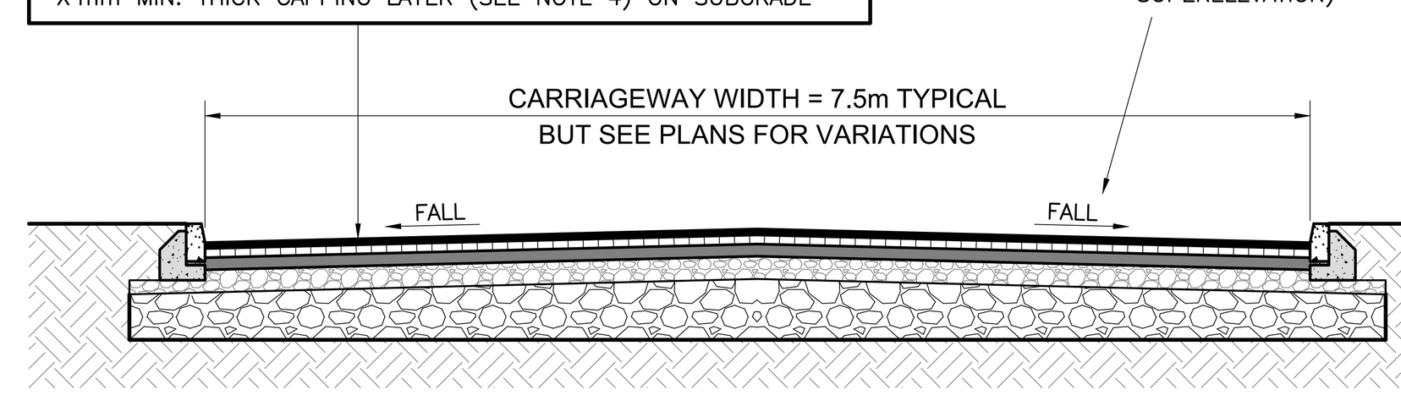
***40mm** MIN. THICK OF 'SMA 10 surf 70/100 des' SURFACE COURSE TO IS EN 13108 and NSAI's S28; AAV10 ON
60mm MIN THICK OF 'AC 20 dense bin 70/100 des' BINDER COURSE TO IS EN 13108 AND NSAI's S28 ON
100mm MIN THICK OF 'AC 32 dense base 70/100 des' BASE COURSE TO IS EN 13108 AND NSAI's S28 (SEE NOTES 1 & 2) ON
150mm MIN. THICK SUB-BASE (SEE NOTE 3) ON
'X'mm MIN. THICK CAPPING LAYER (SEE NOTE 4) ON SUBGRADE

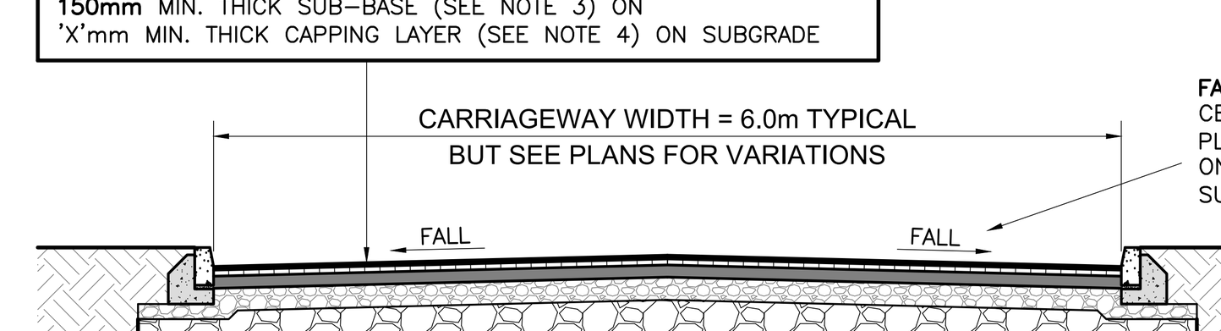


A1 SECTION SCALE:– 1:50 @ A0, 1:100 @ A2

TYPICAL CROSS SECTION THRO' LOCAL DISTRIBUTOR ROAD

* FOR DESIGN SPEEDS >80kph SURFACE COURSE TO BE 'SMA 10 surf PMB 65/105 60 des PSV 60'

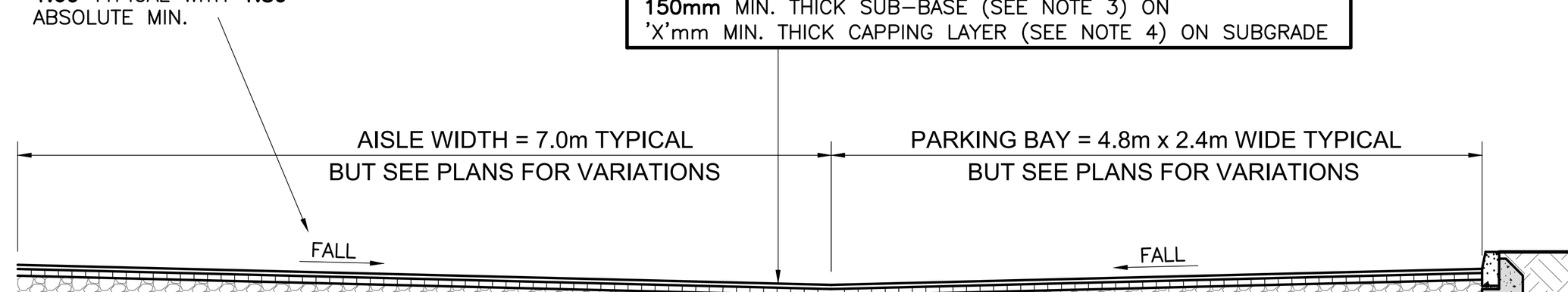
40mm MIN. THICK OF 'SMA 10 surf 70/100 des' SURFACE COURSE TO IS EN 13108 and NSAI's S28; AAV10 ON
60mm MIN THICK OF 'AC 20 dense bin 70/100 des' BINDER COURSE TO IS EN 13108 AND NSAI's S28 ON
80mm MIN THICK OF 'AC 32 dense base 70/100 des' BASE COURSE TO IS EN 13108 AND NSAI's S28 (SEE NOTES 1 & 2) ON
150mm MIN. THICK SUB-BASE (SEE NOTE 3) ON
'X'mm MIN. THICK CAPPING LAYER (SEE NOTE 4) ON SUBGRADE



A2 SECTION SCALE:– 1:50 @ A0, 1:100 @ A2

TYPICAL CROSS SECTION THRO' ESTATE ROAD

40mm MIN. THICK OF 'SMA 10 surf 70/100 des' SURFACE COURSE TO IS EN 13108 and NSAI's S28; AAV10 ON
60mm MIN THICK OF 'AC 20 dense bin 70/100 des' BINDER COURSE TO IS EN 13108 AND NSAI's S28 ON
150mm MIN. THICK SUB-BASE (SEE NOTE 3) ON
'X'mm MIN. THICK CAPPING LAYER (SEE NOTE 4) ON SUBGRADE

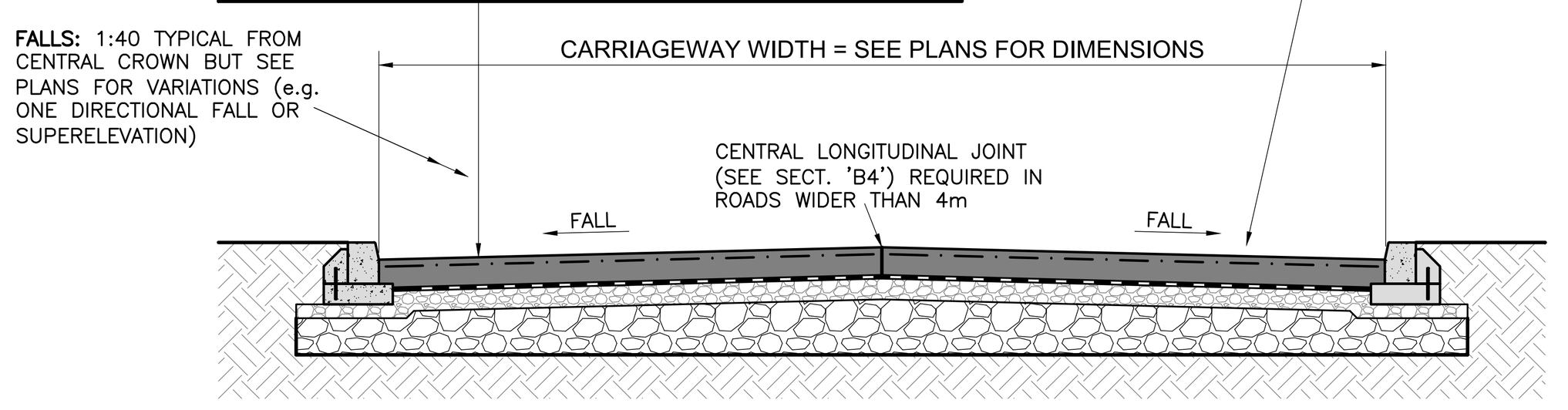


A3 SECTION SCALE:– 1:50 @ A0, 1:100 @ A2

TYPICAL CROSS SECTION THRO' CAR PARK

DETAIL 'A' - FLEXIBLE ROADWAY / HARDSTANDING

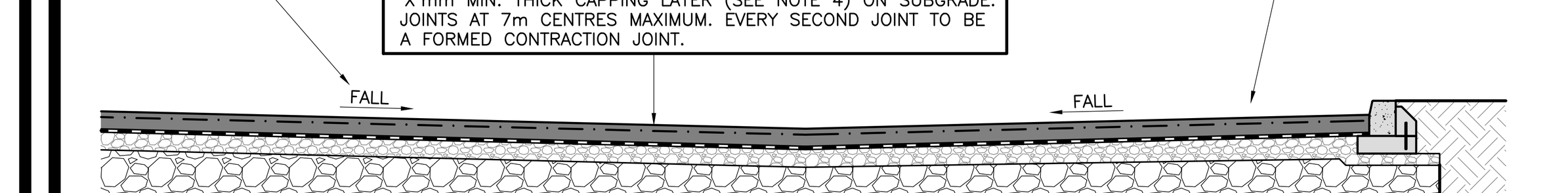
200mm THICK PAV2 MIX TO IS EN 206 (AIR ENTRAINED PAVING QUALITY CONCRETE) (SEE NOTE 5) WITH C385 TOP MESH REINFORCEMENT (SEE NOTE 6) ON
POLYTHENE SHEETING SEPERATING MEMBRANE **125 MICRONS** THICK (300mm MIN. LAPS) ON
150mm MIN. THICK SUB-BASE (SEE NOTE 3) ON
'X'mm MIN. THICK CAPPING LAYER (SEE NOTE 4) ON SUBGRADE.
JOINTS AT 7m CENTRES MAXIMUM. EVERY SECOND JOINT TO BE FORMED CONTRACTION JOINT.



B1 SECTION SCALE:– 1:50 @ A0, 1:100 @ A2

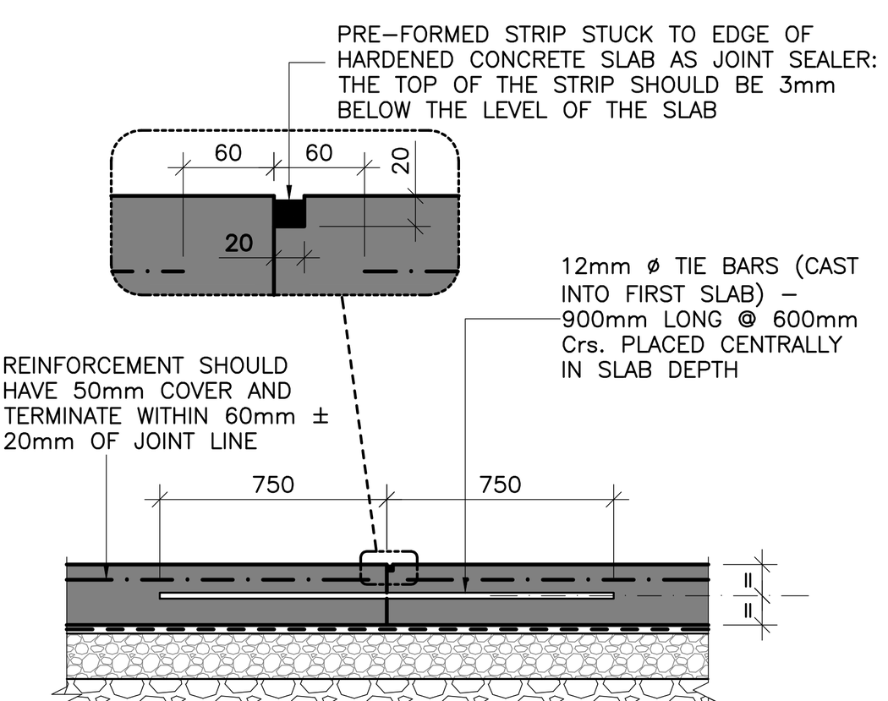
TYPICAL CROSS SECTION THRO' CONCRETE ROAD

150 or 200mm THICK (SEE PLAN) PAV2 MIX TO IS EN 206 (AIR ENTRAINED PAVING QUALITY CONCRETE) WITH C385 TOP MESH REINFORCEMENT (SEE NOTE 6) ON
POLYTHENE SHEETING SEPERATING MEMBRANE **125 MICRONS** THICK (300mm MIN. LAPS) ON
150mm MIN. THICK SUB-BASE (SEE NOTE 3) ON
'X'mm MIN. THICK CAPPING LAYER (SEE NOTE 4) ON SUBGRADE.
JOINTS AT 7m CENTRES MAXIMUM. EVERY SECOND JOINT TO BE A FORMED CONTRACTION JOINT.



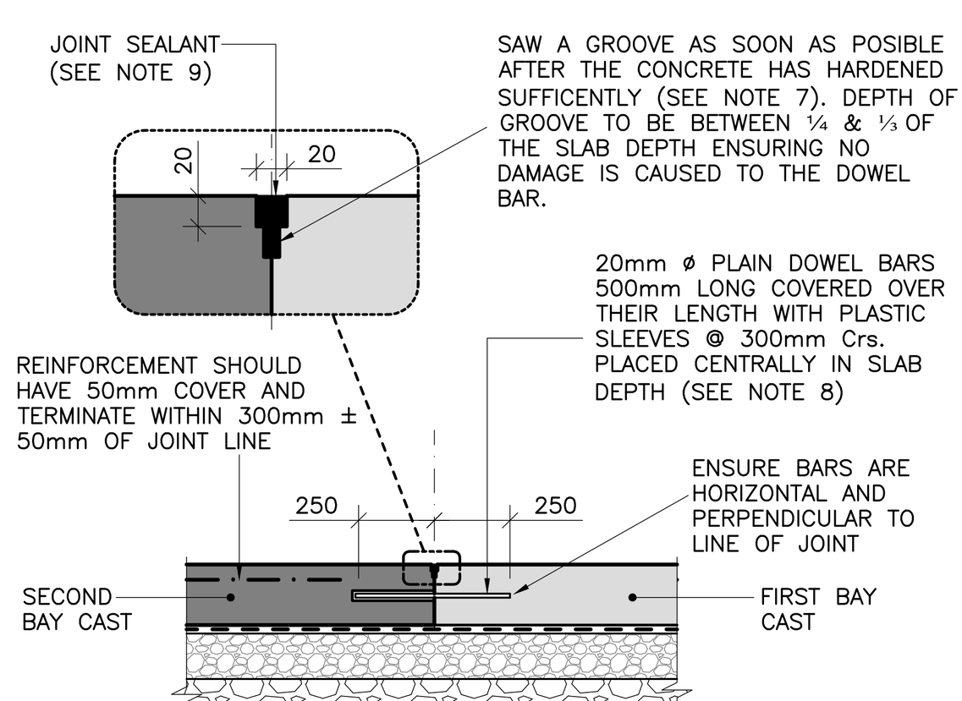
B2 SECTION SCALE:– 1:100 @ A0, 1:200 @ A2

TYPICAL CROSS SECTION THRO' CONCRETE SERVICE YARD



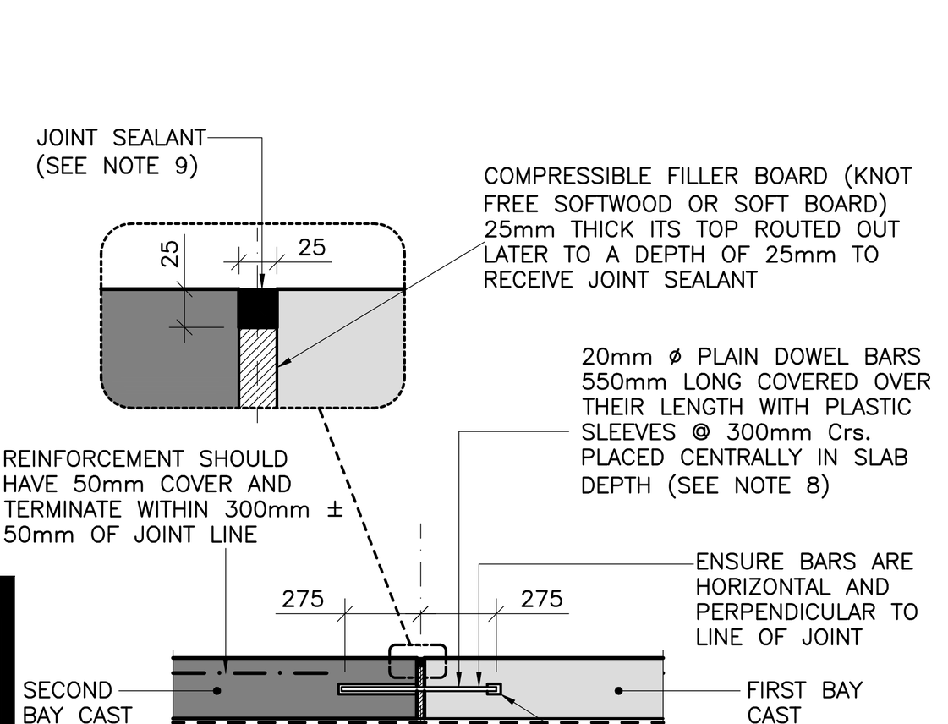
B3 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

LONGITUDINAL JOINT DETAIL



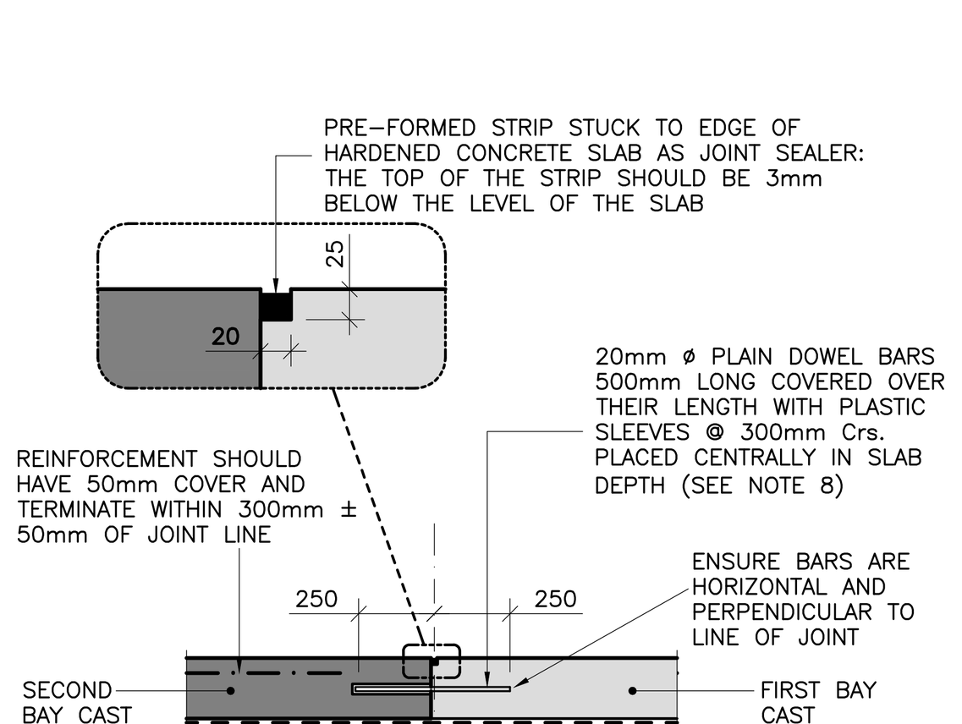
B4 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

TRANSVERSE CONTRACTION JOINT DETAIL



B5 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

TRANSVERSE EXPANSION JOINT DETAIL



B6 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

FORMED CONTRACTION JOINT DETAIL

NOTE: JOINTS IN CONCRETE SLABS

(i) TRANSVERSE CONTRACTION JOINTS (SEE SECT. 'B4') TO BE AT 20m SPACING FOR C385 MESH (SEE NOTE 6 FOR ALTERNATIVES)

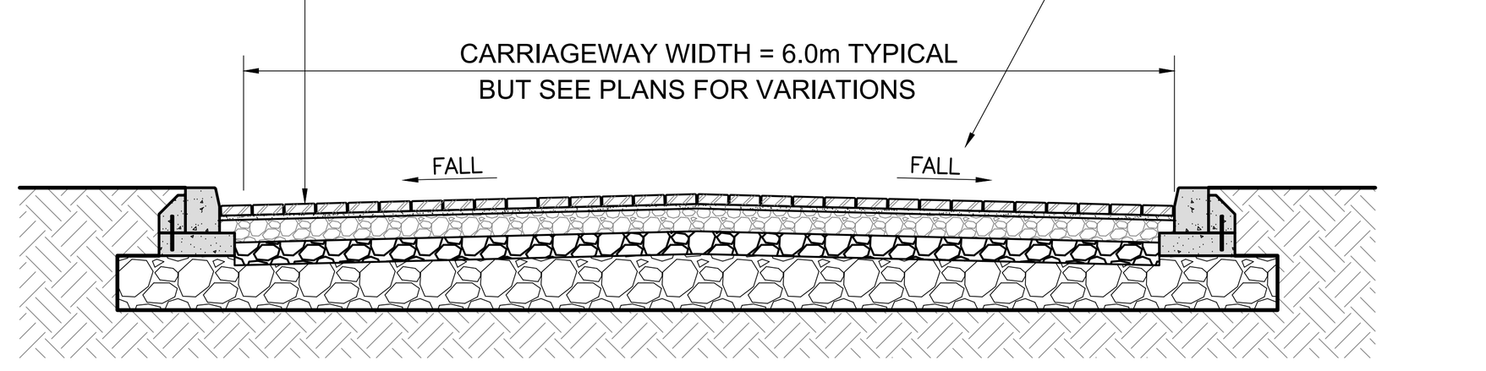
(ii) EXPANSION JOINTS (SEE SECT. 'B5') TO BE AT 60m TO 75m CENTRES WHERE THEY SHOULD REPLACE THE NEAREST CONTRACTION JOINT.

(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 (SEE SECT. 'B6'). IN NO CASE SHOULD A CONSTRUCTION JOINT BE LOCATED CLOSER THAN 2m FROM AN EXISTING JOINT POSITION.

DETAIL 'B' - RIGID ROADWAY / HARDSTANDING

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 BASE (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



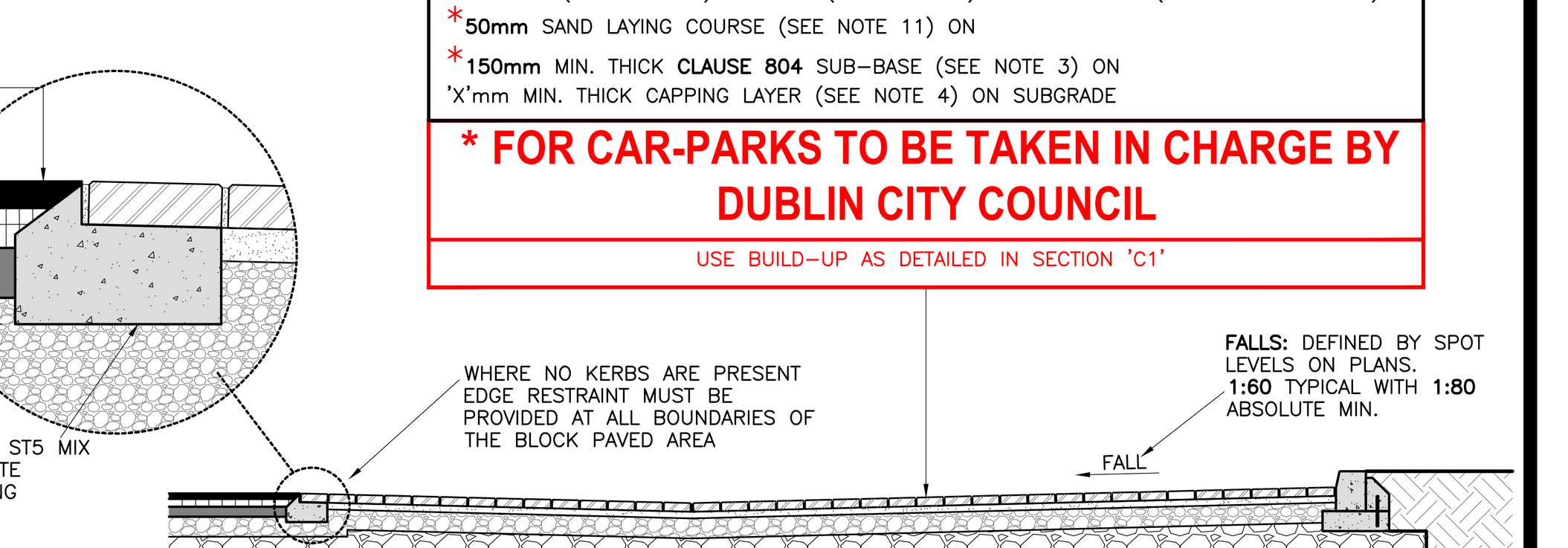
C1 SECTION SCALE:– 1:50 @ A0, 1:100 @ A2

TYPICAL CROSS SECTION THRO' BLOCK PAVING ESTATE ROAD

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

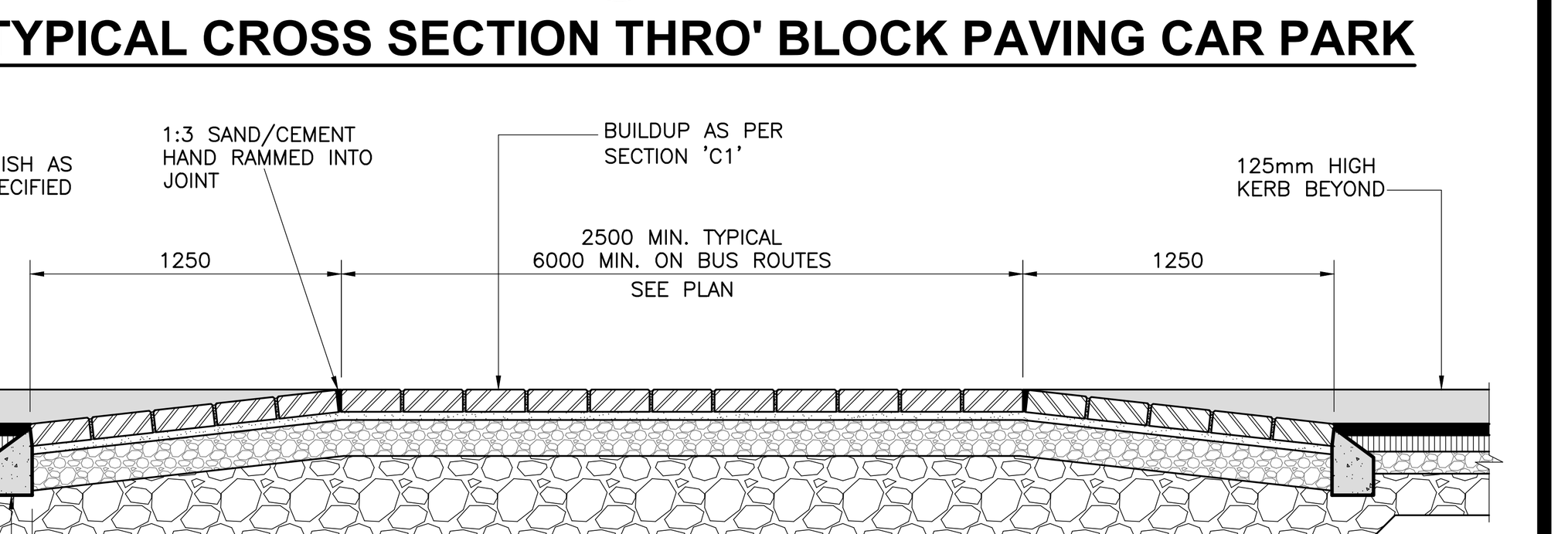
*** FOR CAR-PARKS TO BE TAKEN IN CHARGE BY DUBLIN CITY COUNCIL**

USE BUILD-UP AS DETAILED IN SECTION 'C1'



C2 SECTION SCALE:– 1:50 @ A0, 1:100 @ A2

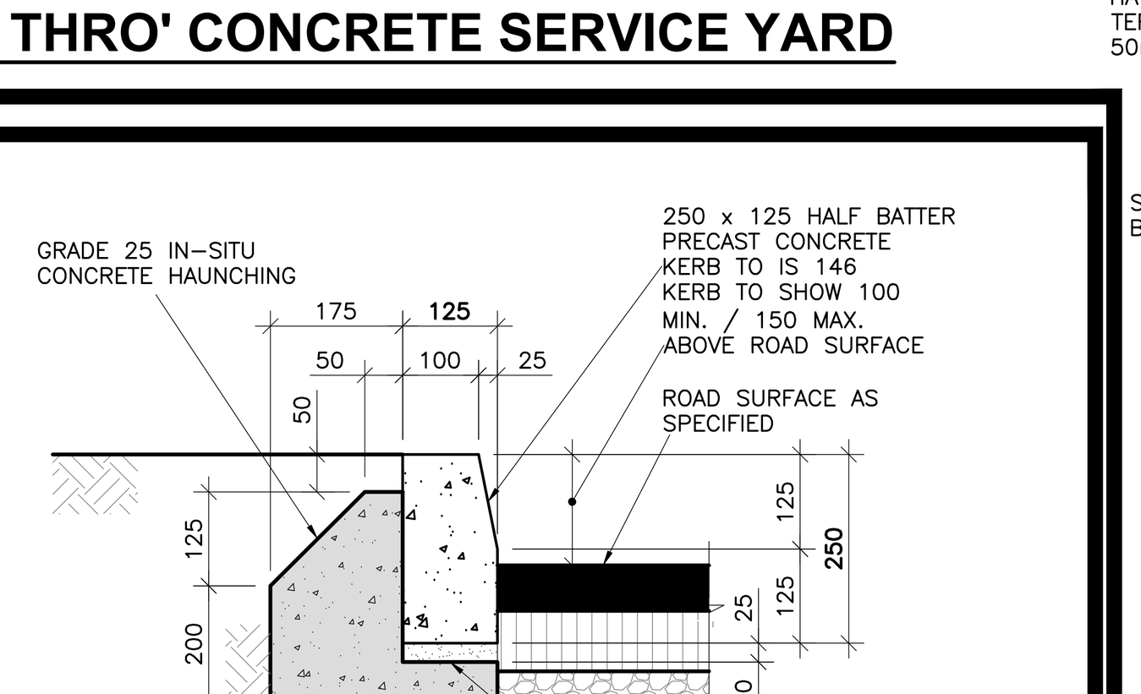
TYPICAL CROSS SECTION THRO' BLOCK PAVING CAR PARK



C3 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

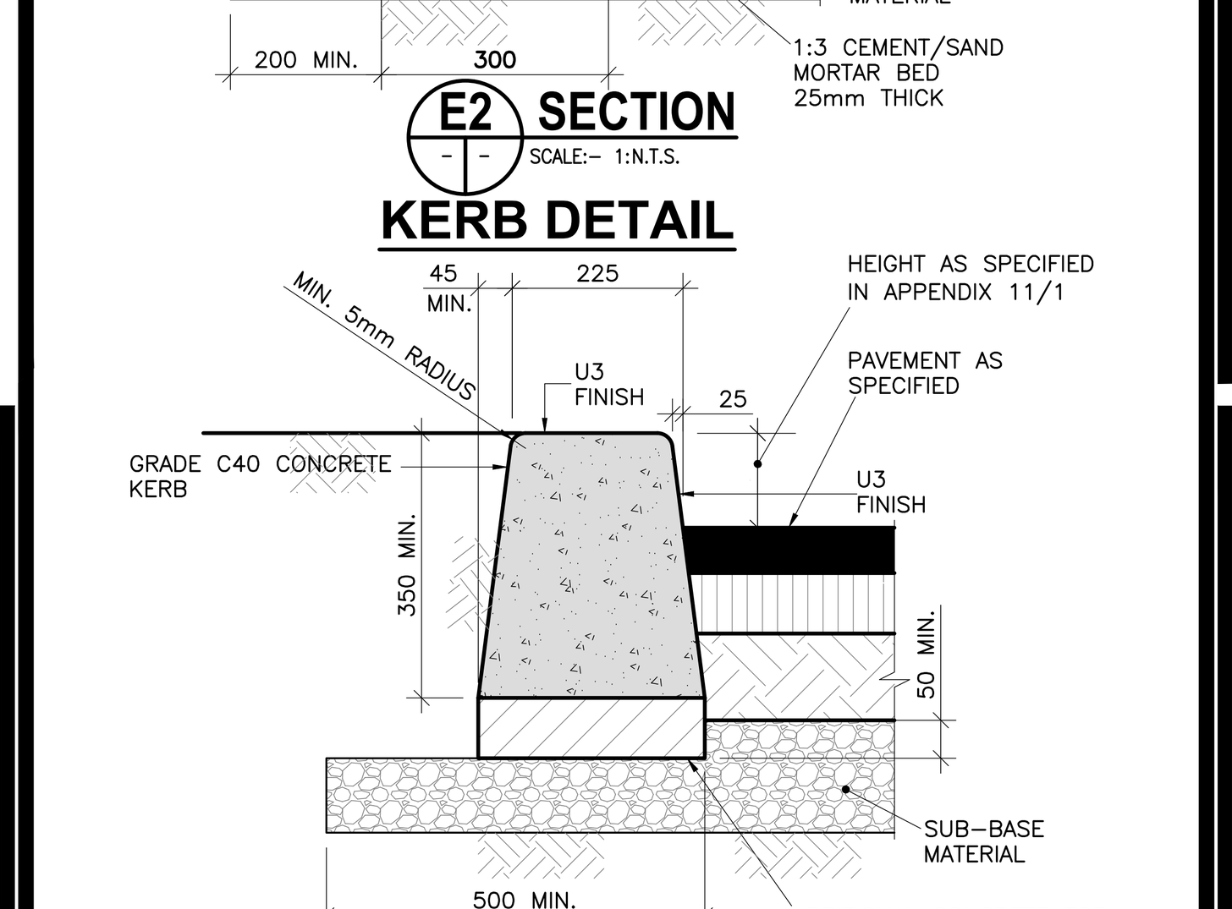
TYPICAL SECTION THRO' SPEED RAMP

DETAIL 'C' BLOCK PAVIOUR ROADWAY / HARDSTANDING



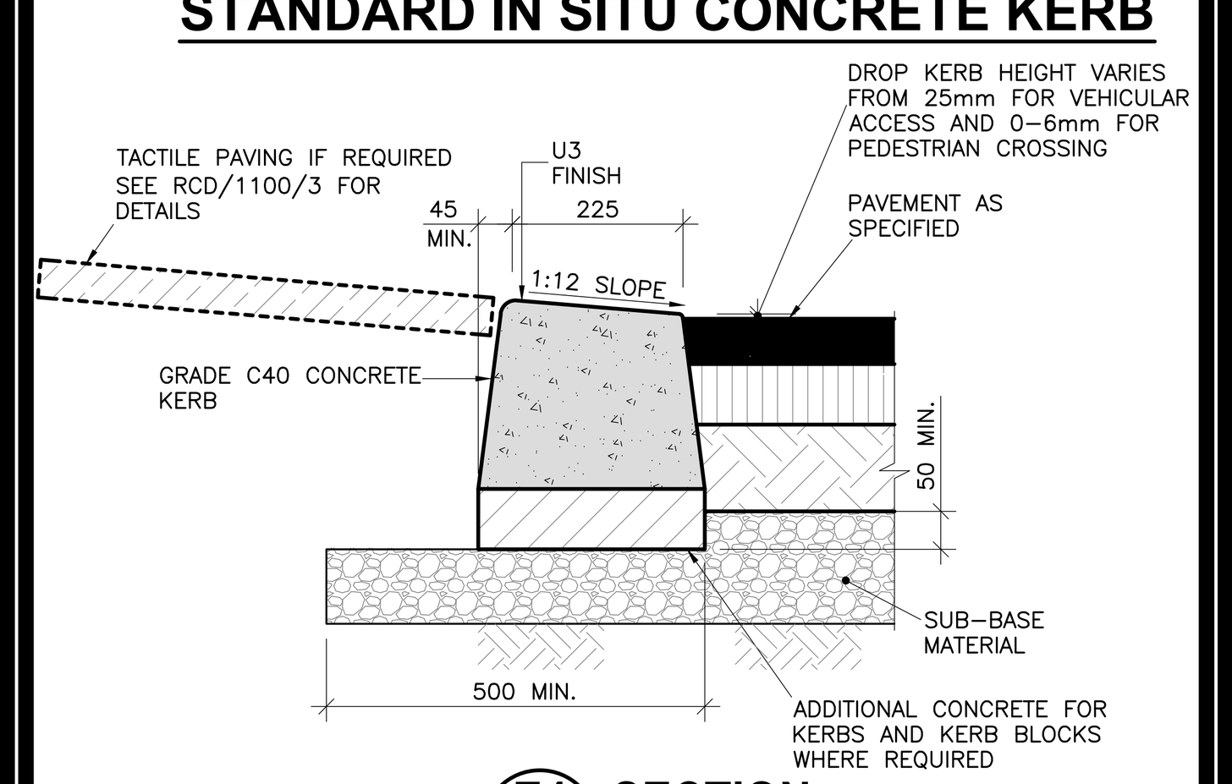
E2 SECTION SCALE:– 1:N.T.S.

KERB DETAIL



E3 SECTION SCALE:– 1:N.T.S.

STANDARD IN SITU CONCRETE KERB



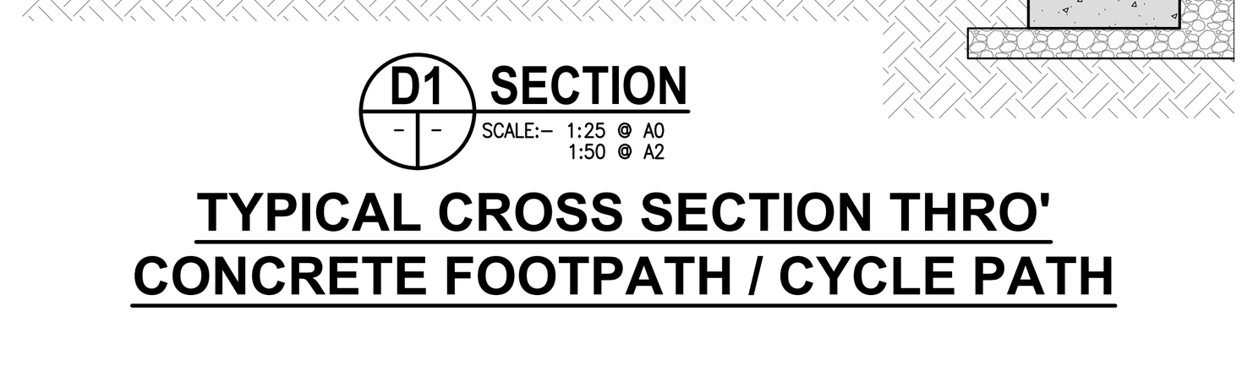
E4 SECTION SCALE:– 1:N.T.S.

IN SITU CONCRETE DROP KERB

DETAIL 'E' - KERB DETAILS

***100mm** THICK IN-SITU CONCRETE FOOTPATH (SEE NOTE 5) ON
POLYTHENE SHEETING SEPERATING MEMBRANE **125 MICRONS** THICK (300 LAPS) ON
100mm SUB-BASE (SEE NOTE 3)

PROVIDE TRANSVERSE CONTRACTION JOINTS IN FOOTPATH @ 3m Crs. USING A DOUBLE LAYER OF ROOFING FELT TO IS EN 13707 FOR THE FULL DEPTH OF THE JOINT.
*AT VECHULAR CROSSINGS INCREASE DEPTH OF CONCRETE TO **200mm**

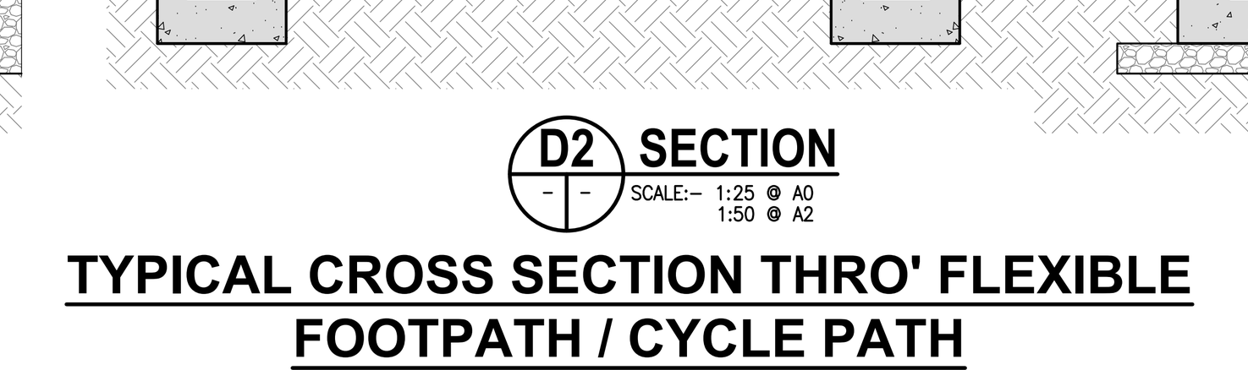


D1 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

TYPICAL CROSS SECTION THRO' CONCRETE FOOTPATH / CYCLE PATH

40mm MIN THICK OF 'AC 10 close surf 70/100 des' SURFACE COURSE TO IS EN 13108 AND NSAI's S28 ON
***40mm** MIN THICK OF 'AC 14 dense bin 70/100 des' BINDER COURSE TO IS EN 13108 AND NSAI's S28
ON
100mm SUB-BASE (SEE NOTE 3)

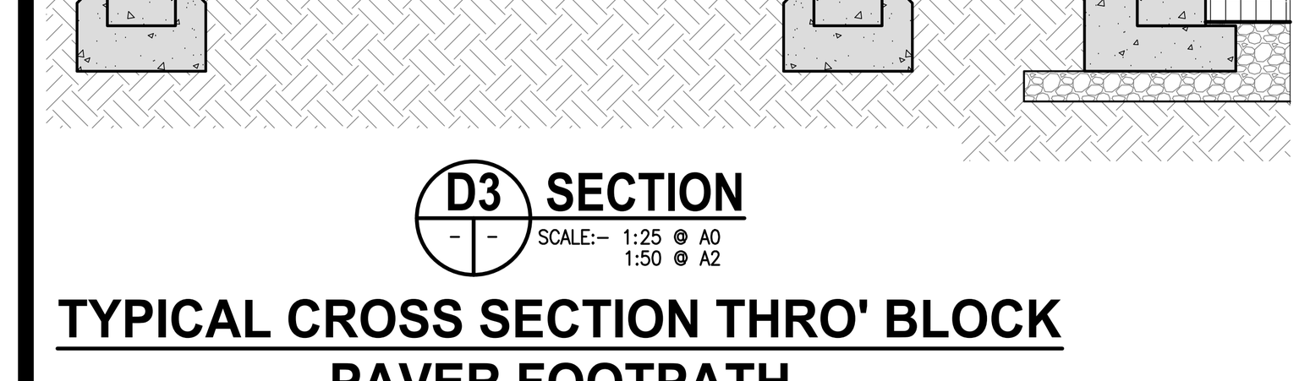
*AT VEHICULAR CROSSINGS INCREASE DEPTH OF BINDER COURSE TO 60mm



D2 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

TYPICAL CROSS SECTION THRO' FLEXIBLE FOOTPATH / CYCLE PATH

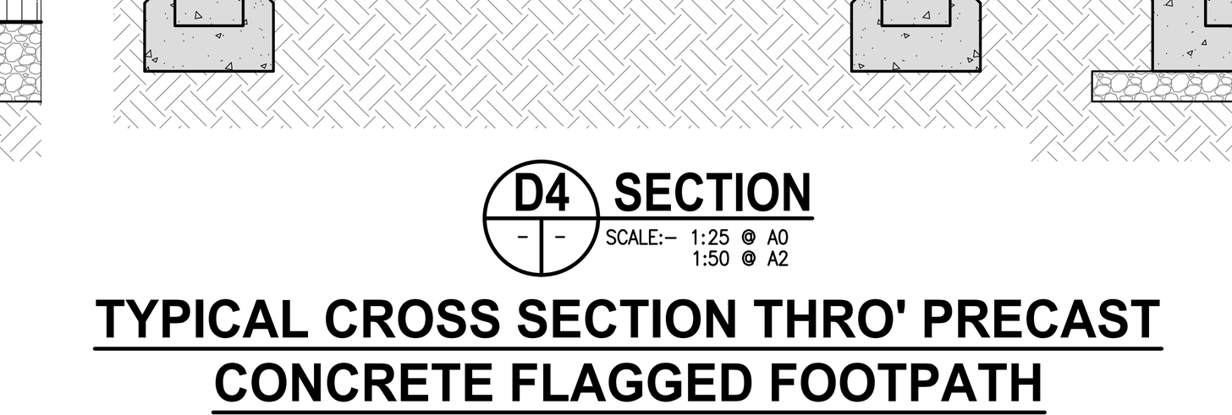
*CONCRETE (60mm THICK) OR CLAY (50mm THICK) BLOCK PAVERS (SEE NOTE 10 & 12) ON
50mm SAND LAYING COURSE (SEE NOTE 11) ON
100mm SUB-BASE (SEE NOTE 4)
*AT VEHICULAR CROSSINGS PROVIDE **80mm** THICK CONCRETE PAVERS OR 65mm THICK CLAY PAVERS ON
30mm SAND LAYING COURSE ON
150mm LEAN MIX CONCRETE ROADBASE (SEE NOTE 1)



D3 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

TYPICAL CROSS SECTION THRO' BLOCK PAVER FOOTPATH

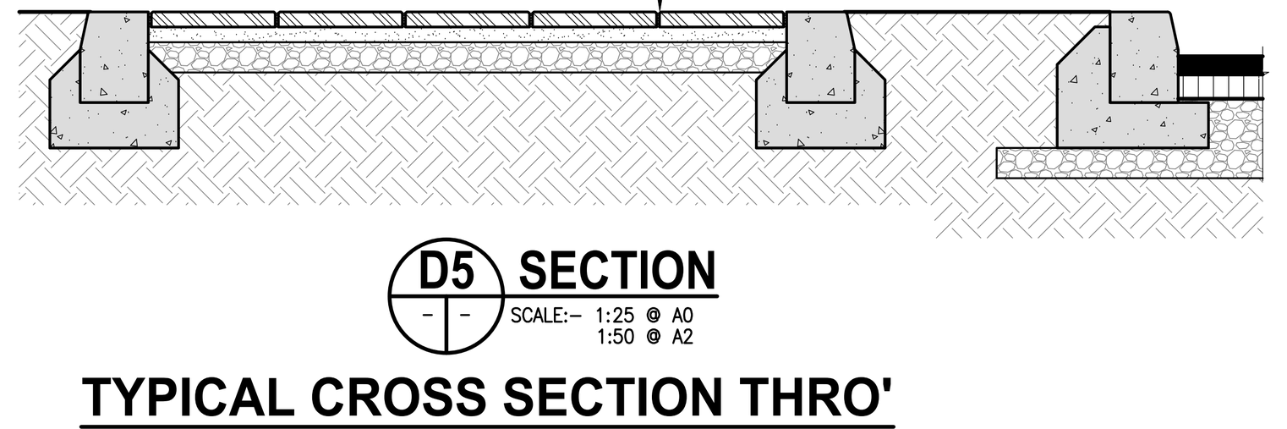
***63mm** THICK CONCRETE FLAGS TO IS EN 1340 ON
25mm 1:3 CEMENT/SAND MORTAR LAYING COURSE ON
100mm SUB-BASE (SEE NOTE 4)
NOMINAL WIDTH 3mm JOINTS GROUTED WITH 1:3 CEMENT/SAND MORTAR AND POINTED
*AT VEHICULAR CROSSINGS PROVIDE **80mm** THICK CONCTRETE BLOCK PAVERS ON
30mm SAND LAYING COURSE ON
150mm LEAN MIX CONCRETE ROADBASE (SEE NOTE 1)



D4 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

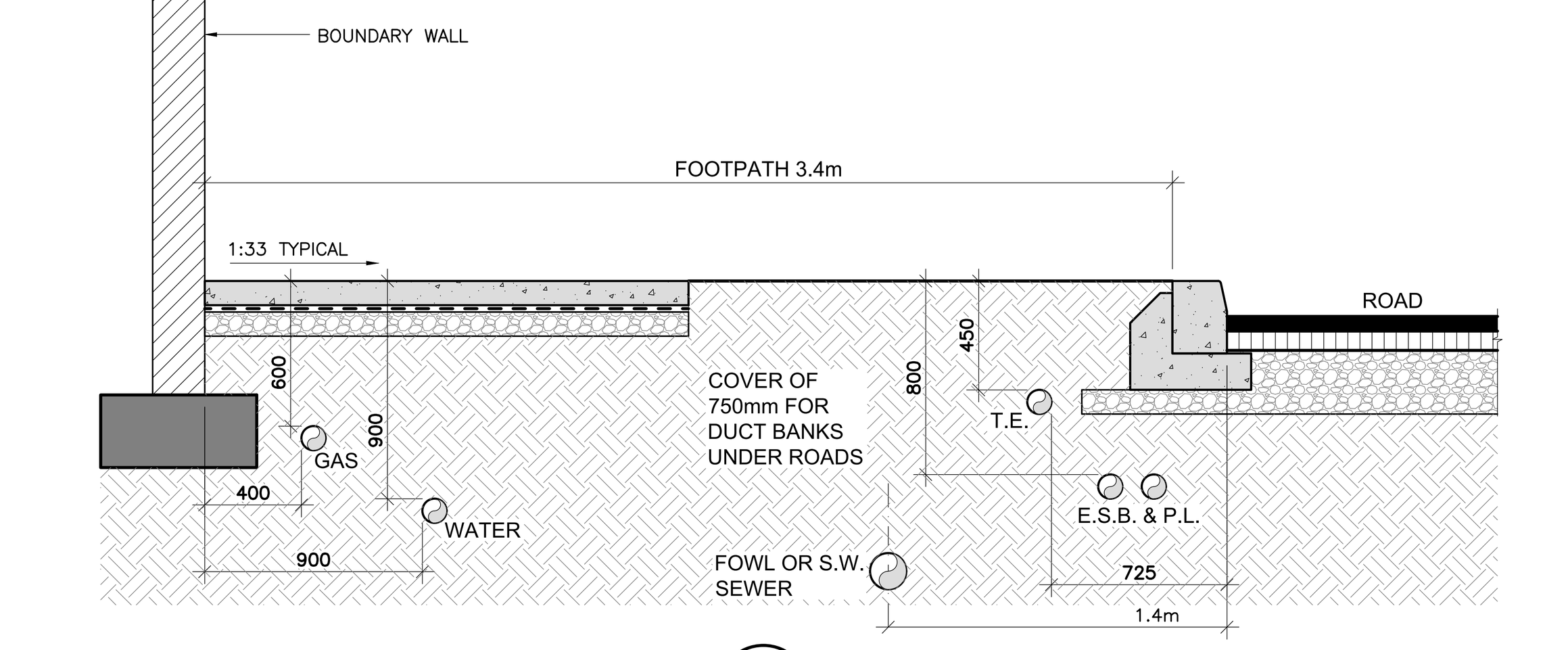
TYPICAL CROSS SECTION THRO' PRECAST CONCRETE FLAGGED FOOTPATH

63mm THICK GRANITE FLAGS TO IS EN 1341 ON
25mm 1:3 CEMENT/SAND MORTAR LAYING COURSE ON
***100mm** SUB-BASE (SEE NOTE 4)
NOMINAL WIDTH 5/10mm JOINTS GROUTED WITH 1:3 CEMENT/SAND MORTAR AND POINTED
*AT VEHICULAR CROSSINGS PROVIDE **150mm** LEAN MIX CONCRETE ROAD BASE (SEE NOTE 1) ON
100mm SUB-BASE (SEE NOTE 4)



D5 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

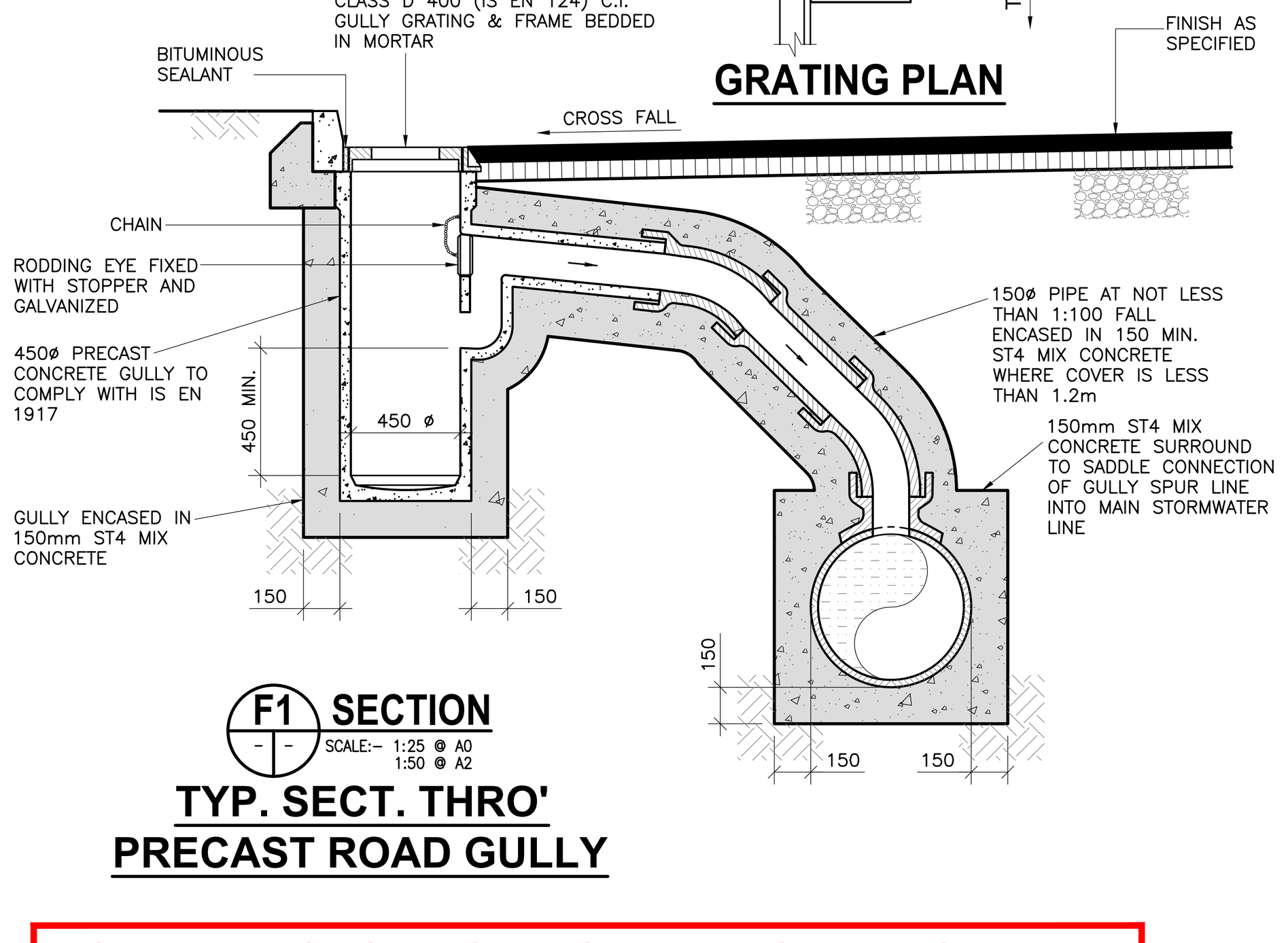
TYPICAL CROSS SECTION THRO' GRANITE FLAGGED FOOTPATH



D6 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

TYPICAL SERVICES LAYOUT IN FOOTPATHS

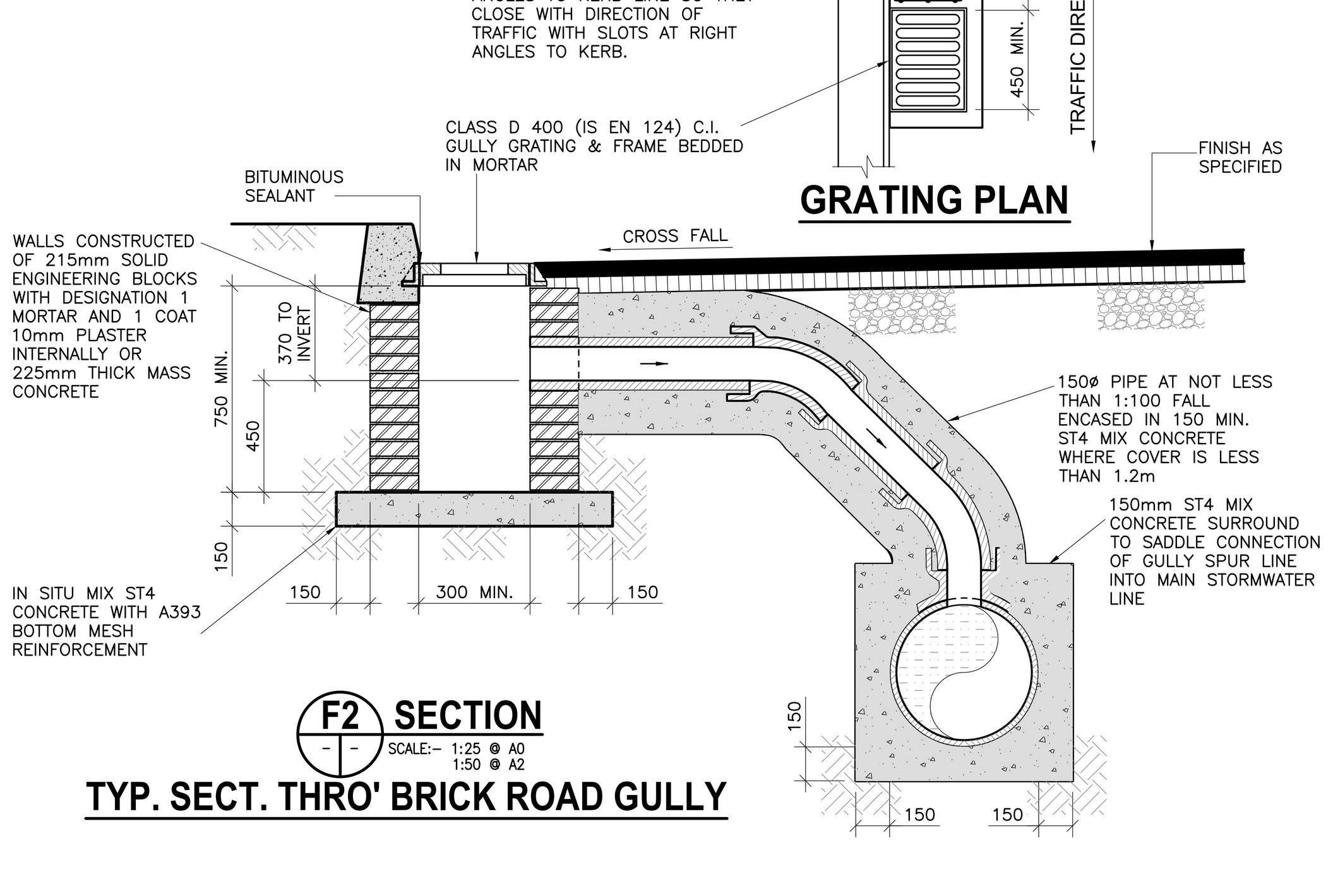
DETAIL 'D' FOOTPATH DETAILS



F1 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

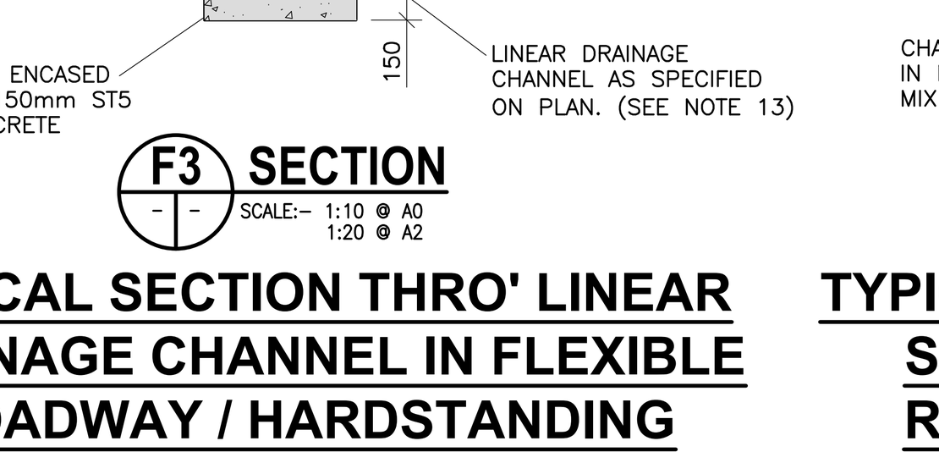
TYP. SECT. THRO' PRECAST ROAD GULLY

NOTE: PRECAST ROAD GULLY NOT ALLOWED IN DUBLIN CITY COUNCIL AREAS



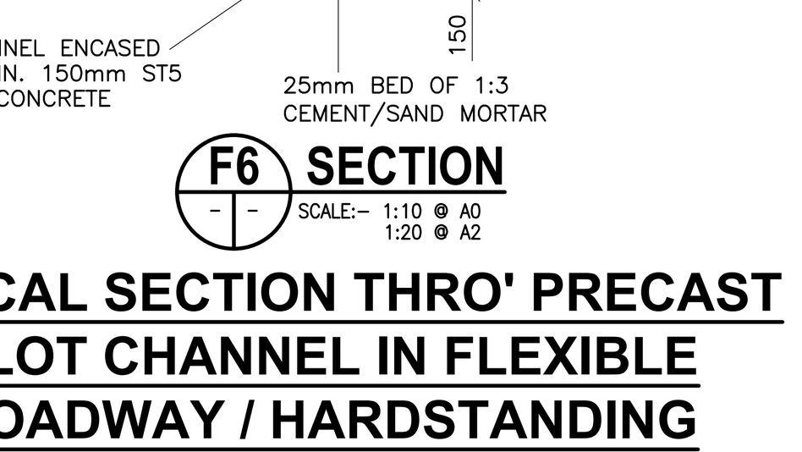
F2 SECTION SCALE:– 1:25 @ A0, 1:50 @ A2

TYP. SECT. THRO' BRICK ROAD GULLY



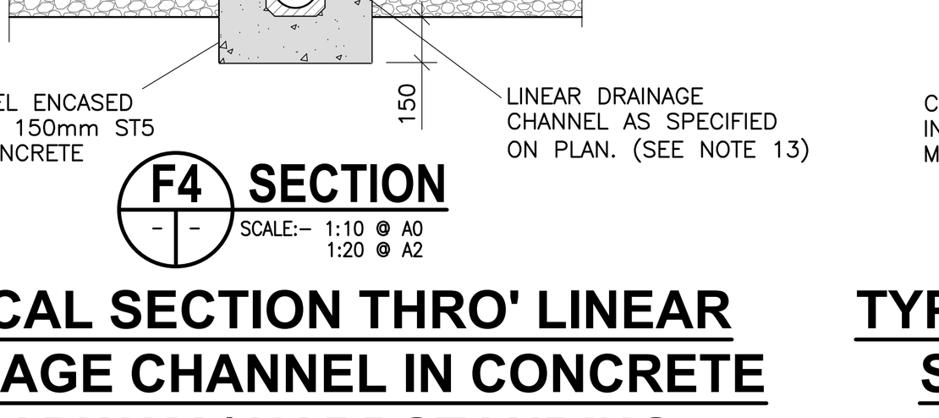
F3 SECTION SCALE:– 1:10 @ A0, 1:20 @ A2

TYPICAL SECTION THRO' LINEAR DRAINAGE CHANNEL IN FLEXIBLE ROADWAY / HARDSTANDING



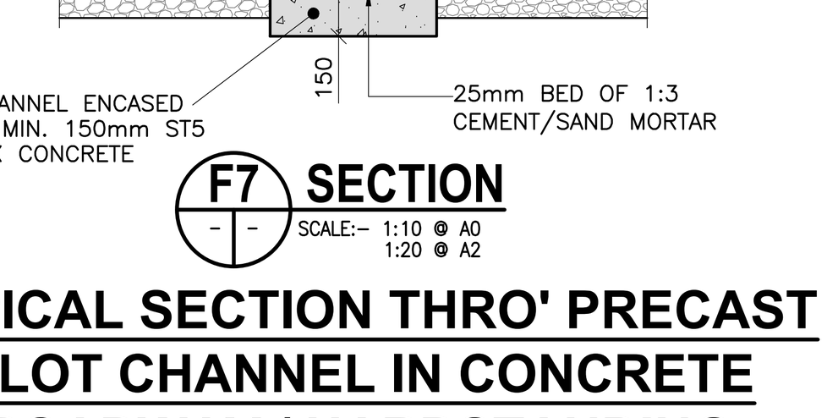
F6 SECTION SCALE:– 1:10 @ A0, 1:20 @ A2

TYPICAL SECTION THRO' PRECAST SLOT CHANNEL IN FLEXIBLE ROADWAY / HARDSTANDING



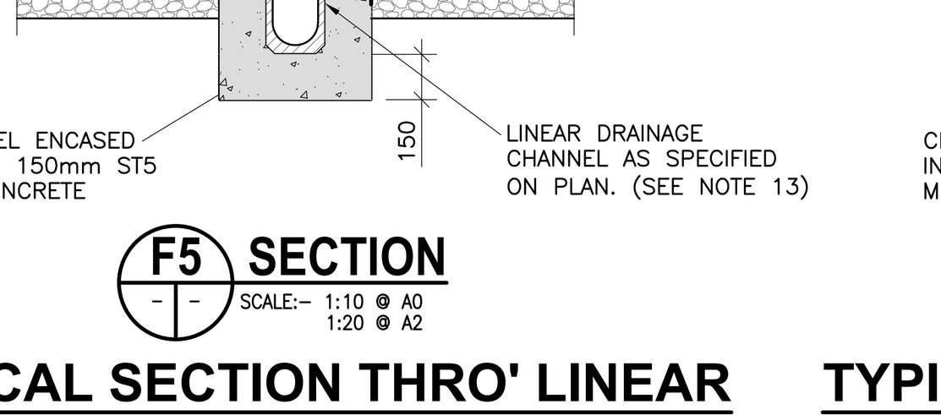
F4 SECTION SCALE:– 1:10 @ A0, 1:20 @ A2

TYPICAL SECTION THRO' LINEAR DRAINAGE CHANNEL IN CONCRETE ROADWAY / HARDSTANDING



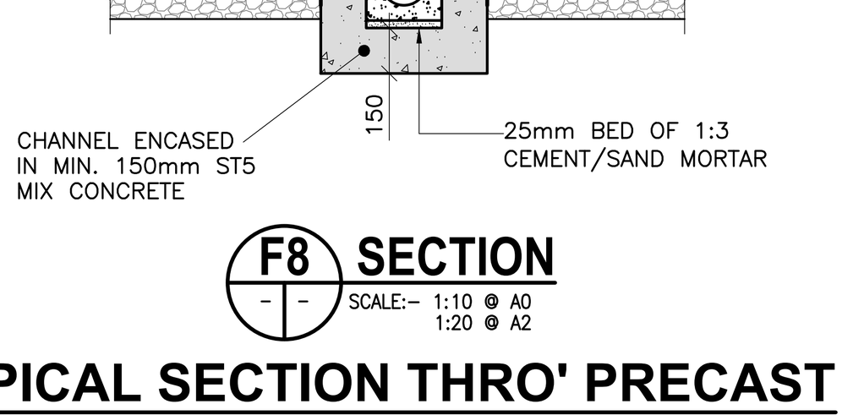
F7 SECTION SCALE:– 1:10 @ A0, 1:20 @ A2

TYPICAL SECTION THRO' PRECAST SLOT CHANNEL IN CONCRETE ROADWAY / HARDSTANDING



F5 SECTION SCALE:– 1:10 @ A0, 1:20 @ A2

TYPICAL SECTION THRO' LINEAR DRAINAGE CHANNEL IN BLOCK PAVER ROADWAY / HARDSTANDING



F8 SECTION SCALE:– 1:10 @ A0, 1:20 @ A2

TYPICAL SECTION THRO' PRECAST SLOT CHANNEL IN BLOCK PAVER ROADWAY / HARDSTANDING

DETAIL 'F' - ROADWAY / HARDSTANDING DRAINAGE DETAILS

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEERS & ARCHITECT'S 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.

NOTES

1. **ALTERNATIVE BASE COURSE MATERIAL:**

   AS AN ALTERNATIVE TO ASPHALTIC CONCRETE BASE COURSE THE CONTRACTOR CAN USE AN STANDARD CONCRETE MIX 'ST2' 'LEAN MIX' BASE COURSE 150mm THICK. STANDARD CONCRETE MIX 'ST2' SHALL CONFORM TO IS 206-1, BS 8500-1, BS 8500-2 & IS EN 13877-1. CURING OF LEAN-MIX ROAD BASE SHALL BE BY BUTUMINOUS SPRAYING TO CLAUSE 920 NRA SPECIFICATION FOR ROAD WORKS.

2. **USE OF BASE COURSE FOR CONSTRUCTION TRAFFIC:**

   THE BASE COURSE MAY BE USED FOR CONSTRUCTION TRAFFIC PROVIDED IT IS INCREASED IN THICKNESS BY 50mm AND SURFACE DRESSED. SURFACE DRESSING SHOULD BE CARRIED OUT IN ACCORDANCE WITH CLAUSE 919 AND 922 OF THE NRA SPECIFICATION FOR ROADWORKS. THE BINDER SHOULD BE CUTBACK BITUMEN OR CATIONIC BITUMEN EMULSION, COMPLYING WITH THE SPECIFICATION. OTHER BINDERS MAY BE USED, SUBJECT TO APPROVAL.

   CUTBACK BITUMEN SHOULD BE OF THE APPROPRIATE GRADE SPECIFIED. CATIONIC BITUMEN EMULSION SHOULD HAVE A NOMINAL BITUMEN CONTENT OF 70%. THE BINDER SHOULD BE SPREAD AT THE APPROPRIATE RATE SPECIFIED. CHIPPINGS SHOULD BE OF A SINGLE SIZE (AS APPROVED BY THE LOCAL AUTHORITY), CUBICAL IN SHAPE AND SHOULD COMPLY WITH THE REQUIREMENTS OF TABLE 2.4 OF CLAUSE 919 OF THE NRA SPECIFICATION FOR ROAD WORKS.

3. **DEPTH OF SUB-BASE & CAPPING LAYER:**

   THE DEPTH OF THE SUB-BASE AND CAPPING LAYERS WILL VARY WITH THE SUBGRADE STRENGTH, AS INDICATED BY THE CBR TEST RESULTS.

   THE THICKNESS OF THE SUB-BASE LAYER SHOULD BE 150mm FOR ALL FORMS OF ROADWAY CONSTRUCTION.

   THE THICKNESS OF THE CAPPING LAYER WILL VARY WITH THE CBR VALUE, AS INDICATED IN TABLE 3.1 BELOW. IF THE CBR VALUE OF THE SUBGRADE EXCEEDS 15%, NO CAPPING LAYER IS REQUIRED. SEE FIGURE 4.1 IN PART 2A, HD25-26 OF NRA DESIGN MANUAL FOR ROADS AND BRIDGES.

TABLE 3.1 CAPPING LAYER – MINIMUM CONSTRUCTION THICKNESS

LOWEST SUBGRADE CBR (%)	MINIMUM CAPPING LAYER THICKNESS (mm)
* LESS THAN 2	(SEE FOOTNOTE)
2–>5	450–>250
5–>15	250–>150
MORE THAN 15	NO CAPPING LAYER REQUIRED

* FOR SUBGRADES WITH A CBR OF LESS THAN 2%, A GEOTEXTILE SEPARATOR (e.g. TERRAM 1000) SHOULD BE USED AND SPECIALIST ADVICE SOUGHT REGARDING MINIMUM THICKNESS.

IF THE CONTRACTOR PROPOSES TO USE THE SUB-BASE FOR CONSTRUCTION TRAFFIC HE SHOULD SEEK APPROVAL FROM THE ENGINEER TO DO SO. SUCH APPROVAL WILL ONLY NORMALLY BE GIVEN ON CONDITION THAT THE SUB-BASE THICKNESS IS INCREASED. TYPICALLY FOR CBR VALUES ≤ 4% THE SUB-BASE THICKNESS WILL HAVE TO BE INCREASED BY 150mm. FOR CBR VALUES > 4% AN INCREASE OF 80mm WILL BE SUFFICIENT.

SUBGRADE STRENGTH SHOULD BE ESTABLISHED BY MEANS OF THE CALIFORNIA BEARING RATIO (CBR) TEST, IN ACCORDANCE WITH BS 1377-4:1990. SAMPLES SHOULD BE TAKEN AT THE RATE OF ONE PER 100m OF ROAD AND WHERE SIGNIFICANT VARIATIONS IN SOIL TYPE ARE ANTICIPATED. EXTRA SAMPLES MAY BE REQUIRED BY THE LOCAL AUTHORITY WHERE THE DIFFERENCE IN STRENGTH BETWEEN TWO ADJACENT SAMPLES INDICATES A SIGNIFICANT VARIATION IN SOIL TYPE. IN PREPARING THE TEST SPECIMEN, THE METHOD OF COMPACTION SHOULD BE THE STATIC COMPACTION METHOD 2, AS SPECIFIED IN PARAGRAPH 7.2.3.3 OF BS 1377-4:1990.

4. **MATERIAL SPECIFICATION FOR SUB-BASE AND CAPPING LAYER:**

   (a) SUB-BASE

   SUB-BASE MATERIAL SHOULD COMPRISE TYPE B GRANULAR MATERIAL, IN ACCORDANCE WITH CLAUSE 804 OF THE SPECIFICATIONS FOR ROADWORKS. THE MATERIAL SHOULD LIE WITHIN THE GRADING LIMITS SET OUT IN TABLE 4.1 BELOW.

TABLE 4.1 SUB-BASE MATERIAL – PERCENTAGE BY MASS PASSING

ISO SIEVE SIZE (mm)	OVERALL GRADING RANGE	SUPP. DECLARED VALUE GRADING RANGE	TOLERANCE
63	100	NR	NR
31.5	80–99	NR	NR
16	55–85	63–77	+/-8
8	35–65	43–57	+/-8
4	22–50	30–42	+/-8
2	15–40	22–33	+/-7
1	10–35	15–30	+/-5
0.5	0–20	5–15	+/-5
0.063	0–7	NR	NR

PARTICLE SIZE DISTRIBUTION SHOULD BE DETERMINED BY THE WASHING AND SIEVING METHOD OF IS EN 933-1. ALL MATERIAL USED SHOULD BE FROST RESISTANT.

MATERIAL PASSING THE 0,425mm SIEVE, WHEN TESTED IN ACCORDANCE WITH BS 1377-2, SHOULD BE NON-PLASTIC.

THE MATERIAL SHOULD HAVE A TEN PERCENT FINES VALUE OF 100kN, OR MORE, WHEN TESTED IN ACCORDANCE WITH IS EN 933-1.

THE SUB-BASE SHOULD BE LAID AND COMPACTED TO THE REQUIREMENTS OF CLAUSE 802 OF THE NRA SPECIFICATION FOR ROADWORKS, WITHOUT DRYING OUT, OR SEGREGATION.

(b) CAPPING LAYER

THE CAPPING LAYER SHALL BE CONSTRUCTED WITH CLASS 6F1 OR 6F2 MATERIAL AS PER SERIES 600 OF THE NRA SPECIFICATION FOR ROAD WORKS AND COMPRISING OF EITHER CRUSHED ROCK, NATURAL GRAVEL, CRUSHED GRAVEL OR CRUSHED CONCRETE. THE MATERIAL SHOULD HAVE A MAXIMUM SIZE OF 100mm AND THE MAXIMUM ALLOWABLE PASSING THE 63 MICRON SHOULD BE 10%. THE MATERIAL SHOULD BE WELL GRADED THROUGHOUT ALL SIZES.

SELECTED DEMOLITION MATERIALS WHICH MEET THE ABOVE REQUIREMENTS MAY ALSO BE USED, SUBJECT TO APPROVAL.

5. **CONCRETE FOR ROAD PAVEMENTS:**

   PAVING QUALITY CONCRETE SHOULD BE PAV2 MIX (AIR ENTRAINED CONCRETE) MADE FROM NATURAL AGGREGATES, CEMENT, WATER AND AIR ENTRAINING AGENT COMPLYING WITH IS 206-1, BS 8500-1, BS 8500-2, EN 13877-2 AND THE REQUIREMENTS OF SERIES 1000 OF THE NRA SPECIFICATION FOR ROAD WORKS.

TABLE 5.1 CONSTITUENTS FOR PAVING QUALITY CONCRETE

MINIMUM CEMENT CONTENT	340kg/m³
MAXIMUM FREE WATER/CEMENT RATIO	0.45
MAXIMUM AGGREGATE SIZE	20mm
MINIMUM STRENGTH CLASS	C32/40
AIR CONTENT	4.5 %
SLUMP CLASS	S3

6. REINFORCEMENT FOR CONCRETE SLABS SHOULD BE LONG MESH STEEL FABRIC, COMPLYING WITH BS 4483 AND SHOULD BE FREE FROM LOOSE MILL SCALE, RUST, DIRT, OIL, PAINT OR GREASE. THE MINIMUM WEIGHT OF REINFORCEMENT SHOULD BE 2.61kg/m². THE REINFORCEMENT SHOULD HAVE 50mm MINIMUM COVER FROM THE SURFACE AND SHOULD TERMINATE BETWEEN 250 AND 350mm FROM ANY TRANSVERSE JOINT BETWEEN 40 AND 80mm FROM A LONGITUDINAL JOINT. THE REINFORCEMENT SHOULD TERMINATE BETWEEN 100 AND 150mm FROM THE EDGE OF THE SLAB. REINFORCING MATS SHOULD OVERLAP SUCH THAT THE TRANSVERSE WIRE OF ONE MAT WOULD LIE WITHIN THE LAST COMPLETE MESH OF THE PREVIOUS MAT AND THE OVERLAP SHOULD BE AT LEAST 450mm. TRANSVERSE CONTRACTION JOINT SPACING FOR VARIOUS MESH SIZES SHOULD BE AS FOLLOWS:

LONG MESH REINFORCEMENT TO BS 4483	MAXIMUM SPACING (m) OF CONTRACTION JOINTS
C283	15m
C385	20m
C503	25m

7. SAWING OF JOINT GROOVES SHOULD BE UNDERTAKEN AS SOON AS POSSIBLE AFTER THE CONCRETE HAS HARDENED SUFFICIENTLY TO ENABLE A SHARP EDGED GROOVE TO BE PRODUCED, WITHOUT DISRUPTING THE CONCRETE AND BEFORE RANDOM CRACKS DEVELOP IN THE SLAB. THIS WOULD BE WITHIN 6 TO 24 HOURS AFTER THE CONCRETE IS POURED. THE GROOVES SHOULD BE BETWEEN ¼ & ⅓ THE DEPTH OF SLAB AND OF ANY CONVENIENT WIDTH NOT LESS THAN 3mm. THE GROOVE CAN BE WIDENED BY SAWING AT THIS STAGE, OR LATER, TO ACCOMMODATE THE JOINT SEALANT.

   EXPANSION JOINT FILLER SHOULD BE COMPRESSIBLE BOARD 25mm THICK, FOR THE FULL DEPTH OF THE CONCRETE. THE TOP OF THE FILLER BOARD SHOULD BE ROUTED OUT LATER, TO A DEPTH OF 25mm, IN ORDER TO RECEIVE THE JOINT SEALANT.

8. DOWEL BARS AND TIE BARS SHOULD BE B500B STEEL, COMPLYING WITH IS EN 13877-3 AND SHOULD BE FREE FROM OIL, DIRT, LOOSE SCALE AND RUST. DOWEL BARS SHOULD BE STRAIGHT, FREE OF BURRS AND OTHER IRREGULARITIES, WITH THE SLIDING END SAWN. DOWEL BARS SHOULD BE DEBONDED OVER THEIR LENGTH WITH A TOUGH, DURABLE PLASTIC SHEATH OF AVERAGE THICKNESS NOT GREATER THAN 1.25mm. FOR EXPANSION JOINTS, THE EXPANSION SPACE AVAILABLE IN THE WATERPROOF CAP SHOULD BE 10mm GREATER THAN THE THICKNESS OF THE JOINT FILLER BOARD.

9. JOINT GROOVES SHOULD BE SEALED WITH A COLD APPLIED JOINT-SEALING COMPOUND COMPLYING WITH BS 5212 TYPE N. THE FINISHED SURFACE OF THE SEAL SHOULD BE 3mm BELOW THE SURFACE LEVEL OF THE CONCRETE.

NOTES Ctd.

14. GRATED LINEAR DRAINAGE CHANNEL SYSTEMS SHALL BE OF 100mm, 150mm OR 200mm NOMINAL INTERNAL WIDTH, AS SPECIFIED ON THE DRAWINGS, MANUFACTURED FROM HIGH STRENGTH POLYMER CONCRETE WITH CAST-IN GALVANISED STEEL EDGE RAILS. THE CHANNELS SHALL BE INSTALLED WITH MANUFACTURERS DUCTILE IRON OR STAINLESS STEEL GRATING APPROPRIATE TO THE SPECIFIED LOAD CLASS AND LOCKED SECURELY IN PLACE. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
15. SLOTTED LINEAR DRAINAGE CHANNEL SYSTEMS SHALL BE CHOSEN ACCORDING TO THE LOAD CLASS REQUIRED AND MANUFACTURED FROM HIGH STRENGTH POLYMER CONCRETE INCORPORATING A 10mm WIDE CENTRALLY POSITIONED SLOT. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
16. PRECAST KERBS SHALL BE LAID AND LEVELLED IN ACCORDANCE WITH BS 7533: PART 4. A RAISED LIP OF 25mm SHOULD BE USED FOR VEHICULAR ENTRANCES AND 0–6mm FOR PEDESTRIAN CROSSINGS.
17. IN SITU KERBS SHALL COMPLY WITH THE REQUIREMENTS OF BS 5931. KERBS SHALL BE PROTECTED FROM THE EFFECTS OF ADVERSE WEATHER UNTIL CURED. A RAISED LIP OF 25mm SHOULD BE USED FOR VEHICULAR ENTRANCES AND 0–6mm FOR PEDESTRIAN CROSSINGS.

NOTE:
BEFORE PAVERS / PAVEMENT WORKS ARE COMMENCED THE CONTRACTOR IS TO ESTABLISH IF THESE WORKS ARE TO BE TAKEN IN CHARGE BY THE LOCAL AUTHORITY. IF THIS IS THE CASE THE CONTRACTOR IS TO GET APPROVAL FROM THE LOCAL AUTHORITY FOR THE DETAILS SHOWN ON THIS DRAWING AND ESTABLISH INSPECTION AND TESTING REQUIREMENTS BEFORE COMENCING THE WORK

NOTES Ctd.

10. CLAY AND CALCIUM SILICATE PAVERS SHOULD COMPLY WITH IS EN 1344: TYPE PB WITH CHAMFERS. 200 x 100 x 65mm FOR TRAFFICKED AREAS & 50mm THICK FOR PEDESTRIAN AREAS

    CONCRETE BLOCK PAVERS SHOULD COMPLY WITH BS EN 1338: TYPE R. 200 x 100 x 80mm THICK FOR TRAFFICKED AREAS & 60mm THICK FOR PEDESTRIAN AREAS.

    HORIZONTAL INTERLOCK SHOULD BE GIVEN TO THE PAVING EITHER BY THE USE OF SHAPED BLOCKS, OR BY LAYING RECTANGULAR BLOCKS IN HERRINGBONE FASHION. AT THE EDGE OF THE PAVEMENT, RESTRAINT SHOULD BE PROVIDED, TO PREVENT THE PAVERS AND THE LAYING COURSE FROM MIGRATING OUTWARDS AND LOSING INTERLOCK.

    CLAY, CALCIUM SILICATE & CONCRETE BLOCK PAVERS SHOULD BE LAID IN ACCORDANCE WITH BS 7533-3.

11. LAYING COURSE SAND SHALL BE 'Gf85 0/4 (MP)' AS PER IS EN 12620. AS A GUIDE TO MOISTURE CONTENT, AFTER THE MATERIAL IS COMPRESSED THE MATERIAL SHOULD BIND TOGETHER WITHOUT SHOWING FREE MOISTURE ON ITS SURFACE. WHERE LAYING COURSE MATERIAL IS STORED ON SITE IT SHOULD BE COVERED TO REDUCE MOISTURE LOSS DUE TO EVAPORATION, OR SATURATION FROM RAINFALL.

    IF THE LAYING COURSE MATERIAL BECOMES SATURATED AFTER PLACEMENT THEN IT SHOULD BE REMOVED AND REPLACED WITH LAYING COURSE MATERIAL IN A CONDITION SUITABLE FOR THE BLOCK LAYING OPERATION. ALTERNATIVELY THE LAYING COURSE CAN BE LEFT IN PLACE UNTIL IT DRIES SUFFICIENTLY TO ALLOW BLOCK LAYING TO PROCEED.

12. JOINTS BETWEEN PAVERS TO BE LAID TIGHT (2mm to 5mm WIDE) AND FILLED WITH FINE SAND 'Gf85 0/1 (FP)' AS PER IS EN 12620.
13. LINEAR DRAINAGE CHANNEL SYSTEMS SHALL BE FULLY COMPLIANT WITH IS EN 1433:2002 AND CERTIFIED TO THE LOAD CASES SPECIFIED ON THE DRAWINGS AND AS DEFINED IN IS EN 1433:2002.

ISSUE	DATE	DESCRIPTION	DRN / ORIG	P.E. / P.D.
P4	20.05.21	ISSUED FOR SHD APPLICATION	JN / DOR	DOR / SOC
P3	21.06.20	ISSUED FOR PRE-APPLICATION	AT / DOR	SOC / SOC
P2	14.01.20	PRE-PLANNING ISSUE	AT / DOR	SOC / SOC
P1	10.12.19	ISSUED FOR COMMENT	AT / DOR	DOR / SOC

DRAWING STAGE: **PLANNING**

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CLIENT: **GLL PRS HOLDCO LIMITED**

PROJECT TITLE: **DEVELOPMENT AT HOWTH ROAD**

BM PROJECT No.: **19196**

MODEL REFERENCE · MODEL REV. · SUITABILITY

DRAWING TITLE: **STANDARD ROADS DETAILS**

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