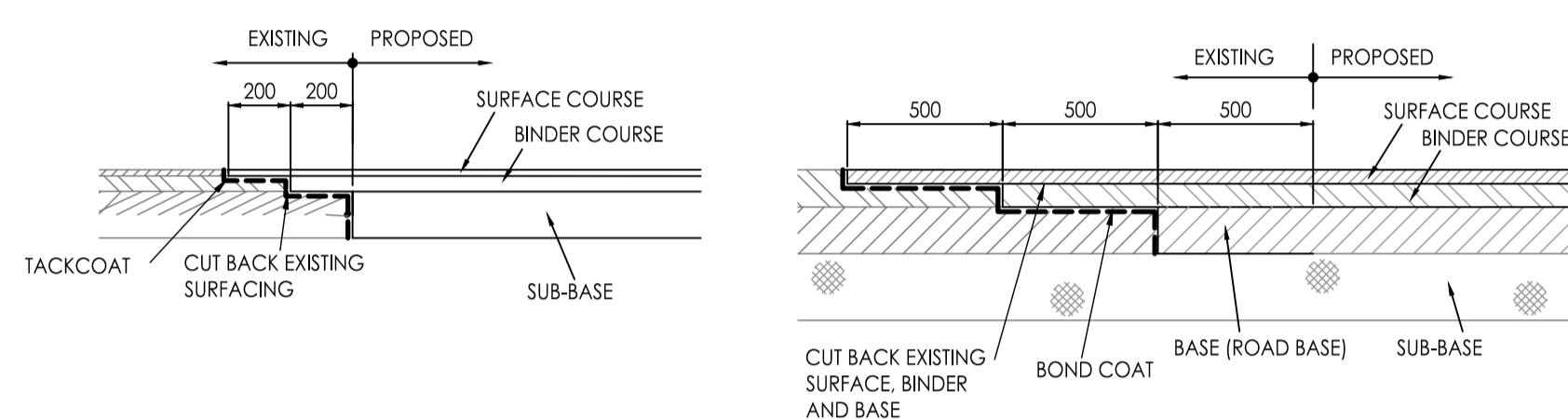
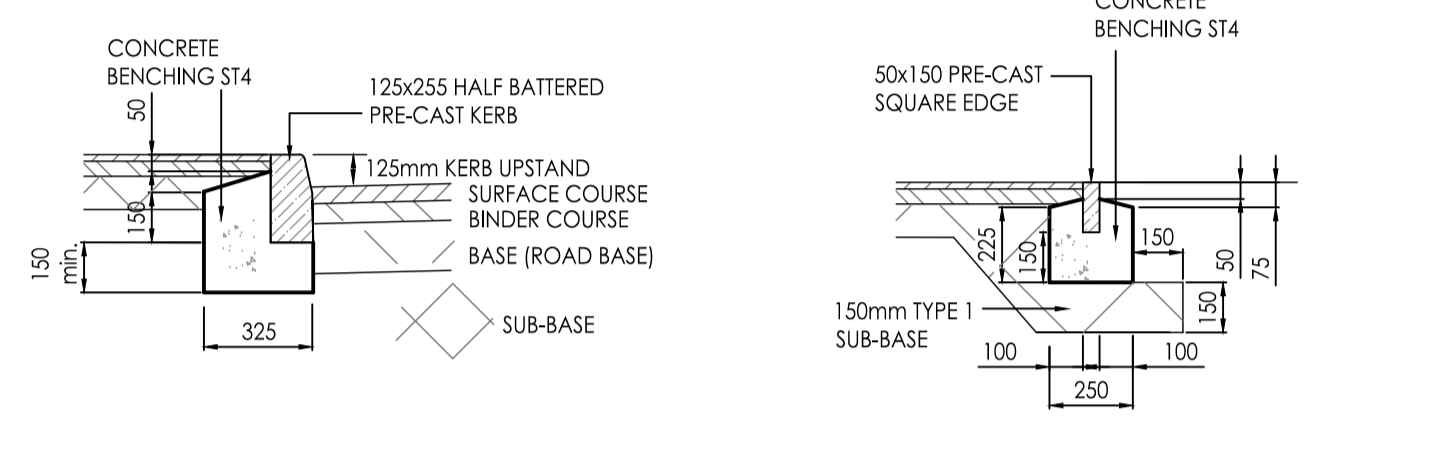


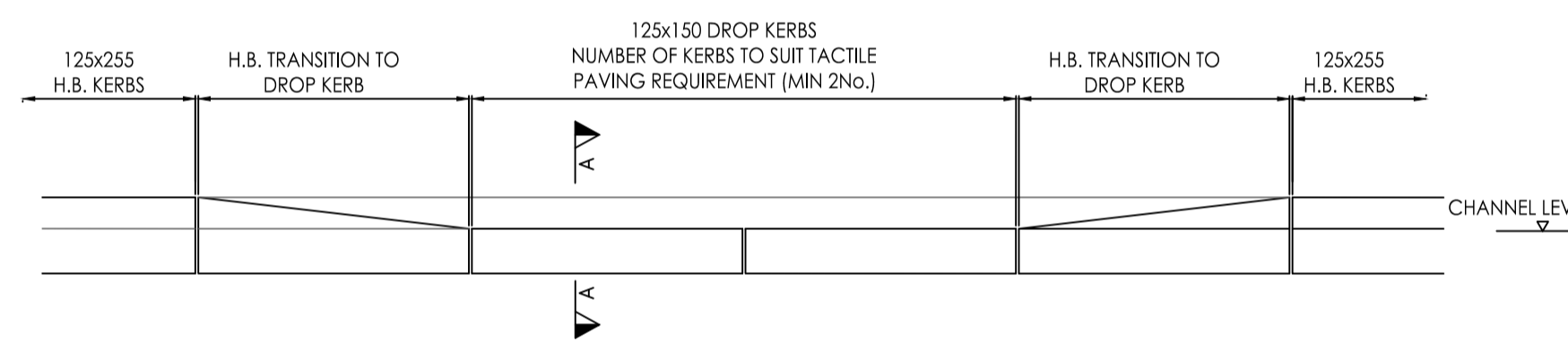
SECTION THRO' ACCESS ROAD CONSTRUCTION



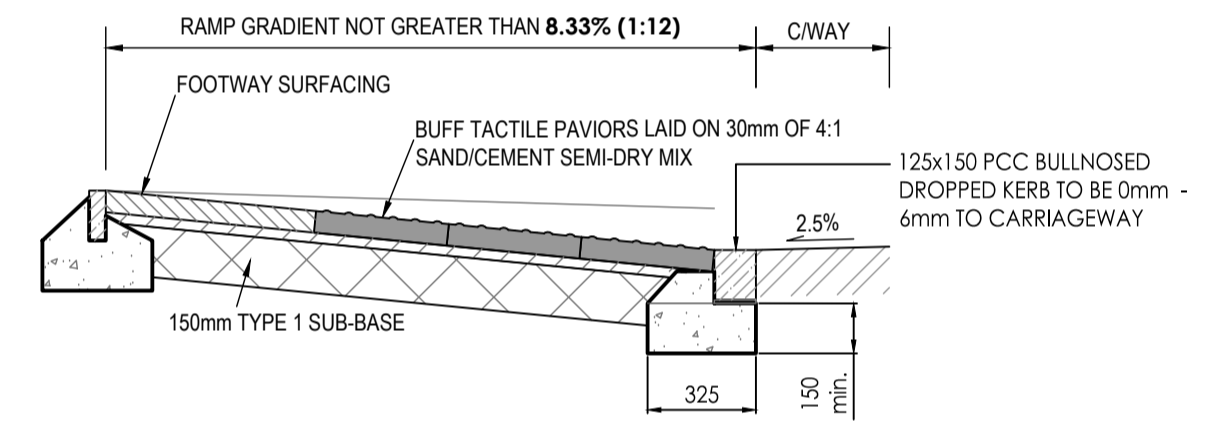
NEW TO EXISTING FOOTWAY DETAIL
NEW TO EXISTING ROAD ABUTMENT DETAIL.



HALF BATTERED KERB DETAIL.
PRE-CAST SQUARE EDGE DETAIL.



ELEVATION ON PEDESTRIAN DROPPED CROSSING



PEDESTRIAN CROSSING SECTION A-A

HIGHWAY CONSTRUCTION SPECIFICATION.

FULL DEPTH CARRIAGEWAY CONSTRUCTION -

- 50mm - SURFACE COURSE
- 14mm HOT ROLLED ASPHALT AND CHIPPINGS TO PSV68
- 70mm - BINDER COURSE
- 0/20mm DBM 125 PEN BINDER COURSE H/STONE TO BS4987-1 CLAUSE 6.5.
- 125mm - BASE COURSE
- 0/32mm DBM 125 PEN BASE L/STONE TO BS 4987-1 CLAUSE 7.9.
- 470mm - SUB-BASE
- TYPE 1 SUB-BASE TO COMPLY WITH SPECIFICATION FOR HIGHWAY WORKS CLAUSE 803, BASED ON A CBR VALUE OF 3% AT SUBGRADE

NOTE:
SUB-BASE AND CAPPING REQUIREMENT TO BE DETERMINED FOLLOWING ON SITE CBR TESTING AND AGREED WITH RWO

FULL DEPTH FOOTWAY CONSTRUCTION

- 25mm - SURFACE COURSE
- 0/6mm DBM 190 PEN SURFACE COURSE L/STONE TO BS4978-1 CLAUSE 7.5.
- 100mm - BINDER COURSE
- 0/20mm DBM 190 PEN BINDER COURSE L/STONE TO BS4987-1 CLAUSE 6.5.
- 150mm - SUB-BASE
- TYPE 1 SUB-BASE TO COMPLY WITH SPECIFICATION FOR HIGHWAY WORKS CLAUSE 803

TACTILE PAVING CONSTRUCTION

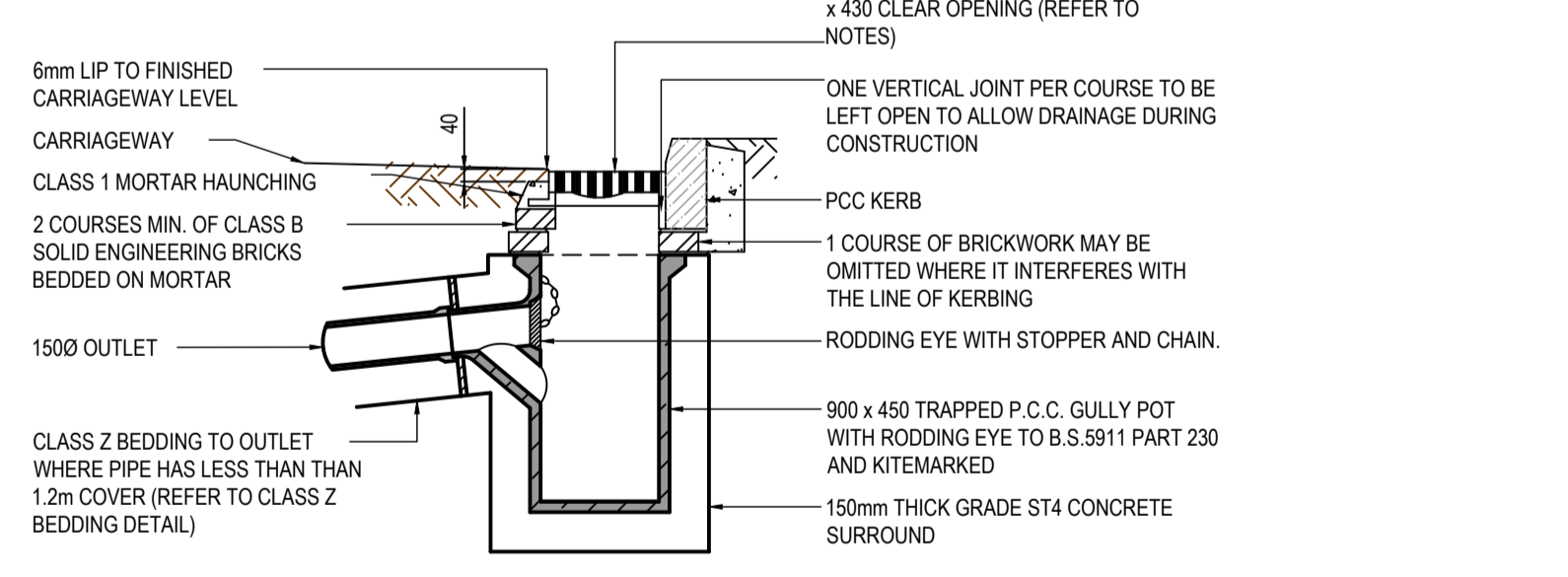
- 70mm - TACTILE FLAG
- 400x400x70mm BUFF COLOURED PRECAST CONCRETE TACTILE PAVING UNITS ON RADIUS CROSSING.
- 30mm - BEDDING SAND / MORTAR OF 4:1 SEMI DRY MIX
- 150mm - SUB BASE
- TYPE 1 STONE TO COMPLY WITH SPECIFICATION FOR HIGHWAY WORKS CLAUSE 803

GRASS SPECIFICATION

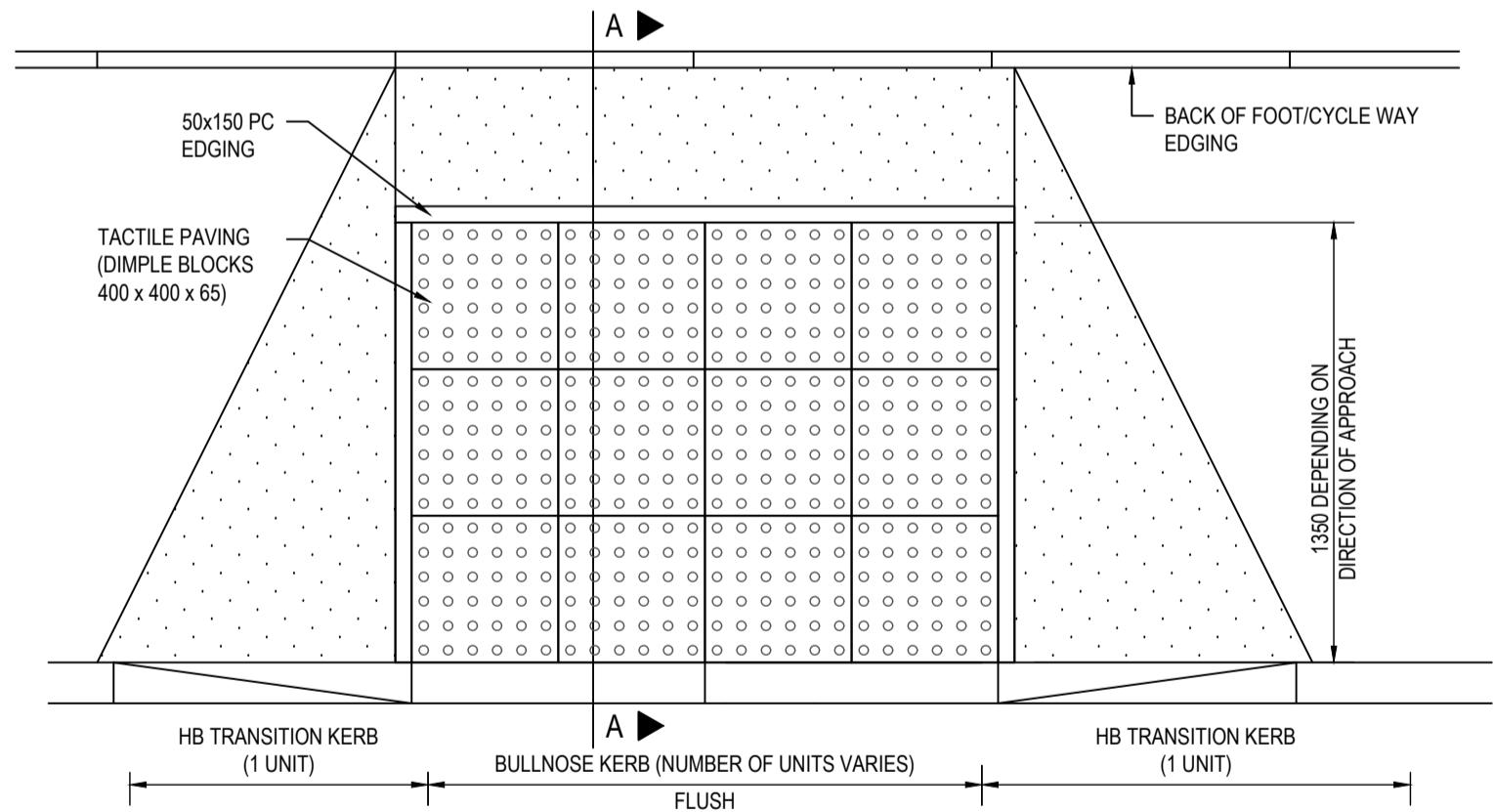
200mm TOPSOIL AND SEED TO BE APPROVED BY BMBC. GRASS SEED (RURAL) LOW MAINTENANCE, A SUITABLE MIX GRASS SEED SPECIES WILL TYPICALLY CONTAIN PERENNIAL RYEGRASS, CREEPING RED FESCUE AND HIGHLAND BROWNTOP BENT AND SPREAD AT 25-35 g/m²

TOPSOIL SHALL COMPLY WITH BS3882. APPROVED TOPSOIL WILL BE GOOD QUALITY MEDIUM LOAM OF GOOD HEART, FREE FROM LARGE STONES (OVER 50mm) AND NOT MORE THAN SLIGHTLY STONY AND SLIGHTLY ACID TO NEUTRAL REACTION (BS CLASSIFICATION)

GULLY GRATES AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124 AND BE OF NON ROCKING DESIGN WITH CAPTIVE HINGE ACCESS AND BE KITE MARKED. LOAD CLASS D400 IN INDUSTRIAL ESTATE ROADS AND AREAS CARRYING REGULAR HEAVY TRAFFIC. IN ALL ROAD LOCATIONS, THE GRATE SHALL BE HINGED ON THE SIDE OF THE TRAFFIC DIRECTION (LEFT HAND OPENING).



TYPICAL ROAD GULLY DETAIL



TACTILE PAVING FOOTWAY SURFACES AT PEDESTRIAN CROSSINGS

GENERAL SAFETY NOTES:

1. WHERE THE BASE (ROAD BASE) HAS BEEN USED AS A TEMPORARY RUNNING SURFACE DURING THE CONTRACT IT SHALL BE THOROUGHLY CLEANED AND POWER WASHED AS NECESSARY. AFTER DRYING AND IMMEDIATELY BEFORE THE BINDER COURSE IS LAID A TACK COAT OF BITUMEN EMULSION CLASS A140 OR K140 TO BS44 SHALL BE APPLIED AT A RATE OF 0.15-0.16 LITRES/SQ METER.
2. ALL RADIUS KERBS WITH A RADIUS OF 12m OR LESS SHALL BE FORMED WITH PROPRIETARY RADIUS KERBS.

HEALTH & SAFETY:

1. CONTRACTOR SHOULD BE AWARE OF GENERAL CONSTRUCTION RISKS TO PREVENT SLIPS, TRIPS AND FALLS AND TAKE NECESSARY PRECAUTIONS WITHOUT SPECIAL INSTRUCTION.

ROADS & DRAINAGE

2. CONTRACTOR TO PROVIDE TRENCH SUPPORTS AS APPROPRIATE AND ENSURE THAT PLANT REMAINS A SAFE DISTANCE FROM TRENCHES PRIOR TO INSTALLING DRAINAGE.
3. THE TIME THAT EXCAVATIONS ARE OPEN ON SITE SHOULD BE KEPT TO A MINIMUM AND ALL TRENCHES SHOULD BE SURROUNDED BY A BARRIER.
4. CONNECTIONS TO EXISTING SEWERS TO BE MADE BY APPROVED CONTRACTOR ONLY.
5. CONTRACTOR TO MAKE OPERATIVES AWARE OF ASSOCIATED DANGERS TO HEALTH SUCH AS LEPTOSPIRIS (WELLS DISEASE) AND RECOMMENDED PRECAUTIONS. ADEQUATE WELFARE FACILITIES AND PROTECTIVE CLOTHING TO BE PROVIDED AS REQUIRED.
6. UNFINISHED MANHOLES MUST BE COVERED WITH LOAD BEARING MATERIALS AND SURROUNDED WITH BARRIER.

PIPES & CABLES

7. CONTRACTOR TO OBTAIN ALL SERVICE RECORDS PRIOR TO WORKS COMMENCING.
8. SERVICE RECORDS TO BE REFERRED TO PRIOR TO WORK COMMENCING. CONTRACTOR TO PROCEED WITH CAUTION AND SERVICES TO BE LOCATED BY HAND DIG AND PROTECTED ACCORDINGLY.

EXCAVATION/FILL

9. CONTRACTOR TO ENSURE RELEVANT MEASURES ARE TAKEN TO KEEP PLANT AND PEOPLE A SAFE DISTANCE FROM STEEP SLOPES DURING THE WORKS.
10. CONTRACTOR TO ENSURE THAT PROCEDURES ARE IN PLACE TO KEEP PEOPLE A SAFE DISTANCE FROM WORKING PLANT WHERE NECESSARY.
11. CONTRACTOR TO REFER TO GROUND INVESTIGATION REPORT FOR CONTAMINATION TESTS AND TO PROVIDE ADEQUATE WELFARE FACILITIES AND PROTECTIVE CLOTHING AS REQUIRED.

ALL WORKS TO COMPLY WITH CURRENT VERSION OF THE FOLLOWING DOCUMENTS:

- DESIGN MANUAL FOR ROADS AND BRIDGES (DMRB)
- SPECIFICATION FOR HIGHWAY WORKS (SHPH)
- WHERE LOCAL AUTHORITY REQUIRES LOCAL SPECIFICATION, BARNLEY METROPOLITAN BOROUGH COUNCIL DESIGN GUIDE AND SPECIFICATION TO BE USED.
- LL IRONWORK WITHIN EXTENT OF WORKS TO BE LOWERED/RAISED AS REQUIRED

STATUTORY UNDERTAKERS NOTE:

1. CONTRACTOR TO LOCATE ALL STATUTORY SERVICES ON SITE. STATUTORY UNDERTAKERS EQUIPMENT TO BE PROTECTED/LOWERED OR ARRANGE DIVERSION AS NECESSARY IN ACCORDANCE WITH THE REQUIREMENTS OF THE NEW ROADS AND STREET WORKS ACT 1991. EVIDENCE MUST BE PROVIDED TO THE LOCAL AUTHORITY THAT STATUTORY UNDERTAKERS INFORMATION IN THE LOCATION OF THE WORKS AND CONFIRM DETAILS OF ANY DIVERSIONARY WORKS REQUIRED.

IN ADDITION TO THE RASWA S171 LICENSE, THE CONTRACTOR MUST CONTACT THE HIGHWAY SUPERVISOR AT THE FOLLOWING STAGES OF THE HIGHWAY WORKS:

- A. AT LEAST TEN WORKING DAYS PRIOR TO THE START DATE.
- B. AT LEAST TWO CLEAR DAYS IN ADVANCE OF EXPOSURE OF FORMATION LEVEL.
- C. ON DISCOVERY OF ANY UNFORSEEN CIRCUMSTANCES OR STATUTORY UNDERTAKERS EQUIPMENT ON COMPLETION.

FAILURE TO DO SO PUTS THE DEVELOPER AT RISK OF HAVING TO RETRACT THE WORKS AND RECONSTRUCT TO HIGHWAYS APPROVAL.

16. TACTILE AND CYCLE/PEDESTRIAN TACTILE PAVING TOT BE EDGED WITH 50x150mm EDGING
17. FOOTWAY GRADIENT TO DROP KERB NO TO EXCEED 1:12
18. OVERBREAK IN CARRIAGEWAY ADJACENT TO KERB, MUST BE BACKFILLED WITH CONCRETE GRADE ST4 TO THE UNDERSIDE OF THE SURFACE COURSE. A 500mm WIDE STOP OF EXISTING SURFACE COURSE MUST BE PLANNED TO A DEPTH OF 50mm AND RELAID ALONG THE FACE OF THE NEW KERBS. THE EXPOSED SURFACE MUST BE TREATED WITH A BITUMEN BOND COAT BEFORE THE NEW SURFACE IS LAID.

28/02/2022	CONSTRUCTION ISSUE	SA	AMF	2
09/09/2021	FIRST ISSUE	JR	AMF	1
Date	Revisions	Drawn	Checked	Rev

Dwg Status CONSTRUCTION

NORTH EAST
0191 265632

YORKSHIRE
0113 523500

WWW.RWO.GROUP
INFO@RWO.GROUP

Client HARWORTH GROUP

Project GATEWAY 36
BIRDWELL

Title SECTION 38 HIGHWAY DETAILS

DO NOT SCALE	Scale @ A1: VARIES	Drawn JR	Checked AMF	Date 09/09/2021
Job No Y20143	Dwg No D700	Rev 2		