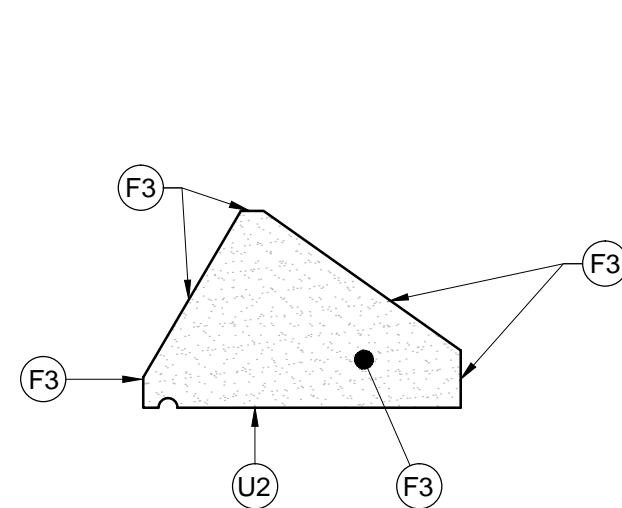
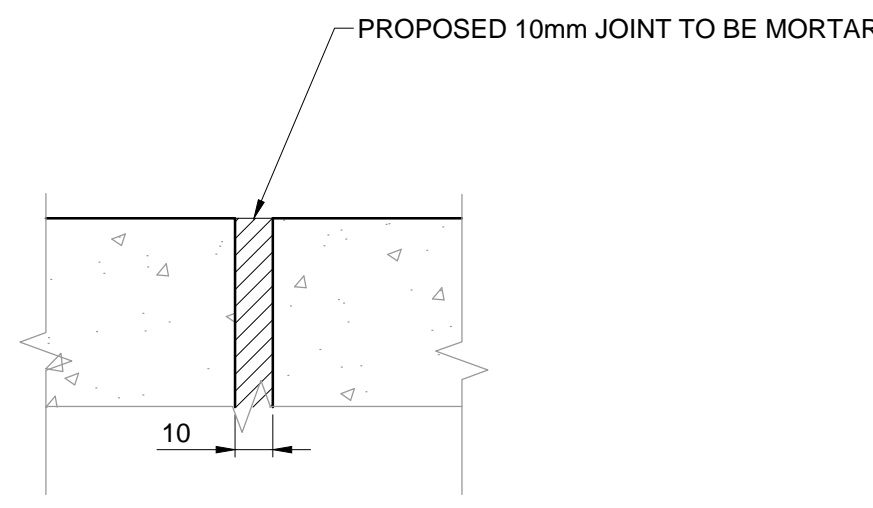


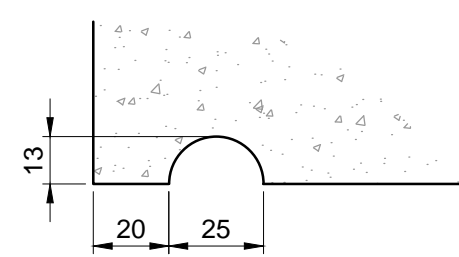
**PROPOSED DOWEL BAR  
DETAIL**  
SCALE 1:20



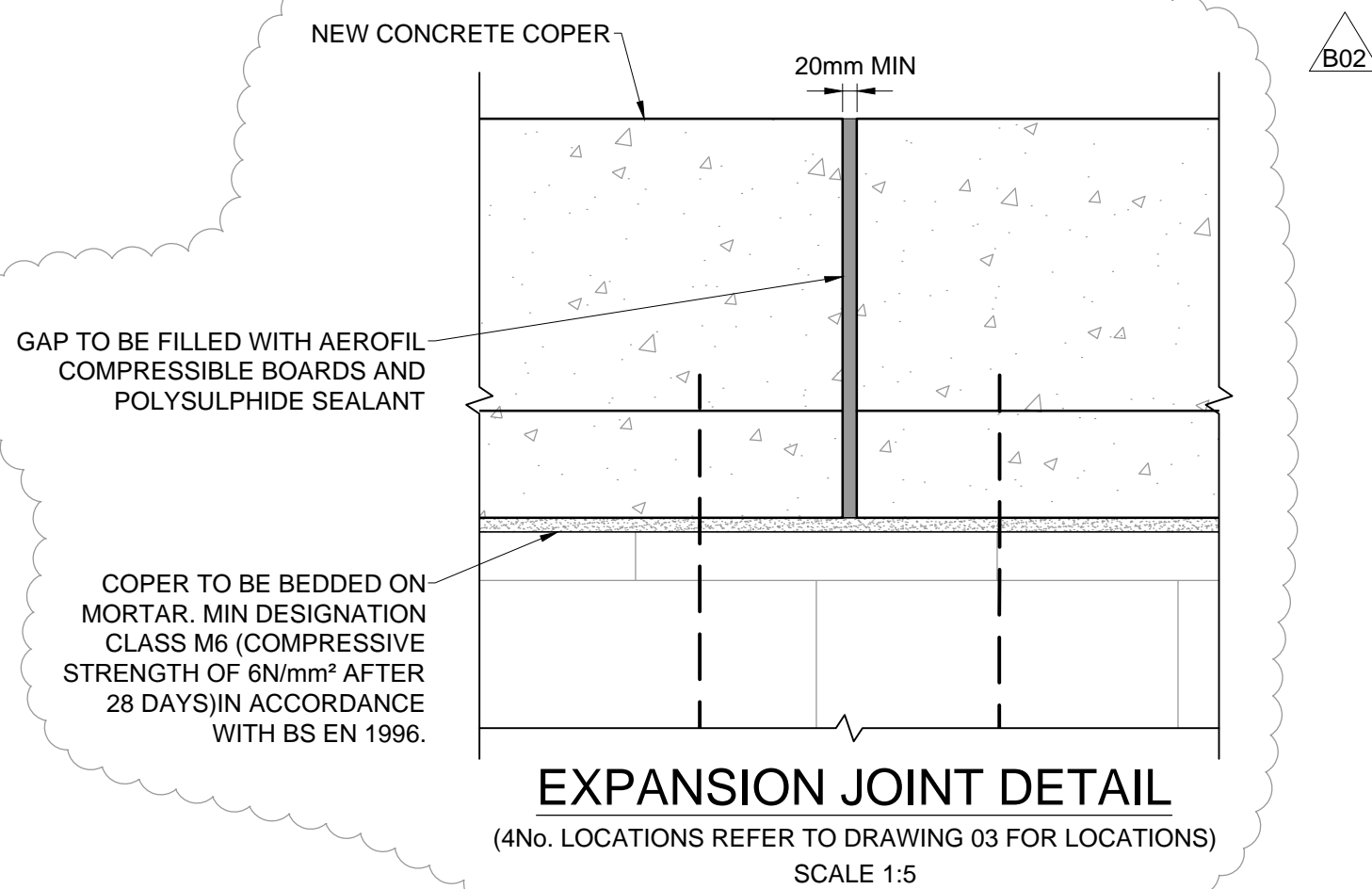
**CONCRETE FINISHES**  
SCALE 1:10



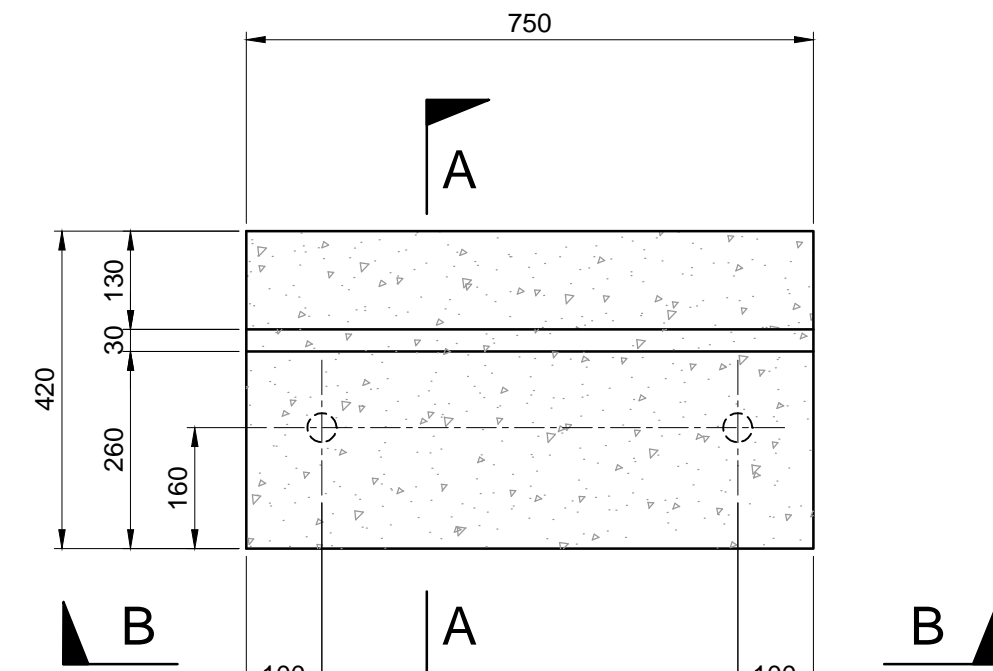
**JOINT DETAIL**  
SCALE 1:2



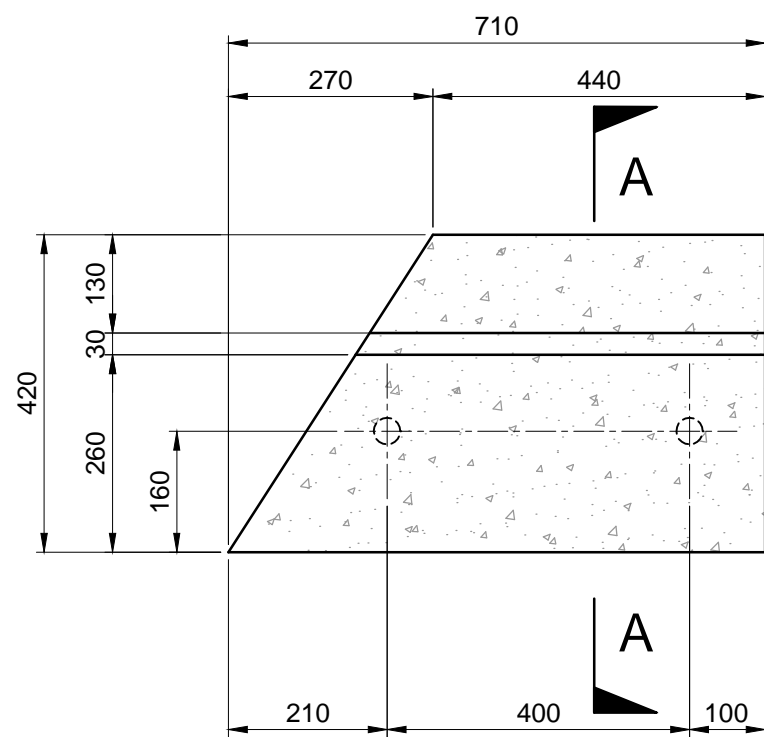
**DRIP DETAIL**  
SCALE 1:2



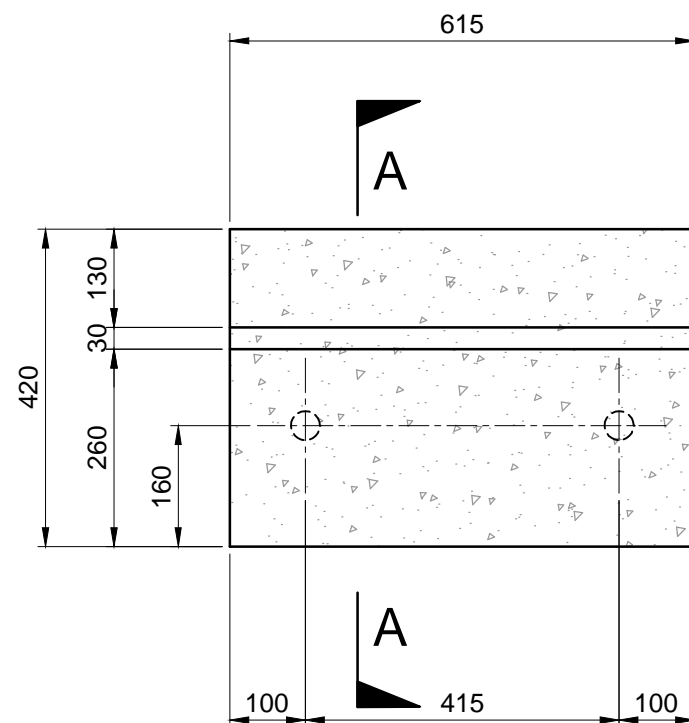
**EXPANSION JOINT DETAIL**  
(4No. LOCATIONS REFER TO DRAWING 03 FOR LOCATIONS)  
SCALE 1:5



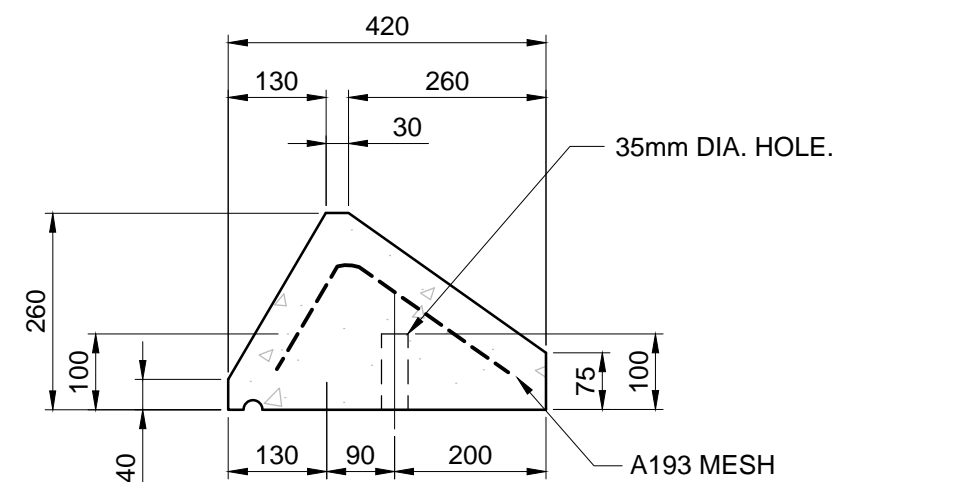
**TYPE 1 COPER - PLAN**  
33No. REQ  
APPROX. WEIGHT = 81kg  
SCALE 1:10



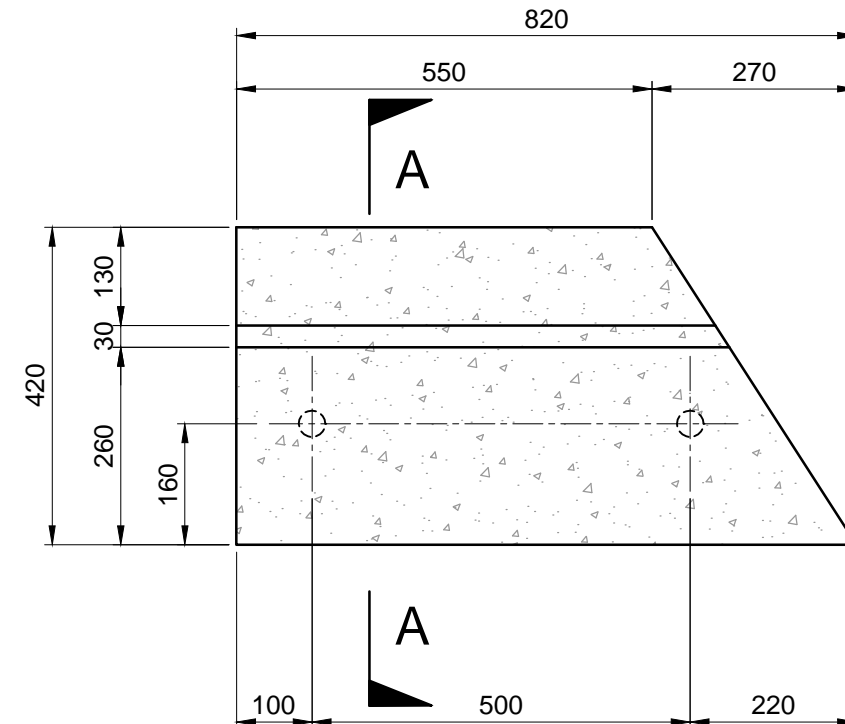
**TYPE 3 COPER - PLAN**  
1No. REQ  
APPROX. WEIGHT = 63kg  
SCALE 1:10



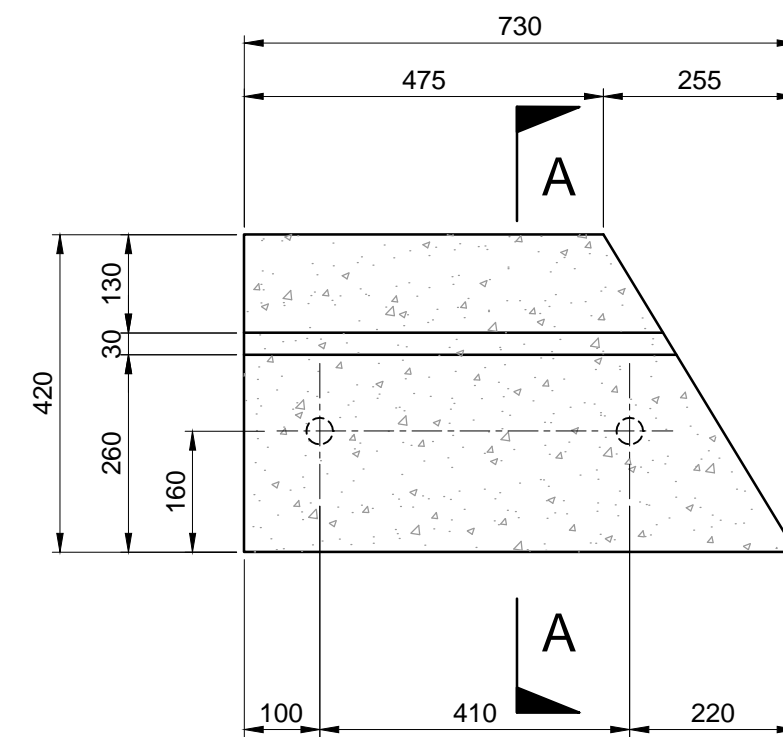
**TYPE 5 COPER - PLAN**  
1No. REQ  
APPROX. WEIGHT = 66Kg  
SCALE 1:10



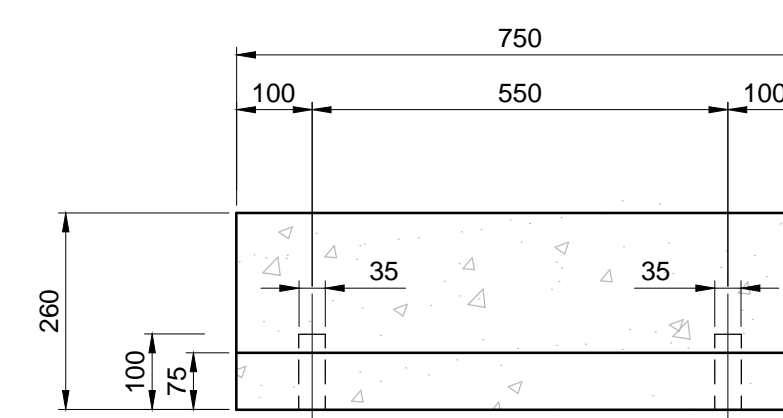
**SECTION A-A**  
SCALE 1:10



**TYPE 2 COPER - PLAN**  
1No. REQ  
APPROX. WEIGHT = 75kg  
SCALE 1:10



**TYPE 4 COPER - PLAN**  
1No. REQ  
APPROX. WEIGHT = 66kg  
SCALE 1:10



**ELEVATION B-B**  
SCALE 1:10

- Legend/Notes
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
  2. DO NOT SCALE FROM THIS DRAWING.
  3. THIS DRAWING IS BASED ON AVAILABLE NETWORK RAIL RECORD INFORMATION AND A DIMENSIONAL SURVEY.
  4. THE CONTRACTOR SHALL CONFIRM ALL DIMENSIONS PRIOR TO FABRICATION AND CONSTRUCTION.
  5. A 40N/mm² NON-SHRINK CEMENTITIOUS GROUT IS TO BE USED FOR THE DOWEL BARS IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
  6. STRUCTURAL CONCRETE REQUIREMENTS ARE AS FOLLOWS:  
BS EN206-1-2000.  
BS EN8500-1-2006.  
BS EN8500-2-2006.  
  
MAX STRENGTH CLASS - LC40/44.  
AGGREGATE SIZE - 20mm.  
CEMENT - 360kg/m³.  
MAX W/C RATIO - 0.45.  
DENSITY CLASS 1.6  
TARGET DENSITY - 1550kg/m³
  7. NEW MATERIAL TO MATCH EXISTING IN COLOUR AND FEATURE AS MUCH AS PRACTICABLY POSSIBLE.

- RESIDUAL RISKS**
1. INJURY FROM MANUAL HANDLING
  2. INJURY DUE TO WORKING AT HEIGHT
  3. INJURY DUE TO WORKING WITH POWER TOOLS
  4. WORKING WITH CEMENTITIOUS PRODUCTS CAUSING BURNS
  5. OLE BELOW STRUCTURE

Rev	Date	Description of Revisions	Drawn	Chkd	Appr
B02	06/05/15	SECOND ISSUE	RD	RB	TC
B01	18/12/15	FIRST ISSUE	ET	RB	TC

Status  
F003 - DETAILED DESIGN

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Project  
**LIVERPOOL TO MANCHESTER DSE LINE  
ELECTRIFICATION WORKS**

Drawing Title  
**DSE/39  
QUEENS DRIVE OFF SLIP  
PROPOSED DETAILS  
(AREA 1 - WEST PARAPET)**

Designer	Signed	Date
R. TURNER		18.12.2015
Drawn	Signed	Date
E. THOMPSON		18.12.2015
Checked	Signed	Date
R. BRINDLEY		18.12.2015
Approved	Signed	Date
T. CHEETHAM		18.12.2015

Scale(s) at A1 Sheet Size A1 594 x 841  
AS SHOWN ELR : DSE 3m 0480yds

Drawing Number	Revision
LNW-124384-ECV-DRG-IAB-DSE-39-04	B02