.</td></tr>
</table>

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
		law	**sufficient to rebuild upon the structure.** Payment of item G1.1, Materials transport allowance and item G2.1 and G2.2 of Transition settlement allowance. Payment of item H2.2 of Additional allowances. Reasonable time (minimum two months) will be given to the household members to find a temporal accommodation. ***Complete loss of land and structure*** For structures not having sufficient land to rebuild upon will be entitled to the following: 1. Assistance from RDA to locate alternative plot for relocation; OR relocation to a resettlement site if developed by the project and decided by PAP (undeveloped value of the land plot will be recovered by RDA from the PAP). 2. Payment of "Self relocation allowance" not more than SLR 500,000 **if PAP decides for self-relocation**. Payment of item G1.1, Materials transport allowance and item G2.1 and G2.2 of Transition settlement allowance. Payment of item H2.2 of Additional allowances. Reasonable time (minimum two months) will be given to the household members to find a temporal accommodation.		
B2	Loss of rental accommodation	Tenant, renter, or user with lease	***Partial loss of rental accommodation*** If there is partial loss of rental accommodation, PAP has the option to stay with the owner's agreement OR; If PAP choses to move out, cash assistance for 3 months rental allowance as mentioned below: 1. Maximum rental of Rs. 20,000/= per month for properties situated in Municipal Council areas 2. Maximum rental of Rs. 15,000/= per month for properties situated in Urban Council areas 3. Maximum rental of Rs. 10,000/= per month for properties situated in PradeshiyaSabha areas	Cash payment for rental allowance or cash value of remaining lease, assistance for finding alternate rental accommodation and support during transition period.	RDA, CV, DS.

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
			Payment of item H2.2 of Additional allowances ***Complete loss of rental accommodation*** If there is complete loss of rental accommodation, cash assistance to cover rental arrangements for minimum period of 6 months of equivalent standard as mentioned below: 4. Maximum rental of Rs. 20,000/= per month for properties situated in Municipal Council areas 5. Maximum rental of Rs. 15,000/= per month for properties situated in Urban Council areas 6. Maximum rental of Rs. 10,000/= per month for properties situated in PradeshiyaSabha areas Assistance in finding new affordable rental accommodation AND Payment of item H2.2 of Additional allowances RDA will assist in recovering advance payments made by the tenant to the owner, if there is a complete loss of rental accommodation.		
B3	Loss of residential structure	Non-titled user, non- permitted user or squatter	***Partial or complete loss of structure*** No payment for land. In case of squatters on state lands, the PAP would be paid the reinstatement value (Regulations 2014 (Special Gazette Notification published on 30.05.2014) with the written concurrence of the Divisional Secretary. In case of squatters on private land where the owner has not contested the encumbrances in a Court of Law the person who carried out the improvements will qualify to receive the value upon adequate proof of the improvements which has been made on the land by such person. The project will also encourage the PAP to relinquish the land and relocate on alternate land or resettlement site if developed by the project and opted by PAP. Payment of item G1.1, Materials transport allowance and	Payment for lost assets, assistance to reorganize on land or provision of alternate site if choosing to relocate and support for transition period for non-titled users or encroachers on government or private land.	RDA, CV, DS. Assistance from NHDA would be required if resettlement sites are to be developed.

<table>
<tr><th></th><th>Type of Loss</th><th>Entitled Persons</th><th>Entitlements</th><th>Justification for Payment</th><th>Responsibility</th></tr>
<tr><td></td><td></td><td></td><td>item G2.1 and G2.2 of Transition settlement allowance.
Payment of item H2.2 of Additional allowances</td><td></td><td></td></tr>
<tr><td>B4</td><td>Loss of residential structures</td><td>Non-title user who is occupied on Temple and Devalegam Lands</td><td>Payment of compensation on lands according to the following criteria:

<table><tr><th rowspan="2">Period of Occupation</th><th colspan="2">% Payment</th></tr><tr><th>Occupant</th><th>Owner</th></tr><tr><td>Over 20 years</td><td>75</td><td>25</td></tr><tr><td>10-20 years</td><td>50</td><td>50</td></tr><tr><td>05-10 years</td><td>25</td><td>75</td></tr><tr><td>Less than 05 years</td><td>10</td><td>90</td></tr></table>
The project will also encourage the PAP to relinquish the land and relocate on alternate land or resettlement site if developed by the project and opted by PAP.
Payment of item G1.1, Materials transport allowance and item G2.1 and G2.2 of Transition settlement allowance.
Payment of item H2.2 of Additional allowances
Reasonable time will be given to harvest the crops or payment will be made at market value as indicated by item F1 if cultivated by the non-title owner.
The Livelihood Restoration Allowance (G3.1) and Special allowance (H2.2)</td><td>Payment for lost assets, assistance to reorganize on land or provision of alternate site if choosing to relocate and support for transition period for non-titled users or encroachers on government or private land.</td><td>RDA, CV, DS and the Department of Trustees NHDA would be required if resettlement sites are to be developed.</td></tr>
<tr><td colspan="6">C. Commercial Land and Structures</td></tr>
<tr><td>C1</td><td>Loss of commercial land and structure</td><td>Owner/s and/ or Operator/s of registered business</td><td>Partial loss of land and structure
All payments for land and structure in material and/ or cash at full replacement cost (provisions under LAA and Regulations 2014 (Special Gazette Notification published on 30.05.2014), WITHOUT deduction for depreciation or salvageable materials to repair or rebuild the structure to original or better condition when remaining land area is sufficient to rebuild upon the structure.
Payment for any associated loss of income while commercial</td><td>Project shall give reasonable time for owner/s or operator/s to continue their business operation while rebuilding their structures.
Owner/s will rebuild their structure as soon as payment is released and clear the area in the agreed timeframe.
Transition assistance and income</td><td>RDA, CV, DS.</td></tr>
</table>

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
			structure is being rebuilt will be based on the following guidelines of Regulations 2008 (Regulations 2014 (Special Gazette Notification published on 30.05.2014); (i) Payment for Formal businesses will be based on the accounts and tax returns pertaining to preceding three (3) years. (ii) A payment for increased overhead expenses would be recommended by CV as per the circumstances. Payment of item G1.1, Materials transport allowance and item G2.1 and G2.2 of Transition settlement allowance. The Livelihood Restoration Allowance (G3.2) and Special allowance (H2.2) ***Complete loss of land and structure*** For structures not having sufficient land to rebuild upon will be entitled to the following: 1. All payments for land and structure in material and/ or cash at full replacement cost (provisions under LAA and Regulations 2014 (Special Gazette Notification published on 30.05.2014), **WITHOUT deduction** for depreciation or salvageable materials to repair or rebuild the structure to original or better condition **when remaining land area is sufficient to rebuild upon the structure**. 2. Assistance from RDA to locate alternative plot for relocation if opted by owner/s on recovery of the undeveloped value of the land plot, 3. For income losses cash payment not exceeding three times the average annual net profits from business, as shown by the books of accounts, for three calendar years immediately preceding acquisition or livelihood restoration grant, whichever is higher, 4. For businesses who do not maintain books of accounts cash payment equivalent to 6 months income OR Livelihood	restoration.	

<table>
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<tr><td></td><td></td><td></td><td>assistance grant, whichever is the higher,
5. Payment of item G1.1, Materials transport allowance and item G2.1 and G2.2 of Transition settlement allowance.
The Livelihood Restoration Allowance (G3.2) and Special allowance (H2.2)</td><td></td><td></td></tr>
<tr><td>C2</td><td>Loss of commercial Structure</td><td>Tenant /renter, or operator of registered business</td><td>Partial loss of rental accommodation
Payment of compensation at replacement cost, according to the following criteria (under the Rent Control Act).
<table><tr><th rowspan="2">Period of Occupation</th><th colspan="2">% Payment</th></tr><tr><th>Occupant</th><th>Owner</th></tr><tr><td>Over 20 years</td><td>75</td><td>25</td></tr><tr><td>10-20 years</td><td>50</td><td>50</td></tr><tr><td>05-10 years</td><td>25</td><td>75</td></tr><tr><td>Less than 05 years</td><td>10</td><td>90</td></tr></table>
If there is partial loss of rental accommodation, PAP has the option to stay with the owner’s agreement OR;
If PAP chooses to move out, cash assistance for 3 months rental allowance as mentioned below:
7. Maximum rental of Rs. 20,000/= per month for properties situated in Municipal Council areas
8. Maximum rental of Rs. 15,000/= per month for properties situated in Urban Council areas
9. Maximum rental of Rs. 10,000/= per month for properties situated in PradeshiyaSabha areas

The Livelihood Restoration Allowance (G3.2) and Special allowance (H2.2)
Complete loss of rental accommodation
Payment of compensation at replacement cost, according to the following criteria (under the Rent Control Act).</td><td>Cash payment for rental allowance or cash value of remaining lease, assistance for finding alternate rental accommodation and support for income losses and during transition period.</td><td>RDA, CV, DS</td></tr>
</table>

<table>
<tr><th></th><th>Type of Loss</th><th>Entitled Persons</th><th>Entitlements</th><th>Justification for Payment</th><th>Responsibility</th></tr>
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<tr><td>05-10 years</td><td>25</td><td>75</td></tr>
<tr><td>Less than 05 years</td><td>10</td><td>90</td></tr>
</table>

If there is complete loss of rental accommodation, cash assistance to cover rental arrangements for minimum period of 6 months of equivalent standard as mentioned below:
10. Maximum rental of Rs. 20,000/= per month for properties situated in Municipal Council areas
11. Maximum rental of Rs. 15,000/= per month for properties situated in Urban Council areas
12. Maximum rental of Rs. 10,000/= per month for properties situated in PradeshiyaSabha areas

Assistance in finding new affordable rental accommodation AND Payment of item H2.2 of Additional allowances
RDA will assist in recovering advance payments made by the tenant to the owner, if there is a complete loss of rental accommodation.</td><td></td><td></td></tr>
<tr><td>C3</td><td>Loss of commercial Structure</td><td>Owner or operator of non-registered business / squatter or vendors operating kiosks with or without permission</td><td>Partial or complete loss of structure
No payment for land.
In case of squatters or vendors on state lands, the PAP would be paid the reinstatement value with the written concurrence of the Divisional Secretary.
In case of squatters or vendors on private land where the owner has not contested the encumbrances in a Court of Law the person who carried out the improvements will qualify to receive the value upon adequate proof of the improvements</td><td>Payment for lost assets, transition assistance and income restoration for owner/s of non-registered businesses and squatters.</td><td>RDA, CV, DS</td></tr>
</table>

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
			which has been made on the land by such person. Payment for any associated loss of income while commercial structure is being rebuilt will be based on the following guidelines of Regulations 2014 (Special Gazette Notification published on 30.05.2014); (i) Payment for Formal businesses will be based on the accounts and tax returns pertaining to preceding three (3) years. (ii) A payment for increased overhead expenses would be recommended by CV as per the circumstances. Payment of item G1.1, Materials transport allowance and item G2.1 and G2.2 of Transition settlement allowance. Livelihood restoration grant (items G3.2 and G3.3) where required Payment of item H2.1 (if required) AND H2.2 of Additional allowances Owner/s of such business will be encouraged to relinquish the land and relocate on alternate land. RDA may assist such PAPs to find such alternate land.		
D. Other Private Properties or Secondary Structures					
D1	Partial or complete loss of other property or secondary structure (i.e. well, parapet wall, shed, outdoor latrine, warehouse, storage facility, cold storage facility, animal pen, etc.)	Owners of structures (regardless of the ownership of land)	Cash payment for affected structure at replacement cost; Or repair the structure to original or better condition by Project;	Payment for loss and relocation if required.	RDA, CV, DS.
D2	Loss of statues, tombs or graves	All owners	A cash payment between Rs. 5,000 and Rs. 15,000 would be paid to cover the cost of exhumation (including any religious	Payment for loss and relocation if required	RDA, CV, DS.

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
			ceremonies if required) and relocation.		
E. Loss of Income of Employees or Hired Labourers					
E1. Temporarily Affected					
E1.1	While business re-establishes (i.e. reorganizing on remaining land or relocating in the same area)	All affected employees, wage or daily labourers in private or government businesses	An allowance of Rs. 15,000/= OR 3 months basic salary whichever is higher Or assistance in securing new employment including relevant skills training if required,	Businesses will be encouraged to retain existing employees. Payment for lost income during business re- establishment.	RDA, CV, DS.
E2. Permanently Affected					
E2.1	Job loss due to relocation of business to another area or business operator decides not to re-establish	All affected employees, wage or daily labourers in private or government businesses	An allowance of Rs. 50,000/= OR 6 months basic salary whichever is higher And preferential access to project construction employment opportunities.	Payment for lost income, rehabilitation package to provide support and income restoration.	RDA, CV, DS.
F. Standing Crops and Trees with Timber Value					
F1	Loss of crops and trees with timber value	Person who cultivates crops and/or owns trees (regardless of the ownership of land)	An advance notice to harvest crop shall be displayed at GN office and informed to PAP by GN in advance. However where harvesting is not possible a net value of trees and standing crops based on market prices. Entitlement for payment will be as follows; Full payment for crops and trees to owner if cultivated by himself or herself (own and operated). For collective ownership, payment for crops shall be paid for the actual land user of the plot of land. For tenant, renter, or *Ande* farmer, payment for crops shall be paid to tenant, renter, or *Ande* farmer at market price. Payment for trees (if any) to land owner. For sharecropper, payment for crops shall be shared between owner and sharecropper according to the sharecropping agreement.	Payment for trees (crop and timber) calculated on market value on the basis of land productivity, type, age, and productive value of affected trees.	RDA, CV, DS, GN and State Timber Corporation (where applicable)

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
G. Livelihood Restoration and Rehabilitation Assistance					
G1. Materials Transport Allowance					
G1.1	Relocation of housing or business	Households or business owners who will be relocated (regardless of the ownership of land)	Cash assistance (relocation allowance) would be paid to household on following basis for transportation to new location or site based on floor area of the house in occupation before relocation; 1. Rs. 10,000 for houses where floor area is less than 1000 sq.ft 2. Rs. 15,000 for houses where floor area is between 1000-2000 sq.ft. 3. Rs. 25,000 for houses where floor area is more than 2000 sq.ft. If there are subfamilies, above payment should be divided proportionately. For other properties, maximum amount of Rs. 25,000 would be paid depending on the nature of occupation.	Payment for disturbance and to assist in relocation	RDA, CV, DS.
G2. Transition Settlement Allowance					
G2.1	Loss of electricity, water and telecommunication connections	Households or business owners who will be relocated (regardless of the ownership of land)	Expenses for electricity facility - Rs. 20,000 Expenses for water facility - Rs. 20,000 Expenses for telecommunication facility - Rs.10,000 Total payment will be based on the available facilities available at the point of resettlement survey.	Assist the household or owner of business to reestablish electricity, water and telecommunication facilities at new site.	RDA, DS, CV and utility supply agency.
G2.2	Cost of re-fixing of Fixtures and fittings	For households and owner/s or operator/s of businesses and institutions that will be permanently displaced	An allowance of Rs. 10,000 maximum will be paid for a household. In case of a business premises or any other construction of specified nature the amount will be based on actual computations. Steps will be taken to avoid any double counting.	To assist the household or business entity to reestablish at new location without delay and to start their activities. To avoid any adverse impact on income of the business.	RDA, CV, DS.
G3. Livelihood Restoration					
G3.1	Permanent effects on	Severely affected	Assistance to increase productivity on remaining land (i.e.	Access to existing agricultural	RDA, DS, CV.

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
	livelihood	farmers remaining on affected land or who starts new cultivations	increasing cropping intensity, use of high yielding seeds, diversification and introduction of new seeds or crops, etc.) and assistance to access existing subsidies.	extension services and development of new services as per the specific needs of PAPs as identified through consultation with them, support for access to existing subsidies, development and training from Department of Agriculture, Tea Smallholding Authority, Agrarian Services Department, Coconut Development Board, and Rubber Control Department	
G3.2	Permanent effects on livelihood	Severely affected households remaining on affected land or who resettle in a self-relocated land or RDA resettlement site	A cash assistance of Rs. 25,000 per household would be paid as Livelihood restoration grant, with written concurrence of Divisional Secretary. If requested by household, RDA will assist in obtaining professional assistance and advice, to invest funds or to set up a business at a commercially viable location. Linked with skill training (item G3.3), RDA would assist the household to obtain Micro Credit facilities to obtain productive assets.	Additional payment to offset any income losses not directly paid for. And to provide support while business re-establishing or as start-up investment for new business if PAP has to change livelihood.	RDA, DS, CV.
G3.3	Permanent effects on livelihood	Self-employed members of Household	Training for up to two members of PAP households to receive skills and vocational training, to an amount of Rs 5,000 per member for maximum six months. The skills and vocational training would be arranged by the RDA with support of regional vocational training centres where it close to the resettlement sites. However, such payment will only be made for households who had requested such training during the census survey carried out in the project area and with written concurrence of Divisional Secretary.	Linked with need to start new business, access to existing or development of new training courses depending on the needs of the PAPs.	RDA, DS, CV.

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
G3.4	Permanent effects on livelihood	Severely affected households who are running livestock farming and remaining on affected land or who resettle in a self-relocated land or RDA resettlement site	Training for up to two members of PAP households to receive skills and vocational training, to an amount of Rs 5,000 per member for maximum six months. The skills and vocational training would be arranged by the RDA with support of regional vocational training centres where it close to the resettlement sites. However, such payment will only be made for households who had requested such training during the census survey carried out in the project area and with written concurrence of Divisional Secretary.	Linked with need to start new business, access to existing or development of new training courses depending on the needs of the PAPs.	RDA, DS, CV.
H. 1 Special Assistance for Households/PAPs					
H1.1	Effects on vulnerable PAPs	Households having vulnerable PAPs (Low income families (attached to Samurdhi or other poverty alleviation schemes) Elderly PAPs, female-headed households, and disabled)	A special grant of Rs 15,000 per household to improve living standards of vulnerable PAPs and households. Assistance to vulnerable households in finding suitable land for relocation and shifting Or provision of resettlement sites if developed by the project and opted by PAP.	Assistance, over and above payment for lost assets, to reduce impacts of resettlement which can disproportionately affect the already vulnerable and to ensure that the project does not simply re-establish levels of vulnerability or marginalization.	RDA, CV, DS.
H1.3	Effects on sub families	A sub family (nuclear family) living in the same house under the same or separate electoral list at least 03 years prior to the publication of the notice under Section 02 of LAA	Cash assistance of Rs.100,000/= per family. Assistance to sub/nuclear family household in finding suitable land for relocation and shifting Or provision of resettlement sites if developed by the project and opted by PAP. DS of the respective division with the supporting evidences from the GN should verify the entitlement of sub/nuclear family.	Assistance to reduce impacts to sub families.	RDA, CV, DS
H2 Additional Allowances					
H2.1	Cost of advertising	For owner/s or	Applicable for businesses or institutions that will be	Assistance to advertise the new	RDA, CV, DS.

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
		operator/s of business or Institution	permanently displaced from present location. An allowance for advertising the new premises, printing of notice boards would be paid as follows; Registered business/ institute Rs. 15,000 Unregistered business/ institute Rs. 7,500	location of the business/ institute and to secure the existing client base. Thereby to avoid any significant impact on income and client base of the business/ institute.	
H2.2	Expenses incurred during acquisition process	All PAPs who appear for section 9 inquiry	An allowance not exceeding Rs. 10,000 would be paid to each PAP who appears for section 9 inquiry.	Assist all APs who appear for section 9 inquiry to offset the expenses they have to bear in obtaining claim/ valuation reports, title reports and traveling expenses etc.	RDA, CV, DS.
I. Community Assets					
I1	Loss of small scale community buildings and other structures.	Divisional Secretary division, urban ward, local community or local authority owning or benefiting from community property. Chief priest of the religious place.	Restoration in existing location of affected community buildings, structures, infrastructure and common property resources to original or better condition; Or relocate at alternative location identified in consultation with affected communities and relevant authorities; Or cash payment at full replacement cost, and restoration of access to community resources.	Full restoration of buildings, structures or other community resources by contractor (costs to be borne by project) or payment for such if agreement for local authority, community to undertake the restoration works.	RDA, CV, DS, Local Authority.
I2	Loss of local infrastructure such as local roads, play grounds, footpaths, bridges, irrigation, water points or communal hand pumps etc.	Divisional Secretary division, urban ward, local community or local authority owning or benefiting from community property.	Restoration in existing location of affected community buildings, structures, infrastructure and common property resources to original or better condition; Or replacement in alternative location identified in consultation with affected communities and relevant authorities; Or cash payment at full replacement cost; And restoration of access to community resources.	Full restoration of Infrastructure or other community resources by contractor (costs to be borne by project) or payment for such if agreement for local authority or community to undertake the restoration works.	RDA, CV, DS, Local Authority.
J. Unanticipated Adverse Impact					

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
J1	Any unanticipated adverse impact due to project intervention	Any unanticipated consequence of the project will be documented and mitigated based on the spirit of the principles agreed upon in this policy framework.			
K Temporary Impact					
K1	Temporary adverse impact of civil works (such as loss of access, damage to property or land, safety hazards, impact of mobility)	Households and businesses/livelihood activities	All PAPs and communities are entitle to make their grievances to the GRM and expect a reasonable solution and/or compensation for the damage caused as a result of gaps in arranging following activities or necessary steps to be taken by the project staff and/or contractor. 1.1 Arrangements of public notices at the site informing the people about: work schedule, likely temporary impacts, signage, safety advice and mitigation measures, contact details of officer in charge and GRM. 1.2 Arrangements of necessary traffic management measures for facilitating mobility 1.3 Special measures to provide access for continuing trade/business 1.4 In case of loss of access to business for over a week, financial assistance @ LKR 1000 per day until ease of access has been restored by the contractor and certified by the engineer with approval of the PD. 1.5 The contractor shall bear the compensation cost of any impact on structure or land due to negligent movement of machinery during construction or establishment of construction plant, as per standard contract provision. 1.6 All temporary use of lands outside proposed ROW to be through written approval of the landowner and contractor. Location of construction camps will set up by contractors in consultation with the implementing agencies. 1.7 Arrangements of necessary health and safety measures to be undertaken as a part of Environment Management Plans including measures for sound, dust pollution, minimize	Mitigation measures of unforeseen activities and incidents	RDA, CV, DS, Local Authority.

	Type of Loss	Entitled Persons	Entitlements	Justification for Payment	Responsibility
			hazard risks through signage and safety barricades, first aid facilities at work sites/camps, etc. 1.8 Steps to minimize and mitigate adverse impacts on human and vehicular mobility including through traffic diversions and management; phased construction strategy; avoiding work during peak hours 1.9 Legal provisions for ensuring equal wages for men and women working at project construction sites and preventing child labour. 1.10 Measures as necessary to deal with any other emergent impacts that comes under health and safety.		

Annex 7.1

EMP

Environmental Issues		Protection and preventive measures	Locations/ Project phase	Mitigation Cost	Institutional Responsibility	
					Implement	Supervision[9]
1.0Advance Works						
1.1	**Land Acquisition**					
	1.1.1	**Removal of structures within the proposed project area**				
	(a)	For the title holders, compensation for lost housing structures will be paid based on the Land Acquisition Act (LAA) and its 2008 regulations. Entitlements of affected persons will be based on the project specific entitlement matrix prepared based on the National Involuntary Resettlement Policy (NIRP).	Locations of affected buildings in the project area	Based on the Land Acquisition Act and its regulations	CV/RDA/ PMU	RDA/ ESDD
	1.1.2	**Acquisition of private/ state land for the proposed project area**				
	(a)	Compensation for private lands will be paid based on the Land Acquisition Act (LAA) and its 2008 regulations guided by the project specific entitlement matrix based on the NIRP.	Throughout the project area where private lands are to be acquired	Based on the Land Acquisition Act and its regulations	CV/DS/RDA/ PMU	RDA/ ESDD
1.2	**Design for cross drainage**					
	(a)	Design of cross drainage structures willbe based on RDA bridge design manual and hydrological reports. Any recommendations given by Department of Irrigation, Provincial Irrigation Engineer and Department of Agrarian Development shall be considered when designing via ducts, road side drains, culverts and bridges.	At stream intersections and flood plains.	Design Cost	RDA/ PMU	RDA/ DI,PIE,DAD
1.3	**Identification of utility supply lines that may need to be shifted**					
	(a)	Prior consultation and consent shall be taken from relevant service providers (CEB, NWS & DB, SLT) if sections of utility lines need to	Throughout the road section where utilities are present	Design cost RDA		Service providers

		be shifted due to design requirements or shift in alignment.				
1.4	**Road sections near cultural, historical and archaeological sites**					
	(a)	Prior to construction, meet with the Department of Archaeology and known places of cultural, historical and archaeological sites within 500m from the trace to identify such areas. Seek Department's advice for recovery and preservation & carry out recommendations given in the Archaeological Impact Assessment (AIA). If any other suspected artefacts surface during site reconnaissance or excavations for the project, it will be immediately notified to the Department of Archeology.	At archaeologically significant areas shown in Table 1 (at the end of EMP)	Design cost if needed	RDA	Department of Archaeolo gyand CEA/NW- PEA /NW- PEA
2.0 Construction Phase						
2.1	**Earthwork and Soil Conservation**					
	2.1.1	**Disposal of debris and spoil**				
	(a)	Identify and earmark all disposal sites for spoil and construction wastes and ensure the contractor's staff is aware of these locations. Strictly monitor on daily basis the unauthorized dumping in different places by operators (common occurrence) as well as the areas designated for storage until proper disposal. Consider the quarry sites for excess spoil disposal and subsequent rehabilitation	Project Cycle: Pre-construction to construction/ de-commissioning phase All active areas of the Project Sites, quarry sites, borrow areas along Ch 29+950 km and Ch 24+360 km, and access routes, batching plants, etc.	A tractor load would cost Rs 1500-2000 (subject to variations). However, provisions for spoil and waste disposal and transport shall be included in the work contracts	Contractor	RDA & CEA/NW- PEA /NW- PEA
	(b)	Construction and Demolition waste (CD wastes) / Solid wastes shall not be disposed on the sides of the road and any debris shall not be left after construction works is complete since it may be washed away by water. Locations for spoil and other CD waste disposal (including hazardous wastes) need to be carefully selected (quarry sites are ideal, but detailed investigations are				

		needed to assess their suitability).				
	(c)	Waste soil disposal sites shall be selected carefully avoiding water bodies and wetlands as much as possible and they shall be approved by the relevant Local Authority (LA). The contractor shall submit the approval along with a soil disposal management plan to the "Engineer" before commencement of such disposal operations.	-Do-	-Do-	-Do-	-Do-
	(b)	Work that lead to heavy erosion shall be avoided during the rainy season. If the contractor intends to carry out such activities during the rainy season prior approval will be obtained from the Engineer by submitting a proposal on actions that will be undertaken by the contractor to prevent erosion.	Locations	-Do-	-Do-	-Do-
	2.1.2	**Conservation and reuse of top soil**				
	(a)	If directed by the engineer, top soil of the agricultural lands and any other productive areas where it has to be removed for the purpose of this project shall be stripped to a specified depth of 150mm and stored in stockpiles of height not exceeding 2m.	Within the project area where topsoil from productive land to be removed	Engineering Cost	Contractor	CSC, RDA/PMU
	(b)	Removed top soil will be used as a productive soil when replanting/establishing road side vegetation.	Throughout the project area	-Do-	-Do-	-Do-
	(c)	Such stockpiled topsoil will also be used to cover the areas including cut slopes where the topsoil has been removed due to project activities. Residual topsoil will be distributed on adjoining/proximate barren areas as identified by the contractor with approval from Divisional Secretary (DS) and LA under the supervision of CSC. The layer of thickness of such spread soil will be within 75mm – 150mm.	-Do-	-Do-	-Do-	CSC, RDA/PMU , DS, LA

	(d)	Topsoil thus stockpiled for reuse shall not be surcharged or overburdened. As far as possible multiple handling of topsoil stockpiles shall be kept to a minimum.	Locations where topsoil is stockpiled for reuse	-Do-	-Do-	CSC, RDA/PMU
	2.1.3	**Borrowing of earth & quarrying**				
	(a)	Vegetation clearing needs to be minimal to the extent possible in order to avoid erosion; the stripped vegetative top soil shall be piled and re-spread to an adequate depth to ensure growth of land cover to mitigate acceleration of surface flows	Project Phase : Construction to de-commissioning / rehabilitation All identified quarries (include Ch 7+940 km) and borrow sites (include Ch 29+950 km and and Ch 24+360 km).	Engineering cost	Contractor	RDA, CEA/NW- PEA & GSMB
	(b)	Borrow areas and quarry sites selected shall be far away from the water bodies & from residential areas to the extent possible	All borrow and quarry areas identified	Engineering cost	Contractor	RDA, CEA/NW-PEA /NW-PEA & GSMB
	(c)	During material exploitation, the removal of land cover in natural slopes will be restricted to maintain the slope stability. Any excavated slopes shall be maintained at stable angles depending on the type of soil at site. After completion of excavation slope shall be maintained to ensure stability and berm and drains be provided to avoid erosion and slope failure. Similarly, areas that are liable for slides (example, steep slopes > 30^0 and having thick overburden soil or highly weathered rocks with exposed roots of trees, gullies, etc..) will be avoided during wet weather		Engineering cost	Contractor	RDA, CEA/NW- PEA /NW- PEA & GSMB
	(d)	Land exploited for fill material shall be cut into profiles of flat surfaces leaving no over burden. After borrowing the slope/gradient of the area shall be graded to match or blend with existing contours; Re-slope the edges of pits so that any fallen animals can escape.		A tractor load would cost Rs 1500-2000 to deliver spoil	Contractor	RDA, CEA/NW- PEA /NW- PEA & GSMB

		Install some form of high visibility fence around the pits to discourage animals wondering into the area. The slopes shall be either hard or soft landscaped.				
	(e)	Plant the area with native trees and water regularly. Thatching of exposed soil areas with dead or live vegetation and even replantation of such areas where possible with any stripped native vegetation is recommended to reduce the generation of surface run-off during rainy periods, intercept material coming down and also to reduce dust emission scenarios.		Engineering cost	Contractor	RDA, CEA/NW- PEA & GSMB
	(f)	Provide rehabilitation plans to the NWP-EA/CEA/NW-PEA (External Monitoring Committee) for each site and progress to be documented according to the plans periodically with dated photographs, etc.	All identified quarry (include Ch 7+940 km) and borrow sites (include Ch 29+950 km and and Ch 24+360 km).	A tractor load would cost Rs 1500-2000 to deliver spoil fill for rehabilitation (subject to variations). But Engineering cost to be included in addition.	Contractor	RDA, CEA/NW-PEA &GSMB
	(g)	Contractor shall comply with the environmental requirements/ guidelines issued by the Central Environmental Authority (CEA) and the respective LA with respect to locating borrow areas and all operations related to excavation and transportation of earth from such sites.	All borrow sites	-Do-	-Do-	-Do-
	(c)	Both permanent and temporary work shall consist of measures as per the design or as directed by the engineer to control soil erosion, sedimentation and water pollution to the satisfaction of the engineer. Typical measures include the use of dikes, sediment basins, fiber mats, mulches, grasses, slope drains and other devices. All sedimentation and pollution control	-Do-	-Do-	-Do-	-Do-

		works and maintenance thereof are deemed, as incidental to the earthwork or other items of work.				
	2.1.4	**Prevention of soil erosion**				
	(a)	Will provide temporary soil mounds, temporary cover (with tarpaulin or coir mats), drainage systems connected to the main side drain culverts/bridges, achieve specified degree of compaction. Will avoid earth works during rainy season. Will not leave open loose soil mounds. Will do periodic de-siltation of the drainage system.	All trace. Slopes in cuts and fill	Engineering cost	Contractor	Supervision Consultant/RDA
	(b)	Work that lead to heavy erosion shall be avoided during the rainy season. If the contractor intends to carry out such activities during the rainy season prior approval will be obtained from the Engineer by submitting a proposal on actions that will be undertaken by the contractor to prevent erosion.	Locations	-Do-	-Do-	-Do-
	2.1.5	**Contamination of soil (fuel, lubricants and salts from sea sand)**				
	(a)	Proper storage of Fuel, lubricants and hazardous goods within enclosed cans / drums at predefined enclosed storage locations (example, elevated containers with provisions to collect spills). Storage tanks and containers (including empty items) will be well stacked (not piled on each other) in enclosed sheds Storage locations shall have good ventilation, but not directly exposed to sunlight, devoid of ignition sources and shall not be subjected to floods or close to waterways.	Complete trace, quarry sites (include Ch 7+940 km), borrow areas (include Ch 29+950 km and and Ch 24+360 km) access routes, batching plants and waterways identified along the trace.	Engineering cost	Contractor	RDA, CEA /NW-PEA
	(b)	Reuse and recycle empty Oil contaminated drums; cans and containers will be removed carefully and will be given to a service provider	Locations as above in section (a) Construction waste and	Engineering cost	Contractor	RDA, CEA /NW-PEA

		having a valid EPL for incineration. To avoid soil contamination at re-fuelling areas, "oil interceptors" shall be provided	Scheduled Waste generation locations, oil storage locations, services centers, workshops etc.			
	(c)	Vehicles, machinery and equipment servicing and maintenance work will be carried out in designated locations / service stations only or on paved locations with draining water collected into settlement/treatment ponds before release (No direct washing in waterways or close to waterways) Also regular servicing and maintenance of all machinery, etc. is crucial	All active areas of the Project Site. This includes quarry sites, borrow areas, access routes, batching plants, waterways described in this report, etc.	Engineering cost	Contractor	RDA, CEA/NW-PEA
	2.1.6	**Disposal of harmful construction wastes(Scheduled Wastes)**				
	(a)	Prior to commencement of work, a list of hazardous chemicals, material to be used in the project work will be provided to the Engineer of the RDA & CEA/NW-PEA for approval (Along with details pertaining to proposed disposal). Material Safety Data Sheets (MSDS) or technical data sheets of the different material to be used too will be furnished for approval Scheduled wastes will be stored separately from other construction material. All hazardous wastes will be contained within fully harnessed quarry sites[10]. Otherwise safe disposal of these wastes according to the National Environmental Regulations will be ensured.	Project Cycle: Pre-construction to construction/ de-commissioning phase Complete trace quarry sites (include Ch 7+940 km), borrow areas (include Ch 29+950 km and and Ch 24+360 km) access routes, batching plants, waterways, construction material and construction waste (including hazardous waste) storage locations	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(b)	Proper storage of Fuel, lubricants and hazardous goods within enclosed cans / drums at predefined enclosed storage locations (example, elevated containers with provisions to collect spills) will be ensured. No storage of incompatible material and hence the MSDS of the relevant goods will be made available and familiarised by the staff. Storage tanks	As given in above section (a)	Engineering cost	Contractor	RDA, CEA/NW-PEA

		and containers (including empty items) shall be well stacked (not piled on each other) in enclosed sheds				
	2.1.7	**Quarry operations & blasting works elsewhere**				
	(a)	Prepare Blasting Plan with Safeguards for approval by the CEA/NW-PEA with GSMB, etc. and this will include method of storage & transport of explosives, use of explosives for blasting (loading of explosives, post-blast requirements, misfires), safety aspects (pre-blast measures and prevention of high noise, dust and projectiles), monitoring of PPVs (Peak Particle Velocities) and ABOPs (Air Blast Overpressures) during blasting or test-blasting works	Project Phase: Prior to construction and during construction Magazines, locations where explosives and detonators are stored, quarry sites, route and vehicle used for transportation of explosives and detonators.	Engineering cost	Contractor	Ministry of Defense and Urban Development, RDA, CEA/NW-PEA & GSMB
	(b)	Test blasts will be carried out according to GSMB guidelines. People will be made aware of the places, dates and times of blasting. Adequate compensation will be provided for property damaged by blasting. Nearby building structures will be regularly monitored of vibration frequencies and PPVs, development of cracks.	Quarry sites and other rocky sites within the trace (Ch 7+940 km).	Engineering cost	Contractor	RDA, CEA/NW- PEA & GSMB
	(c)	Where there are nearby structures (at least < 500 m or as determined by the Engineer / CEA/NW-PEA /GSMB), Dilapidation surveys of nearby structures and pre-construction monitoring of vibration frequencies (Hz) and PPVs to be done.	Project Phase: pre-construction / Prior to blasting. Quarry sites (include Ch 7+940 km) and where ever blasting may be needed	Engineering cost	Contractor	RDA, CEA/NW- PEA & GSMB
	(d)	Vibration less techniques will be used for blasting such as CEA/NW-PEA approved chemicals (that may cause expansion of drilled holed and subsequent cracking) rather than using detonators, ANFO/ and	Locations closer to sensitive recipients (mentioned at the end of the table)	Engineering cost	Contractor	RDA, CEA/NW- PEA & GSMB

		dynamite/Gelignite cartridges				
2.2	**Storage and handling of construction material**					
	2.2.1	**Emission of dust**				
	(a)	All vehicles delivering construction material that could generate dust (example, fill material, cement, aggregates) and transporting Construction and Demolition wastes will be well covered with tarpaulin sheets to avoid dusts and spills Material storage areas and any equipment that could generate dust shall also be located downwind of any habitation areas or away from inhabited areas and other sensitive recipients such as schools and temples. Also the assembly, operation and dismantling of plants, machinery and equipment shall be handled so as to minimize the generation of dust. Construction vehicles and machineries shall be periodically maintained and serviced to minimize air pollutants such as PM2.5. Construction material stockpiles, spoil and any land clearing debris shall be well covered at all times	All active areas of the Project Site with special attention to areas where there are sensitive recipients*(mentioned at the end of this table): such as schools, temples, hospitals, forests, rivers locations (Rambukkana Oya and Kuda Oya), etc.	Engineering cost	Contractor	RDA, CEA/NW-PEA
	2.2.2	**Storage of fuel, oil and hazardous chemicals (avoid fumes and offensive odour)**				
	(a)	The Contractor shall take all precautions to prevent odour and offensive smells emanating from chemicals and processes used in construction works or labour camps. In cases wherein odour or offensive smell does occur, immediate action will be taken to rectify the situation. The Contractor will be held responsible for any compensation	All active areas of the Project site, quarry sites, borrow areas, access routes, batching plants, labor camps, construction material and construction waste (including hazardous waste) storage locations	Engineering cost	Contractor	RDA, CEA/NW-PEA

		involved with any health issue that may result from severe odour or offensive smells. Workers involved in handling chemicals having volatile organic compounds (VOCs), acids, etc. shall be provided with appropriate PPE such as gloves and respirators. Those involved in spray painting shall be given facemasks too.				
	(b)	Fuel, lubricants and hazardous goods (including chemicals that have VOCs) shall be contained within cans and drums that have well closing lids and made of material that is corrosion-proof and shall be stored at predefined enclosed storage locations. These items will be properly stored until disposed through proper disposal methods; and will not be subjected to floods or close to waterways	Construction material and construction waste (including hazardous waste) storage locations	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(c)	MSDS (Material Storage Data Sheets) and technical data sheets of toxic material will be maintained and used according to manufacturer's instructions. MSDS will include an inventory of all hazardous material / chemicals received at site and this will include the trade name, physical and chemical properties, ingredient and their % or levels, eco-toxicological data, safe handling and storage procedures and emergency & first aid procedures, etc.	All active areas of the project. construction material storage yards/ locations (their offices) to be considered	Engineering cost	Contractor	RDA, CEA/NW-PEA
	2.2.3	**Transportation of material**				
	(a)	All vehicles delivering construction material that could generate dust (example, fill material, cement, aggregates) and taking away C&D wastes will be well covered with tarpaulin sheets to avoid spills	All active and sensitive areas* (mentioned in the end of the table) of the Project Site.	Engineering cost	Contractor	RDA, CEA/NW-PEA

	(b)					
2.3.	**Water – Protection of water sources and quality**					
	2.3.1.	**Loss of minor water sources and disruption to water users**				
	(a)	Contractor shall make employees aware on water conservation and waste minimization in the construction process.	Throughout the project area and at worker camps	Engineering Cost	Contractor	CSC, RDA/PMU
	(b)	Contractor shall protect sources of water used by the community so that continued use of these water sources will not be disrupted by the work. For affected sources temporary alternative arrangements will be provided for supply of water to affected parties.	Wells and other public water source locations close to the project area	-Do-	-Do-	CSC, RDA/PMU , LA
	(c)	Contractor shall not divert, close or block existing canals and water paths in a manner that adversely affect downstream intakes. If diversion or closure or blocking of canals and water paths is required for the execution of work, contractor will obtain the engineers approval in writing. Closure of such canals shall not be done during periods when they are highly used such as cultivation periods of agricultural lands. Contractor shall also obtain the approval from line agency that is responsible to maintain the canal, intake/water supply (such as Irrigation Department, Department of Agrarian Services, NWSDB, or local authority of Divisional Secretary). Contractor shall restore the drainage path back to its original status once the need for such diversion or closure or blockage is over. During the affected period contractor shall supply water to the affected community.	Example, irrigation canals and major waterways such as (Ch 15+860 Rambukkan Oya, 19+150-19+850 Kuda Oya , 25+800 & 31+060 Kospothu Oya) that have major beneficial uses	-Do-	-Do-	CSC, RDA/PMU , DoAS, DOI, LA, DS

	2.3.2	**Siltation into water bodies**				
	(a)	Land clearing, cut and fill operations and excavations, etc. and bridge construction works will be confined to the dry periods. Therefore, the monthly rainfall patterns in the Project Area (at least for the last 5-10 years) wukk be studied using data available from the Department of Meteorology (nearest station) to best decide / plan the construction schedule. If the time schedules of the construction activities cannot be effectively coincided with the desired weather patterns in the area, then silt traps and interceptor drains, etc. will be incorporated in the construction sites as much as possible to minimize erosion and siltation of nearby water bodies.	All areas where waterways located; Rambukkana Oya (Ch 15+830 to Ch 16+060 km, Ch 16 + 900 km, Ch 25 + 810 km, Ch 30 + 250 km), Kuda Oya (Ch 17+250 km, Ch 18 + 050 km, Ch 18+750 to Ch 18+850 km & Ch 18+800 to 19 +230 km), Ch 2+400 km, Ch 12+100 km, Ch 14+600 km, Ch 21+950 km, Ch 31+350 km from Ch 17+000 to Ch 17+200 km & Ch 18+700 to 19+050 km of the Kuda Oya Wataraka Moratuwa at Ch 21+300	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(b)	Suitable surface covers will be maintained in the vicinity of any identified water bodies and paddy fields to reduce the effects of rainfall impact; example, Placement of silt fences (until construction is completed). The contained sediments will be regularly removed and disposed as a fill material (or used as backfill material) and the silt fences, traps/drains, etc. will be regularly well checked and maintained/cleaned Note: Number of Silt traps or fences needed to prevent soil from washed into the waterways will be determined and cost provided.	Where paddy fields and marshy areas located close or adjacent to the highway including, (Ch 17+000 to Ch 17+250 km, Ch 18+700 to 19+050 km & Ch 18+800 to Ch 19+230 km of the Kuda Oya	Cost for Geotextiles silt curtains: Rs. 300/m^2. Coffer dams Rs. 6,000/m Silt fence Rs. 2,500/30 m	Contractor	RDA, CEA/NW-PEA
	(c)	Land clearing debris and other construction & demolition (CD) wastes generated as well as construction material such as fill material,	Locations as mentioned in sections (a) and (b) above.	Engineering cost Tarpaulin sheet	Contractor	RDA, CEA/NW-PEA

		quarry muck, etc. will not be stacked close to waterways, areas subjected to inundation and natural drainage paths/low- lying paddy fields. and edges of hillocks facing downstream canals, etc.. Material stacked at locations approved by the Engineer / RDA will be well covered with tarpaulin sheets (to prevent any PM10 generation during hot, windy weather conditions and the material getting washed away by direct rainwater splash and surface runoff during rainy periods) until it is properly disposed or reused.		(3.5 m × 3.5m): Rs. 1750		
	(d)	Place Cofferdams and silt curtains where bridges are to be constructed. During site clearing and excavations of any banks for the construction of bridge abutments, it will be ensured that the containment bunds / coffer dams[11] are incorporated into the excavation areas and these are regularly checked and well maintained to prevent downstream migration of contained sediments. There will be no direct dewatering of sediment-laden water collected within the coffer dams to the river/oya waters	Rambukkana Oya (Ch 15+830 to Ch 16+060 km, Ch 16 + 900 km, Ch 25 + 810 km and Ch 30+250 km), Kuda Oya (Ch 18 + 050 km, Ch 18+750 to Ch 18+850 km & Ch 18+800 to 19 +230 km), Ch 2+400 km, Ch 12+100 km, Ch 14+600 km, Ch 21+950 km and Ch 31+350 km	Cost for Geotextiles silt curtains: Rs. 300/m^2. Coffer dams Rs. 6,000/m Silt fence: Rs. 2,500/30 m	Contractor	RDA, CEA/NW-PEA
	(e)	Sediments dredged from bridge sites will be subjected to a Toxicity Characteristic Leaching Procedure (TCLP) test (according to the USEPA methods) for specific heavy metal pollutants prior to disposal (consider at least Pb, As, Zn, Cu, Fe, Mn, Cr and Cd) and safe disposal methods will be followed in line with National Environmental Regulations	Rambukkana Oya (Ch 15+830 to Ch 16+060 km, Ch 16 + 900 km, Ch 25 + 810 km and Ch 30+250 km),Kuda Oya (Ch 18 + 050 km, Ch 18+750 to Ch 18+850 km & Ch 18+800 to 19 +230 km), Ch 2+400 km, Ch 12+100 km, Ch 14+600 km, Ch 21+950 km and Ch 31+350 km (There are 2 locations along the Ch 15+830 to Ch 16+060 km	15 locations identified. Total cost is Rs 41,250 or Rs 2750 per location	Contractor	RDA, CEA/NW-PEA

			stretch where bridges are required).			
	(f)	No sand mining will be done from rivers without permits	All Rivers/oyas & streams encountered (Bohora Oya, Kuda Oya and Rambukkana Oya). Include any other flowing waterways identified.	Engineering Cost	Contractor	RDA, CEA/NW-PEA
	(g)	Washings of vehicles will be carried out on paved locations with draining water collected into settlement/treatment ponds before releasing (No direct washing in waterways or close to river). Alternately, vehicle/machinery and equipment serving and maintenance works will be carried out only in designated locations such as service stations (having well-functioning treatment plants) approved by CEA/NW-PEA	All active areas of the Project Site including marshy lands and paddy fields, and, quarry sites, borrow areas, access routes, batching plants, etc.	Engineering cost	Contractor	RDA, CEA/NW-PEA
	2.3.3	**Alteration of drainage paths, impacts to retention capacities, damage to flood protection structures**				
	(a)	Temporary cross drainage openings will be provided along the pilot road in line with all locations where permanent cross drainage structures will be located on the trace. 900mmor 120mm pipes will be used as suitable. The contractor will keep provisions to break open the pilot road and dissipate any water logging condition upstream during intense rain events.	Flood plains of critical locations where such measures will be needed. Locations indicated under Section 2.3.2	Engineering Cost	Contractor	CSC, RDA/PMU
	(b)	Contractor shall not close or block existing canals, drains and other water paths permanently. If diversion or closure or blocking of canals and streams is required for the execution of work, contractor will first obtain the Engineers approval in writing and diversion or closure will not be carried out	All waterways described in this report any waterways identified by chance	-Do-	-Do-	CSC, RDA/PMU , DOI, DoAs, LA/ DS

		during times when water is highly demanded such as in cultivation seasons. Contractor shall carry out an investigation and report to the Engineer, if an investigation is requested by the Engineer. Contractor shall also obtain the approval from the relevant agency such as Irrigation Department, Department of Agrarian Services and Divisional Secretary (DS) if instructed by the engineer. Contractor shall restore the drainage path back to its original status once the need for such diversion or closure or blockage is no longer required.				
	(c)	The debris and spoil shall be disposed in such a manner that waterways and drainage paths are not blocked. The contractor shall clear the waterway if blocked due to such activities.	Applicable to all waterways described in this report and identified by chance	-Do-	-Do-	-Do-
	(d)	Construction works near/ at such drainage locations will be avoided or atleast minimized during heavy rain seasons which create flood conditions.	Locations indicated under Section 2.3.2	-Do-	-Do-	-Do-
		Contractor with the consent of CSC and RDA shall closely communicate with the regional office of the Irrigation Department/Provincial Irrigation Engineer or Department of Agrarian Development on methods of carrying out construction works close to bunds and irrigation structures (which are a property of Irrigation Department). The contractor shall attend to any accidental damages caused to the structures without any delay after notifying CSC and RDA. Rectification of such damage shall be under direct supervision of officers of Irrigation Department.	Locations with irrigation structures.	Engineering Cost	Contractor	CSC, RDA/PMU , DOI
	2.3.4.	**Contamination of water from construction wastes**				

	(a)	Refer to the measures mentioned in items 2.1.1, 2.1.5, 2.1.6, 2.2.2 and 2.3.2	All waterway locations indicated under the said items.	Engineering cost	Contractor	RDA, NWP-EA/CEA/N W-PEA
	(b)	Construction works near/ at such drainage locations will be either avoided or minimised during heavy rain seasons such as South West Monsoonal rains from May to September.	-Do-	-Do-	-Do-	-Do-
	(c)	The discharge standards promulgated under the National Environmental Act shall be strictly adhered to. All waste arising from the project will be disposed in a manner that is acceptable to the engineer and according to the guidelines/instructions issued by CEA/NW-PEA.	-Do-	-Do-	-Do-	-Do-
	2.3.5.	**Contamination from fuel and lubricants**				
	(a)	Refer to the measures mentioned in items 2.1.5, 2.1.6 and 2.2.2	All locations indicated under the said items.	Engineering cost	Contractor	RDA, CEA/NW-PEA
	2.3.6.	**Locating labour camps, sanitation and waste disposal in construction camps**				
	(a)	Refer to the measures mentioned in items 2.1.5, 2.1.6 and 2.2.2	All locations indicated under the said items.	Engineering cost	Contractor	RDA, CEA/NW-PEA
	2.3.6.	**Locating labour camps, sanitation and waste disposal in construction camps**				
	(a)	Temporary resting rooms / huts, offices and storage areas shall be located away from waterways (> 100 m) and human settlement areas (Labor camps including temporary huts (used as resting places) and office spaces and surrounding environments)	Project Phase: From site mobilization to decommissioning Location: designated by contractor and approved by RDA	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(b)	Will provide adequate water supply, sanitation and all requisite infrastructure facilities. Will ensure that adequate water supply (conforming to WHO or SLS 614 Parts 1	Project Phase: From site mobilization to construction / decommissioning Labor camps including temporary	Engineering cost	Contractor	RDA, MOH / Local PHI, /CEA/NW-

		and 2 (1983) Drinking Water Standards) is available (about 45-50 L/per/day; Multiple sources may be used for different purposes, in which case 20 L per person per day of potable water will be made available for consumption). If pipe-borne water is not the source, testing will be conducted of water through a reputed lab at least every month and see whether the water quality complies with the WHO or SLS 614 Parts 1 and 2 (1983) Drinking Water Standards	huts (used as resting places) and office spaces and surrounding environments Location: designated by contractor and approved by RDA			PEA
	(c)	Adequate water seal toilet facilities will be provided and upgraded whenever needed (based on 1 toilet per 20 workers) & there shall not be any stagnation of wash water that is been discharged to a nearby drain. These toilets shall be dismantled and filled completely at the time of decommissioning. Septic tank/soak pit of adequate capacity will be construced according to SLS 745: Part 1: 2004 & SLS 745: Part 2: 2009 standards. Septic effluents shall not be directed to waterways; cesspits will be constructed where water table is not high (> 2.5 m below ground surface). Toilets will not be located in water-logging areas, upstream & downstream of aquifers and wells (should be sited > 20 m), toilets & labor camps shall not be adjacent to river or any stream reservations (> 500 m) and wetland / forest areas	As given in above section (b)	Engineering cost	Contractor	RDA, MOH / Local PHI, /CEA/NW-PEA
	(f)	A separate area will be provided within the temporary camps for the workers to clean and safely stack their PPE before start of construction.	As given in above section (b)	Engineering cost	Contractor	RDA, MOH / Local PHI, /CEA/NW-PEA

	(g)	Garbage bins lined with garbage bags and having well closing lids will be provided in adequate numbers and garbage will be regularly removed.. MSW will disposed off in a hygienic manner by seeking the services of the relevant Local Authorities on a daily basis. The recyclables such as glass may be traded off to local recyclers or stakeholders dealing with recyclers	As given in above section (b)	Engineering cost	Contractor	RDA, MOH / Local PHI, /CEA/NW-PEA
	(h)	After completion of construction work, temporary resting, office and storage areas sites shall be restored to its original condition	As given in above section (b)	Engineering cost	Contractor	RDA, MOH / Local PHI, /CEA/NW-PEA
	2.3.8.	**Extraction of water**				
	(a)	The contractor is responsible for arranging adequate supply of water for the project purpose throughout the construction period. Contractor shall not obtain water for his purposes including for labour camps from public or community water supplies without approval from the relevant authority. Such extraction (if approved) shall be under direct supervision of the Engineer.	Within and close to the project area and labour camps	Engineering Cost	Contractor	CSC, RDA/PMU , LA
	(b)	Extraction of water by the contractor for the project purposes shall comply with the guidelines and instructions issued by relevant authority. The Contractor shall not extract water from groundwater or from surface water-bodies without permission from the Engineer.	-Do-	-Do-	-Do-	-Do-
	(C)	Construction over the irrigation canals will be undertaken only with necessary permission from the Department of Agrarian Services and Department of Irrigation.	Existing streams, canals and drains within and close to the project area	-Do-	-Do-	CSC, RDA/PMU DoAS, DOI

	(d)	The Contractor may use natural sources of water subject to the provision that any claim arising out of conflicts with other users of the said natural sources of water shall be made good entirely by the contractor.	At all natural water sources used for construction works	-Do-	-Do-	CSC, RDA/PMU , LA
2.4.	**Flood Prevention**					
	2.4.1.	**Blockage of drainage paths and drains**				
	(a)	Contractor's activities shall not lead to flooding conditions as a result of blocked drainage paths and drains. The contractor shall take all measures necessary or as directed by the Engineer to keep all drainage paths and drains clear of blockage at all times.	Existing streams, canals and drains within and close to the project area	Engineering Cost	Contractor	CSC, RDA/PMU
	(b)	If flooding or stagnation of storm water is caused by contractor's activities, contractors shall provide suitable means to (a) prevent loss of access to any land or property and (b) prevent damage to land and property. Contractor shall compensate for any loss of income or damage as a result of such flooding.	-Do-	-Do-	-Do-	-Do-
	2.4.2	**Work in flood prone areas**				
	(a)	Contractor's activities shall not lead to aggravate floods in nearby areas when working in flood prone areas.	Locations indicated under Section 2.3.2	Engineering Cost	Contractor	CSC, RDA/PMU , DoAS, DOI
	(b)					
		When working in flood prone areas during rainy season the contractor shall avoid storing materials, chemicals and other items of work in areas where such material could be washed away by the floods.	-Do-	-Do-	-Do-	-Do-
	2.4.3	**Construction of pilot road**				
	(a)	The pilot shall at least contain the same	Throughout the pilot road	Engineering cost	Contractor	CSC,

		number of openings as of the main trace. The contractor shall maintain all road side drains giving special attention during rainy seasons. The contractor shall avoid any blockage in side drains and culverts that are put across the pilot road				RDA/PMU
	(b)	Contractor shall properly restore the land over which the pilot/ service road was constructed after completion of project to the satisfaction of Engineer, LA if the pilot trace deviates from ROW.	At places outside ROW	Engineering cost	Contractor	CSC, RDA/PMU, LA
2.5	**Air Pollution**					
	2.5	**Air Pollution**				
	(a)	Refer section 2.2.3 (a) Transportation of Materiel.	All active areas of the Project Siteand sensitive locations* (provide at the end of this table).	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(b)	Maintenance of speed limits of 5-10 km/hr within the Project area will be ensured considering worker & community safety. Speed limit signboards will be erected at regular intervals of the sub roads and drivers will be thus duly notified.		Engineering cost	Contractor	RDA, CEA/NW-PEA
	(c)	Frequent sprinkling of exposed earth surfaces and unpaved haulage roads will be done when dust plumes are likely or when surfaces are dried (with cracks or fissures). Provide adequate reliable water supply at site for sprinkling / wetting and the provide the workforce with appropriate PPE such as dust masks & eye goggles	All active areas of the Project Site and sensitive locations* (mentioned at the end of this table).	Cost of water (Rs 2000[13] per bowzer load)	Contractor	RDA, CEA/NW-PEA

	(d)	Please refer section 2.2.1 (a) emission of Dust also.	All active areas of the Project Site. This includes (but not limited to) quarry sites, borrow areas, access routes, batching plants, labor camps, 3 interchanges and other areas where there are sensitive recipients, etc. Include the construction material and construction waste (including hazardous waste) storage locations	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(e)	Construction vehicles and machineries shall be periodically maintained & serviced to minimize air pollutants such as PM2.5.	All active areas of the Project Site and sensitive locations* (mentioned at the end of this table).	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(f)	Construction material stockpiles, spoil and any land clearing debris shall be well covered at all times.	Locations as above	Engineering cost	Contractor	RDA, CEA/NW-PEA
	2.5.2	**Emission from Asphalt Concrete (AC) Plants and Concrete Batch Mixing Plants**				
	(a)	Aggregate piles from asphalt and concrete plants will be frequently kept damp (through water spraying; Fixed water sprays will be installed for long term stocking areas if appropriate) and well covered with tarpaulin sheets Appropriate PPE (dust masks and eye goggles) will be provided to the workers	Asphalt and concrete batching plants and access routes associated with them (storage areas included)	Cost of a heavy duty tarpaulin sheet (3.5 m × 3.5m): Rs. 1750	Contractor	RDA, CEA/NW-PEA
	(b)	Storage areas where there is vehicular movement will either have a consolidated surface, which will be kept clean and in good repair, or shall be kept wet. Sweeping, wetting or sealing are all techniques that may be used to reduce dust emissions from roads.	Material storage areas within and outside ROW	Engineering cost	Contractor	RDA, CEA/NW-PEA

		The technique used will depend on the type of road under consideration				
	(c)	Water will be sprayed during material loading to tippers, etc. and during unloading and hence there will be a reliable water supply for spraying	Asphalt and concrete batching plants and access routes associated with them (storage areas included)	Engineering Cost Cost of water (Rs 2000[14] per bouzer load.	Contractor	RDA, CEA/NW-PEA
	(d)	Site asphalt and batching plants out of prevailing high winds (The prevailing wind direction will be considered to ensure that bunkers and conveyors are sited in the leeward direction to minimize the effects of the wind). Natural or artificial barriers will be provided to control the emission of dust from the plant. Establish and maintain buffer distances >100 m	Asphalt and concrete batching plants &storage areas	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(e)	Batching plant emissions will be controlled with exhaust passing though either a cyclone dust collector, a scrubber or a baghouse filter. To control dust from batching plant and other work sites following steps will be undertaken • Totally enclosure of the cement weigh hopper, to ensure that dust does not escape to the atmosphere. • Keeping sand and aggregates damp. • Covering or enclosing conveyor belts and hoppers and keeping pavements and surfaces clean. • Keeping duct work air tight. Enclosing the loading bay	Batching plants and material storage areas	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(f)	An inspection regime for all dust control components will be	Asphalt and concrete batching plants and access routes	Engineering cost	Contractor	RDA, CEA/NW-

		developed and implemented. Spills will be cleaned up immediately	associated with them (storage areas included)			PEA
	2.5.5.	**Air Pollution from crusher**				
	(a)	Crushed metal stockpiles shall be frequently kept damp (through water spraying; Fixed water sprays will be installed for long term stocking areas if appropriate) and well covered with tarpaulin sheets. Crushers shall be totally contained or fitted with a water suppression system over the crusher aperture. The discharge from crushers and screens onto conveyors or into other equipment will be enclosed as far as is practicable; gunny bags or geotextiles that are frequently wetted will be used as covering material for crushers. Appropriate PPE (dust masks and eye goggles) will be provided to the workers	Metal crushers (include Ch 29+950 km) access roads and material storage yards.	Cost of a heavy duty tarpaulin sheet (3.5 m × 3.5m): Rs. 1750 -	Contractor	RDA, CEA/NW-PEA
	(b)	Storage areas where there is vehicular movement will either have a consolidated surface, which shall be kept clean and in good repair, or shall be kept wet. Sweeping, wetting or sealing are all techniques that may be used to reduce dust emissions from roads. The technique that will be used depends upon the type of road under	Material storage areas	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(c)	Water will be sprayed during material loading to tippers, etc. and during unloading	Metal crushers (include Ch 29+950 km) access roads and material storage yards.	Cost of water (Rs 2000[15] per bouzer load. But these costs involved are a part of the construction costs	Contractor	RDA, CEA/NW-PEA

	(d)	Crushers will be located out of prevailing high winds (the prevailing wind direction will be considered to ensure that bunkers and conveyors are sited in the leeward direction to minimize the effects of the wind). Natural or artificial barriers (high tapeline screens to prevent wind blowing them away) will be provided to control the emission of dust from the plant. Buffer distances >100 m will be established and maintained.	Metal crushers (include Ch 29+950 km) and material storage yards.	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(e)	An inspection regime will be developed and maintained for all dust control components. Spills will be immediately cleaned up.	Metal crushers (include Ch 29+950 km), access roads and material storage yards.	Engineering cost	Contractor	RDA, CEA/NW-PEA
2.6. Noise Pollution and Vibration						
	2.6.1	**Noise from vehicles, plants and equipment.**				
	(a)	All construction works will be limited from 6.00 am to 6.00 pm to minimize noise induced disturbances and considering worker safety aspects. If that is not possible under some circumstance the the neighboring community will be informed in advance regarding the necessity of doing works during night time (provided there is proper illumination too considering worker safety)	All active areas of the Project Site and sensitive locations* (mentioned at the end of this table).	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(b)	Where schools are located, construction works will be confined after the school hours and during weekends/holidays	Kotawella Kanishta Vidyalaya (Ch 14+350 km), Parape Maha Vidyalaya with Sri Veediya Sri Maha Pirivena (Ch 17+050 km), Wataraka Maha Vidyalaya (Ch 21+300 km), Galagedara Central College (Ch 31+620 km) &	Engineering cost	Contractor	RDA, CEA/NW-PEA

			Galabawa Maha Vidyalaya (Ch 26 + 300 km) & Kaamawa Dombemada Kanishta Vidyalaya (Ch 8 + 500 km) as			
	(c)	All machinery and equipment shall be regularly serviced and well maintained and will have noise reduction devices (vehicles and equipment should have exhaust silencers). Wherever possible, low noise generating machinery & equipment (example, sound-proofed generators by means of enclosure fixation within a metal covering and a silencer to reduce noise emissions) will be used.	All active areas of the Project Site, especially where there are sensitive recipients. Including quarry sites, borrow areas, access routes, batching plants, labor camps, interchanges, material storage yards, etc.	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(d)	The current traffic scenarios will be studied in busy areas (with the support of the RDA and Police) and proper traffic management practices will be implemented with reference to material transport (including quarry material) in order to reduce traffic congestions and traffic noise too	Highly applicable to 3 interchanges	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(e)	Vibratory hammers connected to excavators / JCBs will be used in place of drop hammers to drive the piles with reference to the construction of bridges / flyovers	All active areas of the Project Site and sensitive locations* (mentioned at the end of this table).	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(f)	Necessary PPE (ear plugs or muffs with hard hats/helmets) will be given to the workforce involved in noise handling works including rock blasting works	All active areas of the Project Site with special attention to areas where there are sensitive recipients. The Locations to be considered include (but not limited to) quarry sites, borrow areas, access routes, batching plants, 3 interchanges, material storage yards, etc.	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(g)	Site asphalt, metal crushing and concrete batching	Asphalt plants, crushers and concrete batching plant locations.	Engineering cost	Contractor	RDA, CEA/NW-PEA

		plants, together with noise abatement measures to reduce air-borne noise transmission. Such facilities will be located upwind of sensitive receptors a minimum of 500 m and downwind of sensitive receptors minimum 100 m				
	2.6.2	**Vibration**				
	(a)	Will undertake Dilapidation surveys of nearest structures (<500 m or as determined by the Project Engineer or CEA/NW-PEA) prior to construction and monitor the pre-construction PPVs and vibration frequencies. The method of construction will be modified until compliance with the criteria is reached, if vibration levels exceed the relevant vibration criteria. Reasonable compensation shall be given to affected parties if serious damages have occurred. A mechanism will be established to address public complaints and grievances. The vibration frequencies will be regularly monitored with PPVs and PPVs with ABOP levels (applicable when operating rock blasting works)	Project Cycle: Pre-construction to construction All active areas of the Project Site quarry sites, borrow areas, access routes, batching plants, material storage yards, etc. and sensitive locations* (mentioned at the end of this table).	Engineering cost	Contractor	RDA, CEA/NW-PEA
	(b)	All construction works will be limited from 6.00 am to 6.00 pm. If that is not possible, the neighboring communities will be informed in advance regarding the necessity of doing works during night time (provided there is proper illumination too considering worker safety)	All active areas of the Project Site and sensitive locations* (mentioned at the end of this table).	Engineering cost	Contractor	RDA, CEA/NW- PEA
	2.6.3	**Noise from blasting or pre splitting operations**				
	(a)	Rock blasting works shall be confined to the day	Project Cycle: Pre-construction to construction	Engineering cost	Contractor	RDA, CEA/NW- PEA

		time (from 6 am to 6 pm) and proper communication mechanisms shall be established to inform the nearest (within 500 m) and surrounding community regarding the blasting times. Powerful sirens will be used prior to blasting with deployment of flagmen and preventing public access to the blasting areas with barricades, etc. Also refer to item no. 2.10.5	Quarry sites (include Ch 7+940 km) and wherever blasting may be needed provided there are sensitive recipients in the vicinity			& GSMB
	(b)	Vibrationless techniques such as approved chemicals will be used rather than using detonators, ANFO/ and dynamite/Gelignite cartridges in areas where there are sensitive recipients to reduce vibration and projectiles	Locations where blasting may be needed / unavoidable, (include Ch 7+940 km), but in the vicinity of houses	Engineering cost	Contractor	RDA, CEA/NW- PEA & GSMB
2.7.	**Impacts to Flora**					
	2.8.1.	**Loss, damage or disruption to fauna**				
	(a)	Practices such as root balling, replacing top soil, replanting & nurturing will be adopted (select sites & species)	All forest patches already identified. Includes Siyambalagamuwa (Ch ≈8+200)	Rs.3,000,000 tentative	Contractor / RDA	FD, NWP-EA/CEA/N W-PEA
	(b)	Enrichment of home gardens (select sites & species)will be ensured	In between those forest areas and on either side of the road at selected sensitive locations	Rs. 3,000,000 tentative	Contractor / RDA	FD , NWP-EA/CEA/N W-PEA
2.8.	**Impact on Fauna**					
	2.8.1.	**Loss, damage or disruption to fauna**				
	(a)	Construction of overpasses, eco-ducts, canopy Bridges will be ensured			Contractor RDA	FD / DWLC& CEA/NW-PEA
2.9.	**Disruption to Users**					
	2.9.1	**Loss of access**				
	(a)	At all times, the Contractor shall provide safe and convenient passage for vehicles,	Entire project area and surroundings.	Engineering Cost	Contractor	CSC, RDA/PMU

		pedestrians and livestock to and from side roads and property accesses connecting the project road. Work that affects the use of side roads and existing accesses shall not be undertaken without providing adequate provisions to the prior satisfaction of the Engineer.				
	(b)	The works shall not interfere unnecessarily or improperly with the convenience of public or the access to, use and occupation of public or private roads, railways and any other access footpaths to or of properties whether public or private.	- Do-	-Do-	- Do-	-Do-
	(c)	On completion of the works, all temporary obstructions to access shall be cleared away, all rubbish and piles of debris that obstruct access be cleared to the satisfaction of the Engineer.	- Do-	-Do-	- Do-	-Do-
	(d)	Advance information will be provided to the public about the planned construction works and activities causing disruption to access roads, and temporary arrangements will be made to give relief to public in order to avoid any inconveniences due to the construction activities.	- Do-	-Do-	- Do-	-Do-
	(e)	Flagmen and/or temporary traffic lights will be used to control traffic flows at constricted sites, including safe crossing for pedestrians especially at town areas and near schools.	- Do-	-Do-	- Do-	-Do-
2.10	**Accidents and Risks**					
	2.10.1	**Public and worker safety**				
	(a)	All relevant provisions of the Factories Ordinance and any other relevant regulations aimed at safety and health of workers shall be adhered to	Applicable to all active areas of the Project Site, quarries, bathing plants, asphalting plants, quarries from pre-construction to construction / de-commissioning phase	Engineering Cost	Contractor	RDA, MOH / Local PHI, Labor Department, NWP-

						EA/CEA/N W-PEA
	(b)	Contractor shall arrange all personal protective equipment (PPEs) like helmet, boots, first-aid and firefighting equipment at construction sites. An emergency plan shall be prepared to fight with any emergency like fire; According to the construction schedule, Daily Tool Box sessions will be conducted by qualified and experienced Safety Officers under the guidance of the Environmental, Health and Safety Manager of the Contractor on a daily basis emphasizing the importance of worker safety and precautions to be taken for different works including wearing of appropriate PPE. Emergency vehicles with reliable drivers and with first aid boxes shall be readily available at site to reach the nearest hospitals. If night time works are unavoidable, sufficient illumination will be provided to the satisfaction of the Project Engineer and other authorities Comply with the requirements of the safety of the workmen according to the International Labor Organization convention No. 62 and Safety and Health Regulations of the Factory Ordinance of Sri Lanka[16]	Applicable to all active areas of the Project Site from pre-construction to construction / de-commissioning phase	Engineering Cost	Contractor	RDA, MOH / Local PHI, Labor Department, NWP-EA/CEA/N W-PEA
		All reasonable precautions will be taken to prevent danger for the workers and the public from accidents such as fire, explosions, etc. All electrical wiring and supply related shall confirm to Sri Lankan Standards or relevant British Standards (BS). Adequate precautions will be taken to prevent danger of electrocution from electrical equipment and power supply	All active areas of the Project Site quarry sites, borrow areas, access routes, batching plants, material storage yards, etc. and sensitive locations* (mentioned at the end of this table).			

		lines including distribution boards, transformers, etc. Measures such as danger signboards, danger/red lights, fencing and lights will be provided to protect the public and workers. All electric power driven machines used shall be free from defect, be properly maintained and kept in good working condition, be regularly inspected and according to BS provisions and to the satisfaction of the Project Engineer				
	(d)	Generation of projectiles when undertaking rock blasting will be prevented to protect the workers and nearby communities (use of approved blasting mats or steel plates, rubber tyres with filled soil or quarry dust will be ensured)	Quarry sites (include Ch 7+940 km) and where ever blasting is needed	Engineering Cost	Contractor	RDA, /CEA/NW-PEA & GSMB
	(e)	At every workplace, a first aid kit shall be provided according to the Sri Lankan legislation (example, necessary material and medicinal items for cuts and first, second and third degree burns) and will be made readily available. The medical items will not be outdated / expired and the first aid boxes will be regularly inspected and re-filled when needed. Emergency vehicles (ambulances if possible) with reliable drivers and with first aid boxes will be made readily available at each active site to reach the nearest hospitals.	Applicable to all active areas of the Project Site from pre-construction to construction / de-commissioning phase	Engineering Cost	Contractor	RDA, MOH / Local PHI, Labor Department, /CEA/NW-PEA
	2.10.2					
	(a)	All electrical wiring and supply related shall confirm to British Standards (BS) or relevant Sri Lankan standards. Adequate precautions will be taken to prevent danger of electrocution from electrical equipment and	All active areas of the Project Site from site mobilization to construction Consider the 3 interchanges and	Engineering Costas they part of the construction costs	Contractor	RDA, Labor Department

		power supply lines including distribution boards, transformers, etc. Measures such as danger signboards, danger/red lights, fencing and lights will be provided to protect the public and workers. All electric power driven machines to be used shall be free from defect, be properly maintained and kept in good working condition, be regularly inspected and according to BS provisions and to the satisfaction of the Project Engineer	all sensitive recipient areas indicated at the end of this table.			
	2.10.3					
	(a)	Refer to the appropriate measures described under items 2.1.7, 2.2.2, 2.5.1, 2.5.2., 2.5.5, 2.6.1. and also 2.10.4 with reference to Occupational, health & safety management aspects	All active areas of the Project Site. Include the construction material and construction waste (including hazardous waste) storage locations.	Engineering Costas they part of the construction costs	Contractor	RDA, Labor Department, NWP-EA/CEA/N W-PEA
	(b)	The use of any toxic chemical shall be strictly in accordance with the manufacturer's instructions. The Engineer shall be notified of toxic chemicals that are planned to be used in all contract related activities. A register of all toxic chemicals delivered to the site shall be kept and maintained up to date by the Contractor. The register shall include the trade name, physical properties and characteristics, chemical ingredients, health and safety hazard information, safe handling and storage procedures, and emergency and first aid procedures for the product.	Within and close to the project area	-Do-	- Do-	-Do-
	2.10.4					
	(a)	It will be ensured that Pb containing items such as paints needed for the painting of railings in bridges are compatible with approved standards and Workers are provided	Project Cycle: Pre-construction to construction/ de-commissioning phase	Engineering cost	Contractor	RDA, CEA/NW-PEA

		with necessary protective gear. Prior to commencement of work, a list of hazardous chemicals and/or material to the Engineer of the RDA & CEA/NW-PEA will be provided for approval (Along with details pertaining to proposed disposal). MSDS or technical data sheets of the different material to be used too shall be furnished for approval. Hazardous wastes (Scheduled Waste) will be stored separately from other construction material. All hazardous wastes will be contained within fully harnessed quarry sites[17].	All active areas of the Project Site. Include the construction material and construction waste (including hazardous waste) storage locations			
	2.10.5					
	(a)	The use of explosives shall be strictly controlled (Explosive loads shall be determined through test blasts, mathematical modeling, etc.) so that excessive vibration can be avoided) or prohibited to avoid significant impacts on nearby structures.	Project Phase: Prior to construction works and during construction Magazines, quarry sites and route taken to transport the explosives and detonators.	Shall be considered as a part of the construction costs	Contractor	MD&UD, RDA, CEA/NW- PEA & GSMB
	(b)	Vibrationless techniques will be used for blasting works to be undertaken in areas where there are sensitive recipients	Quarry sites (include Ch 7+940 km) and wherever blasting may be needed provided there are sensitive recipients in the vicinity (≤ 500 m)	Shall be considered as a part of the construction costs	Contractor	RDA, CEA/NW-PEA & GSMB
	(C)	Permits will be obtained from the Ministry of Defense and Urban Development (MD&UD)under the Explosives Act No. 12 of 1956 (as amended) and approvals from the GSMB too)	Project Phase: prior to commencement of construction works	Shall be considered as a part of the construction costs	Contractor	MD&UD& GSMB /CEA/NW-PEA
2.11	**Health and safety**					
	2.11.1	**Prevention of vector borne diseases**				

	(a)	Measures under item 2.3.6 apply; stagnating water conditions in labor camps, will be addressed and measures will be taken to destroy mosquito breeding sites. Contractor shall report any outbreak of infectious disease or water-borne disease in a labor camp to the Project Engineer of the RDA and the Medical Officer of Health (MOH) or the PHI of the area immediately. Contractor shall carry out all instructions issued by the Medical Officer of Health (MOH) or the local PHI	Applicable to all active areas of the Project, Labor camps and temporary resting huts	Engineering Cost	Contractor	RDA, MOH / Local PHI, /CEA/NW-PEA
2.12	**Protection of cultural and religious places and properties**					
	2.12.1	**Prevention of damage to cultural and religious places and properties**				
	(a)	During construction activities the contractor shall take all necessary and adequate care to minimize impacts on places of worship. Workers will not be allowed to trespass in to such areas.	Within and close to the project area	Engineering Cost	Contractor	CSC, RDA/PMU , DOA, LA, Religious leaders
2.13	**Environmental enhancement**					
	2.13.1	**Roadside landscape**				
	(a)	Road landscape plantation, re-vegetation of road embankments and other slopes, edge treatment of water bodies shall be taken up according to either detailed design or typical design guidelines given as part of the Bid Documents. The contactor also shall remove all debris, piles of unwanted earth, spoil material, away from the roadsides and from other work places and disposed at locations designated or acceptable to the Engineer.	Within and close to the project area, and all locations used for quarry sites, burrow pits, asphalt plant, concrete batching plants, workshops and labour camps	Engineering Cost	Contractor	CSC, RDA/PMU
	(b)	On completion of the works, the temporary				

		structures shall be cleared away in full, all rubbish burnt, waste dumps and septic tank shall be filled and closed and roadsides, workplaces and labour camps, cleared and cleaned.	- Do-	-Do-	- Do-	-Do-
	2.13.2	**Utilities**				
	(a)	Contractor shall take care not to damage/destroy or affect the functional purposes of utilities such as water, electricity, telephone posts. The arrangements the contractor made with those service providers shall be informed to the Engineer in writing (advance work). Contractor shall assist the service providers in whatever possible manner to minimize disruption to such services.	At all locations where electricity, water and telecommunication supply lines located close to the project area	Engineering Cost	Contractor	CSC, RDA/PMU
	(b)	In case of damage caused to a utility, the contractor shall immediately inform the Engineer and service provider and help restore the service without delay.	Within and close to the project area	-Do-	- Do-	CSC, RDA/ PMU, Service provider
	2.13.3	**Road furniture**				
	(a)	Road furniture including footpaths, railings, storm water drains, crash barrier, traffic signs, speed zone signs, pavement markers and any other such items will be provided according to design given in the Bid Documents.	Throughout the project area	Engineering Cost	Contractor	CSC, RDA/PMU
	(b)	Intersections, rotaries, traffic islands, roadside protection and other structures or furniture shall be constructed, complete with the landscape elements according to design in the above manner.	- Do-	-Do-	- Do-	-Do-
2.14	**Handling environmental issues/grievances during construction**					
	(a)	The Contractor shall appoint a qualified	Project Phase: Construction phase	No special cost involved	Contractor	RDA (RDA should report

		Environmental & Social Safeguard Specialist / Manager for community liaison and to handle public complaints and grievances. The Contractor shall develop a suitable mechanism to receive and address the complaints and grievances. The complaint register shall be easily accessible by the public. The Environmental Manager will promptly investigate and review environmental complaints and implement the appropriate corrective actions. A register consisting of all the complaints made will be passed to the Project Engineer within a reasonable time after reception. Action taken by the Environmental Manager on complains will be included with chainages and other details. A Register will be maintained at the RDA / Regional RDA offices/sub-offices too for the affected community to have easy access	Entire project area			to the /CEA/NW-PEA
	(b)	Contractor shall prepare a detailed Environmental Method Statement (EMS) clearly stating the approach, actions and manner in which the EMP is implemented. It is required of the contractor to prepare the EMS for each work site, if work is carried out at more than one site at once and time plan for implementation. The EMS shall be updated regularly and submit for Engineers review and approval.	Throughout the project construction period	-Do-	- Do-	-Do-
2.15	**Impacts due to slope failure and earth slips**					
	(a)	Stable slope angles recommended in the design, provide drainage and relief	Throughout the project construction period			

		trenches, provide filter media , obtain NBRO recommendations , monitor slope levels, crack widths etc. will be used. Recommended erosion control measures will be used.		Engineering cost	-Do-	RDA , NBRO
2.16	**Impacts due to lowering of well water because of excavations**					
	(a)	Temporary water supply will be provided to well users and new wells will be provided at alternative locations if there is no water table recovery.	At locations of dug wells close to ROW	Rs. 34,000,000	-Do-	RDA, DS, PS
3.0 Operational stage						
	3.1	**Stagnation of water at hydraulic structures during heavy rains due to siltation and blocking of openings with debris.**				
	(a)	Periodic maintenance through desiltation of hydraulic structures and lead away canals, monitoring of upstream water levels will be ensured.	All hydraulic structures identified: Once a month or regular inspection	Part of routine maintenance costs	RDA	CEA/NW-PEA / NWP-EA
	3.2.	**Road safety**				
	(a)	Proper illumination will be ensured during night time (example, lights and luminous signs). Legible sign boards will be erected and regular maintenance will be ensured.	Entire road trace; Once a month or regular inspection	Part of routine maintenance costs	RDA	CEA/NW-PEA
	(b)	Fencing will be established to prevent animal access and regular maintenance	Entire trace: Once a month or regular inspection	Part of routine maintenance costs	RDA	CEA/NW-PEA
	(c)	It will be ensured that pedestrian crossovers have well maintained fences to prevent accidents.	Where pedestrian crossovers are located: Once a month or regular inspection	Part of routine maintenance costs	RDA	CEA/NW-PEA
	3.3	**Encochement on to ROW**				
	(a)	RDA shall not allow any encroachments to ROW nor shall RDA encroach to the outer boundary of ROW without permission from necessary	All trace	No cost	RDA	DS

		authorities.				
	3.4	**Damage to flora and fauna**				
	(a)	Compensatory replanting (with specific species) and nurturing will be wnsured	Temporary camp and storage sites		Contractor / RDA	FD
	(b)	Erection of sign boards, provision of eco-ducts, canopy walkways will be ensured	At points where road travels through forests		Contractor / RDA	DWLC/ Ministry of Environment
	(c)	Biodiversity monitoring (after six months and once over the next three years) will be conducted	Within forests or in streams and rivers where roads pass through		Contractor / RDA	DWLC/FD
	3.5	**Noise Barriers (Designing, Construction and Maintenance)**				
	(a)	Noise barriers will be designed and constructed at sensitive areas.	Phase: Detailed designing and construction Kotawella Kanishta Vidyalaya (Ch 14+350 km), Parape Maha Vidyalaya –(Ch 17+050 km), Wataraka Maha Vidyalaya (Ch 21+300 km), Galagedara Central College (Ch 31+620 km) & Galabawa Maha Vidyalaya (Ch 26 + 300 km) Kaamawa Dombemada Kanishta Vidyalaya (Ch 8 + 500 km) as well as the Galadegera interchange which has 3 hospitals (Bhikshu Wattauwa, Ministry of Health and Distric Hospital, Galagedara) and Galagedera Magistrates Court and wherever noise barriers are needed	Rs 1.7 million (for a 5 or 10 m concrete wall) per side per 180 m length Total cost is Rs 8.5 million (considering 5 schools already identified only)	RDA / Contractor for construction	RDA
	(b)	Will monitor the condition of noise barriers (for cracks, etc)	Phase: once a month / regularly during road maintenance works	Part of the maintenance cost	RDA	CEA/NW-PEA

			(regular surveys & appropriate documentation with dated photos, etc) Locations as mentioned in previous section 3.5 (a)			

Sensitive locations*: All three interchanges and various areas nearby, Rambukkana Oya (Ch 15+830 to Ch 16+060 km, Ch 16 + 900 km and Ch 30+200 km), Kuda Oya (Ch 18 + 000 km, Ch 18+700 to Ch 18+800 km & Ch 18+750 to 19 +150 km), Ambepussa-Kurunegela Road (A6 Road; cross- point/Ch 5 km), Deyawadiwala-Pitawala Road intersection (N240117 & E156971), Rambukkana-Katupitiya Road intersection (N239756 & E158151), Dombemada-Rambukkana-Kurunegala Road / crosspoint (N242106 & E153556), Ch 27 + 675 km (Pubbiliya), Kotawella Kanishta Vidyalaya (Ch 14+350 km), Parape Maha Vidyalaya with Sri Veediya Sri Maha Pirivena (Ch 17+050 km), Wataraka Maha Vidyalaya (Ch 21+200 km), Galagedara Central College (Ch 31+560 km), Galabawa Maha Vidyalaya (Ch 26 + 200 km) and Kaamawa Dombemada Kanishta Vidyalaya (Ch8 + 500 km). Also the Galadegera interchange which has 3 hospitals (Bhikshu Wattauwa, Ministry of Health and Distric Hospital, Galagedara) and

Galagedera Magistrates Court. And also the quarry sites, borrow areas, access routes, batching plants, labor camps, etc.

ABBREVEATIONS

ABOP - Air Blast Over Pressure
RDA – Road Development Authority
NWP-EA – North Western Province Environmental Authority
DWLC- Department of Wild Life Conservation
DA – Department of Archeology
FD- Forest Department

PMU- Project Management Unit
ID- Irrigation Department
PIE- Provincial Irrigation Engineer

DAD- Department of Agrarian Development
DS – Divisional Secretary
PS- Pradesheya Sabha
PPV- Peak Particle Velocity

Locations of Culturally and Archeologically Significant Places

No	Title	Coordinates	Chainage	Side	Distance	Sensitivity Range[i]
1)	Sri Vijeya Sundarama Rajamaha Viharaya	$07^0$24'03.3" $080^0$16'37.2"	00+460	R	1.5 Km	Medium
2)	Mayurawathi Rajamaha Viharaya	$07^0$24'18.3" $080^0$16'58.0"	00+680	R	700 m	High
3)	Pothgul Viharaya, Lihinigiriya	$07^0$24'26.9" $080^0$17'18.6"	01+040	R	75 m	High
4)	Road to Koradoluwa Temple	$07^0$23'28.1" $080^0$19'10.3"		L		
5)	Sri Aswaththarama Viharaya	$07^0$23'40.7" $080^0$19'39.3"	05+840	L	670 m	Medium
6)	Vivekarama Purana Viharaya	$07^0$22'58.1" $080^0$19'43.1"	06+280	R	550 m	Medium
7)	Sri Saranapala Road Viharaya	$07^0$23'31.7" $080^0$20'09.8"	06+620	L	720 m	Low

8)	Sri Negrodarama Senasanaya	$07^{0}22'50.8"$ $080^{0}20'11.7"$	07+100	R	425 m	Medium
9)	Sambudda Mandiraya and Ella Bodiya	7°23'27.23" 80°20'27.39"	07+440	L	710 m	Low
10)	Keththarama Viharaya (Road to)	$07^{0}23'03.6"$ $080^{0}21'03.6"$	08+560	L	265 m	
11)	Roadside Statue 01 (Christian)	$07^{0}22'36.2"$ $080^{0}21'27.3"$	09+640	R	45 m	High
12)	Roadside Statue 02 (Christian)	$07^{0}22'13.2"$ $080^{0}21'37.9"$	10+400	R	60 m	High
13)	Church	7°22'4.26" 80°21'38.14"	10+540	R	285 m	
14)	Galadenikada Purana Viharaya	$07^{0}21'52.1"$ $080^{0}21'39.1"$	10+640	R	615 m	
15)	Dambulu Rajamaha Viharaya	$07^{0}21'11.3"$ $080^{0}21'43.9"$	11+000	R	1750 m	
16)	Sri Bodiseeha Pirivena	$07^{0}19'44.8"$	16+140	R	4.5 km	Low
17)	Galagedara Mosque	$07^{0}22'23.0"$ $080^{0}30'55.1"$	31+070	L	420 m	Medium
18)	Welivita Sri Saranankara Sangaraja Centre	$07^{0}22'18.7"$ $080^{0}31'30.2"$	32+350	L	115 m	High

Annex 7.2

EMoP

Environmental Monitoring Plan

Environmental component	Project Stage	Parameters to be Monitored	Frequency	Standards	Rate (Rs.)	Amount (Rs)
Air quality	Pre- construction	PM10, PM2.5, NO_2, SO_2 and CO	Twice a year (i.e., prior to commencement of construction) covering dry and wet seasons Total (1 x 2) = 2 times	Ambient air quality standards; the National Environmental Ambient Air Quality Regulations 1994 (Gazette	Rs. 20,000 per location Approximately 14 locations in terms of sensitive areas but more to be included by Contractor when requested by relevant authorities and once identified by	Rs1,000,000.00
	Construction Phase (Sensitive Receptors)	$PM10^{18}$, PM2.5, NO_2, SO_2 and CO Serious public complaints	Every 2 weeks or as requested by RDA, CEA/NW-PEA with Monitoring Committee)/appointed Consultants and depending on serious complaints(ten complaints per year for 4 years)	As above	Rs 20,000 per location Approximately 14 locations in terms of sensitive areas but more to be included by Contractor when requested by relevant authorities and	Rs. 52800000.00

	Construction Phase (Crusher, batching and asphalt plants)	PM10/SPM Public complaints	Every 2 weeks or as requested by RDA, CEA/NW-PEA with Monitoring Committee)/appointed Consultants and depending on serious public complaints	CEA/NW-PEA proposed limits for stationary sources: difference between 2 simultaneous 3	Rs 8000 per location 09 Locations tentatively (i.e., one major crusher, asphalt and batching plant per interchange).	Rs.7776000.00
	Operation Phase	PM 2.5, CO, NO_2, SO_2 and PM10 Serious public complaints	At least twice a year covering wet and dry seasons and report the levels for each year (for comparison purposes) & depending on serious complaints made by the community (ten complaints	National Environmental Ambient Air Quality Regulations 1994 (Gazette Extraordinary No. 1562/22 of	Rs 20,000 per location 10 Locations	Rs.21400000.00
Noise	Pre-construction phase	Leq Levels (day; 6 am to 6pm and night time; 6pm to 6 am the following day levels) with L50 and L90	Once before construction commences 1 time	National Environmental (Noise Control) Regulations No. 01 of 1996	Rs 10,000 per location Approximately 14 locations in terms of sensitive areas but more to be included by Contractor when requested by relevant authorities and once identified by authorities &Contractor. Altogether 25 locations	Rs. 250,000.00

	Construction Phase	Leq Levels (day; 6 am to 6pm and night time; 6pm to 6 am the following day levels) with L50 and L90	Every 2 weeks or as requested by PEA / CEA/NW-PEA (with Monitoring Committee), RDA/appointed Consultants and depending on serious complaints made by public (ten complaints per year for 4 years)	National Environmental (Noise Control) Regulations No. 01 of 1996.	Rs10,000 per location Approximately 14 locations in terms of sensitive areas but more to be included by Contractor when requested by relevant authorities and once identified by	Rs.26400000.00
	Operation Phase	Leq Levels (day; 6 am to 6pm and night time; 6pm to 6 am the following day levels) with L50 and L90	At least once a year and report the levels for each year (for comparison purposes) & depending on serious complaints made by the community	National Environmental (Noise Control) Regulations No. 01 of 1996	Rs 10,000 per location 10 Locations	Rs. 11000000.00
Vibration	Pre-construction phase	Fracture lengths, widths etc. Through dilapidation Surveys of nearest structures (< 500 m or as determined by	Prior to commencement of construction works (once) 1 time	Vibration levels – according to standards on vibration (Table)	Rs. 10,000 per location Approximately 14 locations in terms of sensitive areas but more to be included by Contractor when requested by relevant authorities and	Rs. 250,000.00

	Construction Phase	PPVs and vibration frequencies on built structures	Vibration frequencies and PPV levels on built structures – whenever serious complaints have arisen or as requested by the CEA/NW-PEA , RDA and Supervision Consultants	Vibration levels – according to standards on vibration for built structures & inconvenience of the	Rs. 10,000 per location Approximately 14 locations in terms of sensitive areas but more to be included by Contractor when requested by relevant authorities and	Rs. 800,000.00
		PPVs and ABOP levels Serious complaints Records / evidence of compensation	Daily during the construction phase whenever quarrying and other blasting works are done (test blasts and pre-blasting events should be included. Serious public complaints have to be considered	According to the Standards on vibration for blasting activities (Table 4)	Rs. 10,000 per location Presently, there are 2 locations identified where there could be some rock blasting works. But more to be included by Contractor when requested by relevant authorities and	Rs. 960,000.00

	Operation Phase	PPVs and vibration frequencies on built structures	Depending on serious complaints made by the community	Vibration levels – according to standards on vibration for built structures	Rs10,000 per location 15 locations tentatively	Rs. 600,000.00
Surface Water quality	Pre-construction phase	Grab samples for pH (in-situ), turbidity (in-situ), electrical conductivity(in-situ), DO, BOD_5, COD, NH3-N, NO_3^-, TN, TP, Fecal and total coliform, Oil and Grease	Twice (covering dry and wet seasons) – consider upstream and an immediate downstream location for flowing oyas / where bridges would be constructed . Total (2 x 2 x 15 locations) = 60 times for locations where bridges would be constructed (2 x 2 x 4 locations = 16 times) where the trace is located parallel to waterways 76 times for surface water quality	CEA/NW-PEA proposed limits for inland waters : Class II Waters – Category 3 (Bathing), Category 4 (Fish & Aquatic Life Protection), Category 6 (Irrigation & Agriculture) and Class III Waters; Class 7 (Minimum quality/other uses)	Rs 10,000 (considering the given parameters per location 38 Locations Surface Water	Rs. 28880000.00 For surface water quality

	Construction Phase	Grab samples for pH (in-situ), turbidity (in-situ), electrical conductivity(in-situ), DO, BOD_5, COD, NH3-N, NO_3^-, TN, TP, Fecal and total coliform, Oil and Grease	Once a month or as directed by the RDA, CEA/NW-PEA and the External Monitoring Committee and appointed Consultants; also depending on serious complaints made by the community – consider upstream and an immediate downstream location of strams. Total (12 x 4) = 48 times	CEA/NW-PEA proposed limits for inland waters : Class II Waters – Category 3 (Bathing), Category 4 (Fish & Aquatic Life Protection), Category 6 (Irrigation & Agriculture) and Class III Waters; Class 7 (Minimum quality/other uses) + Baseline conditions	Rs 10,000 (considering the given parameters per location 38Locations as above	Rs. 18240000.00 (for Surface water quality)
	Operation Phase	Grab samples for pH (in-situ), turbidity (in-situ), electrical conductivity(in-situ), DO, BOD_5, COD, NH3-N, NO_3^-, TN, TP, Faecal and total coliform, Oil and Grease	Twice a year covering dry and wet seasons Total (2 x 4 yrs) = 8 times	CEA/NW-PEA proposed limits for inland waters : Class II Waters – Category 3 (Bathing), Category 4 (Fish & Aquatic Life Protection), Category 6 (Irrigation & Agriculture) and Class III	Rs 10,000 (considering the given parameters) per location 38 Locations as above	Rs. 3040000.00 (for surface water quality only)

Wastewaters from concrete batching plants& asphalt plants	Construction Phase	pH, TSS, COD, BOD_5 & oil and grease	Once a month or as directed by the RDA, CEA/NW-PEA and the External Monitoring Committee and appointed Consultants. Serious complaints made by the community and / or government authorities have to be considered	CEA/NW-PEA limits for Industrial Effluents Discharged on Land for Irrigation OR CEA/NW-PEA limits for	Rs 5,000 (considering the given parameters) per location 6 Locations tentatively (i.e., one major batching plant and asphalt plant per interchange)	Rs. 1440000.00

NOTES

IMPLEMENTATION AND SUPERVISION

1). Construction Stage: Contractor (implementation) and RDA with CEA/NW-PEA and the External Monitoring Committee & Supervision Consultant (Supervision)
2). Operational Stage: RDA (implementation) and CEA/NW-PEA (Supervision)

CONSTRUCTION PERIOD

3). Construction period 4 years. Note that further measurements with reference to air quality, vibration levels, noise measurements, water quality monitoring and effluent testing will be needed (if requested by the Engineer and / or appropriate government authorities) once remedial measures are taken (after considering grievances & public complaints) to ensure that the measures have been well implemented

LOCATIONS

4). All locations changes above shown in **Table 1**.

Annex 8.1

Letters from line agencies

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கமநல அபிவிருத்தித் திணைக்களம்
DEPARTMENT OF AGRARIAN DEVELOPMENT

මගේ අංකය / எனது இல. / My No. 7 /4 / මධ්‍යම අධිවේගී මාර්ගය/2015

ඔබේ අංකය / உமது இல. / Your No.

දිනය / திகதி / Date 2015·12· ১৯

අධ්‍යක්ෂ,
පාරිසරික හා සමාජීය අංශය,
මගනැගුම ගොඩනැගිල්ල,
මාර්ග සංවර්ධන අධිකාරිය.

මධ්‍යම අධිවේගී මාර්ගය

ඉහත ව්‍යාපෘතිය සඳහා පරිසර ඇගයීම් වාර්තාව ලැබුණු පසු ගොවිජන සංවර්ධන දෙපාර්තමේන්තුවේ අදහස් ඉදිරිපත් කරන බව කාරුණිකව දන්වමි.

එම්.ඒ.එස්.වීරසිංහ
ගොවිජන සංවර්ධන කොමසාරිස් ජනරාල්

ගොවිජන සංවර්ධන දෙපාර්තමේන්තුව, අංක 42, ශ්‍රීමත් මාර්ක්ස් ෆ්‍රනාන්දු මාවත, තැ. පෙ. 537, කොළඹ 07.
கமநல அபிவிருத்தித் திணைக்களம், இல. 42, சேர் மார்கஸ் பெர்னாந்து மாவத்தை, அ.பெ. 537, கொழும்பு 07.
DEPARTMENT OF AGRARIAN DEVELOPMENT, No. 42, Sir Marcus Fernando Mawatha, P. O. Box 537, Colombo 07.
දුරකථන / தொலைபேசிகள் / Telephones :
පොදු කාර්යාලය / பொது அலுவலகம் / General Office 2694231, 2694232, 2694233, 2694234
ගොවිජන සංවර්ධන කොමසාරිස් ජනරාල් / கமநல அபிவிருத்தி ஆணையாளர் நாயகம் / Commissioner General of Agrarian Development 2691060
ෆැක්ස් / தொலைநகல் / Fax 2693572, 2691843, 2674481
E-mail: commissionerdad@yahoo.com
විදුලි පණිවුඩ / தந்தி / Telegram ගොවිජනසේවා / கொவிச்சேவா / Agraservis

වන සංරක්ෂණ දෙපාර්තමේන්තුව
வன பரிபாலனத் திணைக்களம்
FOREST DEPARTMENT

ප්‍රධාන කාර්යාලය - 'සම්පත්පාය', තැ. පෙ. 3, බත්තරමුල්ල, ශ්‍රී ලංකාව
தலைமை அலுவலகம், "சம்பத்பாய", த.பெ. இல.3, பத்தரமுல்லை, இலங்கை
Head Office - 'Sampathpaya', P. O. Box 3, Battaramulla, Sri Lanka

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මගේ අංකය
எனது இல.
My Ref. EMD/EIA/NE /2015

ඔබේ අංකය
உமது இல.
Your Ref.

දිනය
திகதி
Date 2016/01/ 19

අධ්‍යක්ෂ,
පරිසර හා සමාජීය සංවර්ධන අංශය
මාර්ග සංවර්ධන අධිකාරිය

<u>යෝජිත මධ්‍යම අධිවේගී ව්‍යාපෘති ය</u>

උක්ත කරුණට අදාළව ඔබේ අංක RDA/ESD/CEP හා 2015.11.30 දිනැති ලිපිය හා බැඳේ.

මෙම යෝජිත මධ්‍යම අධිවේගී මාර්ග ව්‍යාපෘතියේ ඉදි කිරීම් වලදී හැකි සෑම විටම වනාන්තර භූමීන් භාවිතා නොවන ලෙස සැළසුම් කිරීම සිදු කළ යුතු වේ. ඒ සඳහා මෙම පරිසර බලපෑම් ඇගයීම් සිදු කරන අවස්ථාවේදී වන සංරක්ෂණ දෙපාර්තමේන්තුව දැනුවත් කර අදාළ යෝජනා ලබා ගැනීම වඩාත් සුදුසු බව කාරුණිකව දන්වමි.

මහින්ද සෙනෙවිරත්න
වන සංරක්ෂක
(පරිසර සංරක්ෂණ හා කළමනාකරණ)
වන සංරක්ෂක ජනරාල් වෙනුවට

நீர்ப்பாசனத் திணைக்களம்
IRRIGATION DEPARTMENT

Director General: 011-2584984
Fax: 011-2505890
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Web site: www.irrigation.gov.lk

My No: ADGI (SM)/Gen/11
Your No:
Date: 2016.01.14

Director
Environment and Social Development Division,
Road Development Authority,
"Sethsiripaya",
Battaramulla.

SUB: Proposed Central Expressway Project

This has reference to the letter no. RDA/ESD/CEP dated 30.11.2015 regarding the above subject.

It seems that the proposed road trace will run through rivers, streams, paddy fields and Irrigation canals and related structures. In addition, there will be new Irrigation Proposals in the pipe line such as NWP canal Project etc which also will be passing through the project area.

Hence, it is necessary for Road Development Authority to discuss coordinate and get the approval from the Irrigation Department while carrying out designs before finalizing the proposals.

Further once the EIA report of the proposed Central Expressway Project is received by the Irrigation Department, further comments will be submitted.

Eng. T. P. Alwis
Additional Director General of Irrigation
(System Management)

Eng. T. P. Alwis
Additional Director General of Irrigation
(System Management)
Irrigation Department
Colombo - 07.

CC: Director of Irrigation (Drainage & Flood Systems)
Director of Irrigation (Kurunegala)
Director of Irrigation (Colombo)
Director of Irrigation (Kandy)

ශ්‍රී ලංකා මහවැලි අධිකාරිය

500, ටී.බී. ජයා මාවත, කොළඹ 10.

இலங்கை மகாவலி அதிகாரசபை

500, டி.பீ. ஜயா மாவத்தை, கொழும்பு 10

Mahaweli Authority of Sri Lanka.

500, T.B. Jayah Mawatha, Colombo 10, Sri Lanka.

දුරකථනය தொலைபேசி Telephone 011-2687491-5

ෆැක්ස් අංකය பெக்ஸ் இல. Fax No. 011-2687240

විද්‍යුත් තැපෑල් மின்னஞ்சல் E-mail info@mahaweli.gov.lk

වෙබ් අඩවිය இணையத்தலம் Website www.mahaweli.gov.lk

මගේ අංකය - ENV/EIA/2014-10

2016.01.19

අධ්‍යක්ෂ
පාරිසරික හා සමාජ සංවර්ධන අංශය
සෙන්සිරිපාය
බත්තරමුල්ල.

යෝජිත මධ්‍යම අධිවේගී මාර්ග ව්‍යාපෘතිය

උක්ත කරුණ සම්බන්ධව ඔබගේ අංක RDA/ESD/CEP හා 2015.11.30 දිනැති ලිපිය හා බැඳේ.

කොටස් 4 කින් සමන්විත මෙම අධිවේගී මාර්ගයේ 4 වන කොටසට (අදියර 8) අයත්වන කුරුණෑගල දඹුල්ල මාර්ග කොටස ශ්‍රී ලංකා මහවැලි අධිකාරී බල ප්‍රදේශය හරහාද වැටී ඇත.

ලිපියේ සඳහන් අයුරින් මෙම ව්‍යාපෘතිය සඳහා නව පාරිසරික බලපෑම් වාර්තාවක් පිළියෙල කරමින් පවතින බැවින්, එම වාර්තාව අප වෙත ලැබුණු පසු අපගේ නිර්දේශ, අදහස් හා යෝජනා ලබා දීමට කටයුතු කරන බව කාරුණිකව දන්වා සිටිමි.

ඉංජී. එච්.එච්. පද්මසිරි ප්‍රේමකුමාර
නි. අධ්‍යක්ෂ ජනරාල් (කා.සේ)
ශ්‍රී ලංකා මහවැලි අධිකාරිය

පිටපත

- අධ්‍යක්ෂ (වන හා පරිසර) - දැ.ගැ. හා ඉදිරි කටයුතු සඳහා

Annex 8.2

Summary of key views and comments

Public Consultation report

In the meetings of people and families in the project affected area they were highly concerned with the following negative impacts and issues affecting their life, properties, livelihoods, social functions, infrastructure facilities, order of communities and effective adaptation to developing new environment and support for such purposes.

- Issues stemming from land acquisition and accompanied adverse impacts on the geographical base of their family and community life.
- Issues of partial acquisition of lands and profitable use of remaining portions of lands and cost of making them productive
- Issues of losing livelihoods due to the land acquisition, paddy lands, lands of commercial and home garden crop cultivations, business, industrial and service centers.
- Issues of bifurcation of communities and interdependent community life, work and leisure of people.
- Issues of acquisition of lands of temples, public institutions and services.
- Issues of demolishing residential and other valuable structures and relocation of families and their econpomic and other service centers.
- Issues of economic survival during the period of relocation and restoration of livelihoods in new locations.
- Issues of finding suitable relocation sites capable of replacing the residential, infrastructure, economic and social factors they enjoyed at the original locations.
- Issues of possible breakdown of the education of the children due to partial and permanent relocation and the construction related negative impacts.
- Issues of getting due compensations without unnecessary delays and legal and bureaucratic procedures that may aggravate the situation and deprive some of their due compensations and other measures addressing grievances.
- Issues of the capacity of adapting to developing situation including resettlement, restoration of livelihoods and community life due to being ageing people, female headed family, disabled and lack of skills required for adopting new livelihoods.
- Issues of justice and equal treatment and due concern about people with special needs in the process of land acquisition, resettlement, compensation assessment, and payment of compensations, and other project activities. The fear of political loyalty and discriminations was expressed by the people.
- Issues of maintaining the social order and smooth functioning of social institutions in the period of construction and operation of the project were also raised.
- Issues of losing the rural environment and accompanied rural culture which was interpreted as a destruction of villages by the project.
- Issues of proper awareness and uncertainty of project plan, activities, policies, proper mechanisms, official reaction and concern about the plight of affected people.

- **Positive impacts according to the people**

- Development in the area would solve economic problems of future generations.

- The market available for the crops cultivated in those areas would be further expanded with good returns.

- Increase in the land values would be beneficial to the land owners of the affected areas

- Flood affected lands, barren lands can be transformed into profitable lands with the acquisition of them for the project and those affected can get high lands under resettlements.

- Project generated new employments and market

- **Peoples' suggestions**
  - Detailed awareness of the project plan and its impacts on the affected people is required
  - Project design needs to be changed to avoid acquisition of their lands and other properties and community centers and religious places.
  - Unavoidable acquisition of lands needs to be confined to the minimum quantity and negative impacts.
  Compensation needs to cover all the loses including home garden crops, and valued in terms of the market value with the policy paying maximum compensation.
- Relocation sites should be in close vicinity of current residential places and all the necessary infrastructure facilities should be provided.
- Relocation needs to be facilitated according to the will of affected families
- Those without proper ownership of lands and properties should be equally treated as others.
- Restoration of livelihoods
- Provision of employments for the affected people in the construction and operation period of the project
- All the grievances need to be effectively addressed before the commencement of the project activities.
- Safety of people needs to be duly addressed at all the sites and times of construction of the project

Annex 8.3

Public information leaflet

මධ්‍යම අධිවේගී මාර්ගය

හැඳින්වීම

මධ්‍යම අධිවේගී මාර්ග ව්‍යාපෘතිය ජාතික මාර්ග සැලැස්ම තුලින් ක්‍රියාත්මක කිරීමට හඳුනාගනු ලැබූ ව්‍යාපෘතියකි.මෙය රජයේ ප්‍රමුඛ සංවර්ධන යෝජනාවක් ලෙස ක්‍රියාත්මක කිරීමට සැලසුම් කර ඇත.ඒ අනුව දැනට ව්‍යාපෘතියේ මූලික අධ්‍යයනයන් සිදුකරමින් පවතින අතර මෙය ක්‍රියාත්මක කිරීම සඳහා විදේශීය ආයෝජකයන්ගේ යෝජනාද රජය විසින් සලකා බලමින් පවතී.

ව්‍යාපෘතියේ අධ්‍යයන සැලැස්ම

- මධ්‍යම අධිවේගි මාර්ගයට අයත් බිම්තීරුව නිශ්චය කිරීම.
- හඳුනාගත් ප්‍රදේශය තුල මැනුම් කටයුතු සිදුකිරීම.
- මාර්ග පථයේ භූ විද්‍යා සමීක්ෂණ කටයුතු සිදුකිරීම.
- සවිස්තරාත්මක සැළසුම් සකස් කර මාර්ග පථයට අයත් බිම්තීරුව නිශ්චය කිරීම.
- එම ප්‍රදේශය තුල පවත්නා පුද්ගලික පොදු හා සියළුම පදිංචිකරුවන්ගේ දේපල පිළිබඳව සමීක්ෂණය ග්‍රාම නිලධාරී කොට්ඨාශ මට්ටමින් සිදුකිරීම.
- එම ප්‍රදේශය තුල පාරිසරික ඇගයීමක් සිදුකිරීම.
- නැවත පදිංචි කිරීමේ සැලසුම සඳහා ප්‍රජාවගේ යෝජනා ලබාගැනීම.
- වන්දි ලබාදීමේ ක්‍රමවේදය සැලසුම් කිරීම.
- නැවත පදිංචිකිරීමේ වැඩසටහන ප්‍රාදේශීය ලේකම් කාර්යාල මගින් සැලසුම් කිරීම.

වැනි අධ්‍යයනයන් ක්‍රියාත්මක වන අතර ඒ සඳහා ඔබ දක්වන කාරුණික සහය තුලින් මෙම ව්‍යාපෘතියේ අධ්‍යයනය කටයුතු පහසුවනු ඇත.

වන්දි ලබාදීමේ ක්‍රියාවලිය

1 මෙම ව්‍යාපෘතිය සඳහා දැනට ක්‍රියාත්මකවන සති 72ක කාලයක් ගතවන ක්‍රමවේදයෙන් බැහැරව විශේෂ වැඩපිලිවෙලක් යටතේ සති 26ක් වැනි කාලයක් තුල වෙළඳපොල වටිනාකමට පදනම්ව බලපෑමට ලක්වන පාර්ශවයන්ට වන්දි ලබාදීමට අමාත්‍ය මණ්ඩල අනුමැතියක් ලැබී ඇත.

2 ප්‍රතිස්ථාපන ක්‍රියාවලියේදී බලපෑමට ලක්වන පාර්ශවයන්ගේ අදහස් හා යෝජනා සැලකිල්ලට ගෙන අවශ්‍ය කටයුතු සැලසුම් කරනු ඇත.

ව්‍යාපෘතිය ක්‍රියාත්මක කිරීම

ව්‍යාපෘතිය කොටස් 04ක් ලෙස ක්‍රියාත්මකවේ

- පළමු කොටස : කඩවත මීරිගම
- දෙවන කොටස : මීරිගම කුරුණෑගල
- තෙවන කොටස : නුවර අධිවේගී මාර්ගය
- හතරවන කොටස : කුරුණෑගල දඹුල්ල

මෙම ව්‍යාපෘතියේ මූලික සැලසුම් අධ්‍යයනය කිරීම තුලින් ප්‍රජාවට මෙන්ම ව්‍යාපෘතියටද වඩාත්ම ආර්ථික ඵලදායිතාවයකින් යුතු මාර්ග පථයක් හඳුනාගත හැකි විය.

ව්‍යාපෘතිය ක්‍රියාත්මකවීම තුලින් ලැබියහැකි ප්‍රතිලාභ:

- උපරිම ආර්ථික ඵලදායිතාවයකින් යුතු අධිවේගී මාර්ග පද්ධතියක් බිහිවීම.
- කොළඹ නුවර මාර්ගයේ හා අඹේපුස්ස කුරුණෑගල මාර්ගයේ අධික රථවාහන තදබදය අවම වීම.
- මාර්ග පථය දෙපස ආර්ථික හා සමාජය සංවර්ධනය.
- සංචාරක කර්මාන්තයේ වර්ධනය.
- දේශීය ව්‍යාපාරික ප්‍රජාවගේ හා අපනයන කෘෂිකර්මාන්තයේ ප්‍රවාහන පහසුකම් වැඩි දියුණුව උතුරු හා නැගෙනහිර ප්‍රදේශ සංවර්ධනය සඳහා මාර්ග ජාලය පුළුල් වීම.
- කෘෂි ආර්ථිකය හා බැඳුණු දඹුල්ල හා අවට ප්‍රදේශවල ආර්ථික හා සමාජීය සංවර්ධනය.
- ආයෝජකයන්ට ආයෝජන අවස්ථා සඳහා අධිවේගී මාර්ගය තුලින් ඉඩ ප්‍රස්ථා පුළුල් කිරීම.
- 2030 වසර වනවිට ප්‍රමාණාත්මක හා ගුණාත්මක මාර්ග පද්ධතියක් සපුරාලීම.

උසස් අධ්‍යාපන හා මහාමාර්ග අමාත්‍යංශය

මාර්ග සංවර්ධන අධිකාරිය

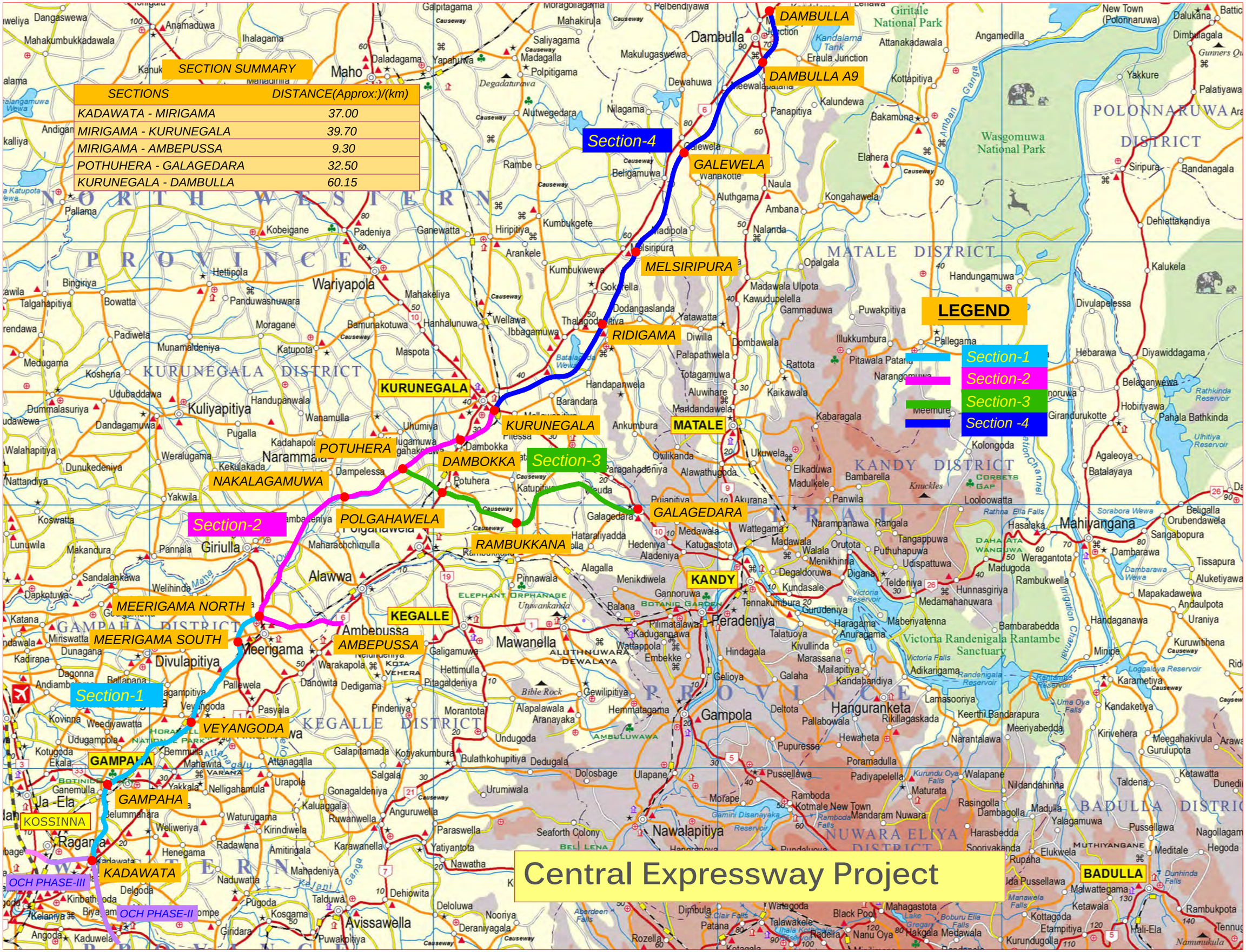
මධ්‍යම අධිවේගී මාර්ග ව්‍යාපෘතිය

ව්‍යාපෘති අධ්‍යක්ෂක

මධ්‍යම අධිවේගී මාර්ග ව්‍යාපෘතිය

තුන්වන මහල

සෙත්සිරිපාය



Central Expressway Project

Annex 9.1

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