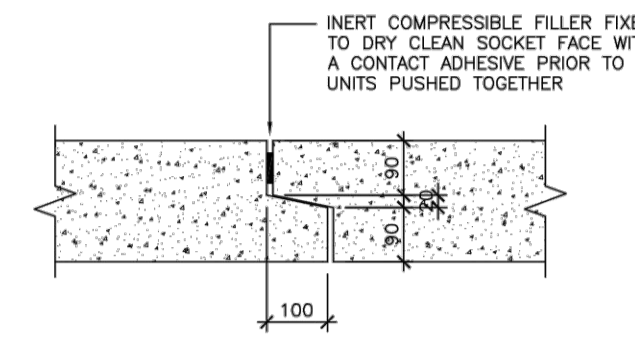
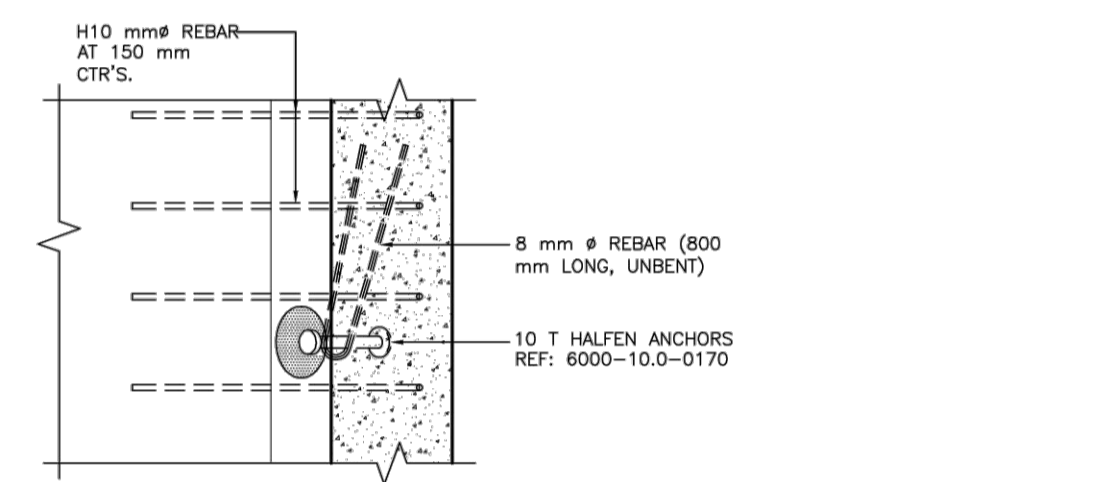


ISOMETRIC: JOINT BAY ARRANGEMENT  
SCALE 1:25

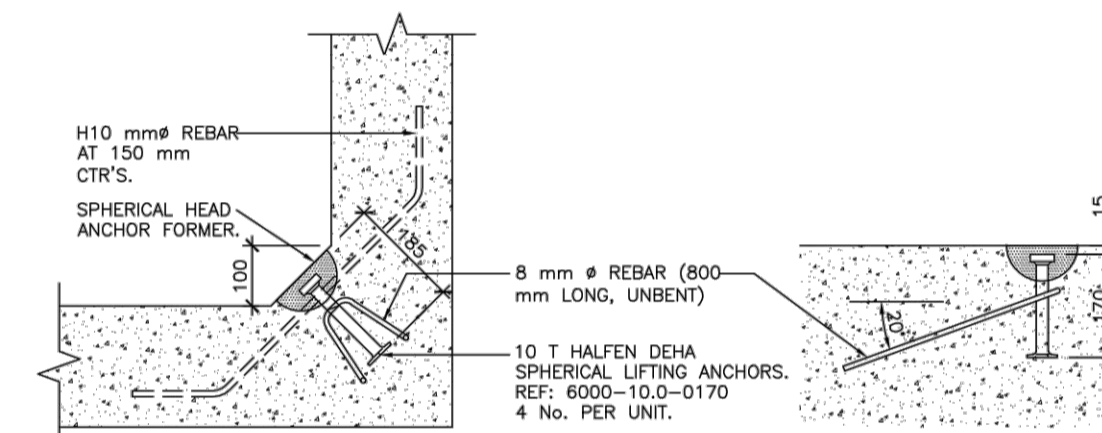


DETAIL 1  
SCALE 1:10

[TYPICAL SOCKET & SPIGOT DETAIL IN WALL & FLOOR]



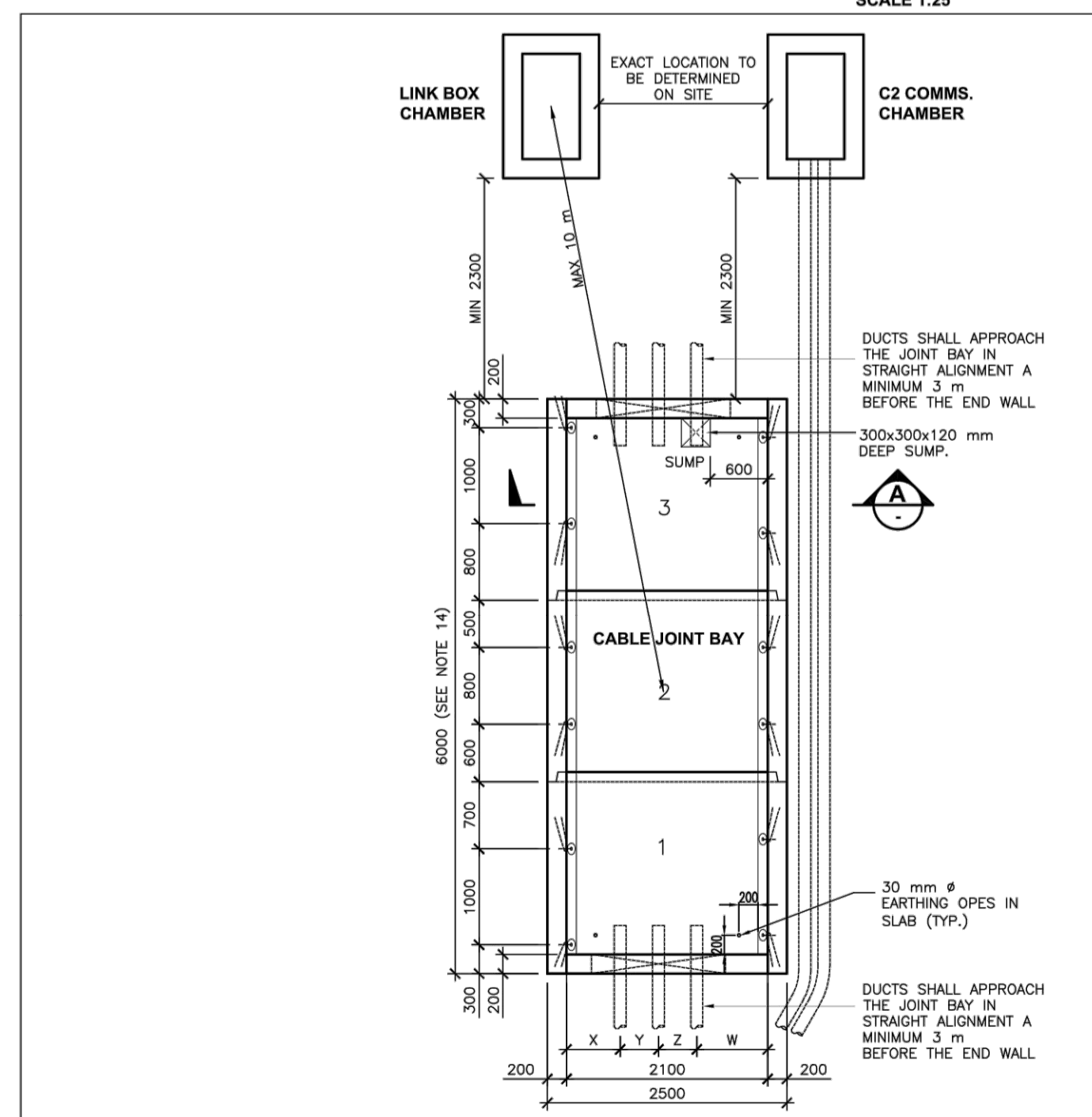
[PLAN]



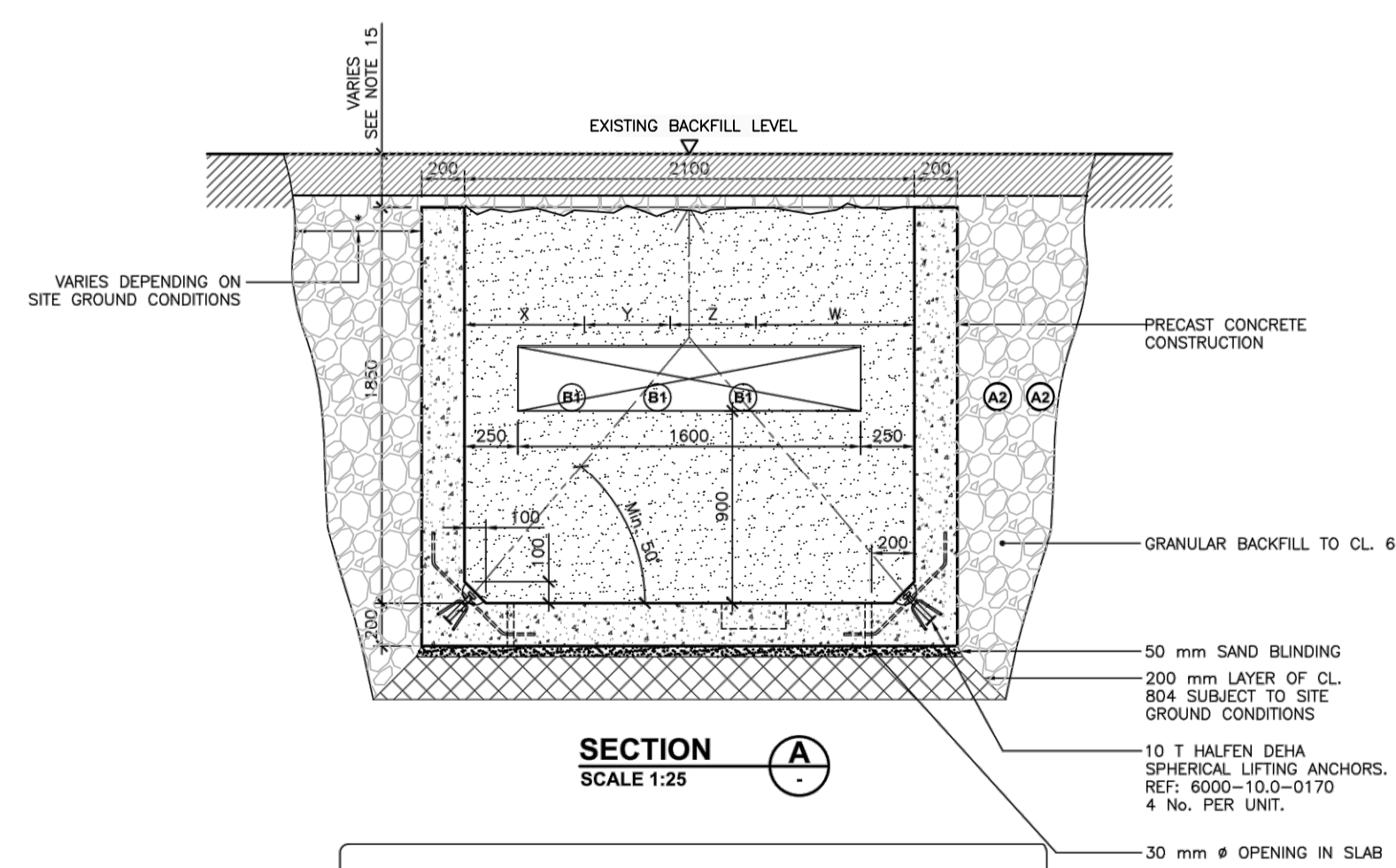
[SECTION]

DETAIL 2  
SCALE 1:10

[LIFTING EYE DETAIL]  
[DETAIL 3 HANDED]



TYPICAL PLAN OF JOINT BAY  
SCALE 1:50



SECTION A  
SCALE 1:25

- A2 125 mm OD HDPE DUCT (COMMS)
- B1 125 mm OD HDPE DUCT (110 kV < 1000 mm sq CONDUCTOR)
- B2 200 mm OD HDPE DUCT (220 kV AND 110 kV > 1000 mm sq CONDUCTOR)

TABLE 1

EXPOSURE CLASS	CONCRETE SPECIFICATION TO I.S. EN 206-1			
	BLINDING & MASS CONCRETE, DRAINAGE PIPE & MANHOLE SURROUNDINGS	FOUNDATIONS & WALLS	INTERNAL SLABS	EXTERNAL SLABS
	X0	XC2	XC1	XC4
MIN. CEMENT CONTENT (kg/m <sup>3</sup> )	240	300	300	320
MAX. WATER/CEMENT RATIO	-	0.60	0.60	0.55
CEMENT TYPE TO I.S. EN 197-1	CEM 1 N	CEM 1 N	CEM 1 N	CEM 1 N
CHLORIDE CONTENT CLASS	CL 1.0	CL 0.40	CL 0.40	CL 0.40
MAX. AGGREGATE (mm)	16	20	20	20
MIN. COVER (mm)	-	40	30	40
*COMPRESSIVE STRENGTH CLASS	C16/20	C30/37	C28/35	C30/37

NOTES: 1. \*C16/20 to be read as follows: 16 - Refers to min. characteristic cylinder strength (N/mm<sup>2</sup>), 20 - Refers to min. characteristic cube strength (N/mm<sup>2</sup>).  
2. Design working life to be 50 years minimum.

TABLE 2- DUCT SEPARATION

	X	Y	Z	W
110 kV	600	400	400	700
220 kV	375	675	675	375

COPYRIGHT © ESSE ENGINEERING & FACILITY MANAGEMENT LIMITED. All rights reserved. No part of this work may be reproduced or transmitted in any form or by any means - graphic, electronic or mechanical, including photocopying, recording, copying, information and retrieval systems, or used for any purpose other than its designated purpose, without the written permission of ESSE Engineering & Facility Management Ltd.

Rev	Description	Drawn	Checked	Date
P06	FOR PLANNING	ZS	HF	21/02/2020

Clifton Scannell Emerson Associates Limited  
Consulting Engineers,  
Seaforth Lodge,  
Castledawson Avenue,  
Blackrock, Co. Dublin,  
Ireland, A94 P768  
T. +353 1 288 5006  
F. +353 1 283 3466  
E. info@csea.ie  
W. www.csea.ie

Client: CRUISERATH 220 kV SUBSTATION & TRANSMISSION LINE  
Project: TYPICAL DETAILS FOR JOINT BAY  
Dwg. Title: 17\_014  
Drawn By: LT Date: 15/08/2019  
Checked By: HF Scale: AS SHOWN @ A1 CSEA Job No.  
Project Code: Originator: Zone/Phase: Level: Type: Role: Dwg. No.  
PROJ\_G - CSE - 00 - XX - DR - C - 2554  
S2 FOR INFORMATION  
Status Code: Suitability Description  
P06 PLANNING  
Revision: Project Status