

Lower Thames Crossing

7.16 Community Impact Report

(Tracked changes version - part 3 of 4)

APFP Regulation 5(2)(q)

Infrastructure Planning (Applications:
Prescribed Forms and Procedure)
Regulations 2009

Volume 7

DATE: August 2023

DEADLINE: 2

Planning Inspectorate Scheme Ref: TR010032
Application Document Ref: TR010032/APP/7.16

VERSION: 2.0

Revision history

Version	Date	Submitted at
1.0	31 October 2022	DCO Application
2.0	3 August 2023	Examination (Deadline 2)

Lower Thames Crossing

7.16 Community Impact Report (Tracked changes version)

List of contents

	Page number
1 Executive summary.....	1
2 Introduction	2
2.1 Purpose of the document.....	2
2.2 Project overview	2
3 How this document is structured.....	6
3.1 Chapters in this report	6
3.2 Communities in the immediate area	7
3.3 Communities in the wider area	8
3.4 Matching wards to operational sections	9
4 Construction overview.....	10
4.1 Description of construction activities.....	10
4.2 Overview of construction compounds	10
4.3 Traffic management.....	12
4.4 Phasing and duration	12
4.5 Project-wide construction mitigation	13
5 Operation overview	15
5.1 Key elements	15
5.2 Project benefits	15
6 Communities in the immediate area	18
6.1 Shorne, Cobham and Luddesdown ward.....	18
6.2 Higham ward.....	42
6.3 Singlewell ward.....	54
6.4 Riverview ward	68
6.5 Westcourt ward.....	81
6.6 Chalk ward.....	94
6.7 East Tilbury ward	106
6.8 Tilbury Riverside and Thurrock Park ward	130
6.9 Tilbury St Chads ward	146
6.10 Chadwell St Mary ward.....	159

6.11	Little Thurrock Blackshots ward	177
6.12	Stifford Clays ward.....	190
6.13	Orsett ward	202
6.14	Belhus ward	238
6.15	Ockendon ward.....	247
6.16	Upminster ward.....	264
6.17	Cranham ward	284
6.18	Warley and South Weald wards.....	298
7	Communities in the wider area	313
7.1	Medway	313
7.2	Gravesham	320
7.3	Dartford.....	333
7.4	Thurrock.....	339
7.5	Havering	349
8	Monitoring.....	355
8.1	Project-wide monitoring proposals.....	355
	References	359
	Glossary	360
	Appendices	425
	Appendix A Traffic Change Maps.....	426
	Appendix B Accessibility Maps	571
	Appendix C Figures	668

List of plates

Page number

Plate 2.1 Lower Thames Crossing route.....	4
Plate 6.1 Location of Shorne, Cobham and Luddesdown ward	18
Plate 6.2 Location of Higham ward	42
Plate 6.3 Location of Singlewell ward	54
Plate 6.4 Location of Riverview ward	68
Plate 6.5 Location of Westcourt ward	81
Plate 6.6 Location of Chalk ward	94
Plate 6.7 Location of East Tilbury ward	106
Plate 6.8 Location of Tilbury Riverside and Thurrock Park ward	130
Plate 6.9 Location of Tilbury St Chads ward	146
Plate 6.10 Location of Chadwell St Mary ward	159
Plate 6.11 Location of Little Thurrock Blackshots ward	177
Plate 6.12 Location of Stifford Clays ward	190
Plate 6.13 Location of Orsett ward.....	202
Plate 6.14 Location of Belhus ward	238
Plate 6.15 Location of Ockendon ward	247
Plate 6.16 Location of Upminster ward	264
Plate 6.17 Location of Cranham ward.....	284
Plate 6.18 Location of Warley ward	298
Plate 6.19 Location of South Weald ward	298
Plate 7.1 Location of communities in the wider area: Medway	313
Plate 7.2 Location of communities in the wider area: Gravesham	320
Plate 7.3 Location of communities in the wider area: Dartford	333
Plate 7.4 Location of communities in the wider area: Thurrock (western wards)	339
Plate 7.5 Location of communities in the wider area: Thurrock (eastern wards)	339
Plate 7.6 Location of communities in the wider area: Havering	349
Plate A.1 AM peak actual change in Shorne, Cobham and Luddesdown	427
Plate A.2 AM peak percentage change in Shorne, Cobham and Luddesdown	428
Plate A.3 Interpeak actual change in Shorne, Cobham and Luddesdown	429
Plate A.4 Interpeak percentage change in Shorne, Cobham and Luddesdown	430
Plate A.5 PM actual change in Shorne, Cobham and Luddesdown.....	431
Plate A.6 PM percentage change in Shorne, Cobham and Luddesdown	432
Plate A.7 AM peak actual change in Higham	433
Plate A.8 AM peak percentage change in Higham	434
Plate A.9 Interpeak actual change in Higham	435
Plate A.10 Interpeak percentage change in Higham	436
Plate A.11 PM actual change in Higham	437
Plate A.12 PM percentage change in Higham	438
Plate A.13 AM peak actual change in Singlewell	439
Plate A.14 AM peak percentage change in Singlewell	440

Plate A.15 Interpeak actual change in Singlewell	441
Plate A.16 Interpeak percentage change in Singlewell	442
Plate A.17 PM actual change in Singlewell	443
Plate A.18 PM percentage change in Singlewell	444
Plate A.19 AM peak actual change in Riverview	445
Plate A.20 AM peak percentage change in Riverview	446
Plate A.21 Interpeak actual change in Riverview	447
Plate A.22 Interpeak percentage change in Riverview	448
Plate A.23 PM actual change in Riverview	449
Plate A.24 PM percentage change in Riverview	450
Plate A.25 AM peak actual change in Westcourt	451
Plate A.26 AM peak percentage change in Westcourt	452
Plate A.27 Interpeak actual change in Westcourt	453
Plate A.28 Interpeak percentage change in Westcourt	454
Plate A.29 PM actual change in Westcourt	455
Plate A.30 PM percentage change in Westcourt	456
Plate A.31 AM peak actual change in Chalk	457
Plate A.32 AM peak percentage change in Chalk	458
Plate A.33 Interpeak actual change in Chalk	459
Plate A.34 Interpeak percentage change in Chalk	460
Plate A.35 PM actual change in Chalk	461
Plate A.36 PM percentage change in Chalk	462
Plate A.37 AM peak actual change in East Tilbury	463
Plate A.38 AM peak percentage change in East Tilbury	464
Plate A.39 Interpeak actual change in East Tilbury	465
Plate A.40 Interpeak percentage change in East Tilbury	466
Plate A.41 PM actual change in East Tilbury	467
Plate A.42 PM percentage change in East Tilbury	468
Plate A.43 AM peak actual change in Tilbury Riverside and Thurrock Park	469
Plate A.44 AM peak percentage change in Tilbury Riverside and Thurrock Park	470
Plate A.45 Interpeak actual change in Tilbury Riverside and Thurrock Park	471
Plate A.46 Interpeak percentage change in Tilbury Riverside and Thurrock Park	472
Plate A.47 PM actual change in Tilbury Riverside and Thurrock Park	473
Plate A.48 PM percentage change in Tilbury Riverside and Thurrock Park	474
Plate A.49 AM peak actual change in Tilbury St Chads	475
Plate A.50 AM peak percentage change Tilbury St Chads	476
Plate A.51 Interpeak actual change Tilbury St Chads	477
Plate A.52 Interpeak percentage change Tilbury St Chads	478
Plate A.53 PM actual change Tilbury St Chads	479
Plate A.54 PM percentage change Tilbury St Chads	480
Plate A.55 AM peak actual change in Chadwell St Mary	481
Plate A.56 AM peak percentage change in Chadwell St Mary	482
Plate A.57 Interpeak actual change in Chadwell St Mary	483
Plate A.58 Interpeak percentage change in Chadwell St Mary	484

Plate A.59 PM actual change in Chadwell St Mary	485
Plate A.60 PM percentage change in Chadwell St Mary	486
Plate A.61 AM peak actual change in Little Thurrock Blackshots	487
Plate A.62 AM peak percentage change in Little Thurrock Blackshots	488
Plate A.63 Interpeak actual change in Little Thurrock Blackshots	489
Plate A.64 Interpeak percentage change in Little Thurrock Blackshots	490
Plate A.65 PM actual change in Little Thurrock Blackshots	491
Plate A.66 PM percentage change in Little Thurrock Blackshots	492
Plate A.67 AM peak actual change in Stifford Clays	493
Plate A.68 AM peak percentage change in Stifford Clays	494
Plate A.69 Interpeak actual change in Stifford Clays	495
Plate A.70 Interpeak percentage change in Stifford Clays	496
Plate A.71 PM actual change in Stifford Clays	497
Plate A.72 PM percentage change in Stifford Clays	498
Plate A.73 AM peak actual change in Orsett	499
Plate A.74 AM peak percentage change in Orsett	500
Plate A.75 Interpeak actual change in Orsett	501
Plate A.76 Interpeak percentage change in Orsett	502
Plate A.77 PM actual change in Orsett	503
Plate A.78 PM percentage change in Orsett	504
Plate A.79 AM peak actual change in Belhus	505
Plate A.80 AM peak percentage change in Belhus	506
Plate A.81 Interpeak actual change in Belhus	507
Plate A.82 Interpeak percentage change in Belhus	508
Plate A.83 PM peak actual change in Belhus	509
Plate A.84 PM peak percentage change in Belhus	510
Plate A.85 AM peak actual change in Ockendon	511
Plate A.86 AM peak percentage change in Ockendon	512
Plate A.87 Interpeak actual change in Ockendon	513
Plate A.88 Interpeak percentage change in Ockendon	514
Plate A.89 PM peak actual change in Ockendon	515
Plate A.90 PM peak percentage change in Ockendon	516
Plate A.91 AM peak actual change in Upminster	517
Plate A.92 AM peak percentage change in Upminster	518
Plate A.93 Interpeak actual change in Upminster	519
Plate A.94 Interpeak percentage change in Upminster	520
Plate A.95 PM actual change in Upminster	521
Plate A.96 PM percentage change in Upminster	522
Plate A.97 AM peak actual change in Cranham	523
Plate A.98 AM peak percentage change in Cranham	524
Plate A.99 Interpeak actual change in Cranham	525
Plate A.100 Interpeak percentage change in Cranham	526
Plate A.101 PM actual change in Cranham	527
Plate A.102 PM percentage change in Cranham	528

Plate A.103 AM peak actual change in Warley	529
Plate A.104 AM peak actual change in South Weald	530
Plate A.105 AM peak percentage change in Warley	531
Plate A.106 AM peak percentage change in South Weald	532
Plate A.107 Interpeak actual change in Warley	533
Plate A.108 Interpeak actual change in South Weald	534
Plate A.109 Interpeak percentage change in Warley	535
Plate A.110 Interpeak percentage change in South Weald	536
Plate A.111 PM actual change in Warley	537
Plate A.112 PM actual change in South Weald	538
Plate A.113 PM percentage change in Warley	539
Plate A.114 PM percentage change in South Weald	540
Plate A.115 AM peak actual change in Medway	541
Plate A.116 AM peak percentage change in Medway	542
Plate A.117 Interpeak actual change in Medway	543
Plate A.118 Interpeak percentage change in Medway	544
Plate A.119 PM peak actual change in Medway	545
Plate A.120 PM peak percentage change in Medway	546
Plate A.121 AM peak actual change in Gravesham	547
Plate A.122 AM peak percentage change in Gravesham	548
Plate A.123 Interpeak actual change in Gravesham	549
Plate A.124 Interpeak percentage change in Gravesham	550
Plate A.125 PM peak actual change in Gravesham	551
Plate A.126 PM peak percentage change in Gravesham	552
Plate A.127 AM peak actual change in Dartford	553
Plate A.128 AM peak percentage change in Dartford	554
Plate A.129 Interpeak actual change in Dartford	555
Plate A.130 Interpeak percentage change in Dartford	556
Plate A.131 PM peak actual change in Dartford	557
Plate A.132 PM peak percentage change in Dartford	558
Plate A.133 AM peak actual change in Thurrock	559
Plate A.134 AM peak percentage change in Thurrock	560
Plate A.135 Interpeak actual change in Thurrock	561
Plate A.136 Interpeak percentage change in Thurrock	562
Plate A.137 PM peak actual change in Thurrock	563
Plate A.138 PM peak percentage change in Thurrock	564
Plate A.139 AM peak actual change in Havering	565
Plate A.140 AM peak percentage change in Havering	566
Plate A.141 Interpeak actual change in Havering	567
Plate A.142 Interpeak percentage change in Havering	568
Plate A.143 PM peak actual change in Havering	569
Plate A.144 PM peak percentage change in Havering	570
Plate B.1 AM peak 30 minute travel time in Shorne, Cobham and Luddesdown	572
Plate B.2 AM peak 60 minute travel time in Shorne, Cobham and Luddesdown	573

Plate B.3 PM peak 30 minute travel time in Shorne, Cobham and Luddesdown	574
Plate B.4 PM peak 60 minute travel time in Shorne, Cobham and Luddesdown	575
Plate B.5 AM peak 30 minute travel time in Higham	576
Plate B.6 AM peak 60 minute travel time in Higham	577
Plate B.7 PM peak 30 minute travel time in Higham	578
Plate B.8 PM peak 60 minute travel time in Higham	579
Plate B.9 AM peak 30 minute travel time in Singlewell	580
Plate B.10 AM peak 60 minute travel time in Singlewell	581
Plate B.11 PM peak 30 minute travel time in Singlewell	582
Plate B.12 PM peak 60 minute travel time in Singlewell	583
Plate B.13 AM peak 30 minute travel time in Riverview	584
Plate B.14 AM peak 60 minute travel time in Riverview	585
Plate B.15 PM peak 30 minute travel time in Riverview	586
Plate B.16 PM peak 60 minute travel time in Riverview	587
Plate B.17 AM peak 30 minute travel time in Westcourt	588
Plate B.18 AM peak 60 minute travel time in Westcourt	589
Plate B.19 PM peak 30 minute travel time in Westcourt	590
Plate B.20 PM peak 60 minute travel time in Westcourt	591
Plate B.21 AM peak 30 minute travel time in Chalk	592
Plate B.22 AM peak 60 minute travel time in Chalk	593
Plate B.23 PM peak 30 minute travel time in Chalk	594
Plate B.24 PM peak 60 minute travel time in Chalk	595
Plate B.25 AM peak 30 minute travel time in East Tilbury	596
Plate B.26 AM peak 60 minute travel time in East Tilbury	597
Plate B.27 PM peak 30 minute travel time in East Tilbury	598
Plate B.28 PM peak 60 minute travel time in East Tilbury	599
Plate B.29 AM peak 30 minute travel time in Tilbury Riverside and Thurrock.....	600
Plate B.30 AM peak 60 minute travel time in Tilbury Riverside and Thurrock.....	601
Plate B.31 PM peak 30 minute travel time in Tilbury Riverside and Thurrock.....	602
Plate B.32 PM peak 60 minute travel time in Tilbury Riverside and Thurrock.....	603
Plate B.33 AM peak 30 minute travel time in Tilbury St Chads.....	604
Plate B.34 AM peak 60 minute travel time in Tilbury St Chads.....	605
Plate B.35 PM peak 30 minute travel time in Tilbury St Chads.....	606
Plate B.36 PM peak 60 minute travel time in Tilbury St Chads.....	607
Plate B.37 AM peak 30 minute travel time in Chadwell St Marys	608
Plate B.38 AM peak 60 minute travel time Chadwell St Marys	609
Plate B.39 PM peak 30 minute travel time Chadwell St Marys	610
Plate B.40 PM peak 60 minute travel time Chadwell St Marys	611
Plate B.41 AM peak 30 minute travel time in Little Thurrock Blackshots	612
Plate B.42 AM peak 60 minute travel time in Little Thurrock Blackshots	613
Plate B.43 PM peak 30 minute travel time in Little Thurrock Blackshots	614
Plate B.44 PM peak 60 minute travel time in Little Thurrock Blackshots	615
Plate B.45 AM peak 30 minute travel time in Stifford Clays.....	616
Plate B.46 AM peak 60 minute travel time in Stifford Clays.....	617

Plate B.47 PM peak 30 minute travel time in Stifford Clays	618
Plate B.48 PM peak 60 minute travel time in Stifford Clays	619
Plate B.49 AM peak 30 minute travel time in Orsett	620
Plate B.50 AM peak 60 minute travel time in Orsett	621
Plate B.51 PM peak 30 minute travel time in Orsett	622
Plate B.52 PM peak 60 minute travel time in Orsett	623
Plate B.53 AM peak 30 minute travel time in Belhus	624
Plate B.54 AM peak 60 minute travel time in Belhus	625
Plate B.55 PM peak 30 minute travel time in Belhus	626
Plate B.56 PM peak 60 minute travel time in Belhus	627
Plate B.57 AM peak 30 minute travel time in Ockendon	628
Plate B.58 AM peak 60 minute travel time in Ockendon	629
Plate B.59 PM peak 30 minute travel time in Ockendon	630
Plate B.60 PM peak 60 minute travel time in Ockendon	631
Plate B.61 AM peak 30 minute travel time in Upminster	632
Plate B.62 AM peak 60 minute travel time in Upminster	633
Plate B.63 PM peak 30 minute travel time in Upminster	634
Plate B.64 PM peak 60 minute travel time in Upminster	635
Plate B.65 AM peak 30 minute travel time in Cranham	636
Plate B.66 AM peak 60 minute travel time in Cranham	637
Plate B.67 PM peak 30 minute travel time in Cranham	638
Plate B.68 PM peak 60 minute travel time in Cranham	639
Plate B.69 AM peak 30 minute travel time in Warley	640
Plate B.70 AM peak 30 minute travel time in South Weald	641
Plate B.71 AM peak 60 minute travel time in Warley	642
Plate B.72 AM peak 60 minute travel time in South Weald	643
Plate B.73 PM peak 30 minute travel time in Warley	644
Plate B.74 PM peak 30 minute travel time in South Weald	645
Plate B.75 PM peak 60 minute travel time in Warley	646
Plate B.76 PM peak 60 minute travel time in South Weald	647
Plate B.77 AM peak 30 minute travel time in Medway	648
Plate B.78 AM peak 60 minute travel time in Medway	649
Plate B.79 PM peak 30 minute travel time in Medway	650
Plate B.80 PM peak 60 minute travel time in Medway	651
Plate B.81 AM peak 30 minute travel time in Gravesham	652
Plate B.82 AM peak 60 minute travel time in Gravesham	653
Plate B.83 PM peak 30 minute travel time in Gravesham	654
Plate B.84 PM peak 60 minute travel time in Gravesham	655
Plate B.85 AM peak 30 minute travel time in Dartford	656
Plate B.86 AM peak 60 minute travel time in Dartford	657
Plate B.87 PM peak 30 minute travel time in Dartford	658
Plate B.88 PM peak 60 minute travel time in Dartford	659
Plate B.89 AM peak 30 minute travel time in Thurrock	660
Plate B.90 AM peak 60 minute travel time in Thurrock	661

Plate B.91 PM peak 30 minute travel time in Thurrock	662
Plate B.92 PM peak 60 minute travel time in Thurrock	663
Plate B.93 AM peak 30 minute travel time in Havering	664
Plate B.94 AM peak 60 minute travel time in Havering	665
Plate B.95 PM peak 30 minute travel time in Havering	666
Plate B.96 PM peak 60 minute travel time in Havering	667

List of tables

	Page number
Table 4.1 Construction modelling phases	13
Table 6.1 Average daily vehicle numbers going to compounds near Shorne, Cobham and Luddesdown ward	22
Table 6.2 Predicted construction noise levels in Shorne, Cobham and Luddesdown ward	28
Table 6.3 Average daily vehicle numbers going to compounds near Higham ward	45
Table 6.4 Predicted construction noise levels in Higham ward	47
Table 6.5 Average daily vehicle numbers going to Marling Cross Compound	56
Table 6.6 Average daily vehicle numbers going to compounds near Singlewell ward	57
Table 6.7 Predicted construction noise levels in Singlewell ward	60
Table 6.8 Average daily vehicle numbers going to a compound in Riverview ward	70
Table 6.9 Predicted construction noise levels in Riverview ward	72
Table 6.10 Average daily vehicle numbers going to compounds in or near Westcourt ward	84
Table 6.11 Predicted construction noise levels in Westcourt ward	86
Table 6.12 Average daily vehicle numbers going to compounds near Chalk ward	97
Table 6.13 Predicted construction noise levels in Chalk ward	98
Table 6.14 Average daily vehicle numbers going to a compound in East Tilbury ward	111
Table 6.15 Main traffic management measures in East Tilbury	111
Table 6.16 Predicted construction noise levels in East Tilbury ward	116
Table 6.17 Average daily vehicle numbers going to compounds in and near Tilbury Riverside and Thurrock Park ward	134
Table 6.18 Predicted construction noise levels in Tilbury Riverside and Thurrock Park ward	137
Table 6.19 Average daily vehicle numbers going to compounds near Tilbury St Chads ward	148
Table 6.20 Main traffic management measures in Tilbury St Chads ward	148
Table 6.21 Predicted construction noise levels in Tilbury St Chads ward	151
Table 6.22 Average daily vehicle numbers going to compounds near Chadwell St Mary ward	162
Table 6.23 Main traffic management measures in Chadwell St Mary ward	162
Table 6.24 Predicted construction noise levels in Chadwell St Mary ward	167
Table 6.25 Main traffic management measures in Little Thurrock Blackshots ward	179

Table 6.26 Predicted construction noise levels in Little Thurrock Blackshots ward	182
Table 6.27 Main traffic management measures in Stifford Clays ward	192
Table 6.28 Predicted construction noise levels in Stifford Clays ward	194
Table 6.29 Average daily vehicle numbers going to compounds in Orsett ward	210
Table 6.30 Main traffic management measures in Orsett ward	211
Table 6.31 Predicted construction noise levels in Orsett ward	221
Table 6.32 Average daily vehicle numbers going to compounds in Ockendon ward	250
Table 6.33 Main traffic management measures in Ockendon ward	250
Table 6.34 Predicted construction noise levels in Ockendon ward	254
Table 6.35 Daily average number of vehicles going to the M25 and Ockendon Road compounds	267
Table 6.36 Main traffic management measures in Upminster Ward	268
Table 6.37 Predicted construction noise levels in Upminster ward	272
Table 6.38 Average daily vehicle numbers going to compounds in Cranham ward	287
Table 6.39 Main traffic management measures in Cranham ward	288
Table 6.40 Predicted construction noise levels in Cranham ward	290
Table 6.41 Daily average number of vehicles going to the Warley Street compound	301
Table 6.42 Main traffic management measures in Warley and South Weald wards	302
Table 6.43 Predicted construction noise levels in Warley ward	304
Table 7.1 Predicted construction noise levels in Medway	315
Table 7.2 Predicted construction noise levels in Woodlands and Riverside wards	324
Table 7.3 Proposed traffic management measures relevant to Little Thurrock Rectory, and Chafford and North Stifford wards	342
Table 7.4 Predicted construction noise levels in Harold Wood ward	352

List of Figures

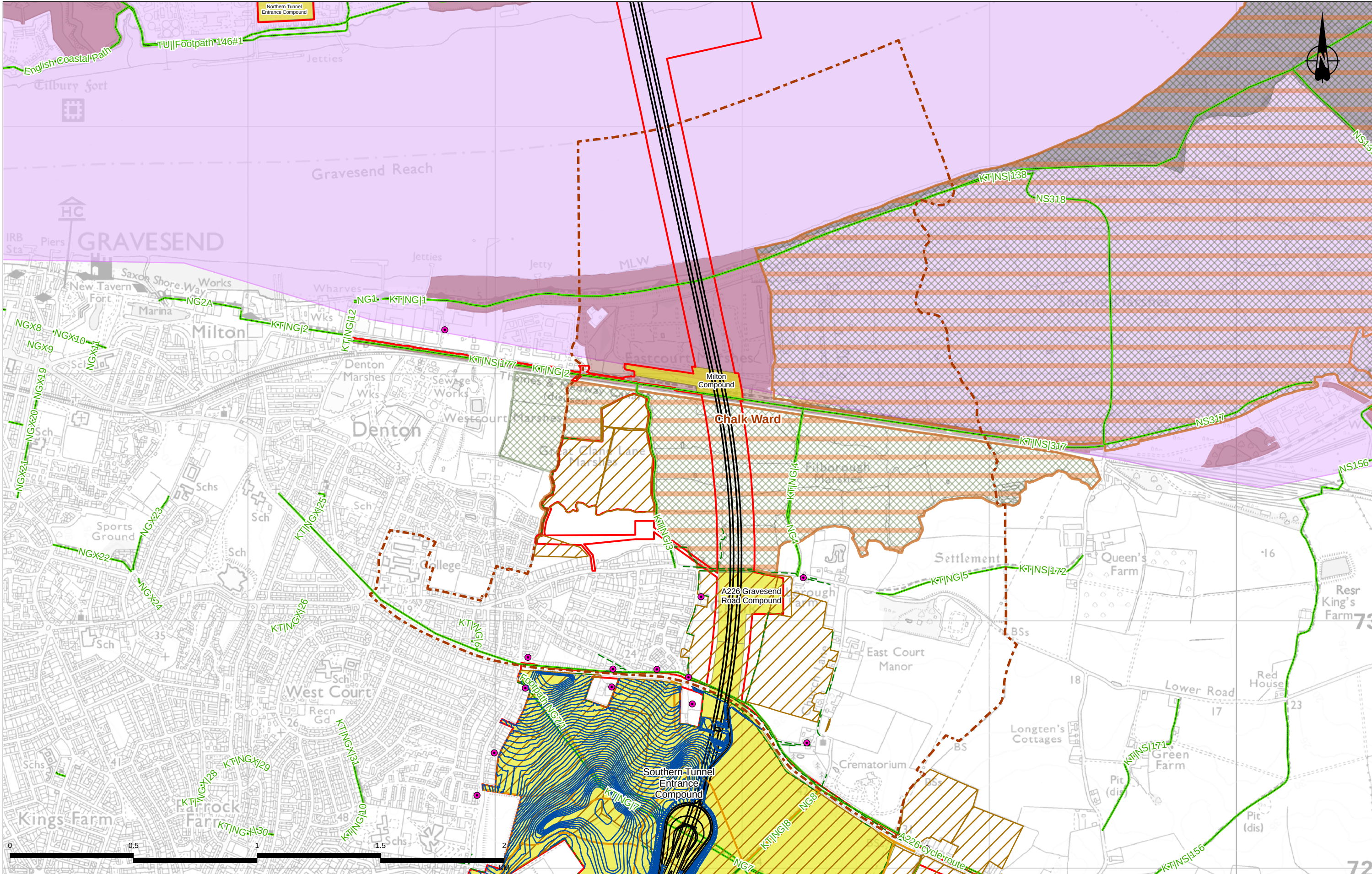
Page number

Figure 3.1 Overview map of local authority areas and wards	
Figure 4.1 Construction compounds and haul roads	
Figure 6.1a Construction impacts summary plan of Shorne, Cobham and Luddesdown Ward	
Figure 6.1b Operational impacts summary plan of Shorne, Cobham and Luddesdown Ward	
Figure 6.1c Mitigation proposals in Shorne, Cobham and Luddesdown Ward	
Figure 6.2a Construction impacts summary plan of Higham Ward	
Figure 6.2b Operational impacts summary plan of Riverview Ward	
Figure 6.2c Mitigation proposals in Riverview Ward	
Figure 6.3a Construction impacts summary plan of Singlewell Ward	
Figure 6.3b Operational impacts summary plan of Singlewell Ward	
Figure 6.3c Mitigation proposals in Singlewell Ward	

Figure 6.4a Construction impacts summary plan of Riverview Ward
Figure 6.4b Operational impacts summary plan of Riverview Ward
Figure 6.4c Mitigation proposals in Riverview Ward
Figure 6.5a Construction impacts summary plan of Westcourt Ward
Figure 6.5b Operational impacts summary plan of Westcourt Ward
Figure 6.5c Mitigation proposals in Westcourt Ward
Figure 6.6a Construction impacts summary plan of Chalk Ward
Figure 6.6b Operational impacts summary plan of Chalk Ward
Figure 6.6c Mitigation proposals in Chalk Ward
Figure 6.7a Construction impacts summary plan of East Tilbury Ward
Figure 6.7b Operational impacts summary plan of East Tilbury Ward
Figure 6.7c Mitigation proposals in East Tilbury Ward
Figure 6.8a Construction impacts summary plan of Tilbury Riverside and Thurrock Park Ward
Figure 6.8b Operational impacts summary plan of Tilbury Riverside and Thurrock Park Ward
Figure 6.8c Mitigation proposals in Tilbury Riverside and Thurrock Park Ward
Figure 6.9a Construction impacts summary plan of Tilbury St. Chads Ward
Figure 6.9b Operational impacts summary plan of Tilbury St. Chads Ward
Figure 6.9c Mitigation proposals in Tilbury St. Chads Ward
Figure 6.10a Construction impacts summary plan of Chadwell St. Mary Ward
Figure 6.10b Operational impacts summary plan of Chadwell St. Mary Ward
Figure 6.10c Mitigation proposals plan of Chadwell St. Mary Ward
Figure 6.11a Construction impacts summary plan of Little Thurrock Blackshots Ward
Figure 6.11b Operational impacts summary plan of Little Thurrock Blackshots Ward
Figure 6.11c Mitigation proposals in Little Thurrock Blackshots Ward
Figure 6.12a Construction impacts summary plan of Stifford Clays Ward
Figure 6.12b Operational impacts summary plan of Stifford Clays Ward
Figure 6.12c Mitigation proposals in Stifford Clays Ward
Figure 6.13a Construction impacts summary plan of Orsett Ward
Figure 6.13b Operational impacts summary plan of Orsett Ward
Figure 6.13c Mitigation proposals in Orsett Ward
Figure 6.14a Construction impacts summary plan of Belhus Ward
Figure 6.14b Operational impacts summary plan of Belhus Ward
Figure 6.14c Mitigation proposals in Belhus Ward
Figure 6.15a Construction impacts summary plan of Ockendon Ward

Figure 6.15b Operational impacts summary plan of Ockendon Ward
Figure 6.15c Mitigation proposals in Ockendon Ward
Figure 6.16a Construction impacts summary plan of Upminster Ward
Figure 6.16b Operational impacts summary plan of Upminster Ward
Figure 6.16c Mitigation proposals in Upminster Ward
Figure 6.17a Construction impacts summary plan of Cranham Ward
Figure 6.17b Operational impacts summary plan of Cranham Ward
Figure 6.17c Mitigation proposals in Cranham Ward
Figure 6.18a Construction impacts summary plan of Warley Ward
Figure 6.18a(i) Construction impacts summary plan of South Weald Ward
Figure 6.18b Operational impacts summary plan of Warley Ward
Figure 6.18b(ii) Operational impacts summary plan of South Weald Ward
Figure 6.18c Mitigation proposals in Warley Ward
Figure 6.18c(iii) Mitigation proposals in South Weald Ward
Figure 7.1 Community impacts in the wider area: Medway
Figure 7.2 Community impacts in the wider area: Gravesham
Figure 7.3 Community impacts in the wider area: Dartford
Figure 7.4 Community impacts in the wider area: Thurrock - west of Project
Figure 7.5 Community impacts in the wider area: Thurrock - east of Project
Figure 7.6 Community impacts in the wider area: Havering

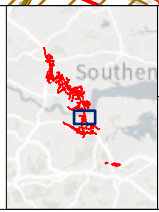
Appendix C Figures



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649
© Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2022

P01	S8	21/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Appr'd

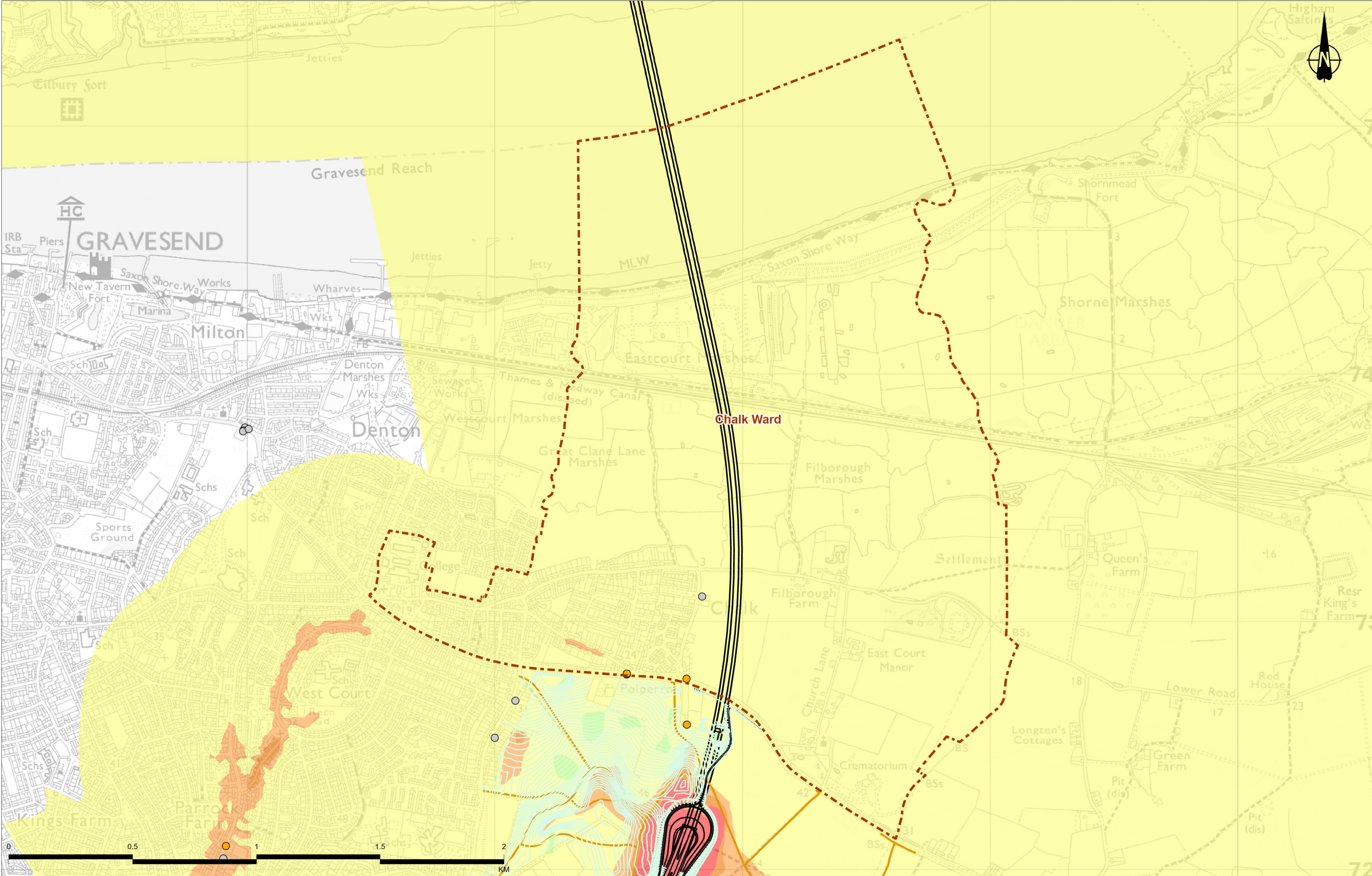
— Route alignment	Electoral ward boundary	Existing Public Right of Way	Local Wildlife Site
— NMU route	Main works construction compound	Ramsar site	Nature Improvement Area
— Earthworks	Utility Logistics Hub	Site of Special Scientific Interest	Arable field
Order Limits	Construction noise receptor	Special Protection Area	Hedgerow



Client
national highways

Project
LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:14,000		
Drawing Title	Figure 6.6a - Construction impacts summary plan of Chalk Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80008				



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	24/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprv'd

- Legend**
- Route alignment
 - Earthworks
 - NMU Route
 - Electoral ward boundary

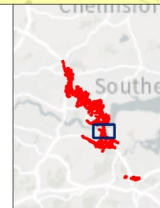
Operation Change in Road Traffic Noise Opening Year
OY Key des

- Minor noise reduction, 1 to 2.9dB(A)
- No Change/Negligible, less than 1dB(A)

- Minor noise increase, 1 to 2.9dB(A)
- Moderate noise increase, 3 to 4.9dB(A)
- Major noise increase, 5dB(A) or more

Degree of change in annual average nitrogen dioxide (NO₂) concentrations
Magnitude

- A minor worsening in air quality
- Negligible



Client

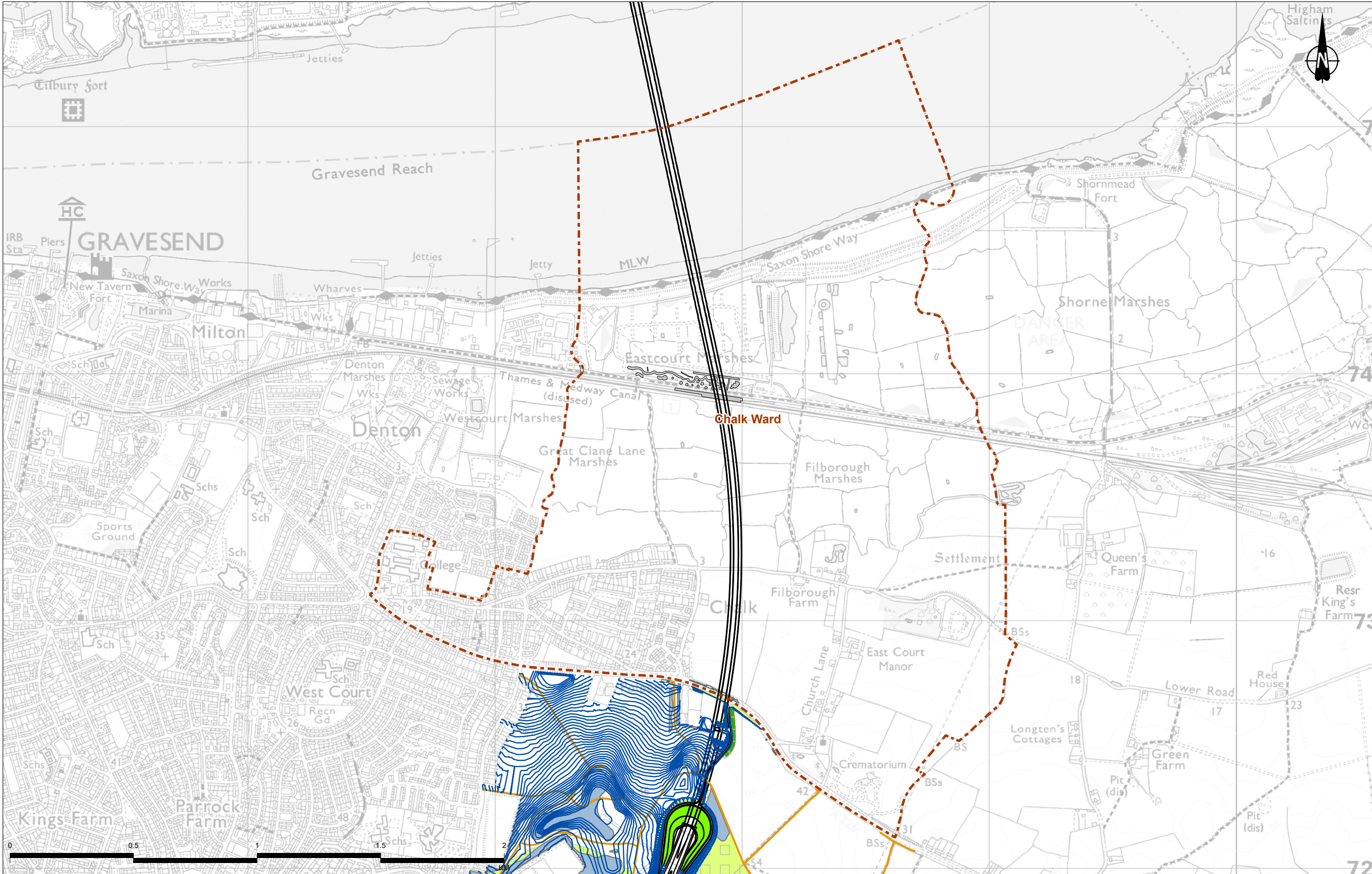
national highways

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:14,000		
Drawing Title	Figure 6.6b - Operational impacts summary plan of Chalk Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80008				

Z:\Environment\Community Impacts Report\Figure 6b - Operational Impacts Summary Plan.aprx



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	18/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd

Legend

- Route alignment
- NMU Route
- Earthworks
- Electoral ward boundary
- LE1.3 Species Rich Grassland
- LE1.4 Rock and Scree
- LE2.8 Scrub
- LE2.11 Woodland with Non-Native Species
- LE2.22 Scrub Woodland
- LE4.3 Native Species Hedge (Untrimmed)
- LE4.4 Native Hedgerow with Trees
- LE6.2 Banks and Ditches (Polygon)
- LE6.4 Wet Grassland
- LE8.2 Ancient Woodland Mitigation Planting
- LE8.4 Wetland / Fenland Creation
- LE8.5 Ecology Pond (Indicative Symbol)
- LE9.1 Agricultural Reinstatement
- LE9.2 Open Space Replacement

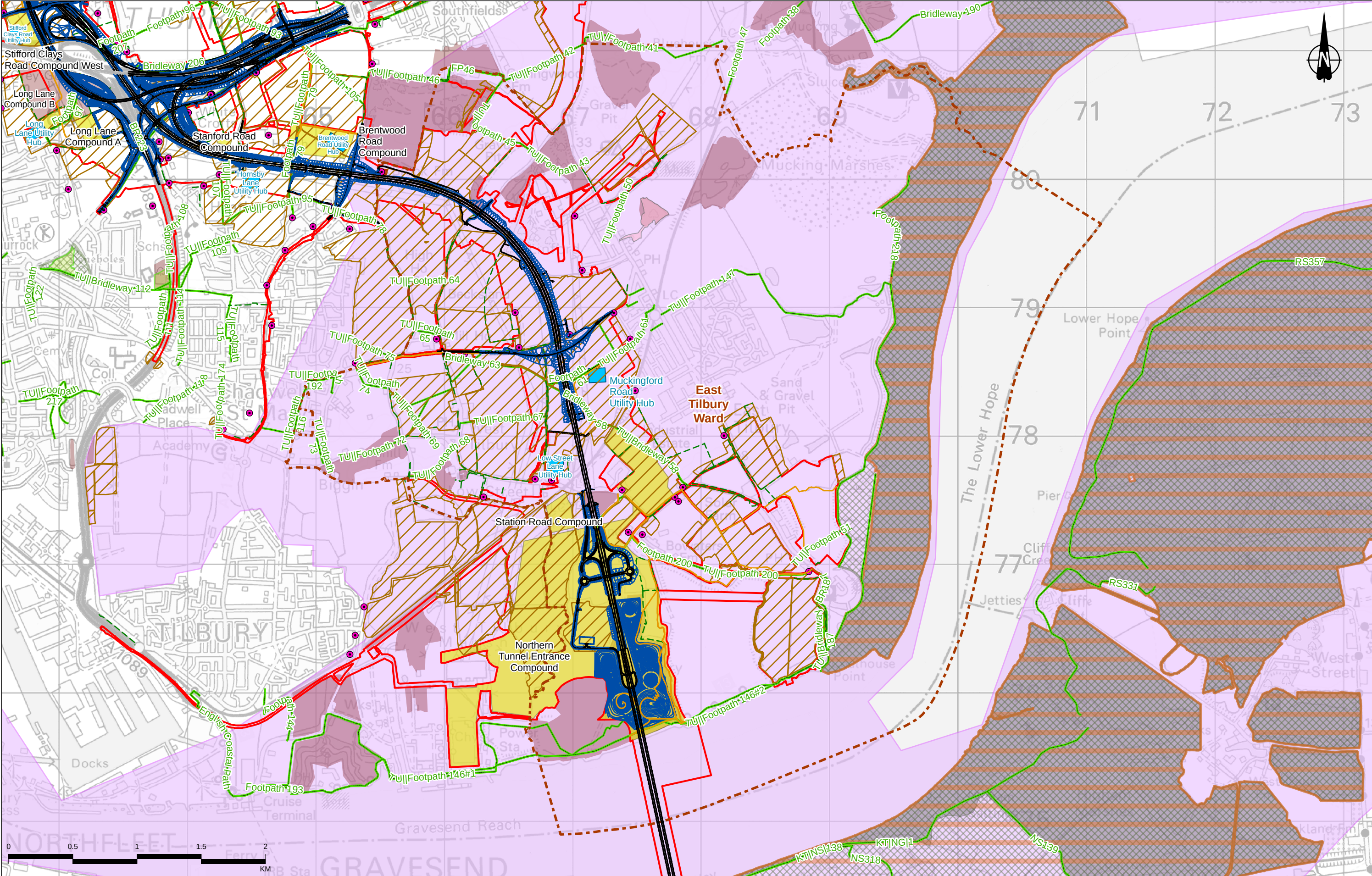
Client

Project

national highways

LOWER THAMES CROSSING

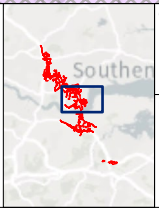
Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:14,000		
Drawing Title	Figure 6.6c - Mitigation proposals in Chalk Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80008				
Z:\Environment\Community Impacts Report\Figure 6c - Mitigation Proposals.aprx					



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649
© Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2022

P01	S8	21/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd

Legend					
— Route alignment	Main works construction compound	Local Nature Reserve	Nature Improvement Area		
— NMU route	Utility Logistics Hub	Ramsar site	Arable field		
— Earthworks	Construction noise receptor	Site of Special Scientific Interest	Hedgerow		
— Order Limits	Existing Public Right of Way	Special Protection Area			
— Electoral ward boundary	Ancient Woodland	Local Wildlife Site			

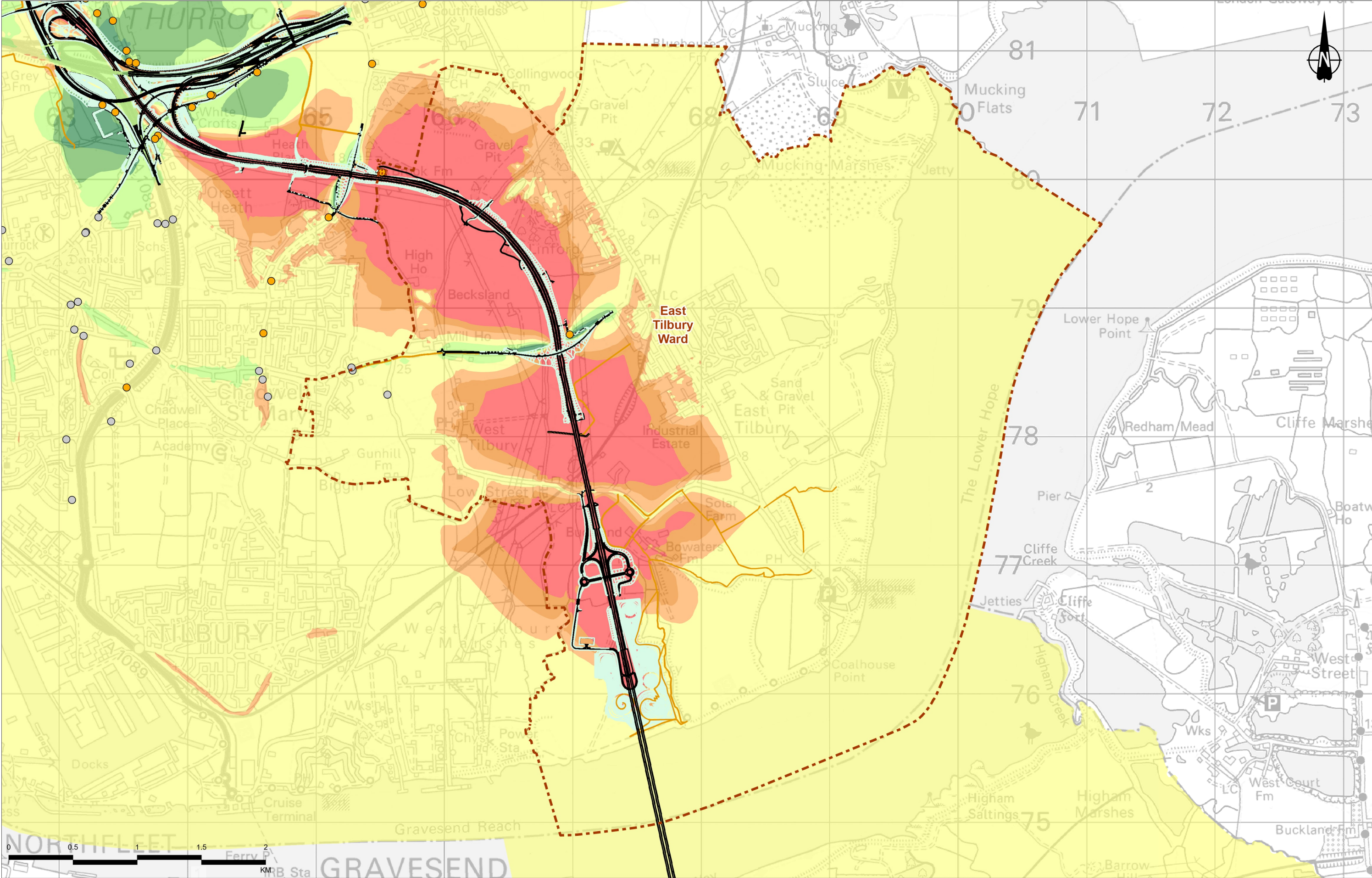


Client

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:27,000		
Drawing Title	Figure 6.7a - Construction impacts summary plan of East Tilbury Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80009				



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	24/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd

Legend

- Route alignment
- Earthworks
- NMU Route
- Electoral ward boundary

Operation Change in Road Traffic Noise Opening Year

OY Key des

- Major noise reduction, 5dB(A) or more
- Moderate noise reduction, 3 to 4.9dB(A)

Degree of change in annual average nitrogen dioxide (NO₂) concentrations

Magnitude

- A minor worsening in air quality
- Negligible

Major noise increase, 5dB(A) or more

- Minor noise increase, 1 to 2.9dB(A)
- Moderate noise increase, 3 to 4.9dB(A)

Minor noise reduction, 1 to 2.9dB(A)

- No Change/Negligible, less than 1dB(A)

Major noise increase, 5dB(A) or more

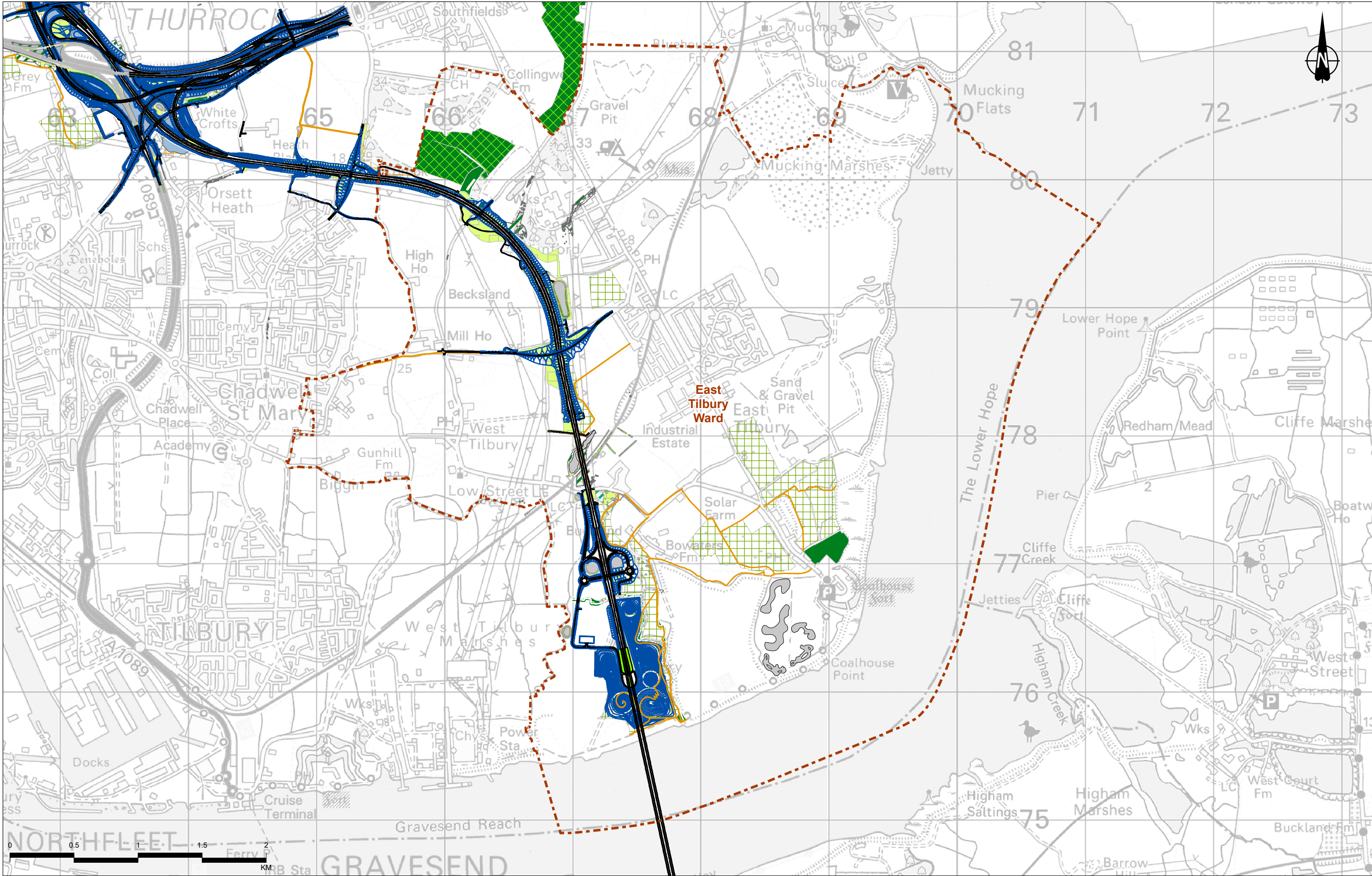
national highways

Client

Project

LOWER THAMES CROSSING

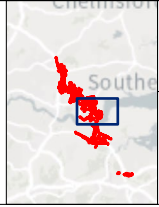
Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:27,000		
Drawing Title	Figure 6.7b - Operational impacts summary plan of East Tilbury Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80009				
Z:\Environment\Community Impacts Report\Figure 6b - Operational Impacts Summary Plan.aprx					



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	18/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprv'd

Legend	LE2.2 Woodland Edge	LE2.11 Woodland with Non-Native Species	LE5.1 Individual Trees
LE2.4 Linear Belt of Shrubs and Trees	LE2.22 Scrub Woodland	LE6.4 Wet Grassland	LE8.4 Wetland / Fenland Creation
Earthworks	LE4.3 Native Species Hedge (Untrimmed)	LE8.1 Open Mosaic Habitat	LE8.5 Ecology Pond (Indicative Symbol)
Electoral ward boundary	LE4.4 Native Hedgerow with Trees	LE8.2 Ancient Woodland Mitigation Planting	LE8.6 Translocated Acid Grassland
Acoustic barrier	LE2.7 Scattered Trees	LE8.3 Woodland Mitigation Planting	LE9.1 Agricultural Reinstatement
LE1.3 Species Rich Grassland	LE2.8 Scrub		
LE2.1 Native Woodland			



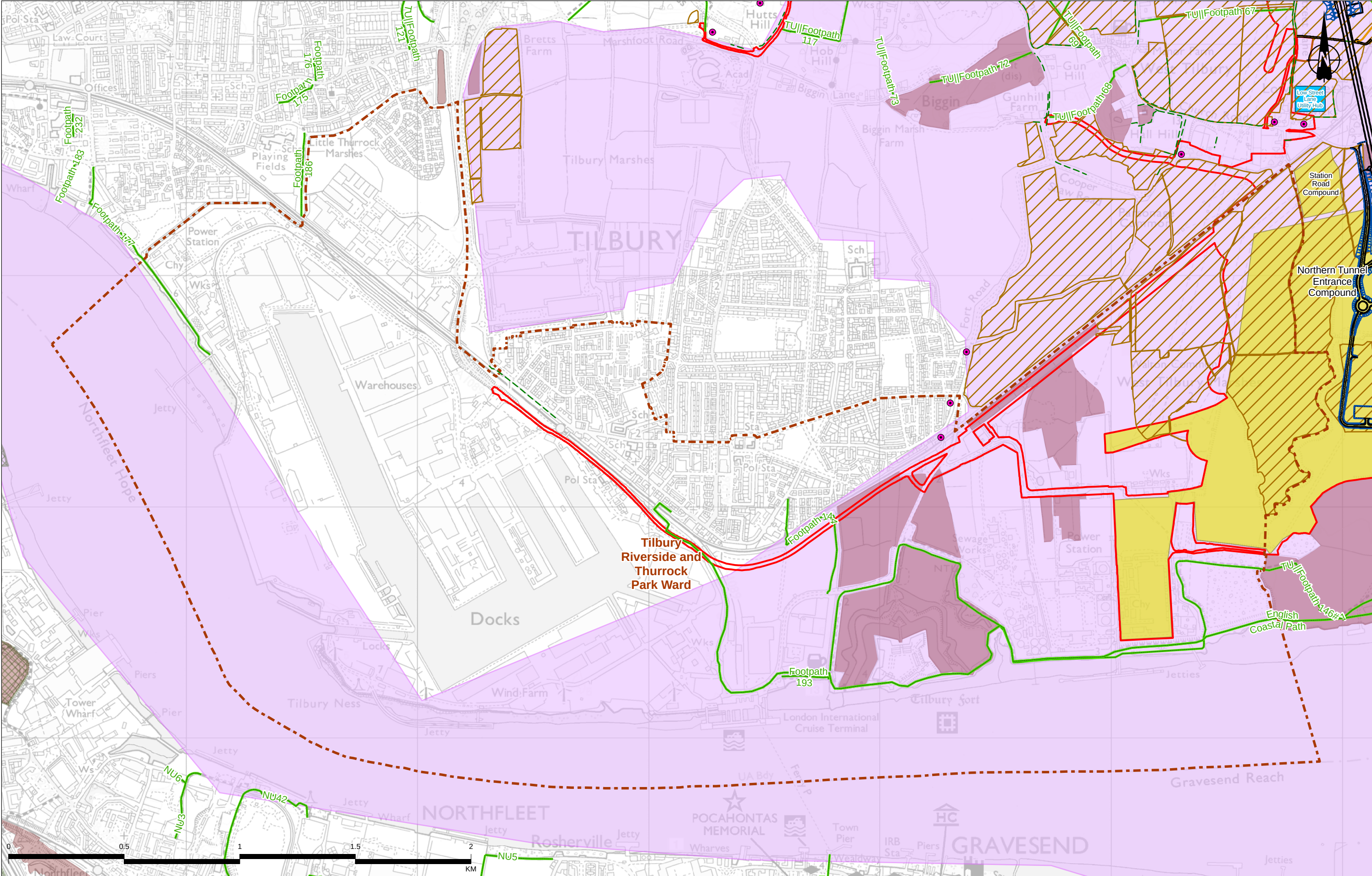
Client

national highways

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION		Original Size	A3	Revision	PC
Application Document Number	TR010032/APP/7.16			Scale	1:27,000	
Drawing Title	Figure 6.7c - Mitigation proposals in East Tilbury Ward					
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-8000					



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649
© Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2022

P01	S8	21/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Checked	Approved

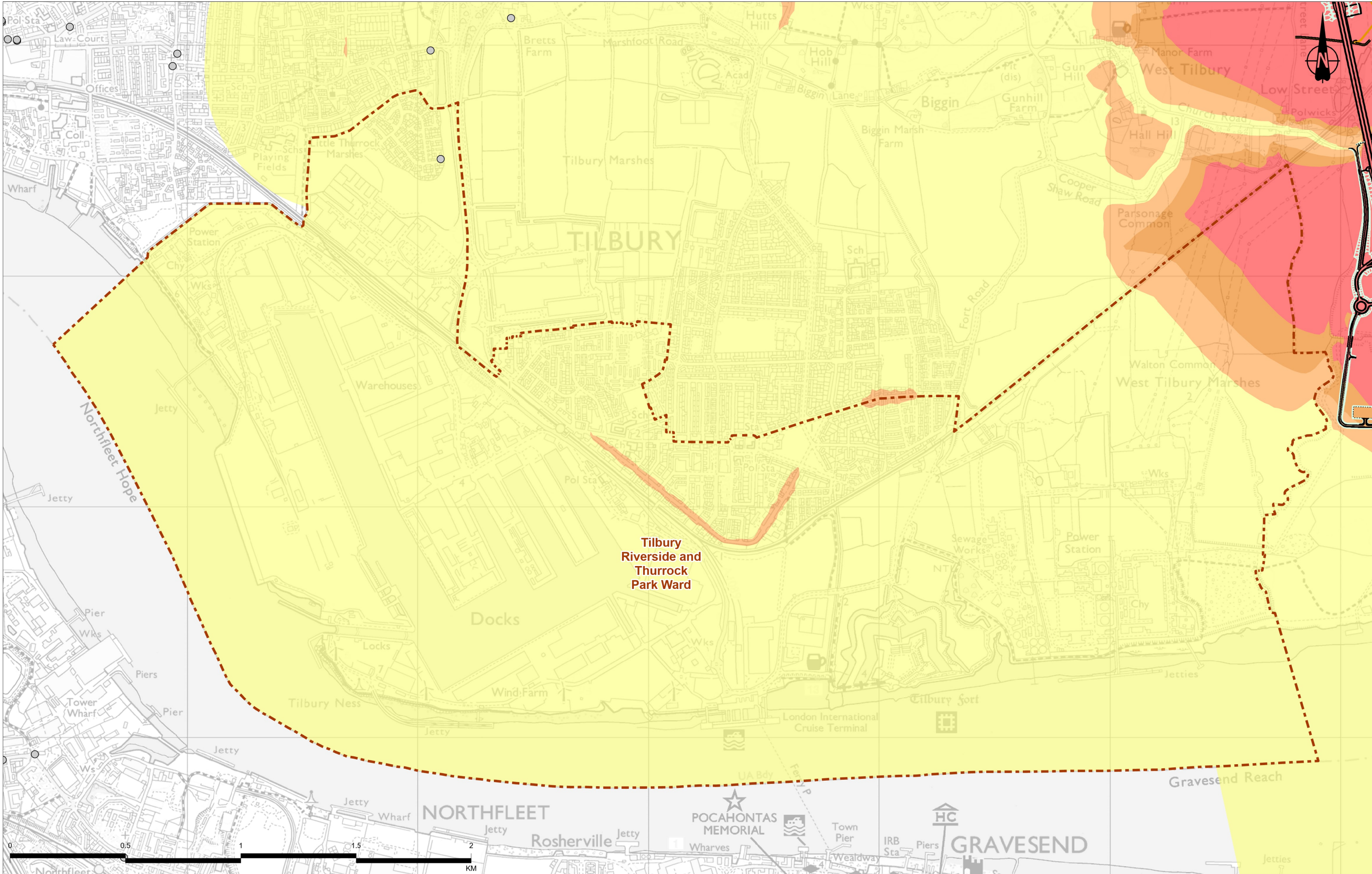
Legend

Route alignment	Electoral ward boundary	Existing Public Right of Way	Arable field
NMU route	Main works construction compound	Site of Special Scientific Interest	Hedgerow
Earthworks	Utility Logistics Hub	Local Wildlife Site	
Order Limits	Construction noise receptor	Nature Improvement Area	

Client: **national highways**

Project: **LOWER THAMES CROSSING**

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:15,000		
Drawing Title	Figure 6.8a - Construction impacts summary plan of Tilbury Riverside and Thurrock Park Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80010				



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	24/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Checked	Approved

Legend

- Route alignment
- Earthworks
- NMU Route
- Electoral ward boundary

Operation Change in Road Traffic Noise Opening Year

OY Key des

- No Change/Negligible, less than 1dB(A)
- Minor noise increase, 1 to 2.9dB(A)
- Moderate noise increase, 3 to 4.9dB(A)

Degree of change in annual average nitrogen dioxide (NO₂) concentrations

Magnitude

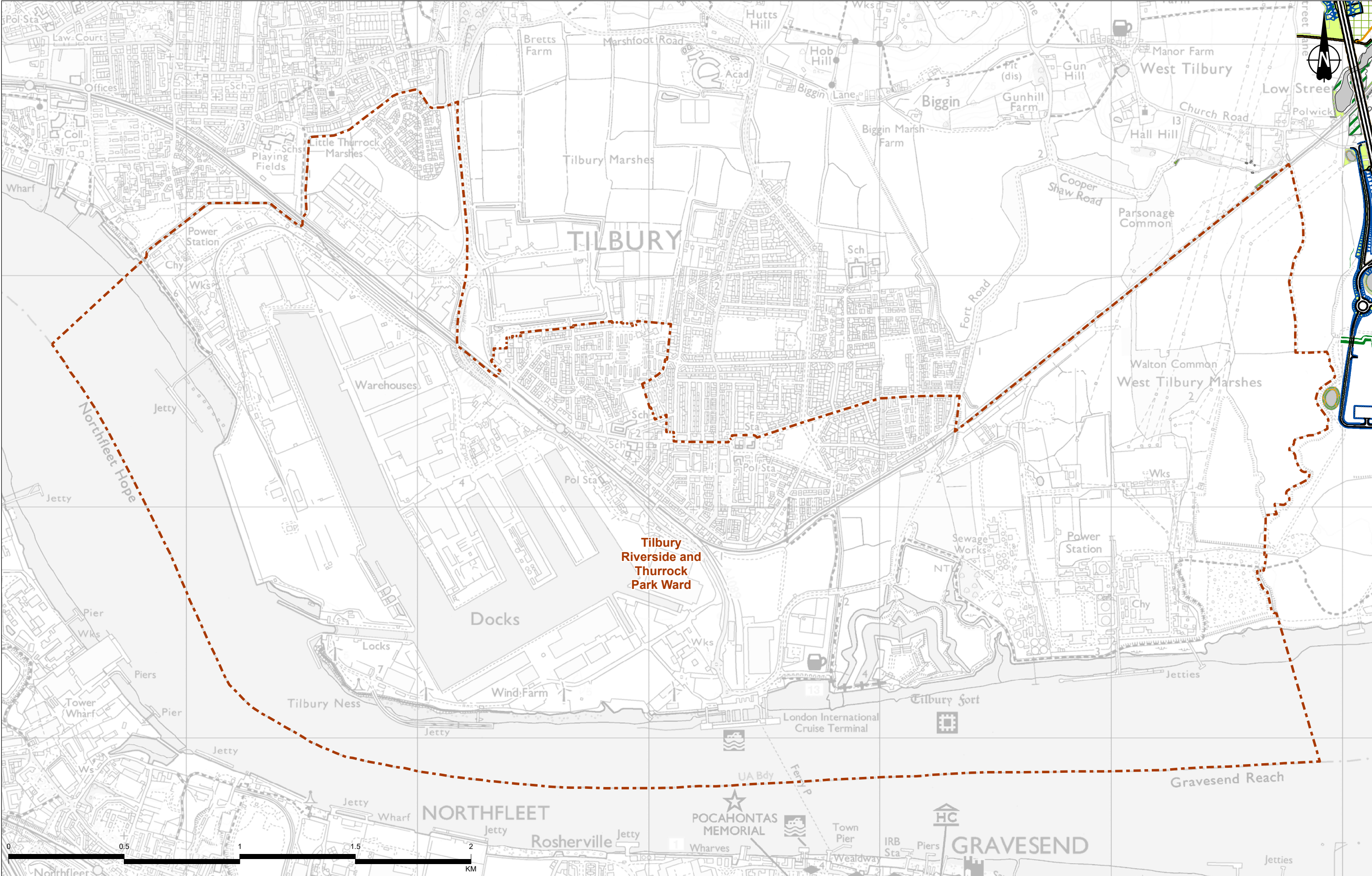
- Major noise increase, 5dB(A) or more
- Negligible

national highways

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:15,000		
Drawing Title	Figure 6.8b - Operational impacts summary plan of Tilbury Riverside and Thurrock Park Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80010				
Z:\Environment\Community Impacts Report\Figure 6b - Operational Impacts Summary Plan.aprx					



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	18/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprv'd

Legend

- Route alignment
- NMU Route
- Earthworks
- Electoral ward boundary
- Acoustic barrier
- LE1.3 Species Rich Grassland
- LE2.4 Linear Belt of Shrubs and Trees
- LE2.5 Shrubs with Intermittent Trees
- LE2.8 Scrub
- LE2.22 Scrub Woodland
- LE4.3 Native Species Hedge (Untrimmed)
- LE5.1 Individual Trees
- LE6.4 Wet Grassland
- LE8.1 Open Mosaic Habitat
- LE8.2 Ancient Woodland Mitigation Planting
- LE8.3 Woodland Mitigation Planting
- LE8.4 Wetland / Fenland Creation
- LE9.1 Agricultural Reinstatement

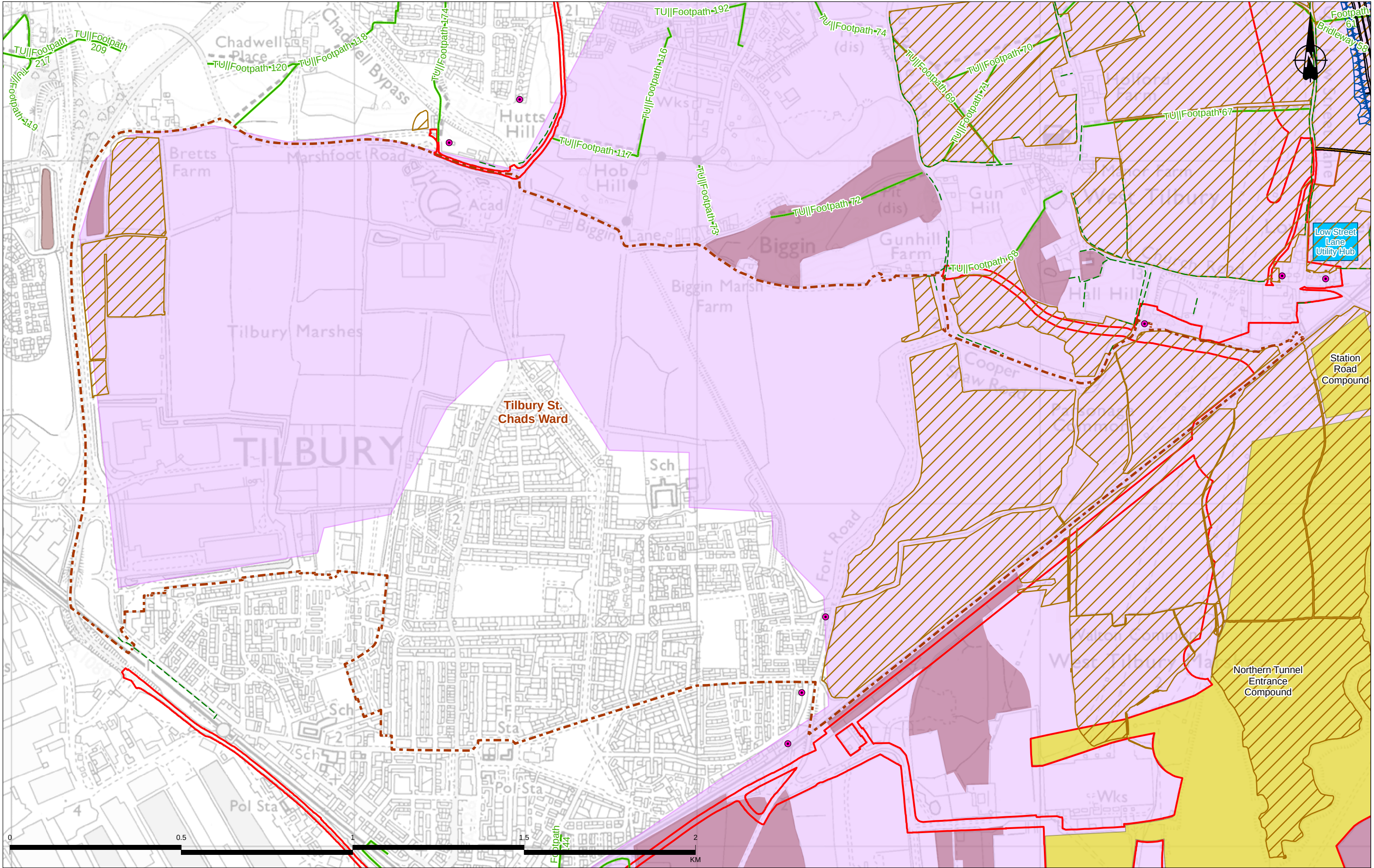
Client

national highways

Project

LOWER THAMES CROSSING

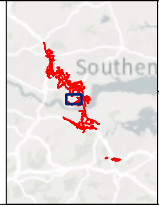
Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:15,000		
Drawing Title	Figure 6.8c - Mitigation proposals in Tilbury Riverside and Thurrock Park Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80010				
Z:\Environment\Community Impacts Report\Figure 6c - Mitigation Proposals.aprx					



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649
© Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2022

P01	S8	21/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Checked	Approved

Route alignment	Main works construction compound	Nature Improvement Area
NMU route	Utility Logistics Hub	Arable field
Earthworks	Construction noise receptor	Hedgerow
Order Limits	Existing Public Right of Way	
Electoral ward boundary	Local Wildlife Site	

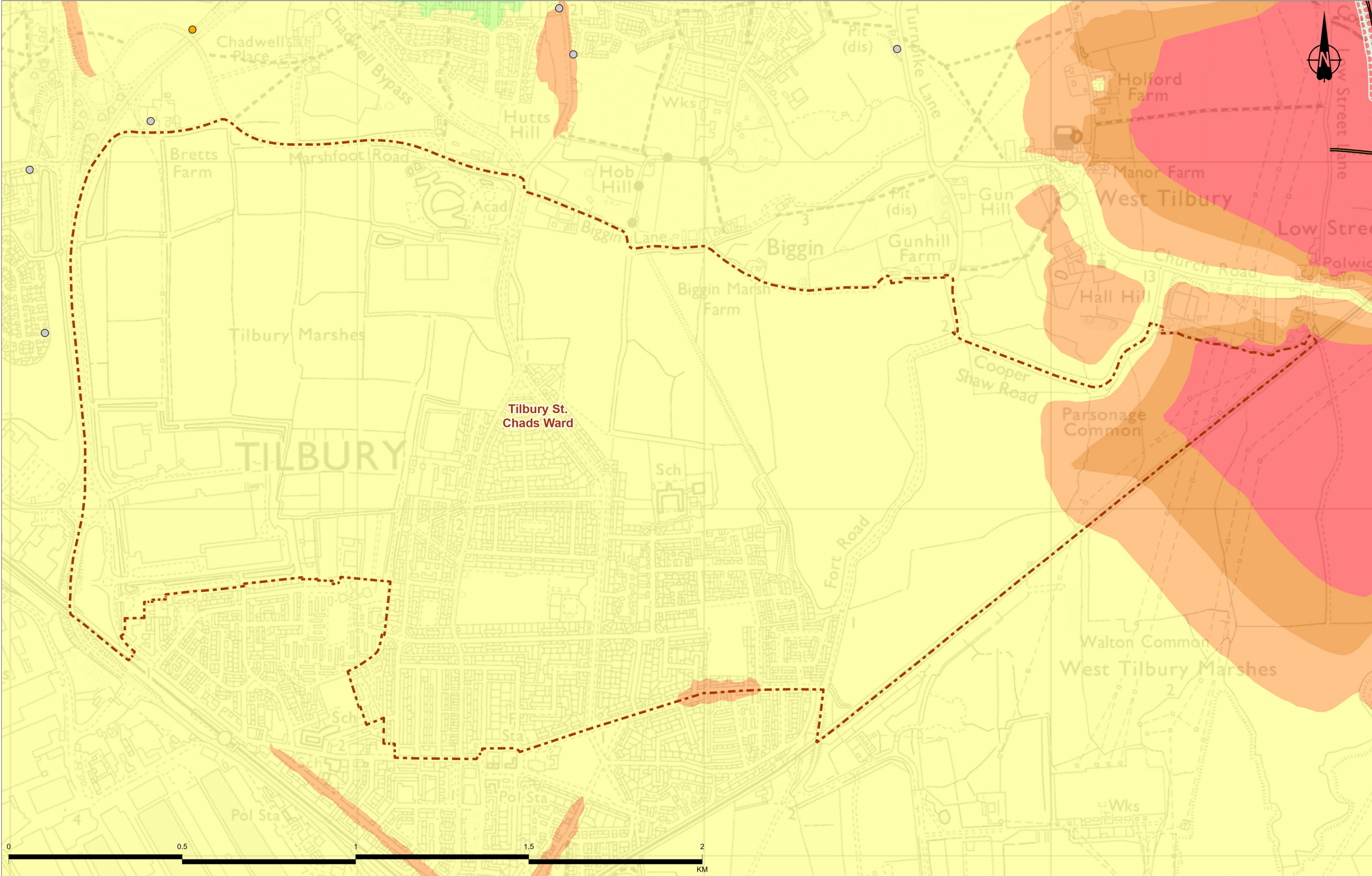


Client

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:10,000		
Drawing Title	Figure 6.9a - Construction impacts summary plan of Tilbury St. Chads Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80011				



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	24/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprv'd

Legend

- Route alignment
- Earthworks
- NMU Route
- Electoral ward boundary

Operation Change in Road Traffic Noise Opening Year

OY Key des

- Minor noise reduction, 1 to 2.9dB(A)
- No Change/Negligible, less than 1dB(A)
- Minor noise increase, 1 to 2.9dB(A)
- Moderate noise increase, 3 to 4.9dB(A)
- Major noise increase, 5dB(A) or more

Degree of change in annual average nitrogen dioxide (NO₂) concentrations

Magnitude

- A minor worsening in air quality
- Negligible

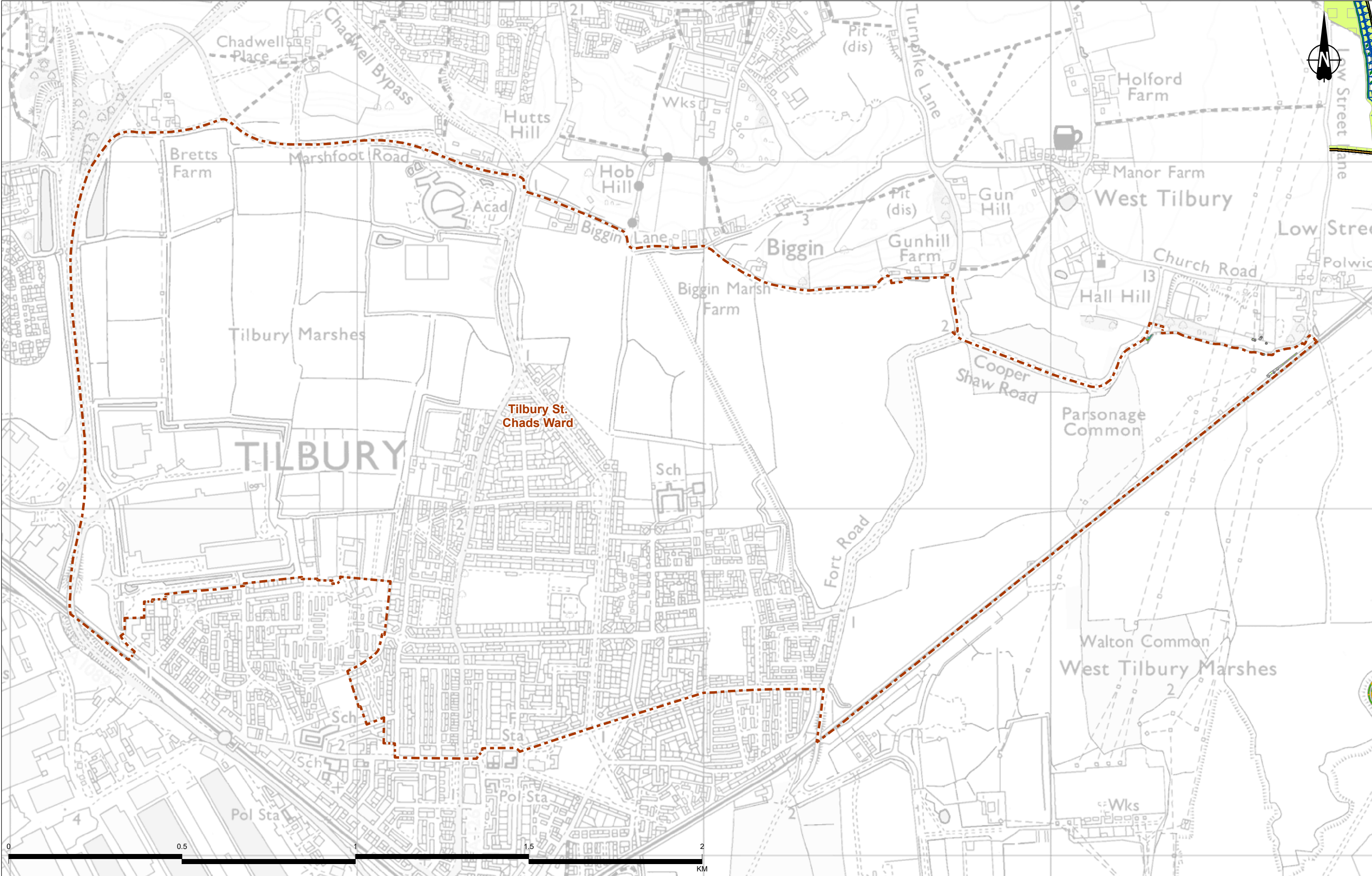
Client

national highways

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:10,000		
Drawing Title	Figure 6.9b - Operational impacts summary plan of Tilbury St. Chads Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80011				
Z:\Environment\Community Impacts Report\Figure 6b - Operational Impacts Summary Plan.aprx					



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	18/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprv'd

Legend

- Route alignment
- NMU Route
- Earthworks
- Electoral ward boundary
- LE1.3 Species Rich Grassland
- LE2.4 Linear Belt of Shrubs and Trees
- LE2.8 Scrub
- LE2.22 Scrub Woodland
- LE4.3 Native Species Hedge (Untrimmed)
- LE5.1 Individual Trees
- LE6.4 Wet Grassland
- LE8.1 Open Mosaic Habitat
- LE8.2 Ancient Woodland Mitigation Planting
- LE8.3 Woodland Mitigation Planting
- LE8.4 Wetland / Fenland Creation

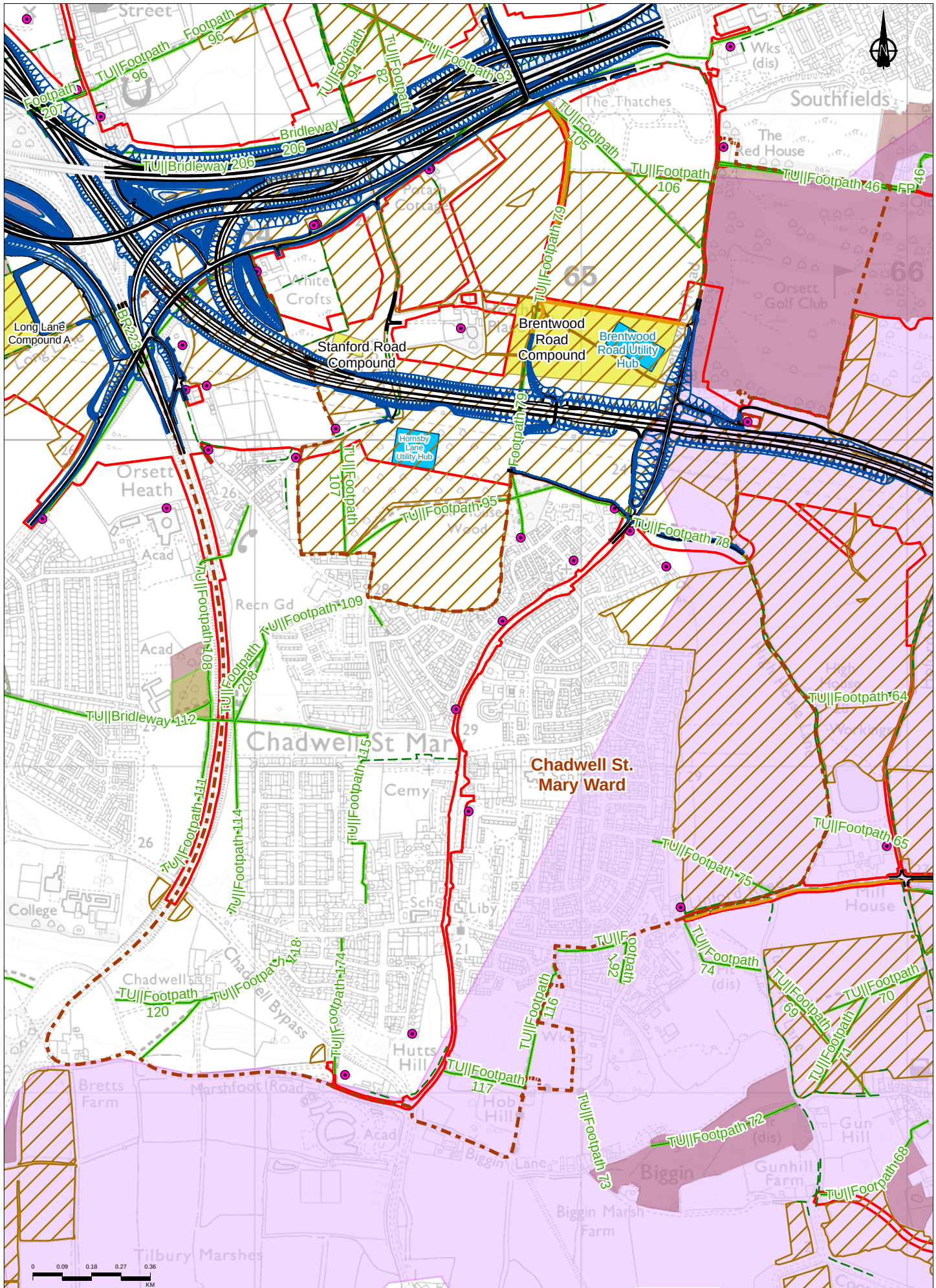
Client

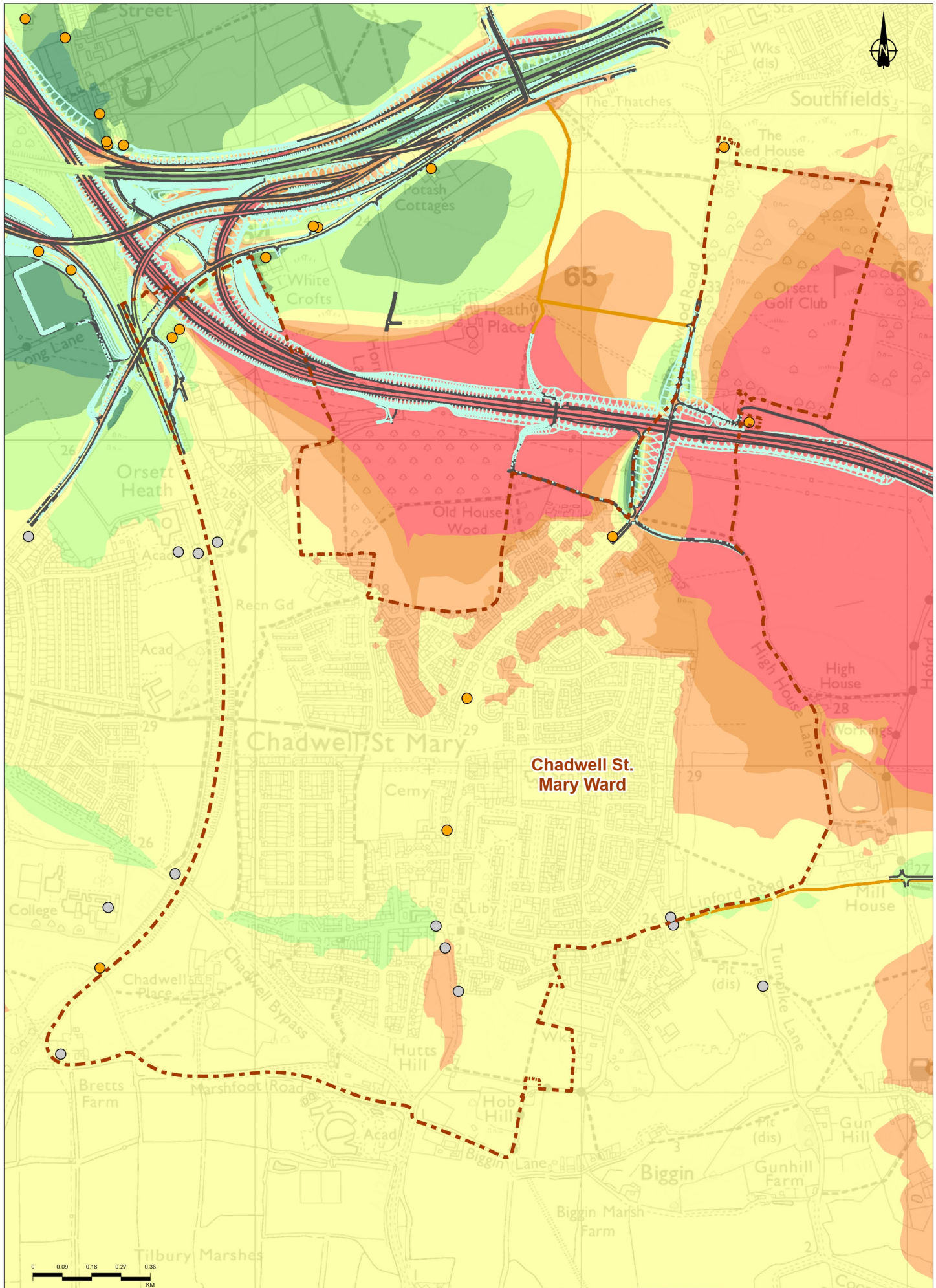
national highways

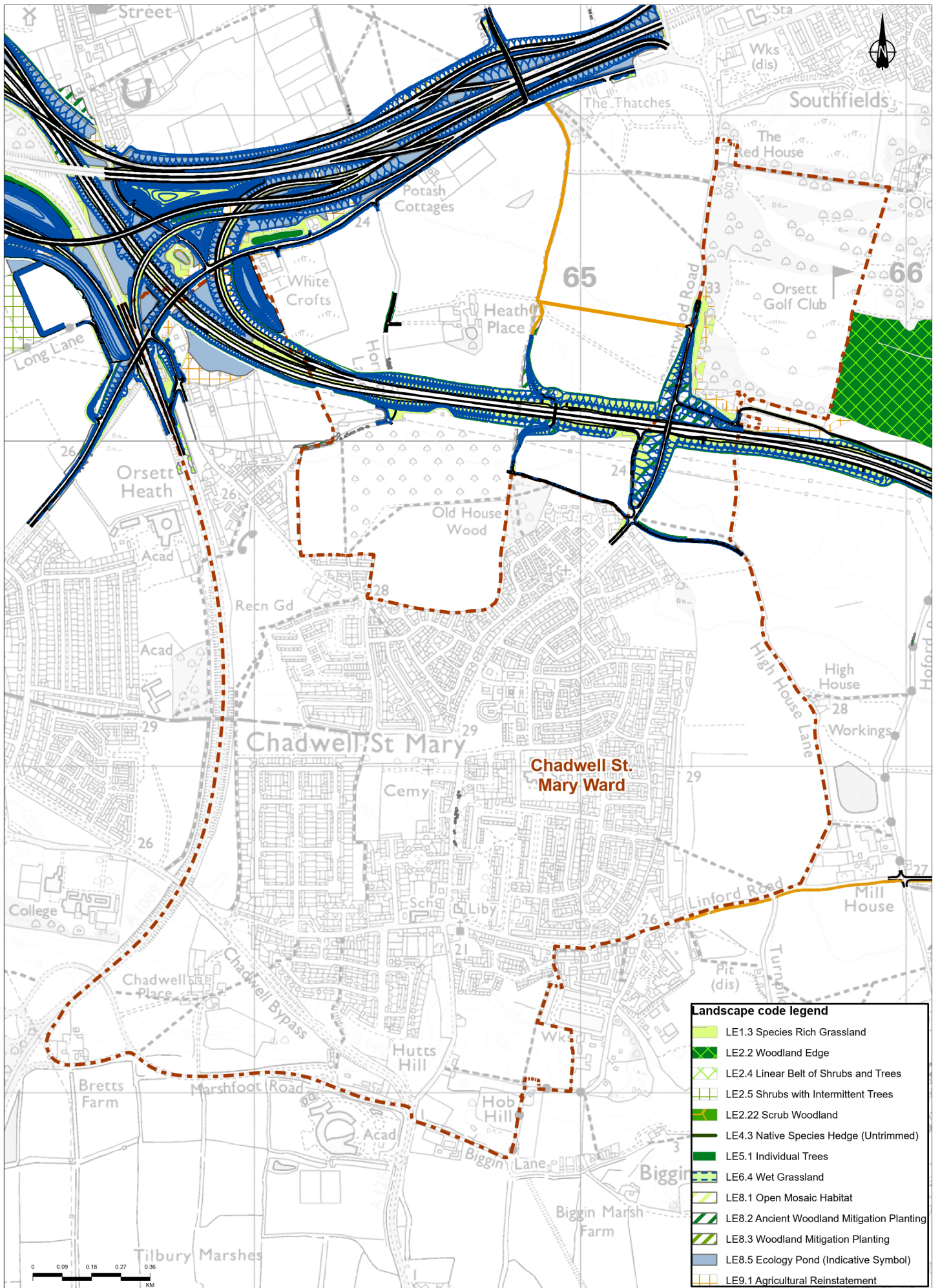
Project

LOWER THAMES CROSSING

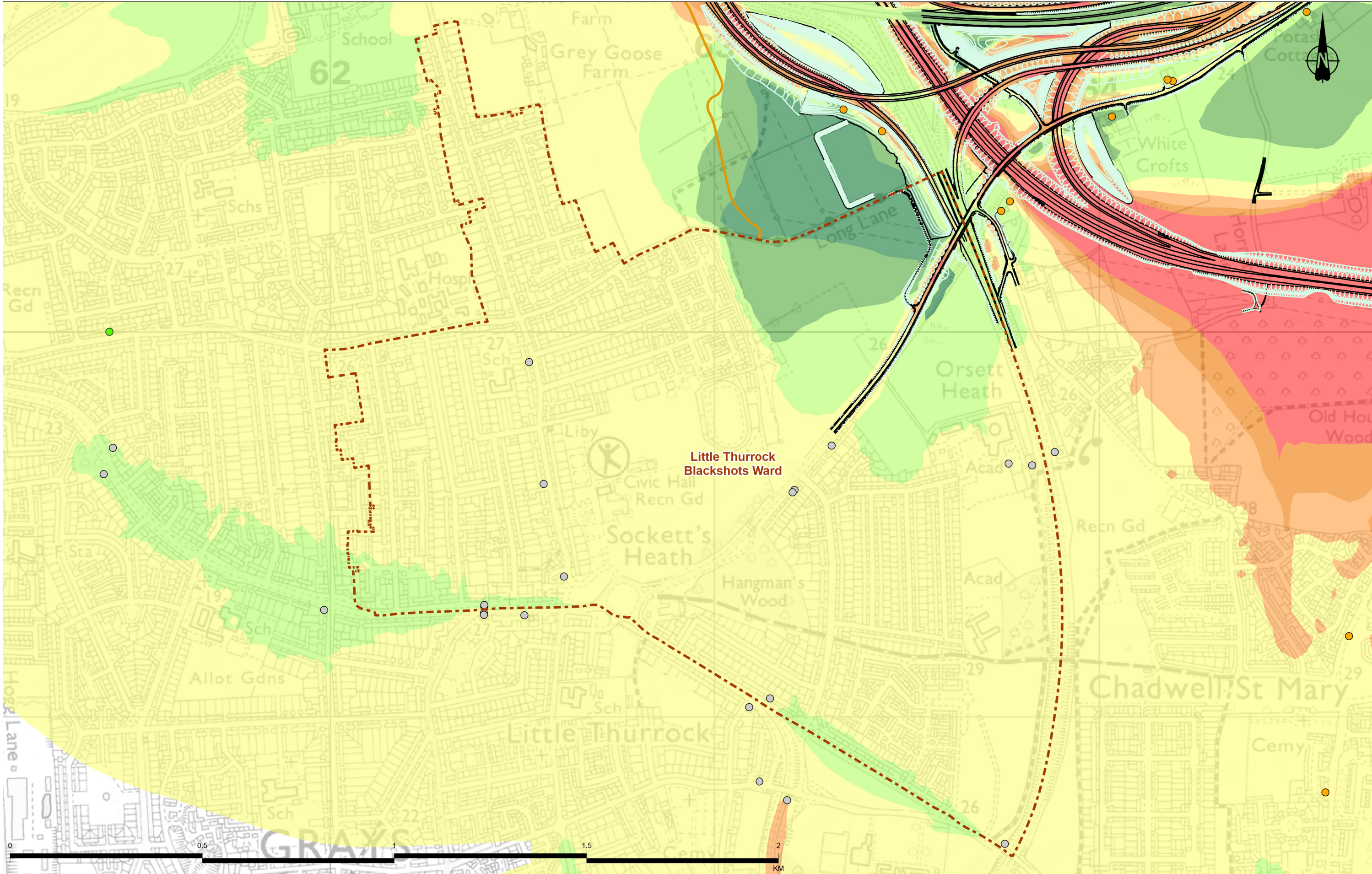
Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:10,000		
Drawing Title	Figure 6.9c - Mitigation proposals in Tilbury St. Chads Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80011				
Z:\Environment\Community Impacts Report\Figure 6c - Mitigation Proposals.aprx					







Landscape code legend	
	LE1.3 Species Rich Grassland
	LE2.2 Woodland Edge
	LE2.4 Linear Belt of Shrubs and Trees
	LE2.5 Shrubs with Intermittent Trees
	LE2.22 Scrub Woodland
	LE4.3 Native Species Hedge (Untrimmed)
	LE5.1 Individual Trees
	LE6.4 Wet Grassland
	LE8.1 Open Mosaic Habitat
	LE8.2 Ancient Woodland Mitigation Planting
	LE8.3 Woodland Mitigation Planting
	LE8.5 Ecology Pond (Indicative Symbol)
	LE9.1 Agricultural Reinstatement



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	24/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd

Legend

- Route alignment
- Earthworks
- NMU Route
- Electoral ward boundary

Operation Change in Road Traffic Noise Opening Year

OY Key des

- Major noise reduction, 5dB(A) or more
- Moderate noise reduction, 3 to 4.9dB(A)
- Minor noise reduction, 1 to 2.9dB(A)

- No Change/Negligible, less than 1dB(A)
- Minor noise increase, 1 to 2.9dB(A)
- Moderate noise increase, 3 to 4.9dB(A)
- Major noise increase, 5dB(A) or more

Degree of change in annual average nitrogen dioxide (NO₂) concentrations

Magnitude

- A minor worsening in air quality
- Negligible
- A minor improvement in air quality

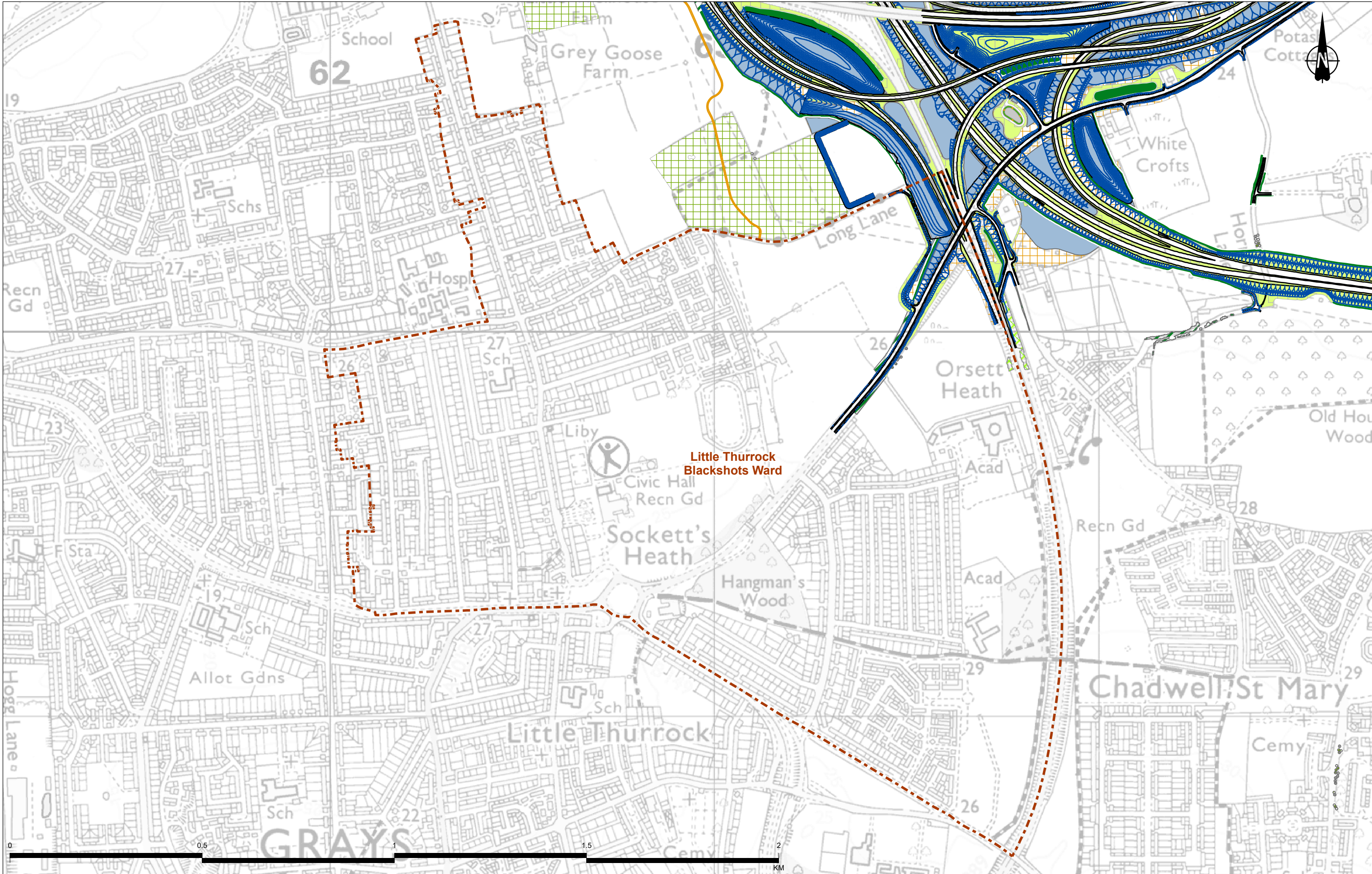
Client

national highways

Project

LOWER THAMES CROSSING

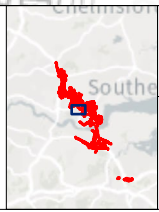
Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:9,000		
Drawing Title	Figure 6.11b - Operational impacts summary plan of Little Thurrock Blackshots Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80013				
Z:\Environment\Community Impacts Report\Figure 6b - Operational Impacts Summary Plan.aprx					



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	18/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd

Legend			
Route alignment	LE2.4 Linear Belt of Shrubs and Trees	LE5.1 Individual Trees	LE8.3 Woodland Mitigation Planting
NMU Route	LE2.5 Shrubs with Intermittent Trees	LE6.4 Wet Grassland	LE8.5 Ecology Pond (Indicative Symbol)
Earthworks	LE2.22 Scrub Woodland	LE8.1 Open Mosaic Habitat	LE9.1 Agricultural Reinstatement
Electoral ward boundary	LE4.3 Native Species Hedge (Untrimmed)	LE8.2 Ancient Woodland Mitigation Planting	
LE1.3 Species Rich Grassland			



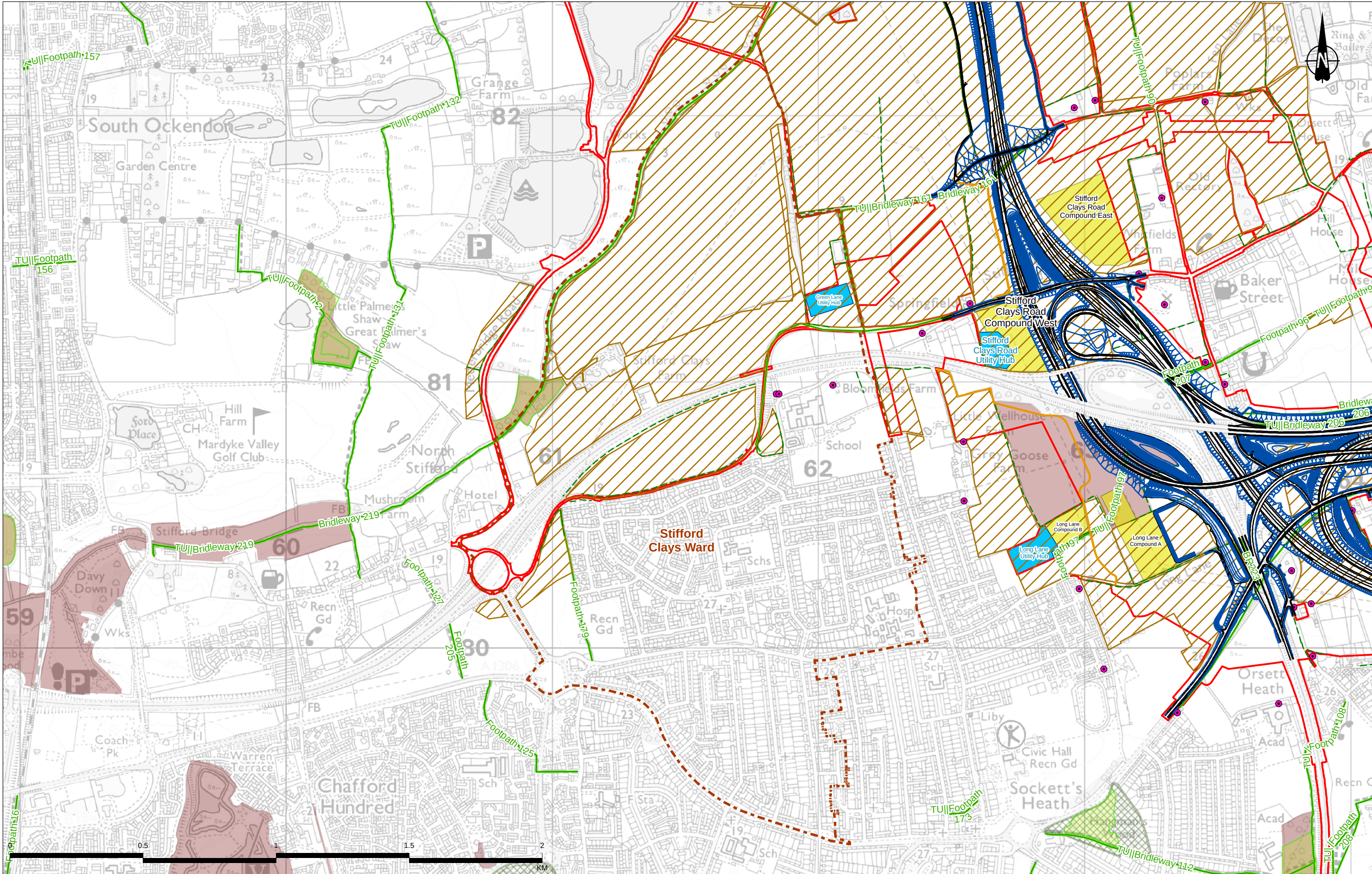
Client

national highways

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:9,000		
Drawing Title	Figure 6.11c - Mitigation proposals in Little Thurrock Blackshots Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80013				



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649
© Natural England copyright. Contains Ordnance Survey data © Crown copyright and database rights 2022

P01	S8	21/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprv'd

Legend

— Route alignment	Electoral ward boundary	Existing Public Right of Way	Arable field
— NMU route	Main works construction compound	Ancient Woodland	Hedgerow
— Earthworks	Utility Logistics Hub	Site of Special Scientific Interest	
Order Limits	Construction noise receptor	Local Wildlife Site	

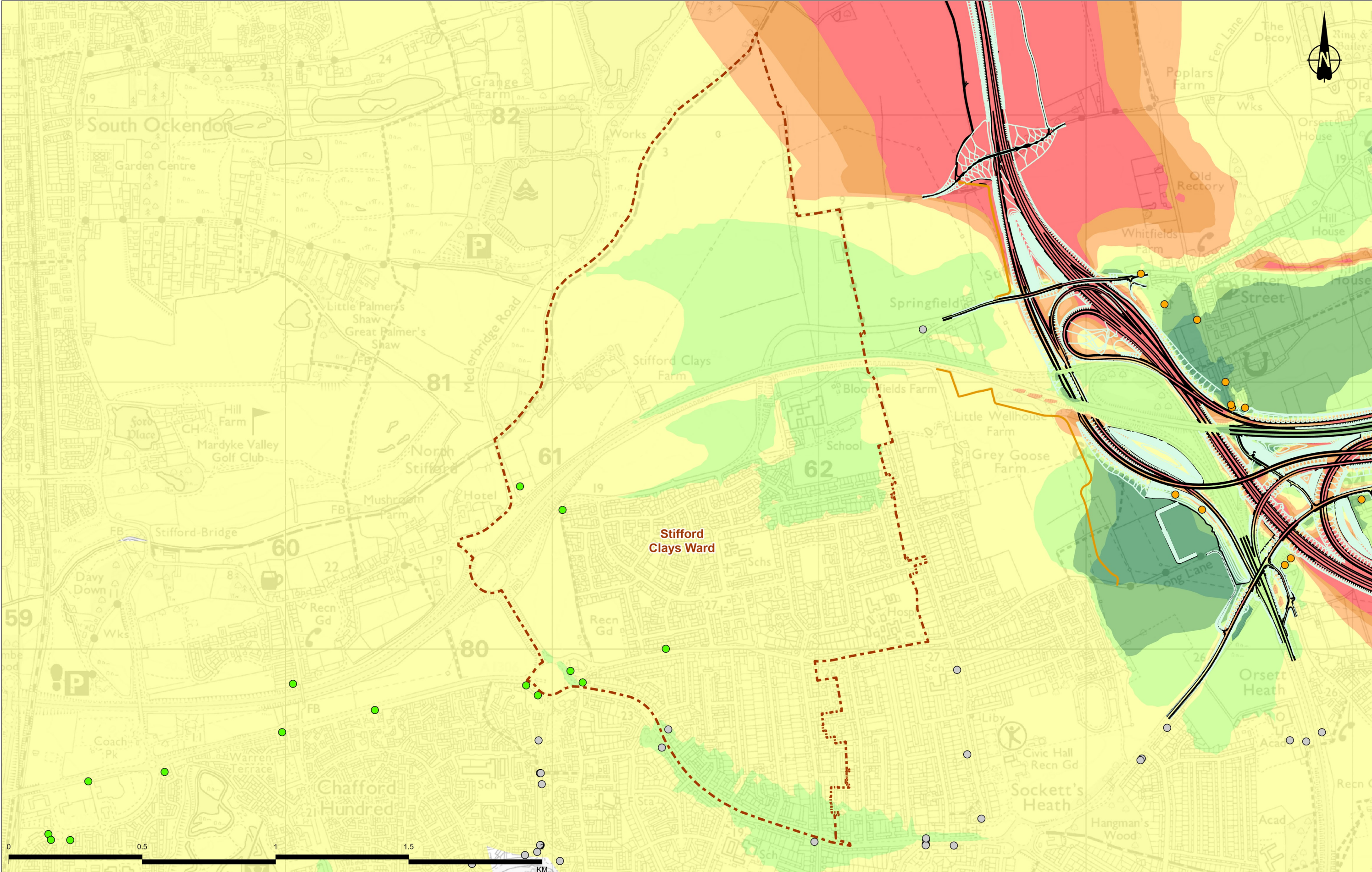
Client

national highways

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:13,000		
Drawing Title	Figure 6.12a - Construction impacts summary plan of Stifford Clays Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80014				



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	24/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprv'd

Legend

- Route alignment
- Earthworks
- NMU Route
- Electoral ward boundary

Operation Change in Road Traffic Noise Opening Year

OY Key des

- Major noise reduction, 5dB(A) or more
- Moderate noise reduction, 3 to 4.9dB(A)
- Minor noise reduction, 1 to 2.9dB(A)

- No Change/Negligible, less than 1dB(A)
- Minor noise increase, 1 to 2.9dB(A)
- Moderate noise increase, 3 to 4.9dB(A)
- Major noise increase, 5dB(A) or more

Degree of change in annual average nitrogen dioxide (NO₂) concentrations

Magnitude

- A minor worsening in air quality
- Negligible
- A minor improvement in air quality

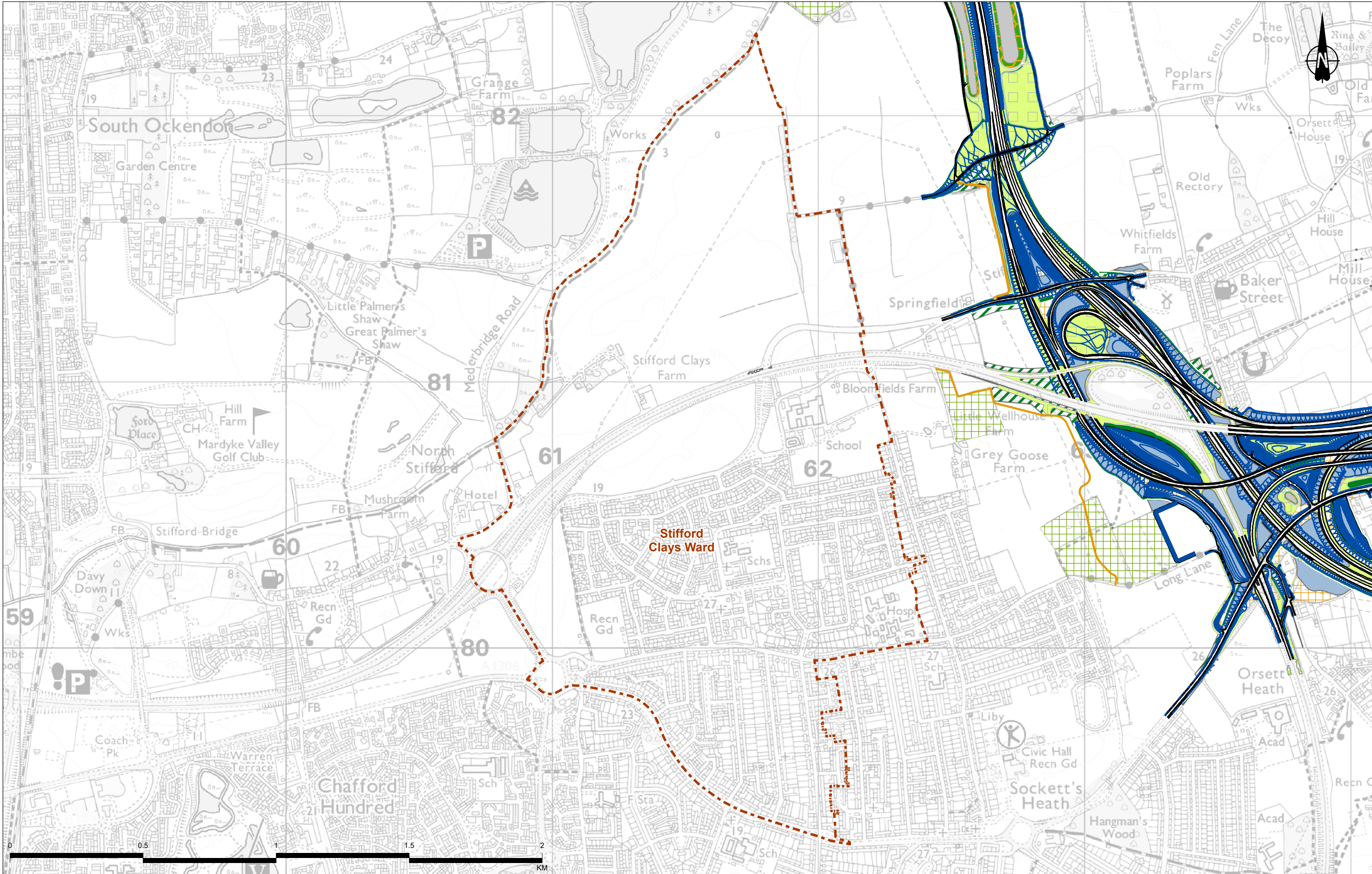
Client

national highways

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:13,000		
Drawing Title	Figure 6.12b - Operational impacts summary plan of Stifford Clays Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80014				
Z:\Environment\Community Impacts Report\Figure 6b - Operational Impacts Summary Plan.aprx					



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	18/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd

Legend

- Route alignment
- NMU Route
- Earthworks
- Electoral ward boundary
- LE1.3 Species Rich Grassland
- LE2.4 Linear Belt of Shrubs and Trees
- LE2.5 Shrubs with Intermittent Trees
- LE2.22 Scrub Woodland
- LE4.3 Native Species Hedge (Untrimmed)
- LE5.1 Individual Trees
- LE6.4 Wet Grassland
- LE8.1 Open Mosaic Habitat
- LE8.2 Ancient Woodland Mitigation Planting
- LE8.3 Woodland Mitigation Planting
- LE8.5 Ecology Pond (Indicative Symbol)
- LE9.1 Agricultural Reinstatement

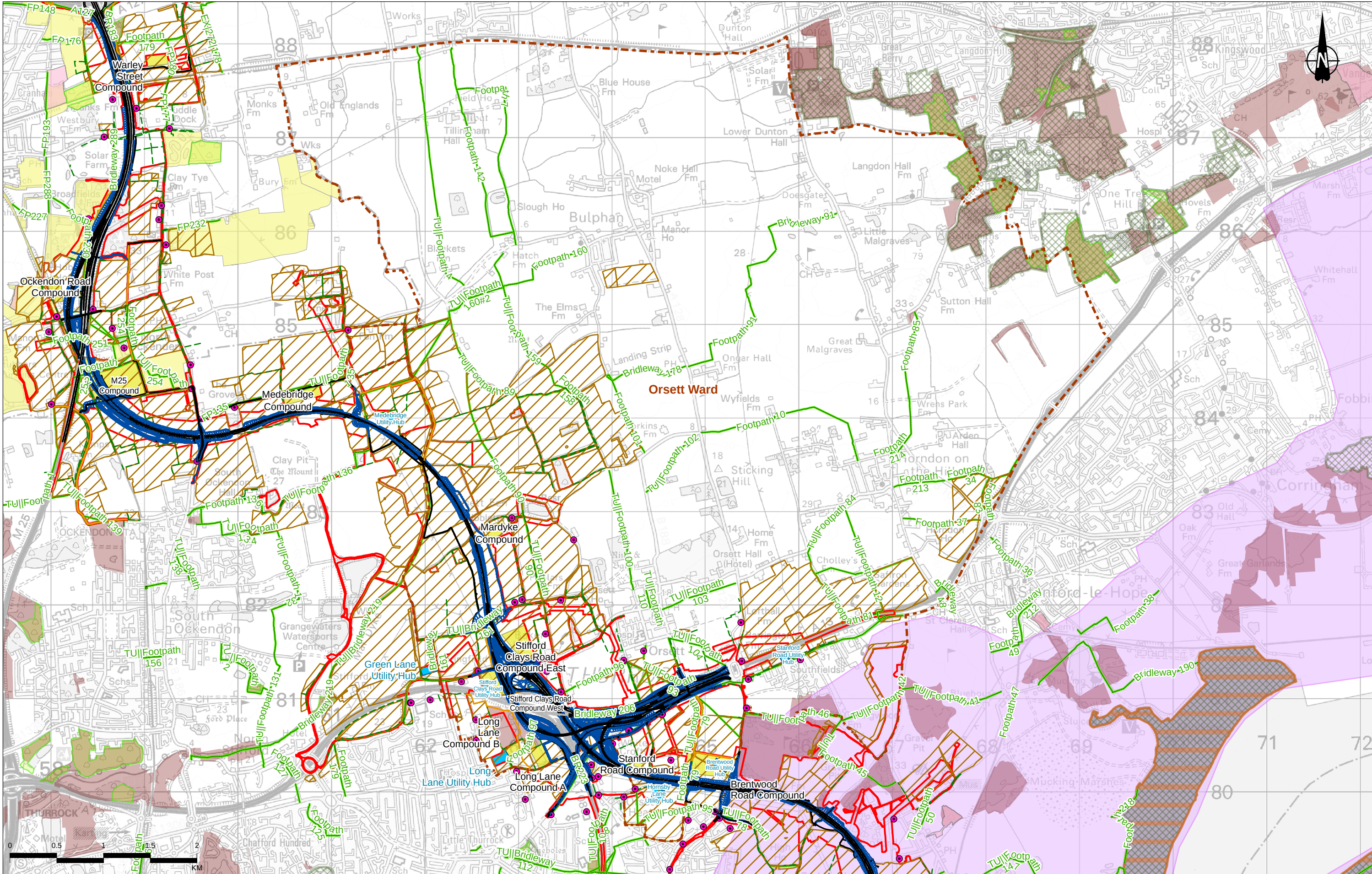
Client

national highways

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:13,000		
Drawing Title	Figure 6.12c - Mitigation proposals in Stifford Clays Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80014				
Z:\Environment\Community Impacts Report\Figure 6c - Mitigation Proposals.aprx					



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649
© Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2022

Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Appvd
P01	S8	21/10/2022	DCO Application	SW	SW	BF

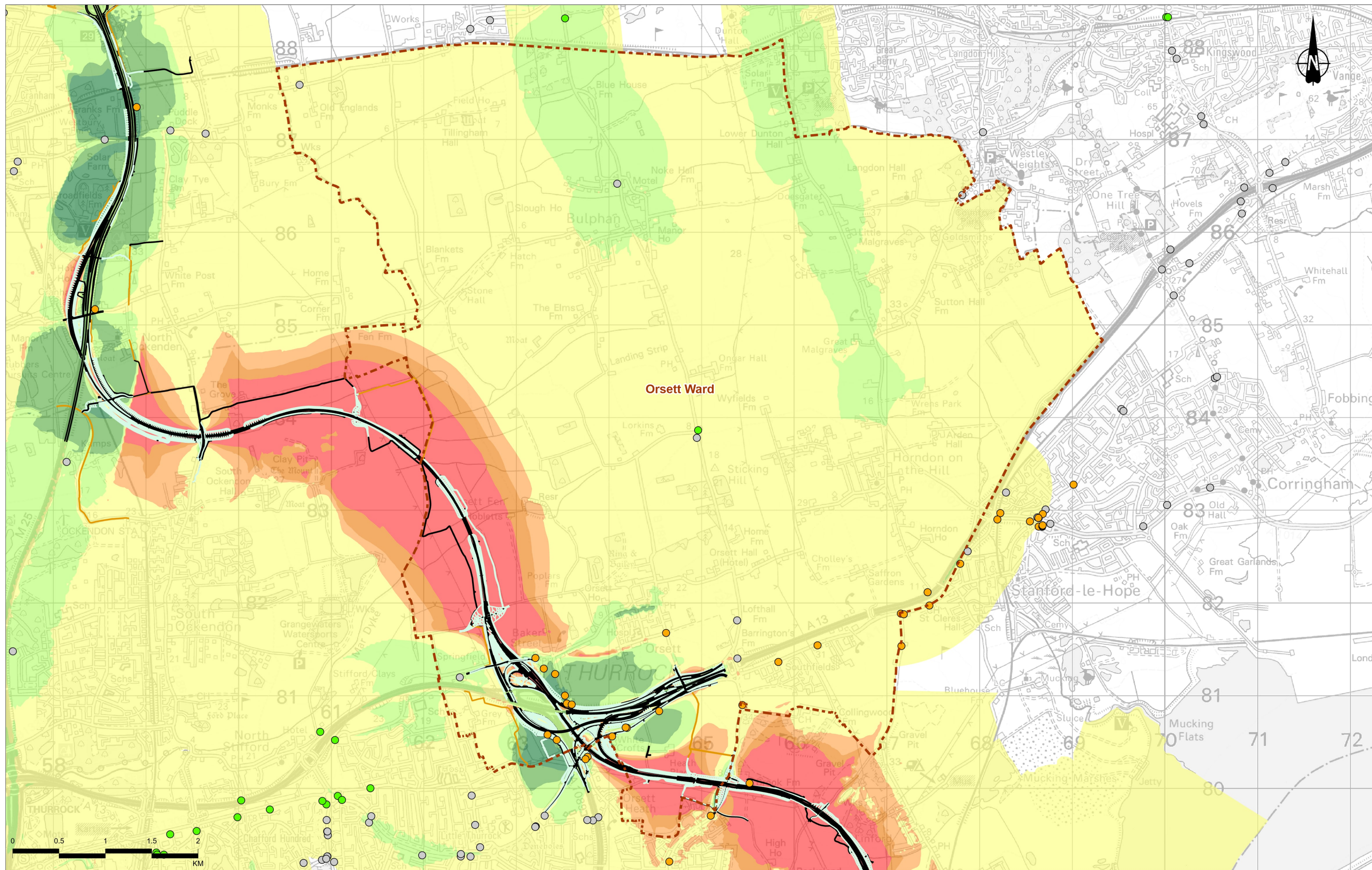
Legend

Route alignment	Main works construction compound	Local Nature Reserve	Nature Improvement Area
NMU route	Utility Logistics Hub	Ramsar site	Site of Importance for Nature Conservation (SINC)
Earthworks	Construction noise receptor	Site of Special Scientific Interest	Arable field
Order Limits	Existing Public Right of Way	Special Protection Area	Hedgerow
Electoral ward boundary	Ancient Woodland	Local Wildlife Site	

Client: **national highways**

Project: **LOWER THAMES CROSSING**

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:37,000		
Drawing Title	Figure 6.13a - Construction impacts summary plan of Orsett Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80015				



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

Legend

- Route alignment
- Earthworks
- NMU Route
- Electoral ward boundary

Operation Change in Road Traffic Noise Opening Year

OY Key des

- Major noise reduction, 5dB(A) or more
- Moderate noise reduction, 3 to 4.9dB(A)
- Minor noise reduction, 1 to 2.9dB(A)

No Change/Negligible, less than 1dB(A)

Minor noise increase, 1 to 2.9dB(A)

Moderate noise increase, 3 to 4.9dB(A)

Major noise increase, 5dB(A) or more

Degree of change in annual average nitrogen dioxide (NO₂) concentrations

Magnitude

- A minor worsening in air quality
- Negligible
- A minor improvement in air quality

national highways

LOWER THAMES CROSSING

Status DCO APPLICATION

Application Document Number TR010032/APP/7.16

Drawing Title Figure 6.13b - Operational impacts summary plan of Orsett Ward

Drawing Number HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80015

Original Size A3

Revision P01

Scale 1:37,000

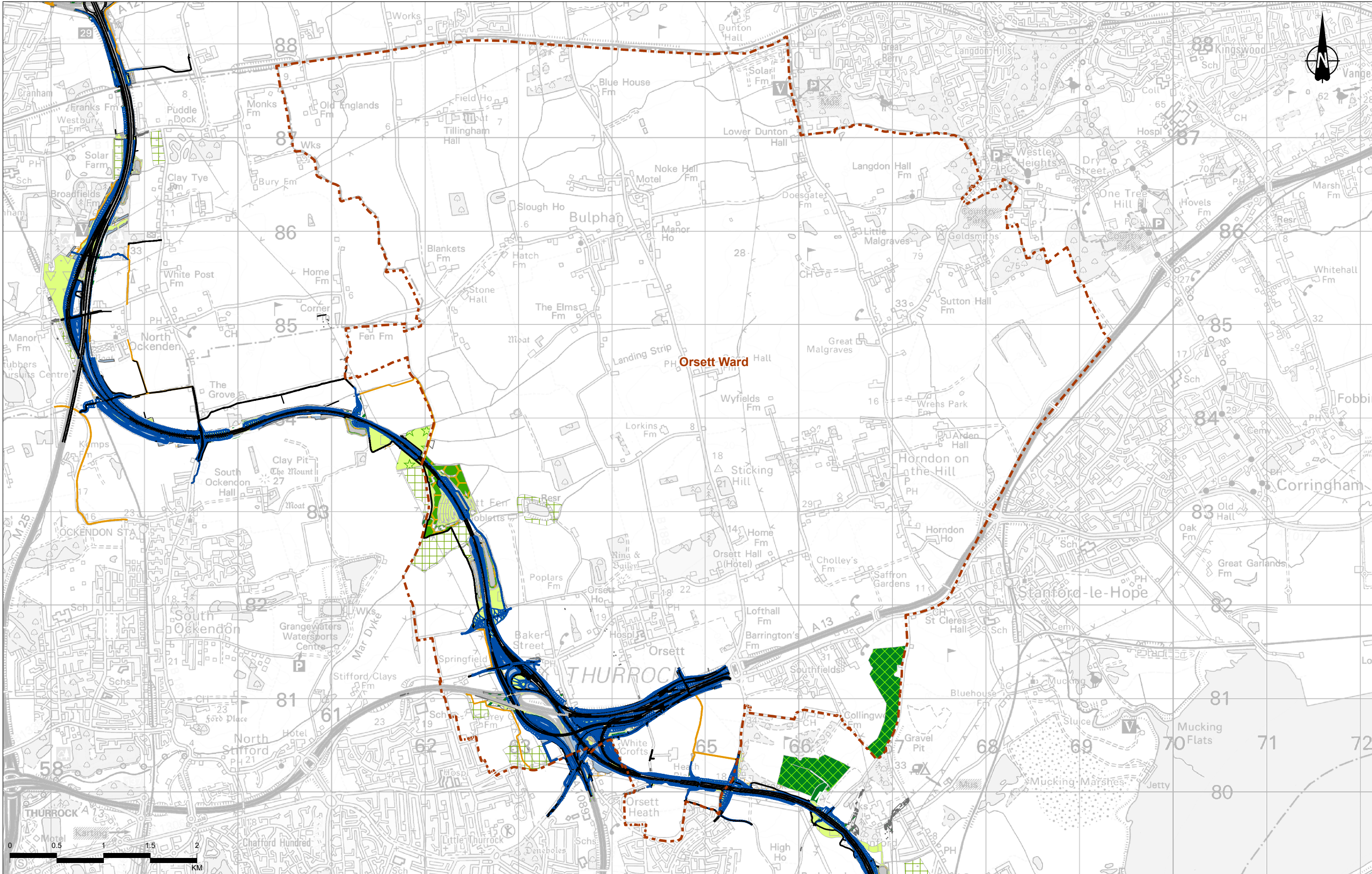
Client

Project

Rev **Status** **Rev. Date** **Purpose of revision** **Drawn** **Checked** **Approved**

P01 **S8** **24/10/2022** **DCO Application** **SW** **SW** **BF**

Z:\Environment\Community Impacts Report\Figure 6b - Operational Impacts Summary Plan.aprx



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	18/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd

Legend

Route alignment	LE1.31 Species Rich Chalk Grassland	LE2.5 Shrubs with Intermittent Trees	LE5.1 Individual Trees	LE8.2 Ancient Woodland Mitigation Planting
NMU Route	LE1.32 Annual Wildflower Grassland	LE2.7 Scattered Trees	LE6.4 Wet Grassland	LE8.3 Woodland Mitigation Planting
Earthworks	LE2.2 Woodland Edge	LE2.8 Scrub	LE6.11 Water Bodies - Standing Water	LE8.4 Wetland / Fenland Creation
Electoral ward boundary	LE2.4 Linear Belt of Shrubs and Trees	LE2.22 Scrub Woodland	LE7.2 Green Roof	LE8.5 Ecology Pond (Indicative Symbol)
Acoustic barrier	LE1.3 Species Rich Grassland	LE4.3 Native Species Hedge (Untrimmed)	LE8.1 Open Mosaic Habitat	LE9.1 Agricultural Reinstatement

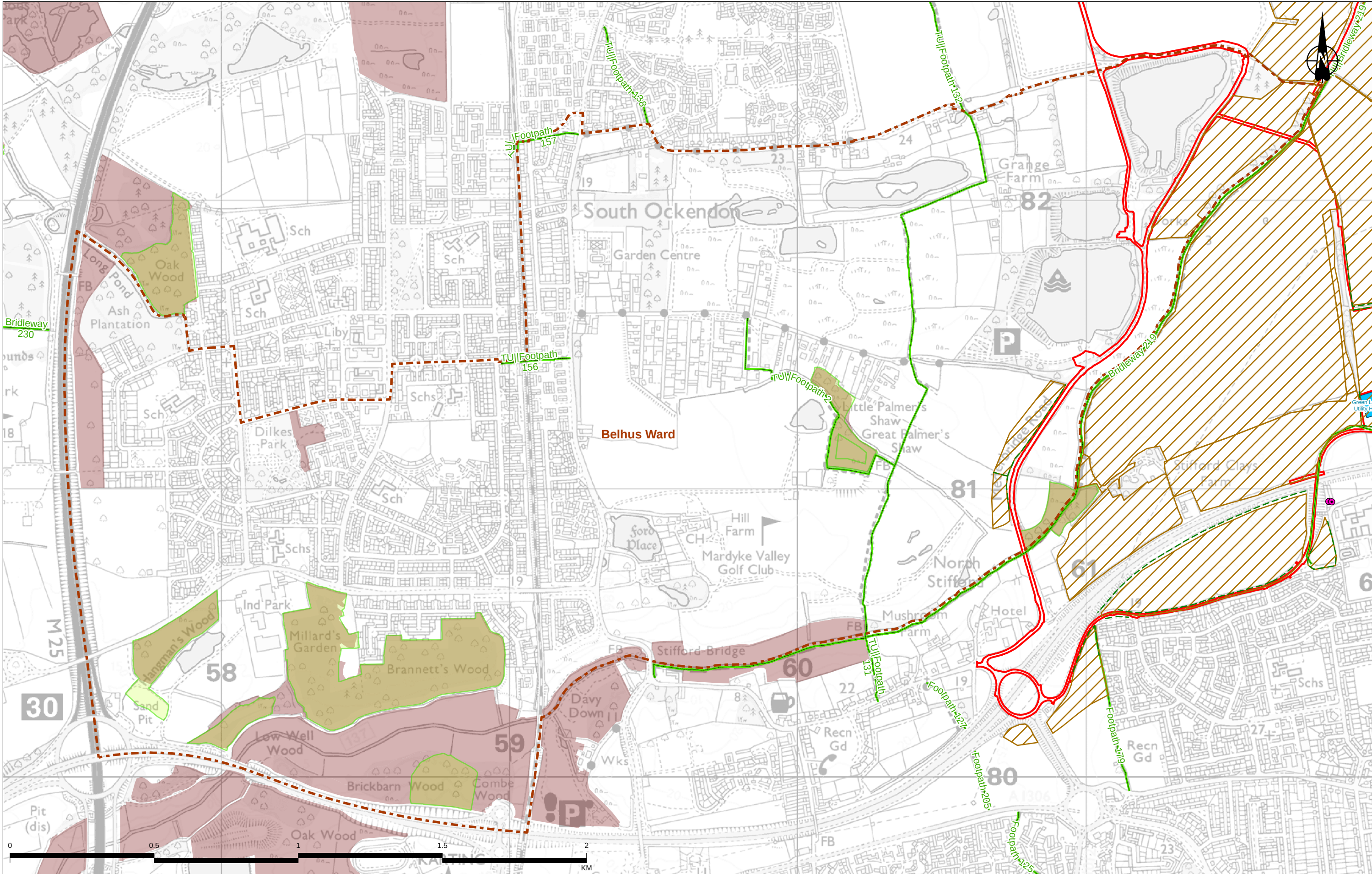
Client

national highways

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:37,000		
Drawing Title	Figure 6.13c - Mitigation proposals in Orsett Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80015				
Z:\Environment\Community Impacts Report\Figure 6c - Mitigation Proposals.aprx					



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649
© Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2022

Legend

Route alignment	Order Limits	Construction noise receptor	Local Wildlife Site
NMU route	Electoral ward boundary	Existing Public Right of Way	Arable field
Earthworks	Utility Logistics Hub	Ancient Woodland	Hedgerow

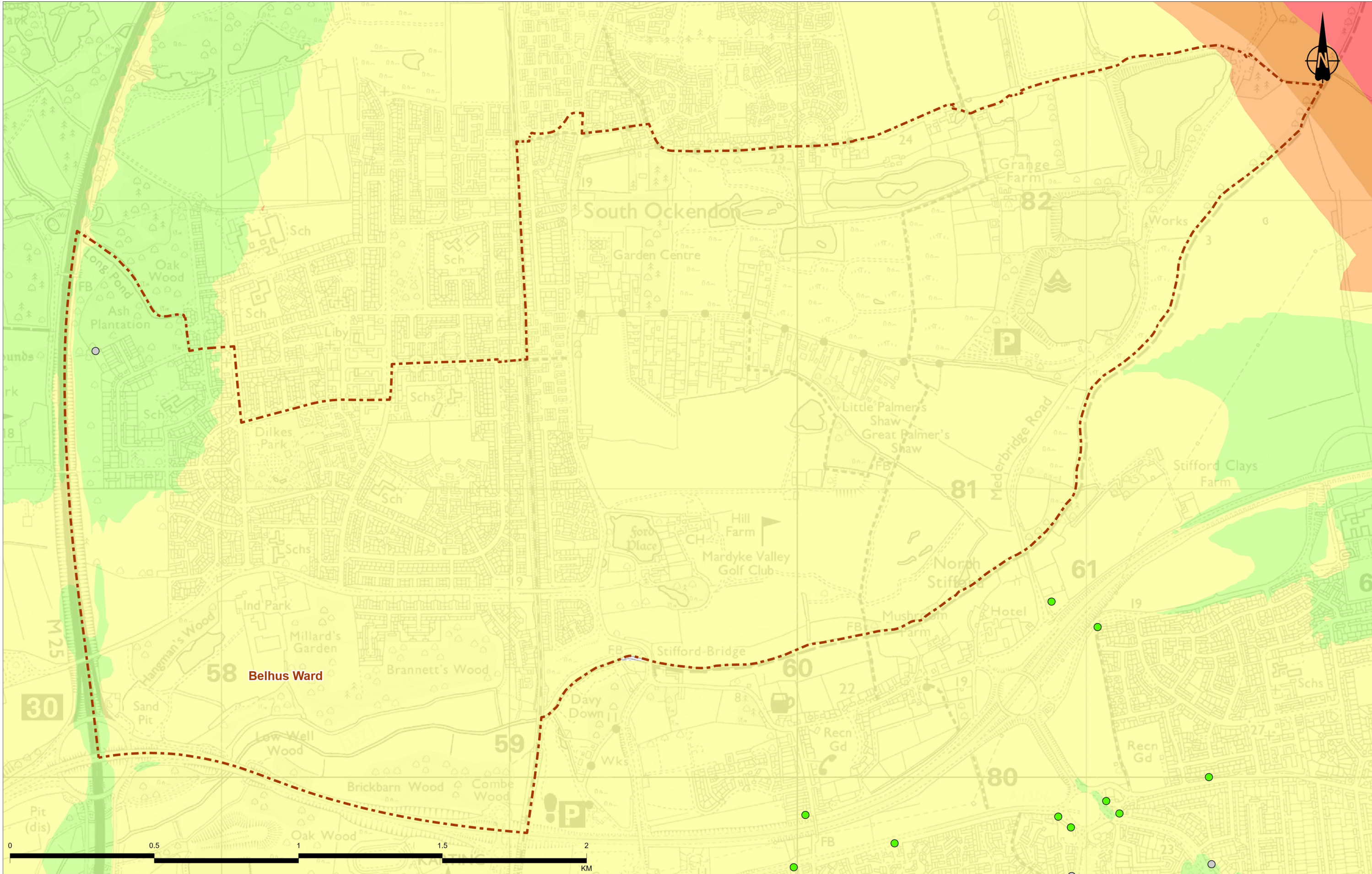
P01 S8 21/10/2022 DCO Application SW SW BF
Rev Status Rev. Date Purpose of revision Drawn Chkd Appr'd

Client

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:12,000		
Drawing Title	Figure 6.14a - Construction impacts summary plan of Belhus Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80016				



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	24/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprv'd

Legend

Electoral ward boundary

Operation Change in Road Traffic Noise Opening Year

OY Key des

- Minor noise reduction, 1 to 2.9dB(A)
- No Change/Negligible, less than 1dB(A)
- Minor noise increase, 1 to 2.9dB(A)
- Moderate noise increase, 3 to 4.9dB(A)
- Major noise increase, 5dB(A) or more

Degree of change in annual average nitrogen dioxide (NO₂) concentrations

Magnitude

- Negligible
- A minor improvement in air quality

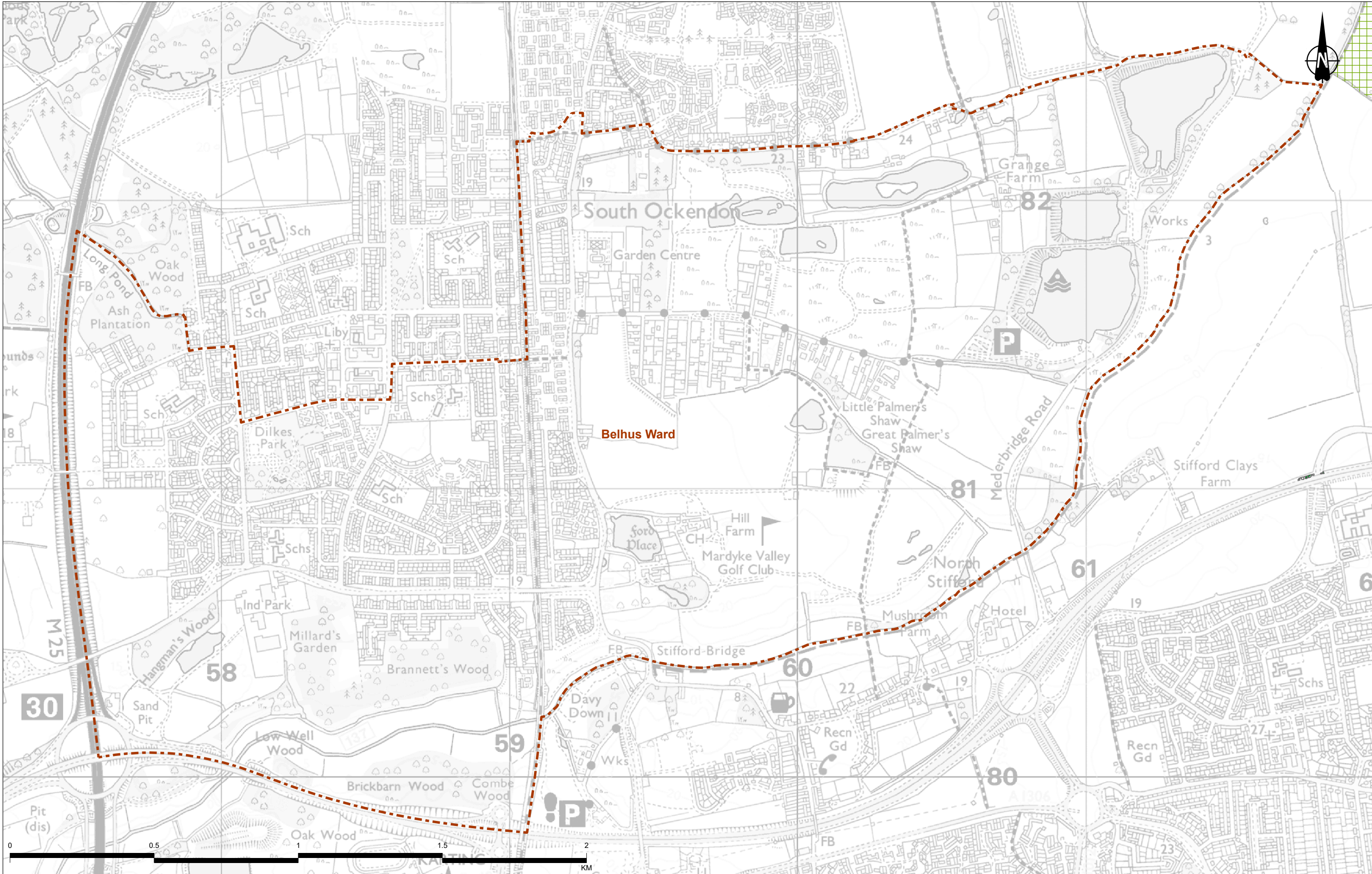
Client

national highways

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:12,000		
Drawing Title	Figure 6.14b - Operational impacts summary plan of Belhus Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80016				
Z:\Environment\Community Impacts Report\Figure 6b - Operational Impacts Summary Plan.aprx					



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	18/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprv'd

Legend

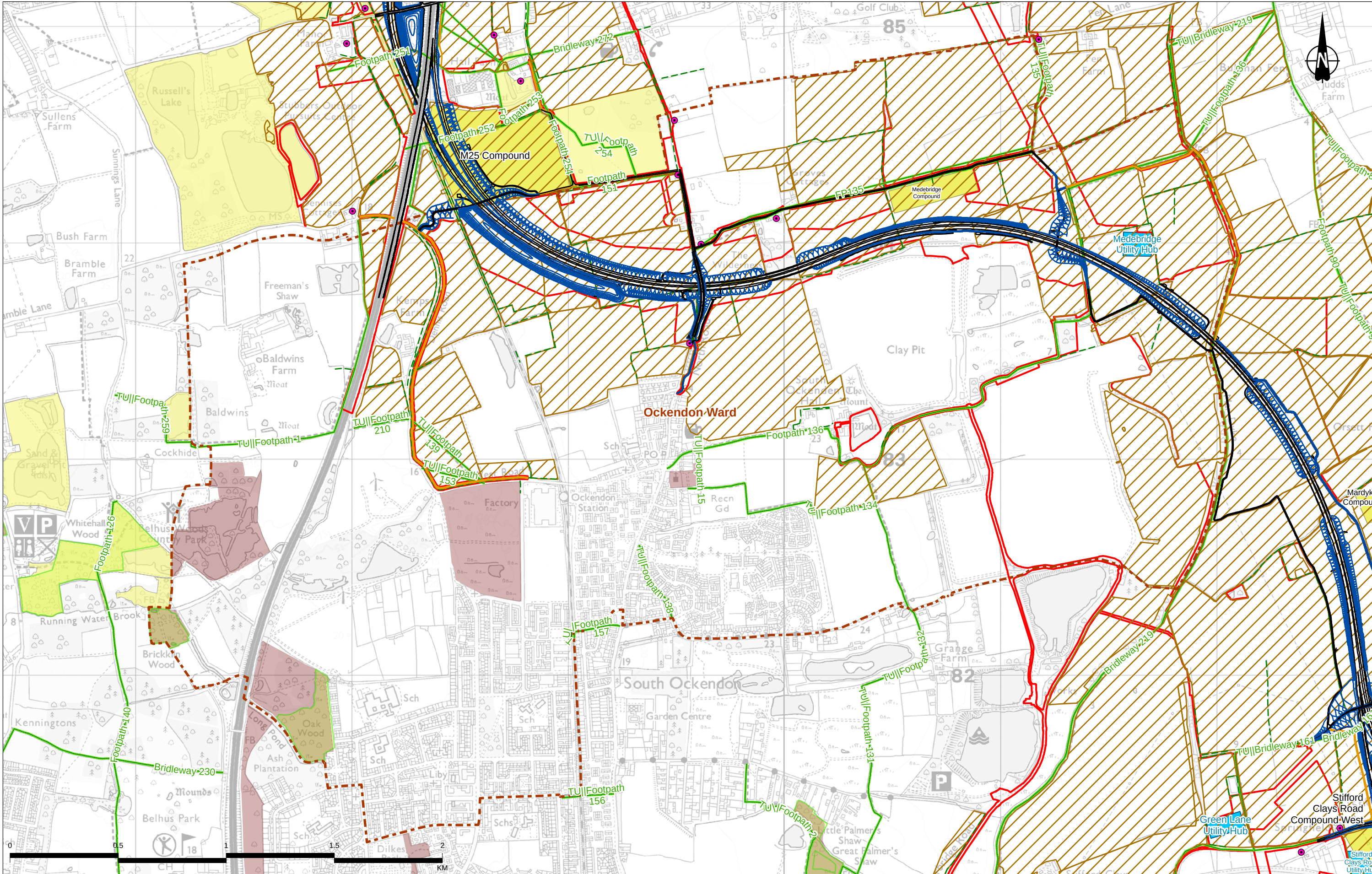
- Electoral ward boundary
- LE2.5 Shrubs with Intermittent Trees
- LE8.2 Ancient Woodland Mitigation Planting

Client

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:12,000		
Drawing Title	Figure 6.14c - Mitigation proposals in Belhus Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80016				
Z:\Environment\Community Impacts Report\Figure 6c - Mitigation Proposals.aprx					



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649
© Natural England copyright. Contains Ordnance Survey data © Crown copyright and database rights 2022

Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd
P01	S8	21/10/2022	DCO Application	SW	SW	BF

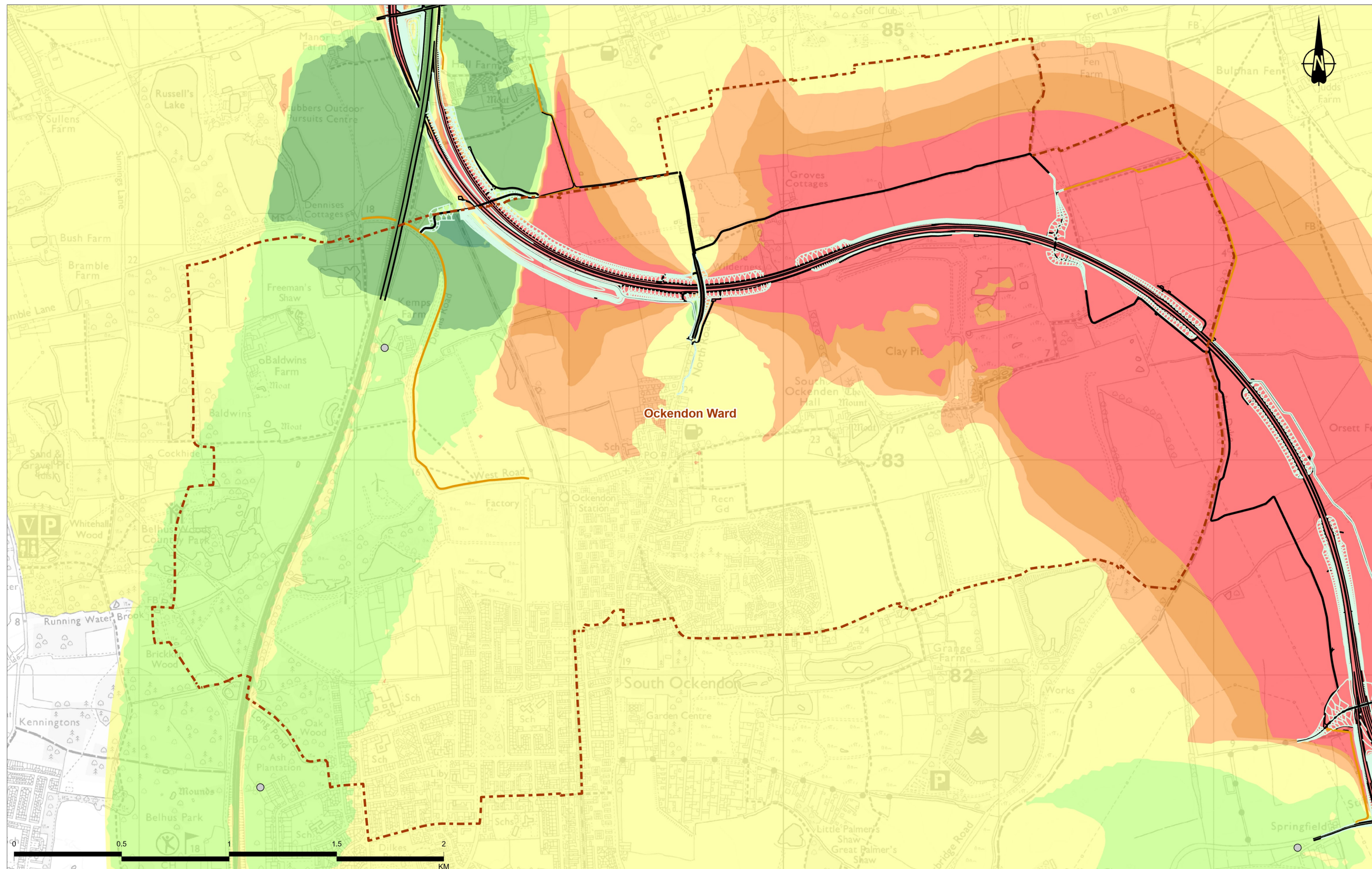
Legend

Route alignment	Main works construction compound	Local Wildlife Site
NMU route	Utility Logistics Hub	Site of Importance for Nature Conservation (SINC)
Earthworks	Construction noise receptor	Arable field
Order Limits	Existing Public Right of Way	Hedgerow
Electoral ward boundary	Ancient Woodland	

Client
national highways

Project
LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:16,000		
Drawing Title	Figure 6.15a - Construction impacts summary plan of Ockendon Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80017				



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	24/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd

Legend

- Route alignment
- Earthworks
- NMU Route
- Electoral ward boundary

Operation Change in Road Traffic Noise Opening Year

OY Key des

- Major noise reduction, 5dB(A) or more
- Moderate noise reduction, 3 to 4.9dB(A)

Degree of change in annual average nitrogen dioxide (NO₂) concentrations

Magnitude

- Minor noise reduction, 1 to 2.9dB(A)
- No Change/Negligible, less than 1dB(A)
- Minor noise increase, 1 to 2.9dB(A)
- Moderate noise increase, 3 to 4.9dB(A)
- Major noise increase, 5dB(A) or more

LOWER THAMES CROSSING

Client

Project

Status

DCO APPLICATION

Application Document Number

TR010032/APP/7.16

Drawing Title

Figure 6.15b - Operational impacts summary plan of Ockendon Ward

Drawing Number

HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80017

Z:\Environment\Community Impacts Report\Figure 6b - Operational Impacts Summary Plan.aprx

Original Size

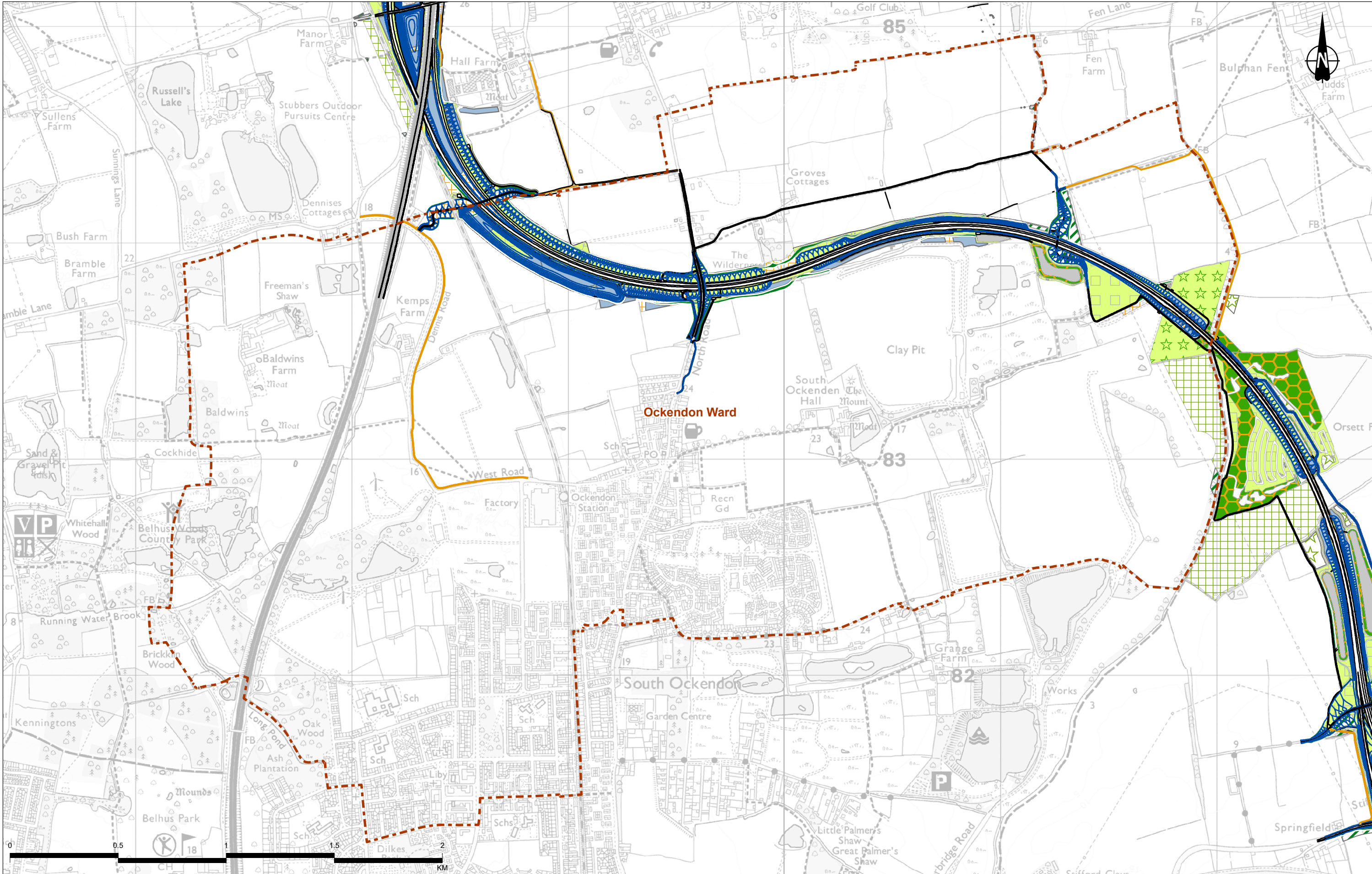
A3

Revision

P01

Scale

1:16,000



Contains Ordnance Survey data. © Crown copyright and database rights 2022. Ordnance Survey 100030649

P01	S8	18/10/2022	DCO Application	SW	SW	BF
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Appr'd

Legend

Route alignment	LE1.31 Species Rich Chalk Grassland	LE2.5 Shrubs with Intermittent Trees	LE6.11 Water Bodies - Standing Water	LE8.3 Woodland Mitigation Planting
NMU Route	LE1.32 Annual Wildflower Grassland	LE2.22 Scrub Woodland	LE7.2 Green Roof	LE8.5 Ecology Pond (Indicative Symbol)
Earthworks	LE2.4 Linear Belt of Shrubs and Trees	LE4.3 Native Species Hedge (Untrimmed)	LE8.1 Open Mosaic Habitat	LE9.1 Agricultural Reinstatement
Electoral ward boundary	LE1.3 Species Rich Grassland	LE5.1 Individual Trees	LE8.2 Ancient Woodland Mitigation Planting	
Acoustic barrier		LE6.4 Wet Grassland		

Client

national highways

Project

LOWER THAMES CROSSING

Status	DCO APPLICATION	Original Size	A3	Revision	P01
Application Document Number	TR010032/APP/7.16	Scale	1:16,000		
Drawing Title	Figure 6.15c - Mitigation proposals in Ockendon Ward				
Drawing Number	HE540039-CJV-EGN-SZP_EGNE00000000-DR-LE-80017				
Z:\Environment\Community Impacts Report\Figure 6c - Mitigation Proposals.aprx					

If you need help accessing this or any other National Highways information, please call **0300 123 5000** and we will help you.

© Crown copyright 2023.

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence:

visit www.nationalarchives.gov.uk/doc/open-government-licence/

write to the **Information Policy Team, The National Archives, Kew, London TW9 4DU**, or email psi@nationalarchives.gsi.gov.uk.

Mapping (where present): © Crown copyright and database rights 2023 OS 100030649. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

If you have any enquiries about this publication email info@nationalhighways.co.uk or call **0300 123 5000***.

*Calls to 03 numbers cost no more than a national rate call to an 01 or 02 number and must count towards any inclusive minutes in the same way as 01 and 02 calls.

These rules apply to calls from any type of line including mobile, BT, other fixed line or payphone. Calls may be recorded or monitored.

Printed on paper from well-managed forests and other controlled sources when issued directly by National Highways.

Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ

National Highways Limited registered in England and Wales number 09346363