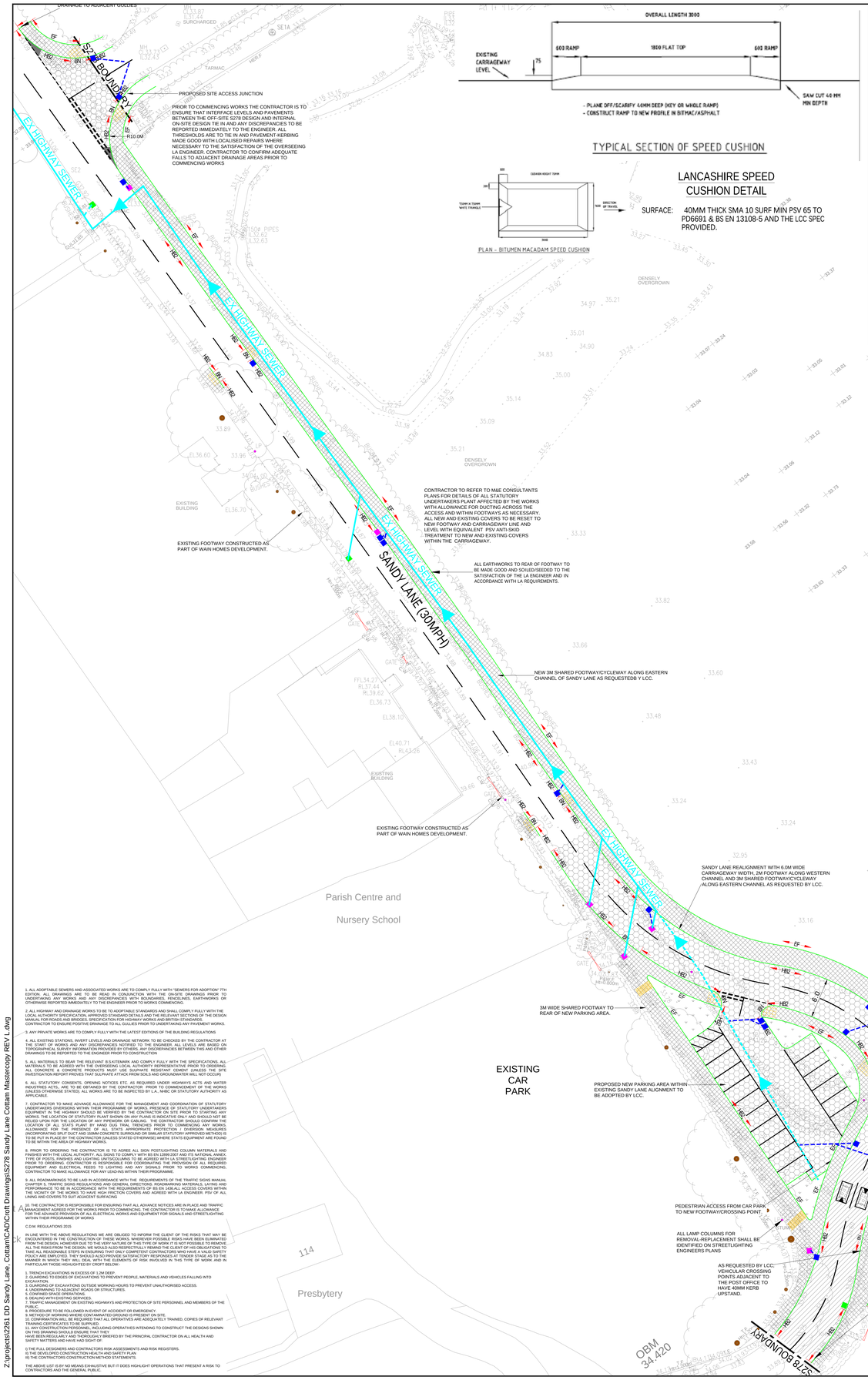
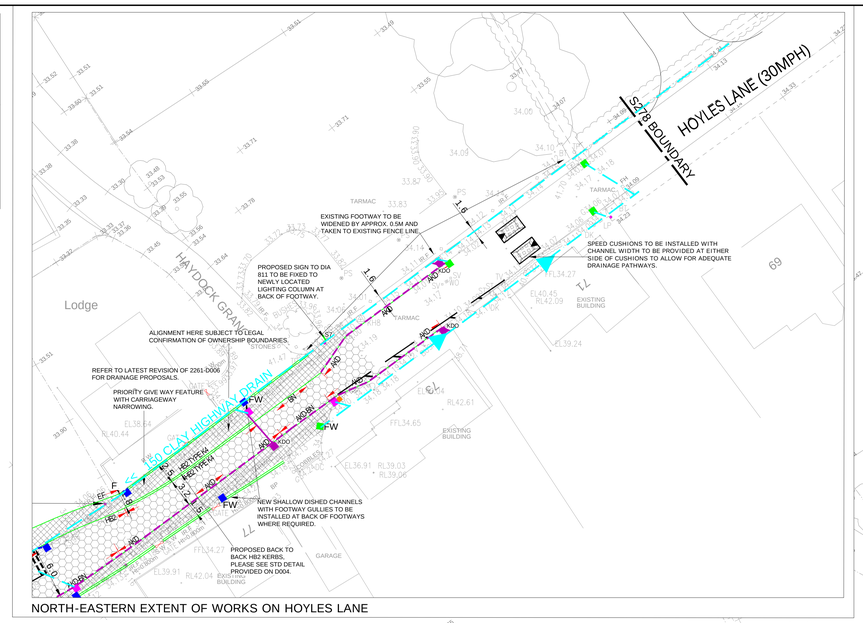


TYPICAL SECTION OF SPEED CUSHION

PLAN – BITUMEN MACADAM SPEED CUSHION

LANCASHIRE SPEED CUSHION DETAIL

SURFACE: 40MM THICK SMA 10 SURF MIN PSV 65 TO PD6691 & BS EN 13108-5 AND THE LCC SPEC PROVIDED.



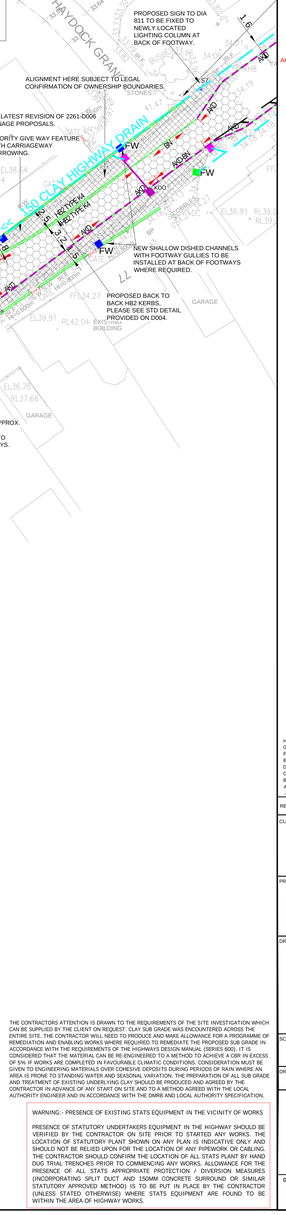
NORTH-EASTERN EXTENT OF WORKS ON HOYLES LANE

1.0	LCC Polymer Modified SMA Surface Course		
1.1	Type		Stone Mastic Asphalt
1.2	Proprietary name		n/a
1.3	Specification		PD6691 & BS EN 13108-5
1.4	Designation		SMA 10 surf
1.5	Normal layer thickness (mm)		40
1.6	Binder	Type	A PMB 75/130-75 has been specified. This PMB has a penetration range of 70 to 130 (Class 7) and a minimum softening point of 75oC (Class 3). However, confirmation of all the properties listed in Table LCC 1.61(table below) will be required.
		Minimum Binder Content (% by mass)	6.5
		Grade	PMB 75/130-75
1.7	Reclaimed Asphalt		Nil
1.8	Aggregate Aggregate	Nominal size D (mm)	10
		Type	Crushed rock
		Min. Polished Stone Value	Generally 60 but 68+ on the 50 metre approaches to junctions.
1.9	Additives		Cellulose fibres. Others with the approval of LCC
2.0	Performance	Min/max. Macro Texture (mm)	0.8/1.3
		Resistance to Permanent Deformation	PD6691 Table B.4, Classification 1
		Minimum Stiffness	Swett
		Maximum Stiffness	Swett
		Min/max void contents (%)	In accordance with PD6691 (1.5/6.5)
2.1	Improvement to the initial skidding resistance		Mechanically apply washed, 1 to 3mm crushed rock at 1 to 2 kg/m² to the hot asphalt.

Table LCC 1.61: Additional PMB Information

Characteristic	Property	Test Method	Unit	Selected Class
Consistency at intermediate service temperature	Penetration at 25-C	EN 1426	0.1mm	75-130 (Class 7)
Consistency at elevated service temperature	Softening point	EN 1427	dC	≥75 (Class 3)
Cohesion	Force ductility (50 mm/min Ductility (25 dC)	EN 13589 EN 13703	J/cm²	≥3 (Class 2)
Brittleness at low service temperature	Fraass breaking point	EN 12593	dC	≤ -20 (Class 9)
Strain recovery (Elastic Recovery @ 25 dC)	Storage stability – Difference in softening point	EN 13399	%	≥ 80 (Class 2)
Additional characteristics	Storage stability – Difference in softening point	EN 13399 EN 1427	dC	≤ 5 (Class 2)

LANCS SMA SPEC



1. ALL ADOPTABLE SEWERS AND ASSOCIATED WORKS ARE TO COMPLY FULLY WITH "SEWERS FOR ADOPTION" 7TH EDITION AND WRAS SI & SD. ALL WORKS TO BE DESIGN IN CONJUNCTION WITH THE SITE DRAWINGS PRIOR TO UNDERTAKING ANY WORKS AND ANY DISCREPANCIES WITH BUNDWALL, KERBLINES, EARTHWORKS OR OTHERWISE REPORTED IMMEDIATELY TO THE ENGINEER PRIOR TO WORKS COMMENCING.

2. ALL HIGHWAY AND DRAINAGE WORKS TO BE TO ADOPTABLE STANDARDS AND SHALL COMPLY FULLY WITH THE LATEST EDITIONS OF THE SPECIFICATION FOR HIGHWAY WORKS, THE DESIGN MANUAL FOR ROADS AND BRIDGES, SPECIFICATION FOR HIGHWAY WORKS AND BRITISH STANDARDS. CONTRACTOR TO ENSURE POSITIVE DRAINAGE TO ALL GULLIES PRIOR TO UNDERTAKING ANY PAVEMENT WORKS.

3. ANY PRIVATE WORKS ARE TO COMPLY FULLY WITH THE LATEST EDITIONS OF THE BUILDING REGULATIONS

4. ALL EXISTING STATIONS, INVERT LEVELS AND DRAINAGE NETWORK TO BE CHECKED BY THE CONTRACTOR AT THE START OF WORKS AND ANY DISCREPANCIES NOTIFIED TO THE ENGINEER. ALL LEVELS ARE BASED ON TOPOGRAPHICAL SURVEY INFORMATION PROVIDED BY OTHERS. ANY DISCREPANCIES BETWEEN THIS AND OTHER DRAWINGS TO BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION

5. ALL MATERIALS TO BEAR THE RELEVANT B.S./EXTERNAIR AND COMPLY FULLY WITH THE SPECIFICATIONS. ALL MATERIALS TO BE AGREED WITH THE OVERSEEING LOCAL AUTHORITY REPRESENTATIVE PRIOR TO ORDERING. ALL CONCRETE & CONCRETE PRODUCTS MUST USE SULPHATE RESISTANT CEMENT (UNLESS THE SITE INVESTIGATION REPORT PROVES THAT SULPHATE ATTACK FROM SOILS AND GROUNDWATER WILL NOT OCCUR)

6. ALL STATUTORY CONSENTS, OPENING NOTICES ETC. AS REQUIRED UNDER HIGHWAYS ACTS AND WATER INDUSTRIES ACTS, ARE TO BE OBTAINED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF THE WORKS (UNLESS OTHERWISE STATED). ALL WORKS ARE TO BE INSPECTED BY L.A., NWC OR STATUTORY AUTHORITY AS APPLICABLE.

7. CONTRACTOR TO MAKE ADVANCE ALLOWANCE FOR THE MANAGEMENT AND COORDINATION OF STATUTORY UNDERTAKERS DIVERSIONS WITHIN THEIR PROGRAMME OF WORKS. PRESENCE OF STATUTORY UNDERTAKERS PLANT HAS BEEN ASCERTAINED FROM RECORDS OBTAINED BY THE DESIGNER. THIS MAY NOT BE ALL INCLUSIVE OF WORKS. THE LOCATION OF STATUTORY PLANT SHOWN ON ANY PLANS IS INDICATIVE ONLY AND SHOULD NOT BE RELIED UPON FOR THE LOCATION OF ANY PIPEWORK OR CABLING. THE CONTRACTOR SHOULD CONFIRM THE LOCATION OF ALL STATS PLANT BY HAND DUG TRIAL TRENCHES PRIOR TO COMMENCING ANY WORKS. ALLOWANCE FOR THE PRESENCE OF ALL STATS APPROPRIATE PROTECTION / DIVERSION MEASURES (INCORPORATING SPLIT DUCT AND 150MM CONCRETE SURROUND OR SIMILAR STATUTORY APPROVED METHOD) IS TO BE PUT IN PLACE BY THE CONTRACTOR (UNLESS STATED OTHERWISE) WHERE STATS EQUIPMENT ARE FOUND TO BE WITHIN THE AREA OF HIGHWAY WORKS.

8. PRIOR TO ORDERING THE CONTRACTOR IS TO SUBMIT ALL DOA PROTECTION LIGHTING COLUMN MATERIALS AND FINISHES TO THE ENGINEER FOR APPROVAL. ALL LIGHTING COLUMNS TO COMPLY WITH BS EN 12767 (CATEGORY 1) NATIONAL TYPE OF POSTS, FINISHES AND LIGHTING UNITSCOLUMNS TO BE AGREED WITH LA STREETLIGHTING ENGINEER PRIOR TO ORDERING. CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE PROVISION OF ALL REQUIRED EQUIPMENT AND ELECTRICAL FEEDS TO LIGHTING AND ANY SIGNALS PRIOR TO WORKS COMMENCING. CONTRACTOR TO MAKE ALLOWANCE FOR ANY LEAD-INS WITHIN THEIR PROGRAMME.

9. ALL ROADMARKINGS TO BE LAID IN ACCORDANCE WITH THE REQUIREMENTS OF THE TRAFFIC SIGNS MANUAL CHAPTER 5, TRAFFIC SIGNS REGULATIONS AND GENERAL DIRECTIONS. ROADMARKING MATERIALS, LAYING AND PERFORMANCE TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF BS EN 1436.ALL ACCESS COVERS WITHIN THE VICINITY OF THE WORKS TO HAVE HIGH FRICTION COVERS AND AGREED WITH LA ENGINEER. PSV OF ALL LINING AND COVERS TO SUIT ADJACENT SURFACING

10. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL ADVANCE NOTICES ARE IN PLACE AND TRAFFIC MANAGEMENT PLANS ARE AGREED WITH THE LA PRIOR TO COMMENCING. THE CONTRACTOR IS TO MAKE ALLOWANCE FOR THE ADVANCE PROVISION OF ALL ELECTRICAL WORKS AND EQUIPMENT FOR SIGNALS AND STREETLIGHTING WITHIN THEIR PROGRAMME OF WORKS

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IN LINE WITH THE ABOVE REGULATIONS WE ARE OBLIGED TO INFORM THE CLIENT OF THE RISKS THAT MAY BE ENCOUNTERED IN THE CONSTRUCTION OF THESE WORKS. WHEREVER POSSIBLE RISKS HAVE BEEN ELIMINATED FROM THE DESIGN. HOWEVER DUE TO THE VERY NATURE OF THIS TYPE OF WORK IT IS NOT POSSIBLE TO REMOVE ALL THE RISKS FROM THE DESIGN. WE WOULD ALSO RESPECTFULLY REMIND THE CLIENT OF HIS OBLIGATIONS TO ENSURE THAT ADEQUATE RESOURCE IS ALLOCATED TO THE PRELIMINARY AND CONSTRUCTION PHASES (WHERE POLICY ARE EMPLOYED). THEY SHOULD ALSO PROVIDE SATISFACTORY RESPONSES AT TENDER STAGE AS TO THE MANNER IN WHICH THEY WILL DEAL WITH THE ELEMENTS OF RISK INVOLVED IN THIS TYPE OF WORK AND IN PARTICULAR THOSE HIGHLIGHTED BY CROFT BELOW:-

1. TRENCH EXCAVATIONS IN EXCESS OF 1.2M DEEP.
2. GUARDING TO EDGES OF EXCAVATIONS TO PREVENT PEOPLE, MATERIALS AND VEHICLES FALLING INTO EXCAVATION
3. MAINTENANCE OF EXCAVATIONS OUTSIDE WORKING HOURS TO PREVENT UNAUTHORISED ACCESS.
4. UNDERMINING TO ADJACENT ROADS OR STRUCTURES.
5. CONFINED SPACE OPERATIONS.
6. DEALING WITH EXISTING SERVICES.
7. TRAFFIC MANAGEMENT ON EXISTING HIGHWAYS AND PROTECTION OF SITE PERSONNEL AND MEMBERS OF THE PUBLIC.
8. PROCEDURE TO BE FOLLOWED IN EVENT OF ACCIDENT OR EMERGENCY.
9. METHOD OF WORKING WHERE CONTAMINATED GROUND IS PRESENT ON SITE.
10. CONFIRMATION WILL BE REQUIRED THAT ALL OPERATIVES ARE ADEQUATELY TRAINED, COPIES OF RELEVANT TRAINING CERTIFICATES TO BE SUPPLIED.

THE CONTRACTOR IS TO ENSURE THAT ANY BUILDING OPERATIVES INTENDING TO CONSTRUCT THE DESIGNS SHOWN ON THIS DRAWING SHOULD ENSURE THAT THEY HAVE BEEN REGULARLY AND THOROUGHLY BRIEFED BY THE PRINCIPAL CONTRACTOR ON ALL HEALTH AND SAFETY MATTERS AND HAVE HAD SIGHT OF:

i) THE FULL DESIGNERS AND CONTRACTORS RISK ASSESSMENTS AND RISK REGISTERS.
ii) THE DEVELOPED CONSTRUCTION HEALTH AND SAFETY PLAN.
iii) THE CONTRACTORS CONSTRUCTION METHOD STATEMENTS.

THE ABOVE LIST IS BY NO MEANS EXHAUSTIVE BUT IT DOES HIGHLIGHT OPERATIONS THAT PRESENT A RISK TO CONTRACTORS AND THE GENERAL PUBLIC.

THE CONTRACTORS ATTENTION IS DRAWN TO THE REQUIREMENTS OF THE SITE INVESTIGATION WHICH CAN BE SUPPLIED BY THE CLIENT ON REQUEST. CLAY SUB GRADE WAS ENCOUNTERED ACROSS THE ENTIRE SITE. THE CONTRACTOR WILL NEED TO PRODUCE AND MAKE ALLOWANCE FOR A PROGRAMME OF REMEDIATION AND ENABLING WORKS WHERE REQUIRED TO IMMEDIATE THE PROPOSED SUB-GRADE IN ACCORDANCE WITH THE DMRB AND LOCAL AUTHORITY SPECIFICATION. ALTERNATIVELY, IF CONSIDERED THAT THE MATERIAL CAN BE RE-ENGINEERED TO A METHOD TO ACHIEVE A CBR IN EXCESS OF 5% IF WORKS ARE COMPLETED IN FAVOURABLE CLIMATIC CONDITIONS. CONSIDERATION MUST BE GIVEN TO ENGINEERING MATERIALS OVER COHESIVE DEPOSITS DURING PERIODS OF RAIN WHERE AN AREA IS PRONE TO STANDING WATER AND SEASONAL VARIATION. THE PREPARATION OF ALL SUB GRADE AND TREATMENT OF EXISTING UNDERLYING CLAY SHOULD BE PRODUCED AND AGREED BY THE CONTRACTOR IN ADVANCE OF ANY START ON SITE AND TO A METHOD AGREED WITH THE LOCAL AUTHORITY ENGINEER AND IN ACCORDANCE WITH THE DMRB AND LOCAL AUTHORITY SPECIFICATION.

WARNING:- PRESENCE OF EXISTING STATS EQUIPMENT IN THE VICINITY OF WORKS

PRESENCE OF STATUTORY UNDERTAKERS EQUIPMENT IN THE HIGHWAY SHOULD BE VERIFIED BY THE CONTRACTOR ON SITE PRIOR TO STARTED ANY WORKS. THE LOCATION OF STATUTORY PLANT SHOWN ON ANY PLAN IS INDICATIVE ONLY AND SHOULD NOT BE RELIED UPON FOR THE LOCATION OF ANY PIPEWORK OR CABLING. THE CONTRACTOR SHOULD CONFIRM THE LOCATION OF ALL STATS PLANT BY HAND DUG TRIAL TRENCHES PRIOR TO COMMENCING ANY WORKS. ALLOWANCE FOR THE PRESENCE OF ALL STATS APPROPRIATE PROTECTION / DIVERSION MEASURES (INCORPORATING SPLIT DUCT AND 150MM CONCRETE SURROUND OR SIMILAR STATUTORY APPROVED METHOD) IS TO BE PUT IN PLACE BY THE CONTRACTOR (UNLESS STATED OTHERWISE) WHERE STATS EQUIPMENT ARE FOUND TO BE WITHIN THE AREA OF HIGHWAY WORKS.

NOTES

FULL DEPTH CARRIAGEWAY CONSTRUCTION MAIN CARRIAGEWAY-NO LIMESTONE AGGREGATE TO BE USED IN SURFACE COURSE OR IN ANY SURFACES TO BE TEMPORARILY TRAFFICKED. ALL MATERIALS TO BE LAID AND TRANSPORTED IN ACCORDANCE WITH THE SHW AND THE LANCS SPECIFICATION WHICH CAN BE SUPPLIED ON REQUEST. BOND COAT TO BE APPLIED IN ACCORDANCE WITH THE SHW BETWEEN ALL BITMAC LAYERS.CONTRACTOR TO CONFIRM BITMAC SPEC AND PSV WITH CLERK OF WORKS PRIOR TO ORDERING

SURFACE: 40MM THICK SMA 10 SURF MIN PSV 65 TO PD6691 & BS EN 13108-5 AND THE LCC SPEC PROVIDED IN THE STANDARD DETAILS

BINDER: 70MM THICK AC 20 HDM BIN 100/150 REC TO BS EN 13108.

BASE: 130MM THICK AC32 BASE 100/150 REC TO BS EN 13108.

SUB BASE: 150MM THICK SUB-BASE IN TYPE 1 GRANULAR MATERIAL, LAID AND COMPACTED TO THE SPECIFICATION FOR HIGHWAY WORKS CLAUSES 701, 801, & 803. CBR HERE ESTIMATED BETWEEN 2% AND 8%. CBR TO BE CONFIRMED ON SITE IN ACCORDANCE WITH LCC SPEC AND DMRB REQTS.

CAPPING: SUBJECT TO ON-SITE CBR RESULTS, REFER TO LCC SPEC FOR DEPTH OF CAPPING REQ'D. LAID AND COMPACTED TO THE SPECIFICATION OF HIGHWAY WORKS CLAUSE 613. CBR TO BE ESTABLISHED ON SITE PRIOR TO STARTING WORKS. CONTRACTOR TO REFER RESULTS TO A REPRESENTATIVE OF THE LOCAL AUTHORITY AND THE DESIGN MANUAL FOR ROADS AND BRIDGES VOLUME 7, SECTION 2, PART 3 CHAPTER 3 FOR FURTHER GUIDANCE ON SUB-BASE CAPPING RELATIONSHIP AND LANCS SPEC AS SUPPLIED. APPROPRIATE TERRAM GEOTEXTILE MEMBRANE TO BE LAID BENEATH CAPPING LAYER TO MANUFACTURER'S PROPRIETRY REQUIREMENTS.

PLANE REGULATE AND INLAY

PLANE 40mm, BOND COAT IN ACCORDANCE WITH SHW AND REPLACE WITH 40mm SURFACE COURSE AS SPECIFIED ABOVE. IN AREAS OF OVERLAY LEVELS TO BE MADE UP WITH REQUIRED DEPTH OF BINDER COURSE (MIN 60MM) PRIOR TO LAYING OF SURFACE COURSE.

ALL FULL DEPTH AND INLAY TO INCORPORATE 300MM STEPPED TIE IN CONSTRUCTION. PLEASE REFER TO STANDARD DETAIL AS SUPPLIED

SPEED CUSHIONS

AS PER ABOVE FULL DEPTH CARRIAGEWAY CONSTRUCTION SPEC WITH 75MM SPEED CUSHION HEIGHT.

NARROW WIDENING IN AREAS LESS THAN 1.2M

AS FULL DEPTH CARRIAGEWAY CONSTRUCTION BUT BASE LAYER REPLACED WITH STZ CONCRETE PLEASE SEE STANDARD DETAIL

FOOTWAY CONSTRUCTION

20MM THICK AC6 DENSE SURF 100/150 REC TO BS EN13108
60MM THICK AC20 DENSE BIN 100/150 REC TO BS EN13108
160MM TYPE 1 SUB BASE 225MM AT VEHICULAR CROSSINGS.

FOOTWAY RESURFACING

EXISTING FOOTWAY SURFACE AND BINDER REMOVED AND REPLACED WITH FOOTWAY SPEC AS ABOVE.

KERBING

ALL KERBS, CHANNELS, FLAGS, EDGINGS ETC CONSTRUCTED TO THE REQUIREMENTS OF BS EN 1339,1340, BS 7533 AND BS 7263. ANY GAP BETWEEN KERB AND EXISTING CARRIAGEWAY TO BE FILLED WITH HOT POURED BITUMEN MAX WIDTH 20MM. WHERE THE GAP IS GREATER THAN 20MM IT SHALL BE REINSTATED AS SHOWN IN THE REINSTATEMENT STANDARD DETAIL. ALL NEW TO EXISTING WEARING COURSE JOINTS TO BE SEALED WITH HOT POUR BITUMEN. WHERE NECESSARY EXISTING SURFACES TO BE SAW CUT TO PROVIDE A NEAT VERTICAL EDGE.KERBS IN CONCRETE PRODUCTS TO BE BEDDED AND BACKED IN CONCRETE TO THE REQUIREMENTS OF BS 7263 AND A METHOD AGREED WITH LOCAL AUTHORITY ENGINEER PRIOR TO CONSTRUCTION.RADII BETWEEN 12M AND 20M TO BE LAID USING 600MM UNITS. 25MM UPSTAND AT VEHICLE CROSSOVERS.

HB2 — PRECAST CONCRETE 'HALF BATTERED' KERB 125X255, BS REF 'HB2' SET WITH 100MM FACE UNLESS OTHERWISE INDICATED.

EF — PRE-CAST CONCRETE 'FLAT TOP' EDGING 200X50, BS REF 'EF'. FLUSH WITH FOOTWAY SURFACE

BN — DROPPED KERB CONSISTING OF PRECAST CONCRETE 'BULL NOSE' KERB 125 X 150, BS REF 'BN' ,AND TAPER KERBS 125 X 255/150, BS REF 'DLT , DRT'. KERB SET FLUSH ON 6MM UPSTAND AT PED CROSSINGS AND 25MM AT VEHICLE CROSSOVERS, VEH CROSSINGS ADJACENT TO POST OFFICE TO HAVE 40MM UPSTAND.

HB2 TYPE K4 — BACK TO BACK PRECAST CONCRETE 'HALF BATTERED' KERB 125X255, SET WITH 100MM FACE UNLESS OTHERWISE INDICATED IN ACCORDANCE WITH DETAIL TYPE K4 ON DRAWING D004.

AKD — ACO KERBDRAIN HB305 HALF BATTERED KERB UNIT WITH IN-BUILT FALL TO OUTFALL LAID TO MANUFACTURER'S PROPRIETARY REQUIREMENTS

AKD-BN — ACO KERBDRAIN HB305 BULLNOSED KERB UNIT WITH HEELGUARD PROTECTION AND IN-BUILT FALL TO OUTFALL LAID TO MANUFACTURER'S PROPRIETARY REQUIREMENTS

DC — PRECAST CONCRETE DISHED CHANNEL' KERB 125X255, BS REF 'CD' SET FLUSH WITH FOOTWAY SURFACE OTHERWISE INDICATED.

DENOTES EXTENT OF NEW KERBING

TACTILE PAVING

400X400X40 CONCRETE 'BUFF' COLOURED TACTILE BLOCKS RED, AT SIGNALS 50MM CONCRETE BED
200MM TYPE 1 GRANULAR SUB-BASE MATERIAL TO CLAUSE 803

CYCLEWAY ROUTE

400X400X70 'BAR' PATTERN 'BUFF' COLOURED TACTILE PAVING SLABS TO BE LAID ON CONCRETE BED BORDERED BY FLUSH LAID PCC EDGING KERBS
200MM TYPE 1 GRANULAR SUB-BASE, LAID IN A TRANSVERSE LADDER TYPE ORIENTATION FOR SHARED USE AND LONGITUDINAL 'TRAMLINE' ORIENTATION FOR CYCLE SIDE OF SEGREGATED USE IN ACCORDANCE WITH SHW. ORIENTATION TO BE CONFIRMED WITH LA ENGINEER PRIOR TO INSTALLATION (MINIMUM DEPTH OF PAVING 800MM)

EARTHWORKS

ALL EARTHWORKS AND PREPARATION OF SUB-GRADE TO BE IN ACCORDANCE WITH SERIES 600 OF THE SPECIFICATION FOR HIGHWAY WORKS. ALL UNACCEPTABLE MATERIALS, TOPSOIL, ORGANIC MATTER OR SOFT SPOTS SHALL BE EXCAVATED AND DISPOSED OF TO A SUITABLE TIP. IMMEDIATELY PRIOR TO LAYING SUB-BASE ALL SURFACES ARE TO BE CLEANED AND UN-SOUND MATERIAL REMOVED THE SURFACE SHOULD BE BROUGHT UP TO FORMATION LEVEL BY THE ADDITION OF SUITABLE FILL MATERIAL CLASS 1A OR CLASS 6F2 TO PROVIDE A SOUND BASE FOR CONSTRUCTION MINIMUM CBR OF 15%. CONTRACTOR TO SATISFY THEMSELF THAT THE SUB-GRADE IS ADEQUATELY ROLLED IN ACCORDANCE WITH THE SHW AND SUITABLE FOR CONSTRUCTION PRIOR TO UNDERTAKING ANY WORKS

TOPSOIL REQUIREMENTS

1. THE CONTRACTOR SHALL ALLOW FOR THE REINSTATEMENT OF ANY EXISTING GROUND DISTURBED WITHIN THE WORKING SPACE BOUNDARY USING 150MM TOPSOIL AND GRASS SEED IN ACCORDANCE WITH THE LOCAL AUTHORITY SPECIFICATION FAND THE SHW. NO RECYCLED TOPSOIL.

2. ALL 1.0M WIDE SOFT VERGES ADJACENT TO WORKS SHALL INCLUDE 150MM TOPSOIL AND GRASS SEED AS (1) ABOVE.

3. STRUCTURAL EARTHWORKS REQUIRED TO SUPPORT THE WORKS SHALL BE GRADED OUT TO SLOPES OF 1:3 OR SHALLOWER AND FINISHED WITH 150MM TOPSOIL AND GRASS SEED AS (1) ABOVE

UNLESS OTHERWISE STATED EARTHWORK SLOPES TO BE AT 1:3 WITH SUITABLE GRANULAR FILL AND TOP SOIL IN ACCORDANCE WITH SHW. SUPPORTIVE EARTHWORKS TO BACK OF FOOTWAY TO BE GRADED LEVEL TO MAINTAIN HIGHWAY BOUNDARY TO REAR OF FOOTWAY

GRASS VERGE

150MM TOP SOIL CLASS SA GRASS SEEDING TO CLAUSE 3005 OF THE SPECIFICATION FOR HIGHWAY WORKS. WHERE GRASS VERGE OVERLAYS HARD CARRIAGEWAY THEN THI