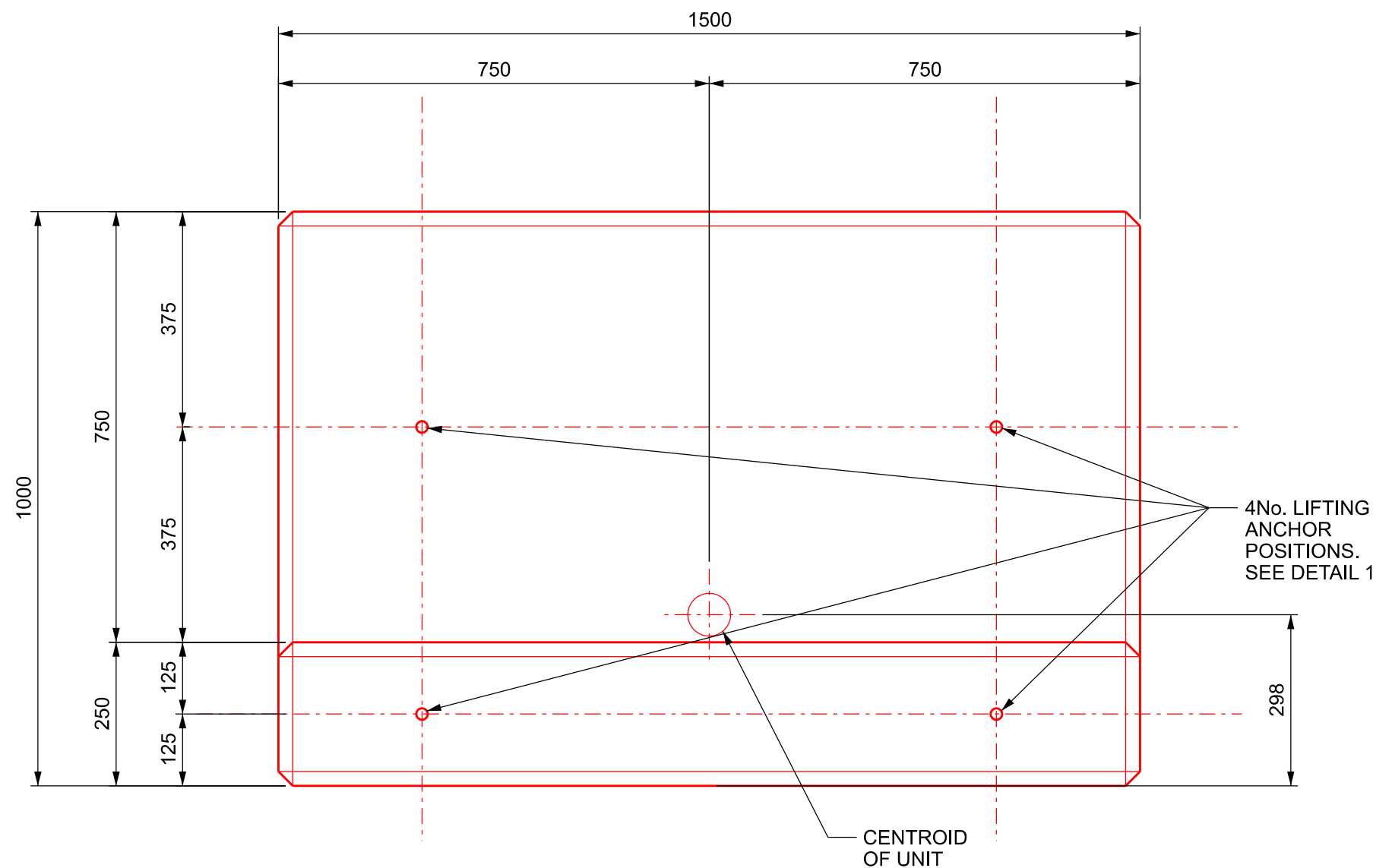
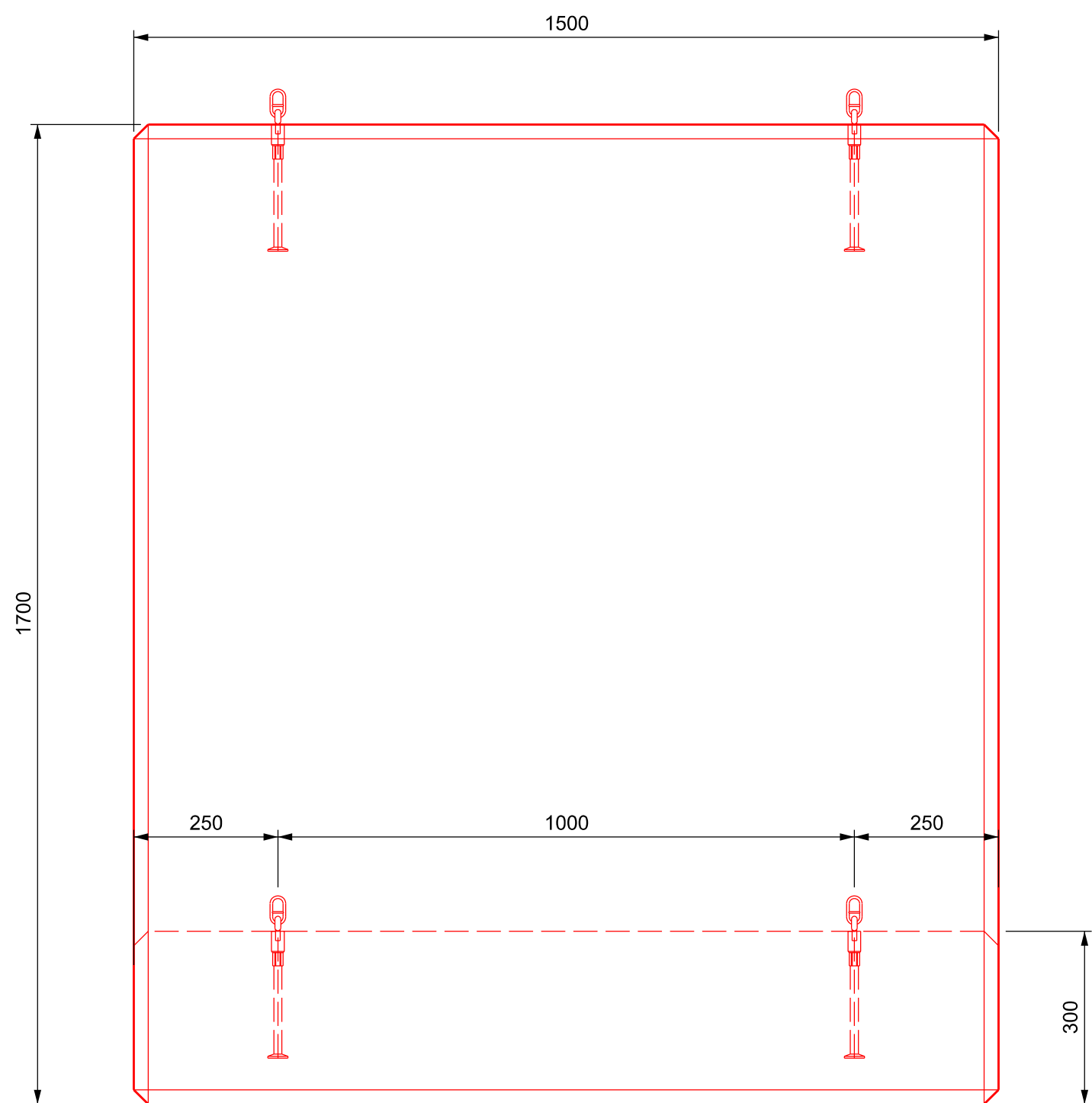
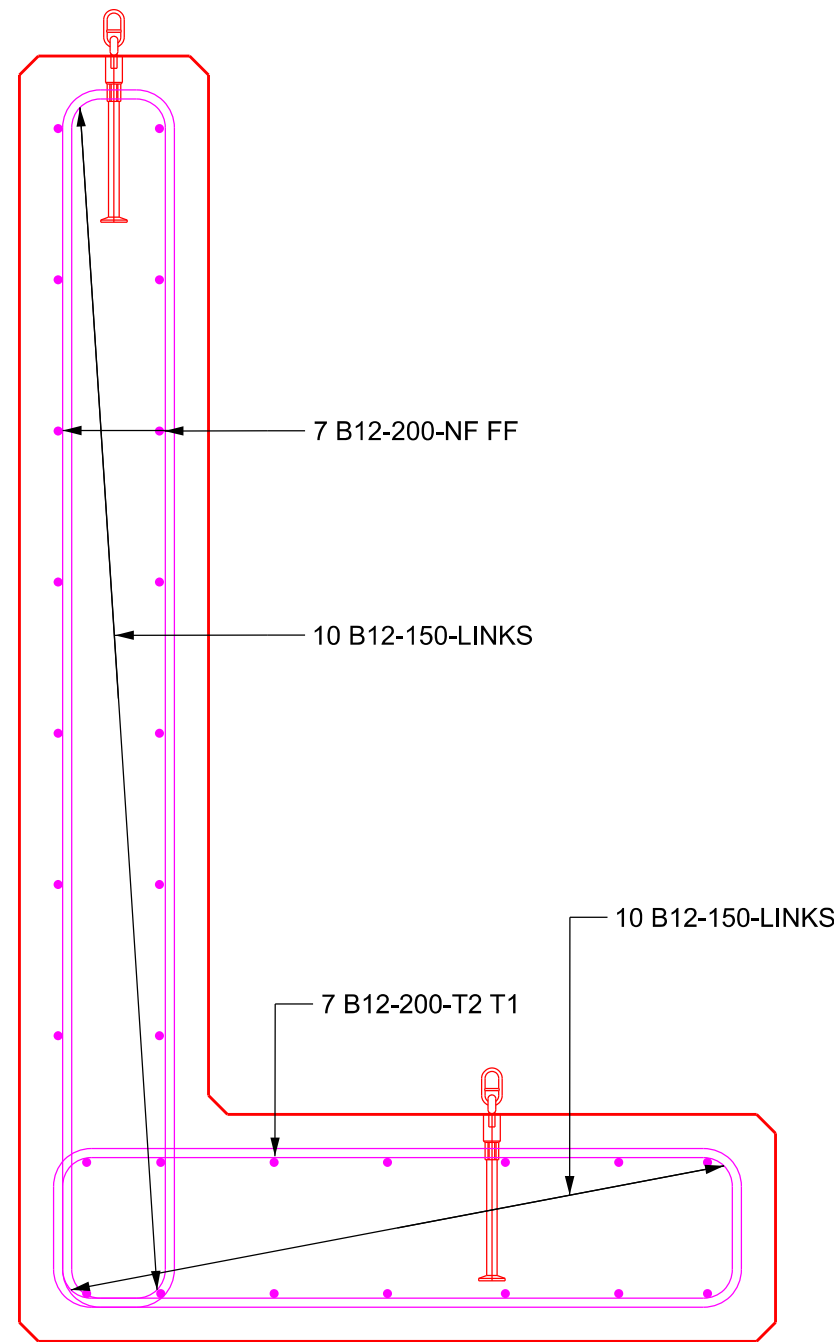




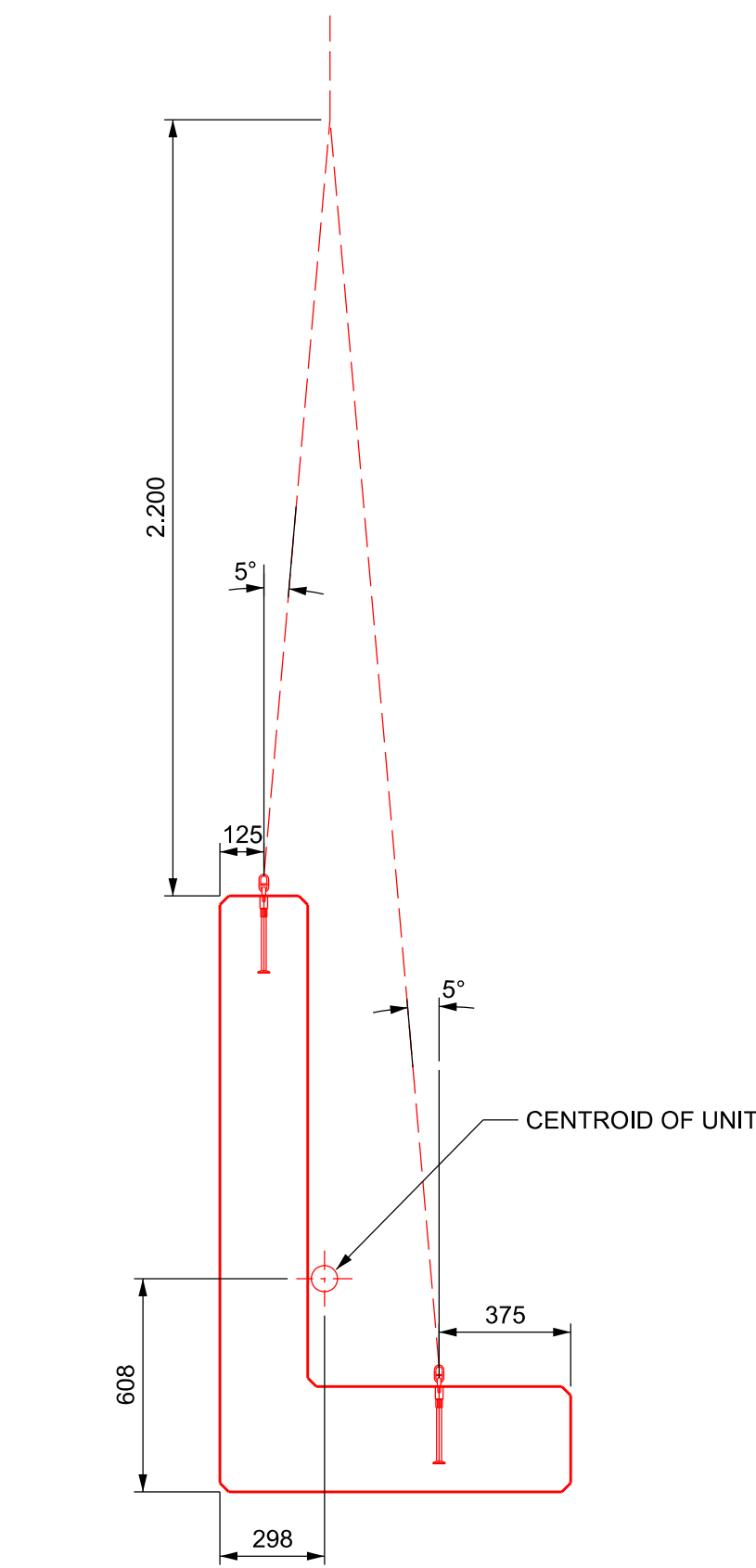
PLAN - BALLAST RETENTION UNIT - 4No. REQUIRED THUS



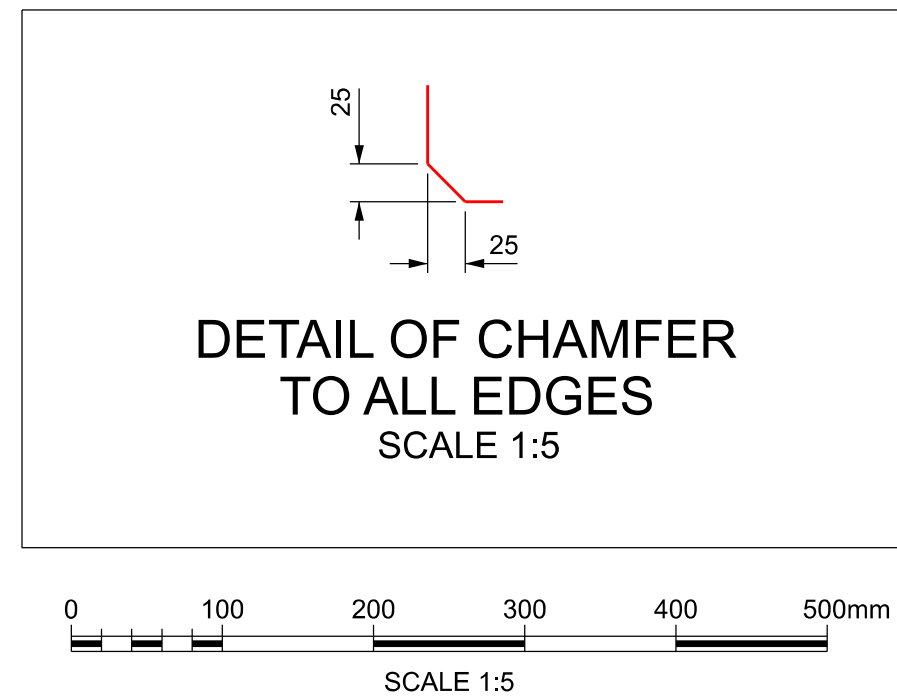
ELEVATION - BALLAST RETENTION UNIT



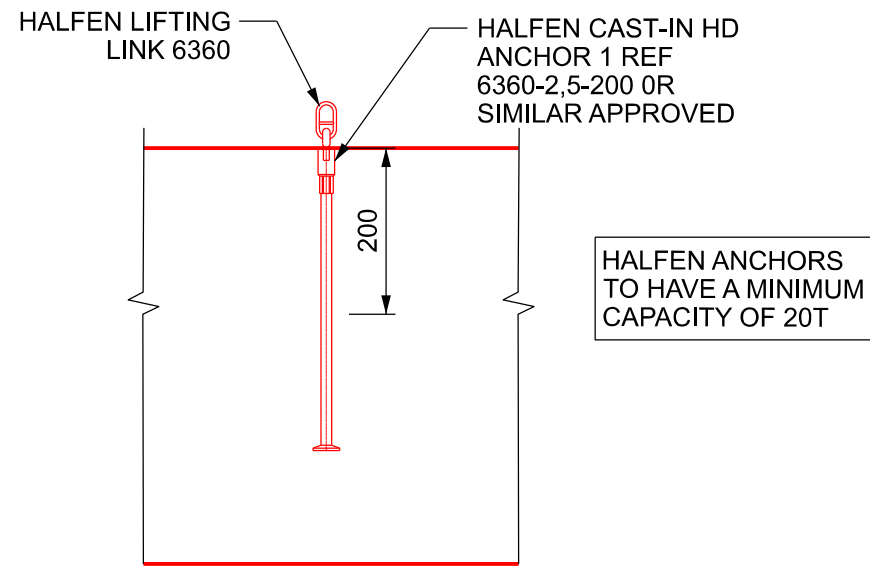
BALLAST RETENTION UNIT - TYPICAL RC ARRANGEMENT



LIFTING ARRANGEMENT



DETAIL OF CHAMFER TO ALL EDGES



LIFTING LUG DETAIL 1

- Legend/Notes
- FOR GENERAL NOTES SEE DRAWING 162906-CGE-WLS-DJP-DRG-ECV-000001.
 - CONCRETE MIXES IN ACCORDANCE WITH BS 8500-2 + BS EN 206-1
 - COVER TO ALL REINFORCEMENT (UNO):
 - UNIT WEIGHT DETAILS:



SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

NOTES BELOW ARE ADDITIONAL TO HAZARDS/RISK NORMALLY ASSOCIATED WITH THIS TYPE OF WORK

CONSTRUCTION
C1. STEEL DECK & CILL BEAMS LIFTING DURING CONSTRUCTION WORKS
C2. ABUTMENT INSTABILITY DUE TO REFURBISHMENT WORKS ON THE ABUTMENT/WING WALLS
C3. EXCAVATION/SLOPE COLLAPSE
C4. UNDERMINING EXISTING ABUTMENT FOUNDATION
C5. STABILITY OF THE 'L' SHAPE RETENTION UNITS
C6. UNFORESEEN GROUND CONDITIONS

OPERATIONAL & MAINTENANCE
O1. DISTURBING THE TRACK DURING WORKS
O2. WORKING AT HEIGHT, RISK OF PERSONNEL FALLING
O3. PERSONAL INJURY TO WORKERS DUE TO CONTACT WITH TRAINS
O4. SLIP/TRIP/FALLS DUE TO UNEVEN OR STEEP GROUND
O5. DISTURBANCE TO LOCAL AREA AND ENVIRONMENT
O6. CONTAMINATION TO ENVIRONMENT AND SPECIES
O7. INJURY OR INFECTION DUE TO CONTACT TO HAZARDOUS MATERIAL
O8. DAMAGE TO SERVICE CABLES LAID ALONG THE BALLAST
O9. PERSONAL INJURY DUE TO WORKING NEAR/ABOVE WATER
O10. BRIDGE/SCAFFOLD IMPACTED BY LARGE OBJECT DURING FLOODING EVENTS
O11. ABUTMENT INSTABILITY DURING CONSTRUCTION WORKS
O12. STABILITY FAILURE OF THE 'L' SHAPE RETENTION UNITS

DISMANTLING/DEMOLITION
D1. OVERTURNING OF ABUTMENT AFTER EXISTING DECK HAS BEEN REMOVED

THESE NOTES ARE BASED ON THE USE OF EXPERIENCED AND COMPETENT CONTRACTORS CARRYING OUT THE WORK USING AN APPROVED SAFE METHOD OF WORKING, A RESIDUAL RISK AND HAZARD DOCUMENT HAS BEEN CREAT FOR A MORE DETAILED ASSESSMENT.

Rev	Date	Description of Revisions	Drawn	Chkd	Appr	Suitability
B01	19/05/21	First Issue				
P01	29/03/21	First Issue				

Fit for Internal Review & Comment

S3



Authorised		Signed		Date	
Contractor(s)					
Centregreat Rail					
Location					
ABERDOVEY, WALES, LL35 ORG					
Type	CAD Drawing		Sub-type		
Role	Civil Engineer		Sub-Role Structures and Buildings		
Zone	Wales Region				
Phasing			Grip Stage	5	
Region					
Western and Wales					
Contract No.					
162906					
Contract Title					
Pant Eidal Bridge					
Drawing Title					
PROPOSED 'L' SHAPE RETENTION UNITS (UPSIDE)					
Designed	M. GOPAL	Signed	Electronically Signed		Date 29/03/21
Drawn	C.MANN	Signed	Electronically Signed		Date 29/03/21
Checked	M. GOPAL	Signed			Date
Approved	S. ALCON GENER	Signed			Date
Scale(s)		ELR & Mileage			
As Shown		81m 31.75ch to			0
Alternative Reference				Sheet	
162906-CGE-DRG-ECV-000012					of
Drawing Number				Revision	
162906-CGE-WLS-DJP-DRG-ECV-000012				B01	