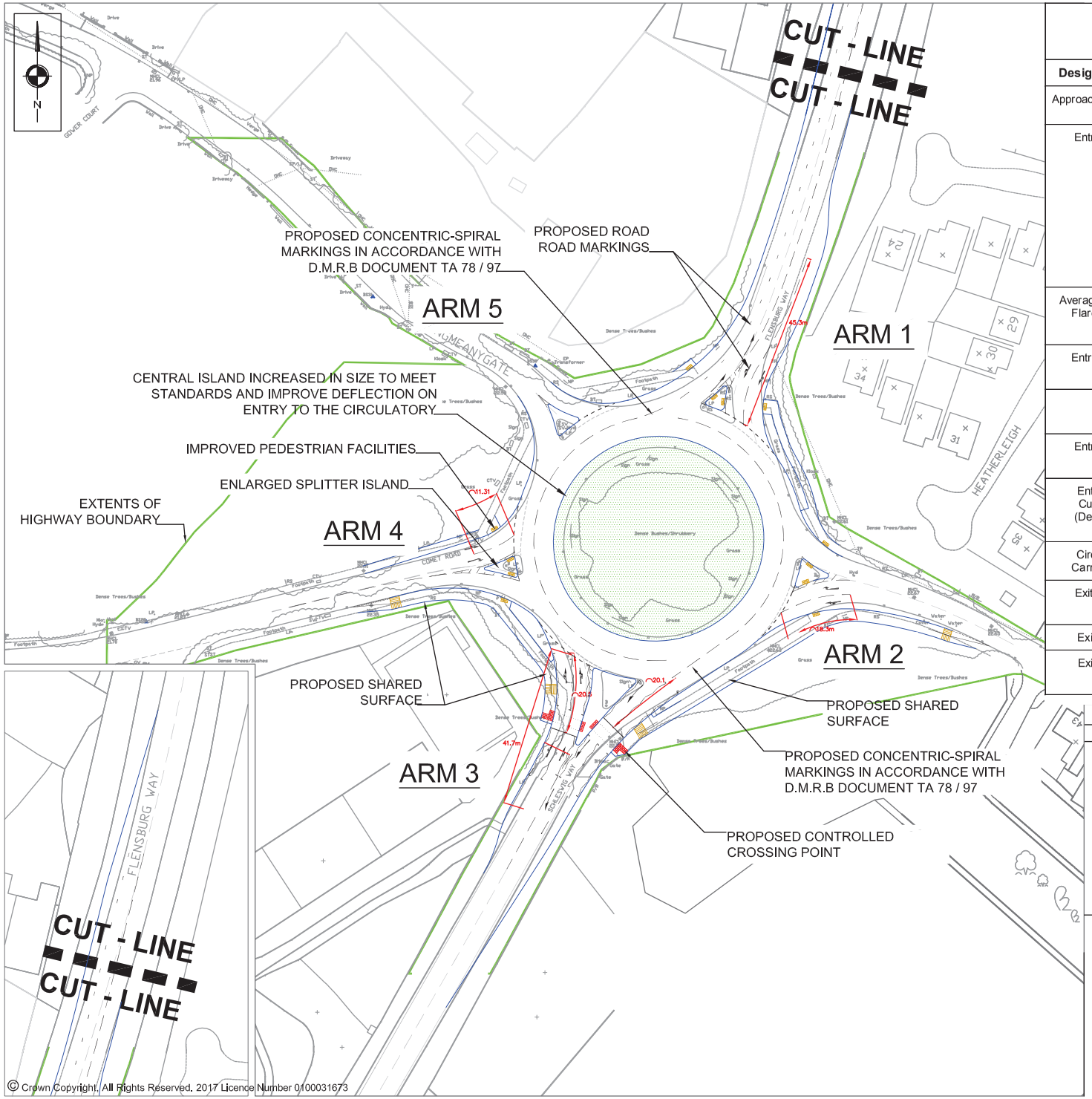

Roundabout Design Checklist – TD 16/07
Normal Roundabout

Design Feature	Design Requirements	Arm 1	Arm 2	Arm 3	Arm 4	Arm 5
Approach Half Width (v)	Typically 2m – 7.3m	7.0m	3.1m	7.0m	3.7m	3.3m
Entry Width (e)	Min 3m per lane Single 3m<e<10.5m (4.5m ideal) Dual 6m<e<15m (3m-3.5m ideal)	Dual 9.7m (3.65m is the min existing entry width)	Dual 7.2m (7.4m is the existing single lane entry width)	Dual 9.3m (3.8m is the min existing entry width)	Dual 7.8m (7.3m is the existing single lane entry width)	Single 4.5m (6.4m is the existing single lane entry width)
Average Effective Flare Length (l')	5m – 100m (25m rural ideal)	6.72m	28.5m	7m	21m	15m
Entry Radius (r)	10m – 100m (20m ideal) Normal – 20m min for HGV's)	21m	36m	32m	16m	20m
ICD (D)	>28m	73m	73m	73m	73m	73m
Entry Angle (Ø)	20° – 60° (30°– 40° ideal)	41°	20°	30°	37°	23°
Entry Path Curvature (Deflection)	Normal - <100m radius Compact - <70m radius (DMRB: urban overruns OK)	99m	87.5m	99m	96m	96.2m
Circulatory Carriageway	1.0 – 1.2 x max entry width max 15m	9.9m	9.9m	9.9m	9.9m	9.9m
Exit Radius	Normal 20m – 100m (40m ideal) Compact – 15m – 20m	46m	20m	100m	32m	22m
Exit Taper	1:15 to1:20 ideal	1:17	1:15	1:15	1:15	1:17
Exit Width	Normal – 6m min Compact – single lane	9.0 m	6.0m	8.8m	6.2m	6.0m

REVISIONS

REV	DESCRIPTION	DATE	BY
B	–PROPOSED SIGNALISED CROSSING POINT ALONG SOUTHERN ARM –TWO HGV'S ACCOMMODATED ALONG THE NORTHERN AND SOUTHERN ROUTES	15.05.18	BA
C	– SIGNALISED CROSSING POINT REALIGNED –PROPOSED SHARED CYCLE/FOOTWAY	12.07.18	BA
D	–CIRCULATORY CARRIAGEWAY WIDTH INCREASED IN LINE WITH THE MAXIMUM ENTRY WIDTH. LANE WIDTHS UPDATED TO SUIT. –SWEPT PATH ANALYSIS UPDATED TO SUIT. –SIGNALISED CROSSING POINT REALIGNED. –STANDARDS TABLE UPDATED TO SUIT	20.07.18	BA
E	–EXIT WIDTHS INCREASED ARM 5 ADDED TO TABLE –ARM 1 REALIGNED	24.07.18	BA
F	–ADDITIONAL ADVISORY ROUNDABOUT STANDARDS TAKEN INTO CONSIDERATION AND PRESENTED IN THE TABLESUCH AS APPROACH HALF WIDTH / EFFECTIVE FLARE LENGTH / ENTRY ANGLE AND EXIT TAPER. –EXIT TAPER ON ARM 2 AND ARM 4 UPDATED TO SUIT MINIMUM EXIT TAPER OF 1:15. –PRESENTATION UPDATED TO SUIT.	31.07.18	BA

SCP
Transportation Planning : Infrastructure Design
Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400, www.scptransport.co.uk, Email info@scptransport.co.uk

Client Name: BDW TRADING LTD AND PROPERTY CAPITAL PLC

Project Title: LEYLAND TEST TRACK

Drawing Title: PROPOSED IMPROVEMENTS TO EXISTING ROUNDABOUT

Drawn By:	Date:
BA	27.09.2017
Checked:	Scale:
PT	1:1000 @ A3
Status:	Approved/Unapproved:
PLANNING	-

Drawing No.: SCP/15043/F23 Rev.: F