A ROADS

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEERS & ARCHITECTS DRAWINGS.FIGURED DIMENSIONS ONLY (NOT SCALING) TO BE USED. WHERE A CONFLICT OF INFORMATION EXISTS OR IF IN ANY DOUBT - ASK.
2. CONSULTANTS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.

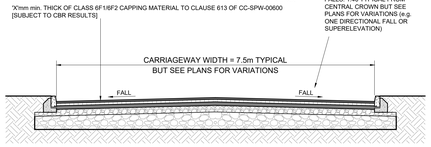
A1 ASPHALT / BITUMEN MACADAM

BLACK MACADAM | BUFF MACADAM | RED MACADAM

A1.1 LINK STREET

* FOR ROADS TO BE TAKEN IN CHARGE BY DUBLIN CITY COUNCIL
THE SURFACING (i.e. WEARING COURSE AND BASECOURSE) SHOULD BE REPLACED BY ONE COURSE OF 50mm MIN. THICK OF HOT ROLLED ASPHALT TO BS 594 (30% COARSE AGGREGATE OF 20mm NOMINAL SIZE).

40mm min. THICK OF BLACK SMA 10 SURF PMB 65/105-60 TO IS EN 13108-5 & CC-SPW-00900 ON
60mm min. THICK OF AC20 HDM BIN 40/60 TO IS EN 13108-1 & CC-SPW-00900 ON
100mm min. THICK OF AC32 HDM BASE 40/60 TO IS EN 13108-1 & CC-SPW-00900 ON
150mm min. THICK OF UNBOUND GRANULAR SUB-BASE TYPE B: UBGM Bc TO CC-SPW-00800 ON
'X'mm min. THICK OF CLASS 6F1/6F2 CAPPING MATERIAL TO CLAUSE 613 OF CC-SPW-00600 [SUBJECT TO CBR RESULTS]

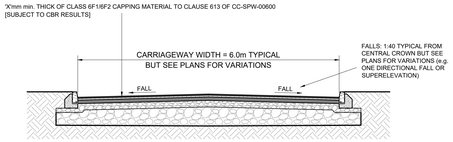


TYPICAL CROSS SECTION
SCALE @ A0: 1:50
SCALE @ A2: 1:100

A1.2 LOCAL STREET

* FOR ROADS TO BE TAKEN IN CHARGE BY DUBLIN CITY COUNCIL
THE SURFACING (i.e. WEARING COURSE AND BASECOURSE) SHOULD BE REPLACED BY ONE COURSE OF 50mm MIN. THICK OF HOT ROLLED ASPHALT TO BS 594 (30% COARSE AGGREGATE OF 20mm NOMINAL SIZE).

40mm min. THICK OF BLACK SMA 10 SURF PMB 65/105-60 TO IS EN 13108-5 & CC-SPW-00900 ON
100mm min. THICK OF AC20 HDM BIN 40/60 TO IS EN 13108-1 & CC-SPW-00900 ON
150mm min. THICK OF UNBOUND GRANULAR SUB-BASE TYPE B: UBGM Bc TO CC-SPW-00800 ON
'X'mm min. THICK OF CLASS 6F1/6F2 CAPPING MATERIAL TO CLAUSE 613 OF CC-SPW-00600 [SUBJECT TO CBR RESULTS]

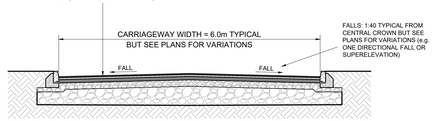


TYPICAL CROSS SECTION
SCALE @ A0: 1:50
SCALE @ A2: 1:100

A1.3 HOME ZONE - COLOURED ASPHALT

* FOR ROADS TO BE TAKEN IN CHARGE BY DUBLIN CITY COUNCIL
THE SURFACING (i.e. WEARING COURSE AND BASECOURSE) SHOULD BE REPLACED BY ONE COURSE OF 50mm MIN. THICK OF HOT ROLLED ASPHALT TO BS 594 (30% COARSE AGGREGATE OF 20mm NOMINAL SIZE).

40mm min. THICK OF RED OR BUFF COLOURED PMSMA 10 SURF PMB 65/105-60 TO IS EN 13108-5 & CC-SPW-00900 ON
80mm min. THICK OF AC20 HDM BIN 40/60 TO IS EN 13108-1 & CC-SPW-00900 ON
150mm min. THICK OF UNBOUND GRANULAR SUB-BASE TYPE B: UBGM Bc TO CC-SPW-00800 ON
'X'mm min. THICK OF CLASS 6F1/6F2 CAPPING MATERIAL TO CLAUSE 613 OF CC-SPW-00600 [SUBJECT TO CBR RESULTS]

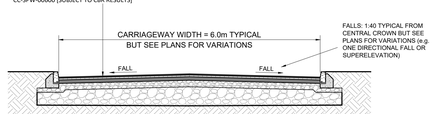


TYPICAL CROSS SECTION
SCALE @ A0: 1:50
SCALE @ A2: 1:100

A1.4 HOME ZONE- COLOURED CHIPPINGS ROLLED IN

* FOR ROADS TO BE TAKEN IN CHARGE BY DUBLIN CITY COUNCIL
THE SURFACING (i.e. WEARING COURSE AND BASECOURSE) SHOULD BE REPLACED BY ONE COURSE OF 50mm MIN. THICK OF HOT ROLLED ASPHALT TO BS 594 (30% COARSE AGGREGATE OF 20mm NOMINAL SIZE).

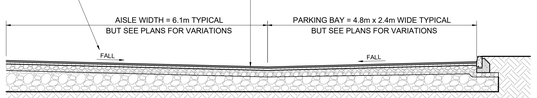
40mm min. THICK OF HRA 30/14F SURF DES 40/60 (14mm AGGREGATE, 30% CONTENT) WITH 20mm RED OR BUFF COLOURED GRANITE CHIPPINGS IN A CLEAR COAT SPREAD EVENLY AT A RATE OF 5KG/SQ.M) TO IS EN 13108-4 & CC-SPW-00900 ON
80mm min. THICK OF AC20 HDM BIN 40/60 TO IS EN 13108-1 & CC-SPW-00900 ON
150mm min. THICK OF UNBOUND GRANULAR SUB-BASE TYPE B: UBGM Bc TO CC-SPW-00800 ON
'X'mm min. THICK OF CLASS 6F1/6F2 CAPPING MATERIAL TO CLAUSE 613 OF CC-SPW-00600 [SUBJECT TO CBR RESULTS]



TYPICAL CROSS SECTION
SCALE @ A0: 1:50
SCALE @ A2: 1:100

A1.4 CAR PARK

40mm min. THICK OF BLACK SMA 10 SURF PMB 65/105-60 TO IS EN 13108-5 & CC-SPW-00900 ON
60mm min. THICK OF AC20 HDM BIN 40/60 TO IS EN 13108-1 & CC-SPW-00900 ON
150mm min. THICK OF UNBOUND GRANULAR SUB-BASE TYPE B: UBGM Bc TO CC-SPW-00800 ON
'X'mm min. THICK OF CLASS 6F1/6F2 CAPPING MATERIAL TO CLAUSE 613 OF CC-SPW-00600 [SUBJECT TO CBR RESULTS]



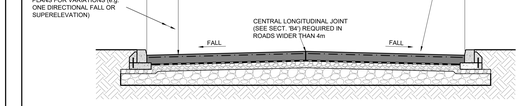
TYPICAL CROSS SECTION
SCALE @ A0: 1:50
SCALE @ A2: 1:100

A2 CONCRETE

A2.1 ROAD

200mm THICK 40 N/mm² AIR ENTRAINED PAVING QUALITY CONCRETE (SEE NOTE 5) WITH C385 MESH REINFORCEMENT (SEE NOTE 6) ON POLYTHENE SHEETING SEPERATING MEMBRANE 125 MICRONS THICK (300mm MIN. LAPS) ON
150mm MIN. THICK CLAUSE 804 SUB-BASE (SEE NOTE 3) ON
'X'mm MIN. THICK CAPPING LAYER (SEE NOTE 4) ON SUBGRADE

FINISH: THE CONCRETE SURFACE SHOULD BE BRUSH OR GROOVE FINISHED AND CURED WITH AN APPROVED ALUMINIZED CURING COMPOUND TO CLAUSE 1027 SPECIFICATION FOR ROAD WORKS



TYPICAL CROSS SECTION
SCALE @ A0: 1:50
SCALE @ A2: 1:100

A2.2 SERVICE YARD

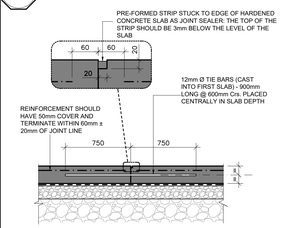
FALLS: DEFINED BY SPOT LEVELS ON PLANS. 1:60 TYPICAL WITH 1:80 ABSOLUTE MIN.

150 or 200mm THICK (SEE PLAN) 40 N/mm² AIR ENTRAINED PAVING QUALITY CONCRETE WITH A393 MESH REINFORCEMENT (SEE NOTE 6) ON POLYTHENE SHEETING SEPERATING MEMBRANE 125 MICRONS THICK (300mm MIN. LAPS) ON
150mm MIN. THICK CLAUSE 804 SUB-BASE (SEE NOTE 3) ON
'X'mm MIN. THICK CAPPING LAYER (SEE NOTE 4) ON SUBGRADE

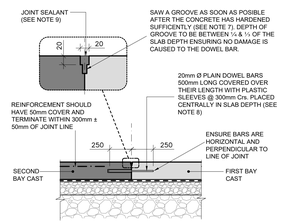
FINISH: THE CONCRETE SURFACE SHOULD BE BRUSH OR GROOVE FINISHED AND CURED WITH AN APPROVED ALUMINIZED CURING COMPOUND TO CLAUSE 1027 SPECIFICATION FOR ROAD WORKS

TYPICAL CROSS SECTION
SCALE @ A0: 1:50
SCALE @ A2: 1:100

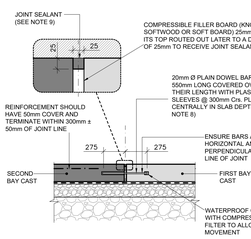
A2.X CONCRETE ROAD JOINT DETAILS



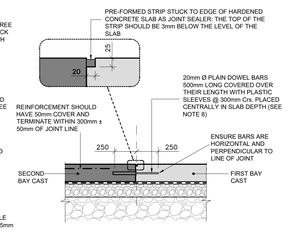
A2.X1 - LONGITUDINAL JOINT



A2.X2 - TRANSVERSE CONTRACTION JOINT



A2.X3 - TRANSVERSE EXPANSION JOINT



A2.X4 - FORMED CONTRACTION JOINT

NOTE: JOINTS IN CONCRETE SLABS

(i) TRANSVERSE CONTRACTION JOINTS (SEE SECTION A2.X2) TO BE AT 20m SPACING FOR C385 MESH (SEE NOTE 6 FOR ALTERNATIVES)

(ii) EXPANSION JOINTS (SEE SECTION A2.X3) TO BE AT 60m TO 75m Crs. WHERE THEY SHOULD REPLACE THE NEAREST CONTRACTION JOINT.

(iii) EXPANSION JOINTS SHOULD ALSO BE PROVIDED AT ALL ABUTTING STRUCTURES AND COVER SLABS TO ALL UNDERGROUND CHAMBERS OCCURING ON THE ROADWAY e.G. MANHOLE CHAMBERS, DRAW-PITS, GULLIES etc. THE COVER SLABS FOR SUCH CHAMBERS SHOULD BE AT LEAST AS LARGE AS THE EXTERNAL DIMENSIONS OF THE CHAMBER.

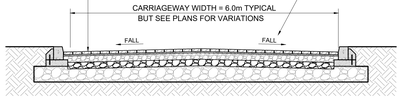
(iv) PROVIDE A CONSTRUCTION JOINT AT THE END OF A DAYS WORK. THE CONSTRUCTION JOINT SHOULD TAKE THE FORM OF EITHER AN EXPANSION JOINT OR A FORMED CONTRACTION JOINT IN NO CASE SHOULD A CONSTRUCTION JOINT BE LOCATED CLOSER THAN 2m FROM AN EXISTING JOINT POSITION.

A3 BLOCK PAVING

A3.1 ESTATE ROAD

CONCRETE (80mm THICK) OR CLAY (65mm THICK) BLOCK PAVERS (SEE NOTE 10 & 12) ON
30mm SAND LAYING COURSE (SEE NOTE 11) ON
150mm LEAN MIX CONCRETE ROADBASE (SEE NOTE 1) ON
150mm MIN. THICK CLAUSE 804 SUB-BASE (SEE NOTE 3) ON
'X'mm MIN. THICK CAPPING LAYER (SEE NOTE 4) ON SUBGRADE

FALLS: 1:40 TYPICAL FROM CENTRAL CROWN BUT SEE PLANS FOR VARIATIONS (e.g. ONE DIRECTIONAL FALL OR SUPERELEVATION)



TYPICAL CROSS SECTION
SCALE @ A0: 1:50
SCALE @ A2: 1:100

A3.2 CAR PARK

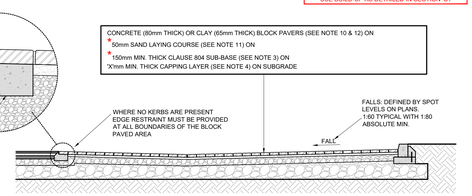
* FOR CAR-PARKS TO BE TAKEN IN CHARGE BY DUBLIN CITY COUNCIL
USE BUILD-UP AS DETAILED IN SECTION 'C1'

BITUMINUS SURFACING
100
IN-SITU CONCRETE BENCHING

CONCRETE (80mm THICK) OR CLAY (65mm THICK) BLOCK PAVERS (SEE NOTE 10 & 12) ON
* 50mm SAND LAYING COURSE (SEE NOTE 11) ON
* 150mm MIN. THICK CLAUSE 804 SUB-BASE (SEE NOTE 3) ON
'X'mm MIN. THICK CAPPING LAYER (SEE NOTE 4) ON SUBGRADE

WHERE NO KERBS ARE PRESENT EDGE RESTRAINT MUST BE PROVIDED AT ALL BOUNDARIES OF THE BLOCK PAVED AREA

FALLS: DEFINED BY SPOT LEVELS ON PLANS. 1:60 TYPICAL WITH 1:80 ABSOLUTE MIN.



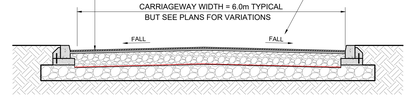
TYPICAL CROSS SECTION
SCALE @ A0: 1:50
SCALE @ A2: 1:100

A4 POROUS ASPHALT

A4.1 ESTATE ROAD

WEARING COURSE: 30mm OF 10mm SIZE COLOURED POROUS MACADAM TO BS4987 ON
BASE COURSE: 40mm OF 20mm SIZE STONE POROUS MACADAM TO BS 4987 ON
SUB-BASE: 250mm COARSE GRADED AGGREGATE TYPE 4/20 TO TABLE A.1 AND TABLE A.3 OF BS 7533 - PART 13. ON
CAPPING LAYER: 300mm CAPPING LAYER CLAUSE 6F1/6F2 MATERIAL. (SEE NOTE RE SUBGRADE TESTING) ON
PERMEABLE GEOTEXTILE

FALLS: 1:40 TYPICAL FROM CENTRAL CROWN BUT SEE PLANS FOR VARIATIONS (e.g. ONE DIRECTIONAL FALL OR SUPERELEVATION)



TYPICAL CROSS SECTION
SCALE @ A0: 1:50
SCALE @ A2: 1:100

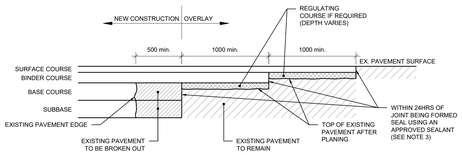
REFER TO DRAWING REFERENCE C-10000, CIVIL ENGINEERING GENERAL NOTES FOR ROAD / FOOTPATH NOTES FOR ALL NOTE REFERRALS ON THIS DRAWING

RT ROAD TIE DETAILS - NEW TO EXISTING

RT.1 TRANSVERSE JOINT

NOTES ON TRANSVERSE JOINTS:

1. EDGE OF EXISTING CARRIAGEWAY TO BE CUT BACK BY 0.5m WITH A ROTARY SAW TO FORM A VERTICAL FACE.
2. WHERE THE BASE COURSE IS TO BE LAID IN TWO LAYERS THE UPPER LAYER OF BASE COURSE SHOULD BE STEPPED INTO THE EXISTING PAVEMENT BY 1.0m min. WITH BINDER COURSE AND SURFACE COURSE TO BE EACH STEPPED IN A FURTHER 1.0m MIN RESPECTIVELY
3. WITHIN 24HRS OF A JOINT BEING FORMED AN APPROPRIATE SEALANT COMPLIANT WITH CLAUSE 10.1.8 OF TII DOCUMENT CC-SPW-00900 SHALL BE APPLIED.
4. A BOND COAT SHALL BE SPRAYED ONTO ALL EXISTING PAVEMENT SURFACES, AND BETWEEN NEW COURSES OF BITUMINOUS MATERIAL PRIOR TO LAYING OVERLYING COURSES, IN ACCORDANCE WITH CLAUSE 10.1.4 OF TII DOCUMENT CC-SPW-00900.
5. BEFORE SPRAYING IS COMMENCED, SURFACES SHALL BE FREE OF STANDING WATER, AND FREE OF ALL LOOSE MATERIAL.

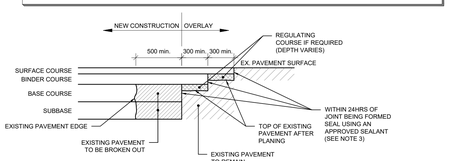


TYPICAL DETAIL
SCALE @ A0: 1:25
SCALE @ A2: 1:50

RT.2 LONGITUDINAL JOINT

NOTES ON LONGITUDINAL JOINTS:

1. EDGE OF EXISTING CARRIAGEWAY TO BE CUT BACK BY 0.5m WITH A ROTARY SAW TO FORM A VERTICAL FACE.
2. WHERE THE BASE COURSE IS TO BE LAID IN TWO LAYERS THE UPPER LAYER OF BASE COURSE SHOULD BE STEPPED INTO THE EXISTING PAVEMENT BY 0.3m min. WITH BINDER COURSE AND SURFACE COURSE TO BE EACH STEPPED IN A FURTHER 0.3m min. RESPECTIVELY.
3. WITHIN 24HRS OF A JOINT BEING FORMED AN APPROPRIATE SEALANT COMPLIANT WITH CLAUSE 10.1.8 OF TII DOCUMENT CC-SPW-00900 SHALL BE APPLIED.
4. A BOND COAT SHALL BE SPRAYED ONTO ALL EXISTING PAVEMENT SURFACES, AND BETWEEN NEW COURSES OF BITUMINOUS MATERIAL PRIOR TO LAYING OVERLYING COURSES, IN ACCORDANCE WITH CLAUSE 10.1.4 OF TII DOCUMENT CC-SPW-00900.
5. BEFORE SPRAYING IS COMMENCED, SURFACES SHALL BE FREE OF STANDING WATER, AND FREE OF ALL LOOSE MATERIAL.



TYPICAL DETAIL
SCALE @ A0: 1:25
SCALE @ A2: 1:50

ISSUE	DATE	DESCRIPTION	BY
PL2	11.10.23	ISSUED FOR PLANNING	MC

Project Engineer: JC | Project Director: JC

BM STAGE: **PLANNING**

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CLIENT: **MALCLOSE LTD.**

PROJECT TITLE: **GOWAN HOUSE**
BM PROJECT No. **22.219**

REFERENCE | SUITABILITY | REVISION

DRAWING TITLE: **ROAD STANDARD DETAILS - SHEET 1**

DRAWING REFERENCE: **GWH-BMD-ZZ-00-DR-C-12100** | STATUS | REVISION **PL2**