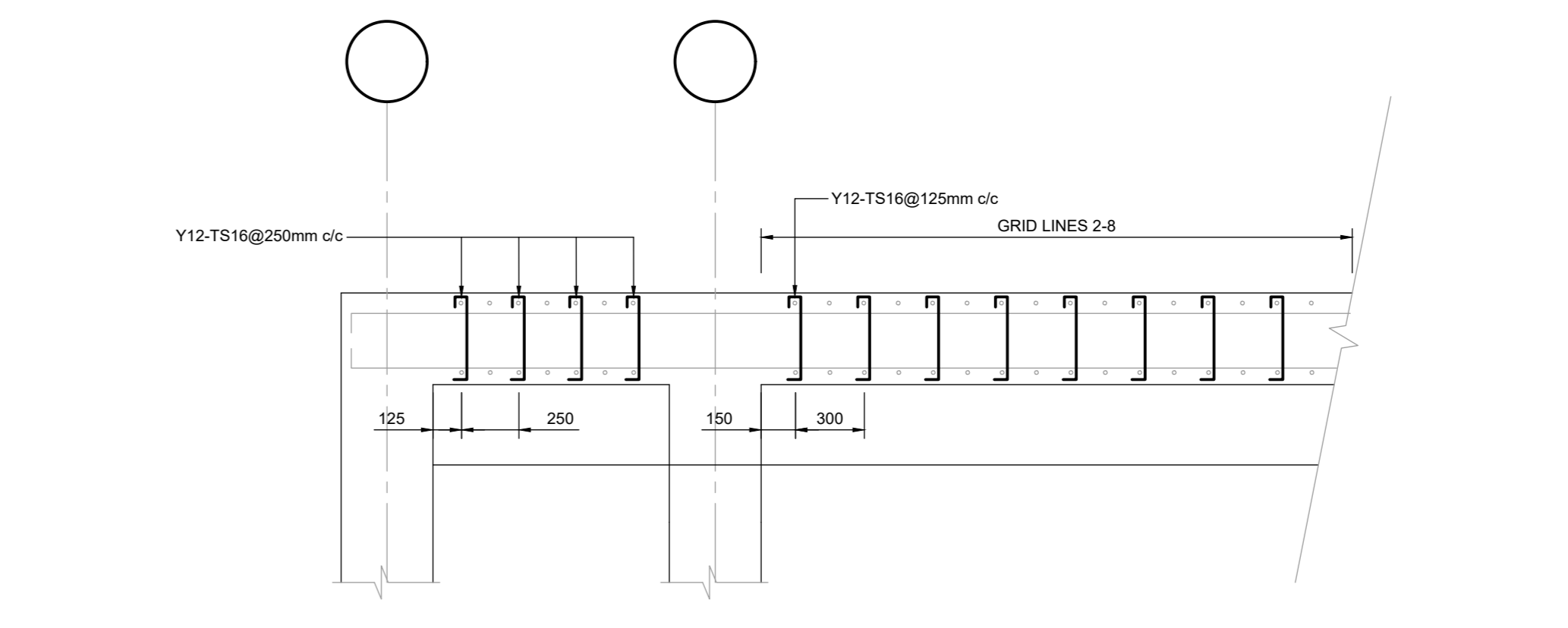
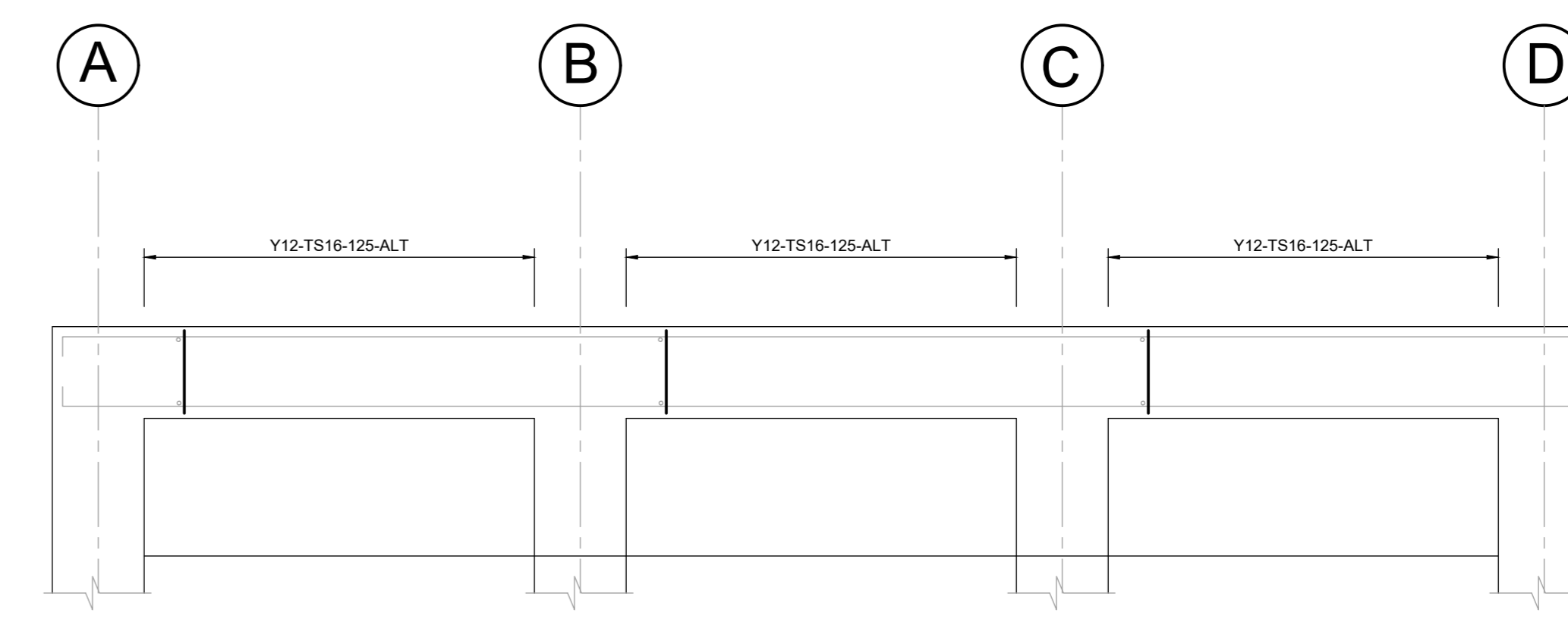


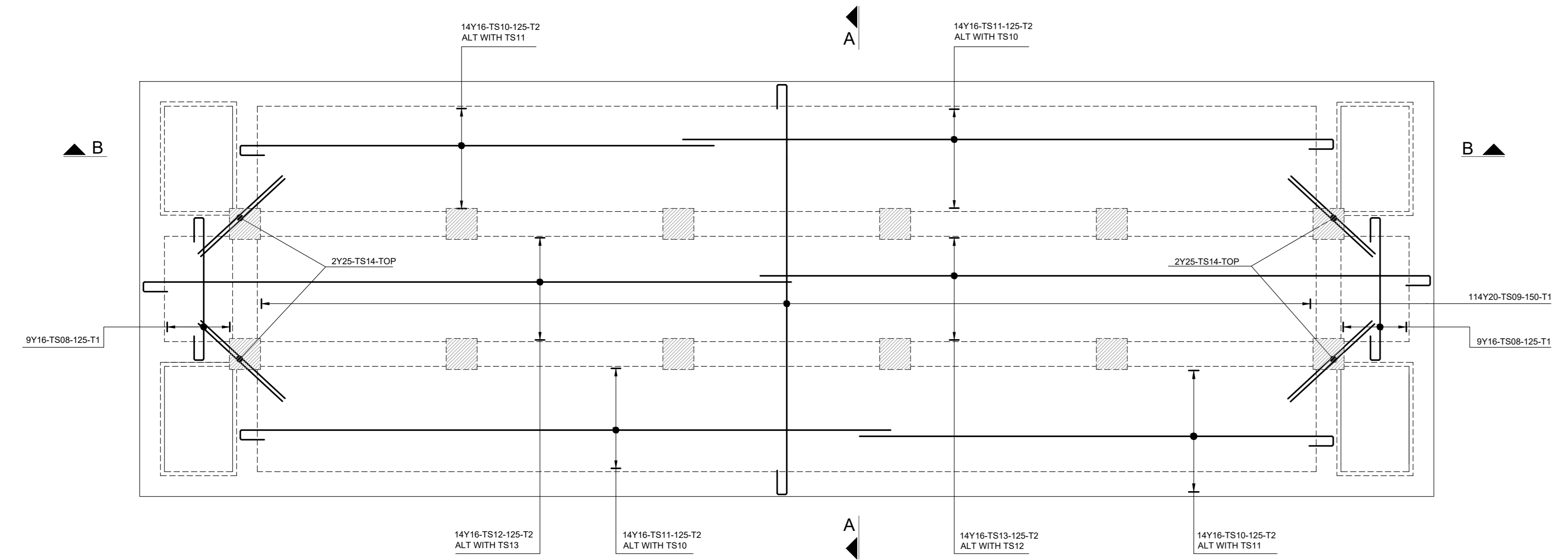
BOTTOM REINFORCEMENT DETAILS  
1:50



SECTION B-B  
1:25



SECTION A-A  
1:25



TOP REINFORCEMENT DETAILS  
1:50

MEMBER & SIZE	REINFORCEMENT						DIMENSIONS				
	UNITS	MARK	TYPE & No. PER	TOTAL No.	LENGTH	SHAPE CODE	A	B	C	D	ER
TOP SLAB BOTTOM REINFORCEMENT	1	TS01	Y16	18	18	2700	38	2380	150	150	
		TS02	Y25	114	114	6950	38	6600	170	170	
		TS03	Y20	28	28	6900	37	6600	200		
		TS04	Y20	28	28	12200	34	12000			
		TS05	Y20	14	14	9450	34	9250			
		TS06	Y20	14	14	12300	34	12100			
		TS07	Y25	8	8	2000	20				
TOP REINFORCEMENT	1	TS08	Y16	18	18	3250	55	150	380	280	150
		TS09	Y20	114	114	7600	55	190	380	6580	280
		TS10	Y16	28	28	8500	38	8000	380		
		TS11	Y16	28	28	11050	38	10550	380		
		TS12	Y16	14	14	11400	38	10900	380		
		TS13	Y16	14	14	11400	38	10900	380		
		TS14	Y25	8	8	2000	20				
OTHER	1	TS15	Y12	150	150	1350	83	300	290	300	
	1	TS16	Y12	2386	2386	1200	85	50	380	50	150

GENERAL NOTES

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- DRAWINGS MUST NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE USED.
- ALL DIMENSIONS AND LEVELS SHALL BE VERIFIED ON SITE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS.
- CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
  - CONCRETE WORK TO TRANSNET'S SPECIFICATION SABS AND SANS 10000.
  - CONCRETE PLACING TO BE DONE IN ACCORDANCE WITH SANS 10100 PART 2, CLAUSE 10.2.
  - CONCRETE CURE STRENGTHS ARE CHARACTERISTIC STRENGTHS TO SANS 10100 PARTS 1 AND 2.
- CONCRETE STRENGTHS AT 28 DAYS:
 

SLAB	40MPa/18mm
BEAMS	40MPa/18mm
WALLS	40MPa/18mm
BLINDING	15MPa/10mm
- COVER TO REINFORCEMENT:
 

WALLS	60mm
SLABS	60mm
BEAMS	60mm
- ALL EXPOSED CONCRETE TO BE CHAMFERED 20mm x 20mm UNLESS OTHERWISE SHOWN.
- REINFORCEMENT SHALL COMPLY WITH SANS 820 AND BENT TO SANS 282.
- SYMBOLS: R - MILD STEEL WITH CHARACTERISTIC STRENGTH OF 250MPa  
Y - HOT ROLLED OR COLD WORKED HIGH STRENGTH BARS WITH CHARACTERISTIC STRENGTH OF 450MPa.  
(ONLY REINFORCEMENT FABRICATED UNDER THE SABS MARK SCHEME SHALL BE DEEMED TO COMPLY WITH SABS REQUIREMENTS).
- 50mm MAX. BLINDING SHALL BE PROVIDED.
- FORMWORK AND SURFACE FINISH FORMED SURFACES:
  - VISIBLE SURFACE - SMOOTH
  - UNEXPOSED SURFACE - ROUGH
- GROUT TO BE FLOWABLE SELF-LEVELLING EPOXY GROUT AND SANS 1921-3.
- STEELWORK TO BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE SPECIFICATIONS IN SANS 2001-C51 AND SANS 1021-3.
- ALL HOT ROLLED STEEL SECTION AND PLATES TO GRADE S355JR TO EN10025.
- CORROSION PROTECTION OF STEELWORK:
  - ALL STEELWORK INCLUDING BOLTS, NUTS AND WASHERS SHALL BE HOT DIP GALVANIZED TO SANS 121 (ISO 1461).
  - TABLE 3. NUTS WITH OVERSIZED THREADS SHALL BE USED TO COMPENSATE FOR THE GALVANIZING ON THE BOLT THREADS.
- PAINTING OF STEELWORK TO SANS 1009HC. APPLY SYSTEM 013-018 IN ACCORDANCE WITH SANS 0120HC. COLOUR TO BE DETERMINED BY CLIENT.
- FABRICATORS TO SUBMIT TWO COPIES OF ALL SHOP DRAWINGS TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO THE COMMENCEMENT OF FABRICATION.

DRAWING NO.	REFERENCE
S200157-2-001-S-DE-0001-01-00	STILLING BASIN - DETAILS
S200157-2-001-S-DE-0002-01-00	STILLING BASIN - SECTIONS AND DETAILS
S200157-2-001-S-GA-0001-01-00	STILLING BASIN 1 to 4 - GENERAL ARRANGEMENTS
S200157-2-001-S-LA-0001-01-00	STILLING BASIN - LAYOUTS
S200157-2-001-S-SE-0001-01-00	STILLING BASIN - SECTIONS AND DETAILS

NO.	DESCRIPTION	BY	CHKD	APPD	DATE
00	ISSUED FOR GATE REVIEW	TT	SS	PM	10-10-23

CONTRACTOR / CONSULTANT				TRANSNET CAPITAL PROJECTS			
TITLE	NAME	SIGN	DATE	TITLE	NAME	SIGN	DATE
				DRAWN	TT		10/10/23
				CHECKED	SS		10/10/23
				DESIGNED	TT		10/10/23
				CHECKED	PM		10/10/23

**Transnet Group Capital** TRANSNET LTD  
 (TRADING AS TRANSNET CAPITAL PROJECTS) - REG. NO. 19900009030  
 CARLTON CENTRE PO BOX 25901 PARKVIEW 2102  
 150 COMMERCE STREET TEL No. +27 11 286 3000  
 JOHANNESBURG FAX No. +27 11 286 2315

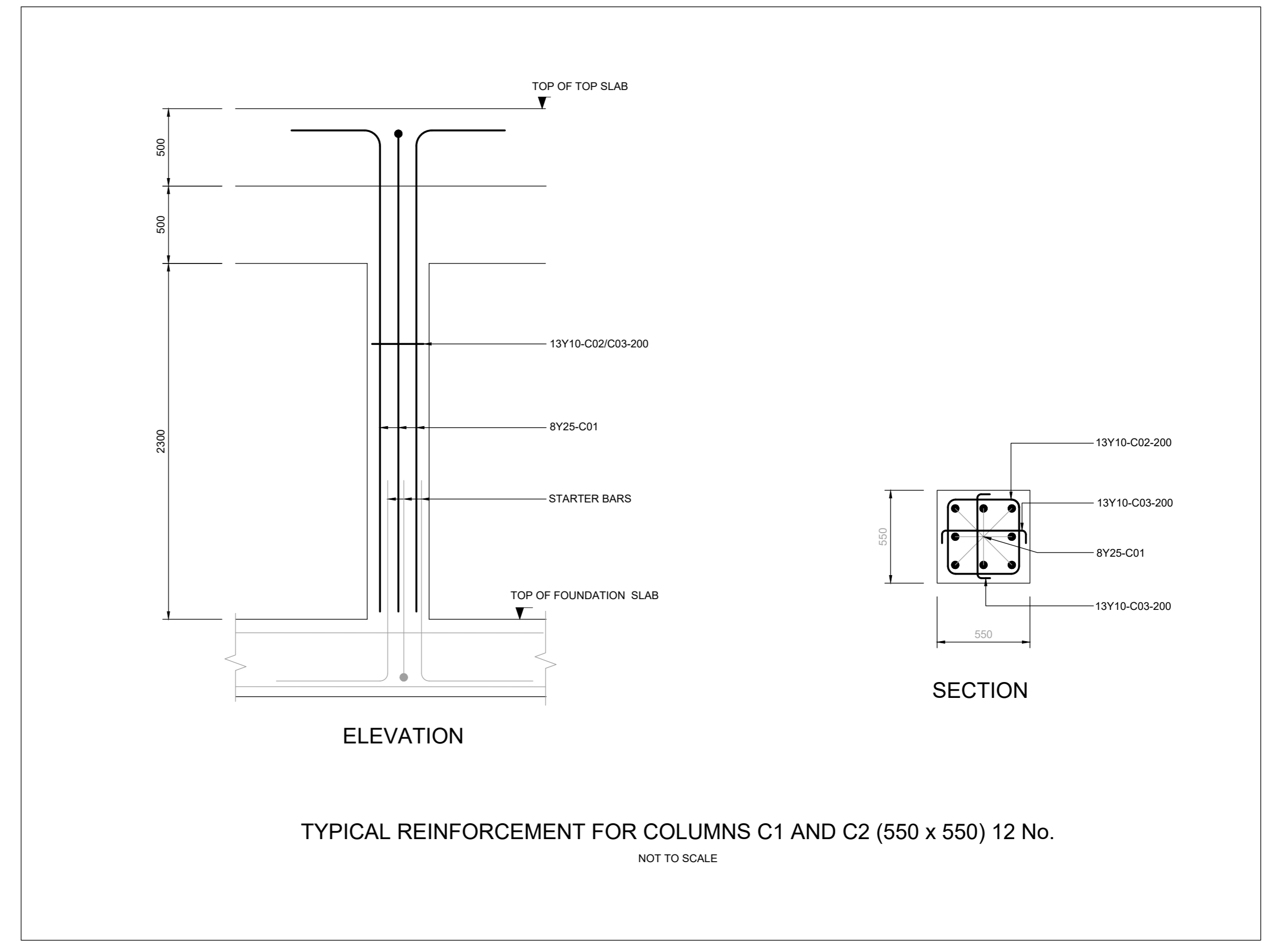
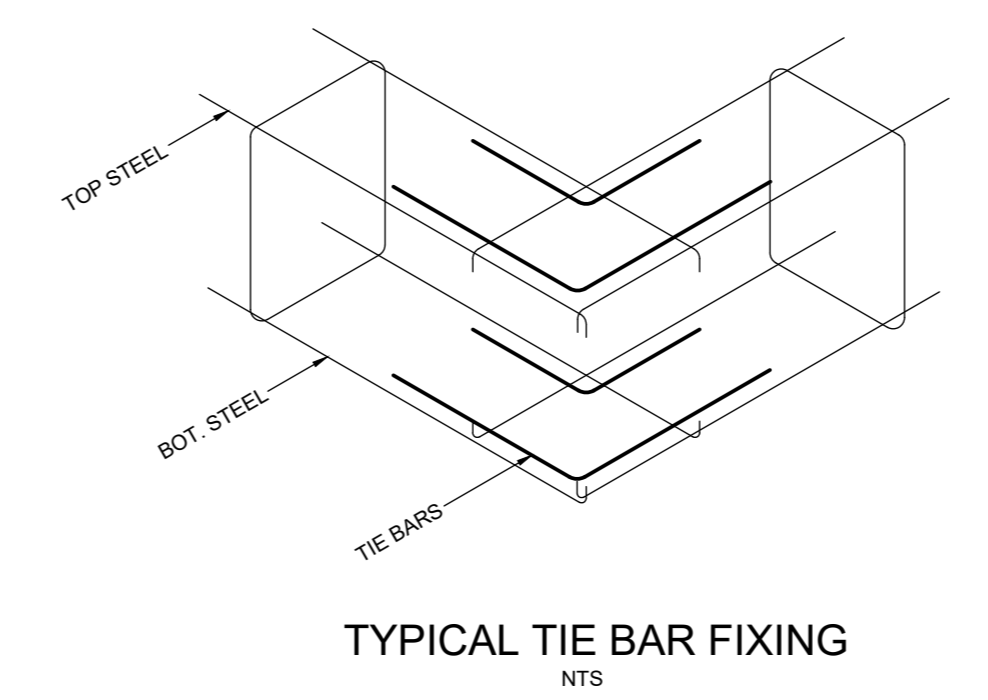
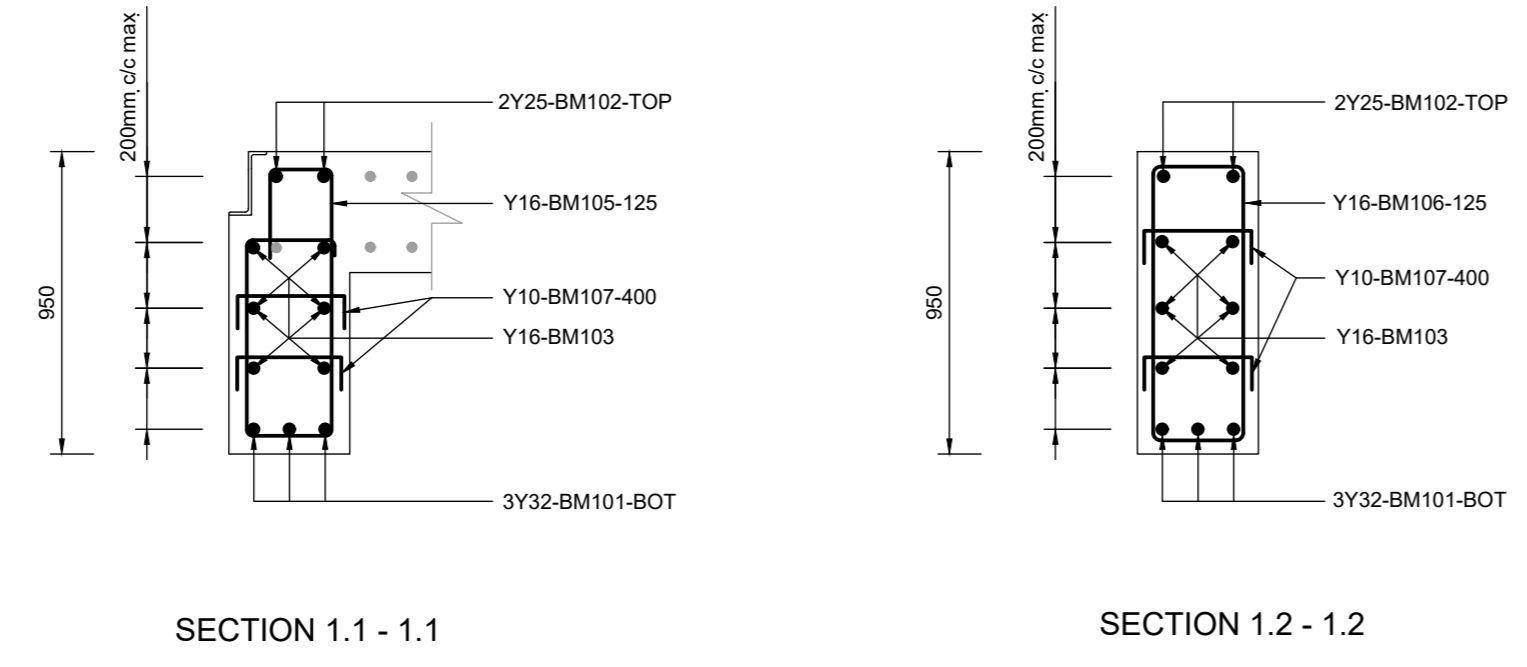
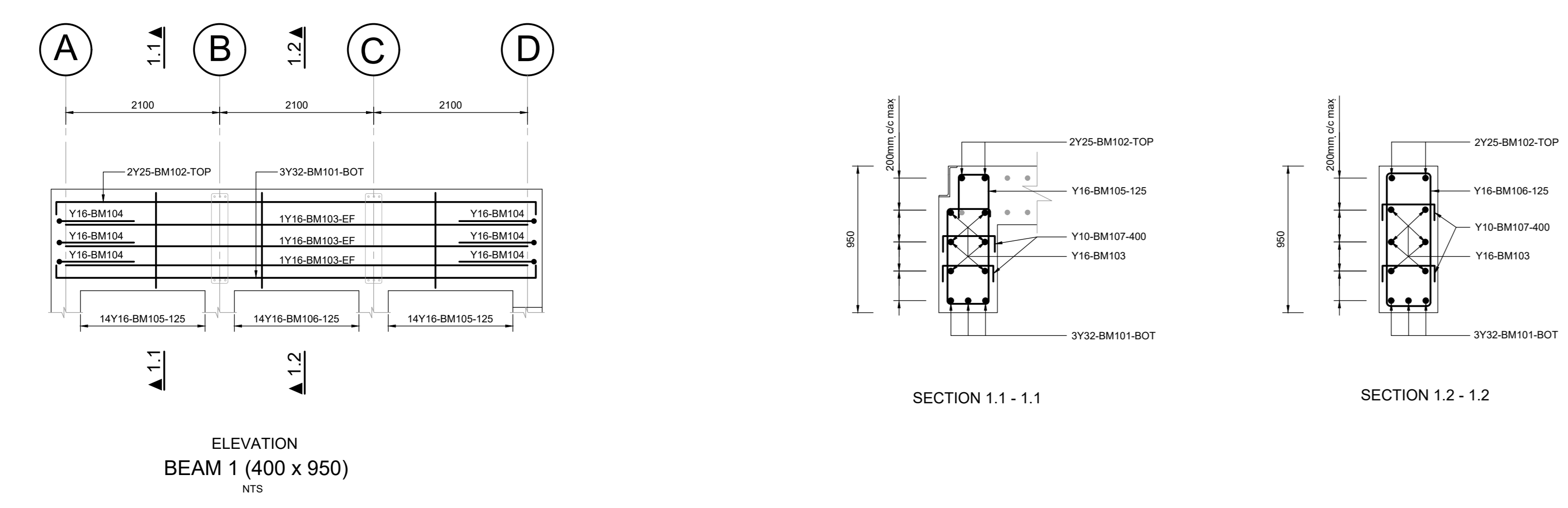
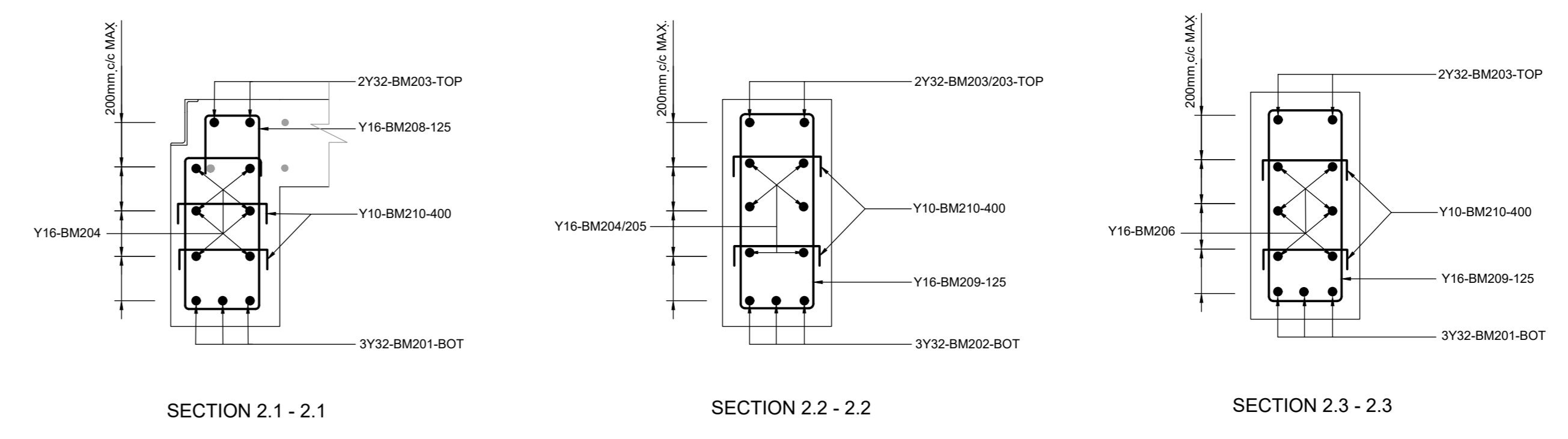
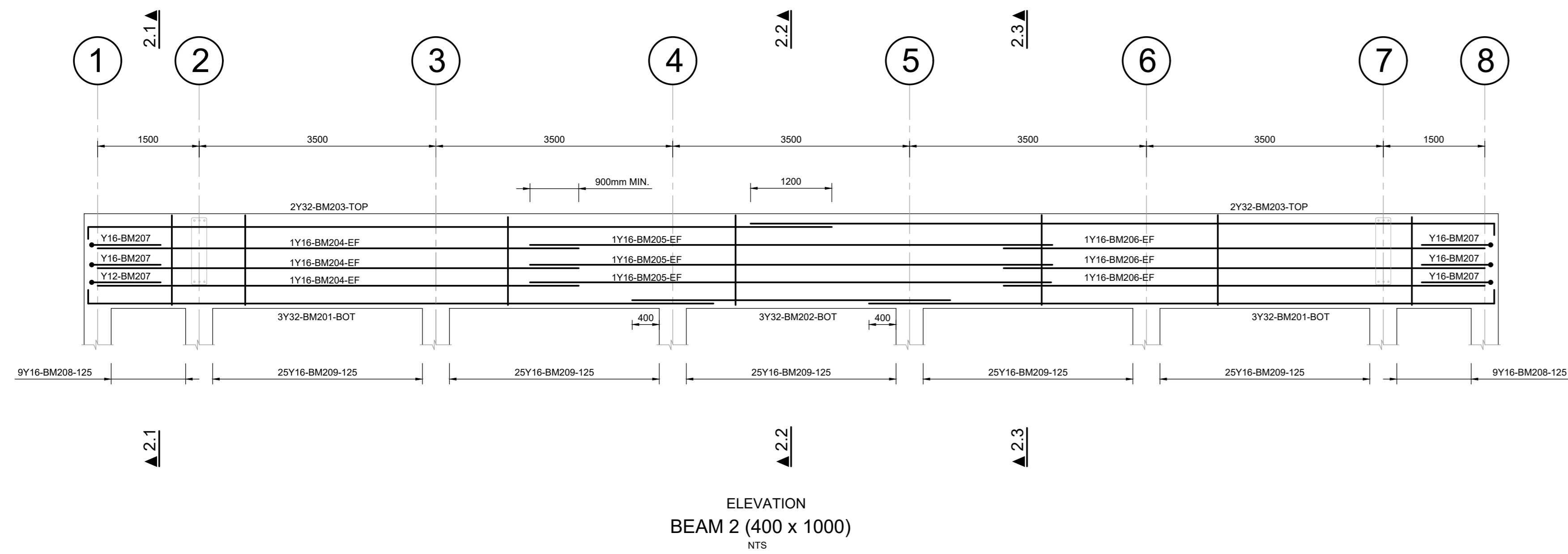
**SALDANHA STORMWATER MANAGEMENT**

**MULTIPURPOSE TERMINAL AREA**

**STILLING BASIN**

**TOP SLAB REINFORCEMENT DETAIL**

PROJECT NUMBER	CO	FBS	DIS	TYPE	DRAWING NO.	SHEET	REV	ID
AO52010157	2	0	1	S	R	D	0	0



MEMBER & SIZE	REINFORCEMENT						DIMENSIONS					
	UNITS	MARK	TYPE & DIA.	No. PER UNIT	TOTAL No.	LENGTH	SHAPE CODE	A	B	C	D	EIR
BEAM 2 400 x 1000 DEEP	2	BM101	Y32	3	6	7050	35	6500				
		BM102	Y25	2	4	6900	35	6500				
		BM103	Y16	6	12	6500	20					
		BM104	Y16	12	24	1200	37	560				
		BM105	Y16	20	40	3300	75	750	190	830	280	675
		BM106	Y16	10	20	2250	60	830	280			
		BM107	Y10	18	36	900	85	50	280	50		
BEAM 1 400 x 950 DEEP	2	BM201	Y32	6	12	9650	37	9250				
		BM202	Y32	9	18	5000	20					
		BM203	Y32	4	8	11400	37	11000				
		BM204	Y16	6	12	7450	20					
		BM205	Y16	6	12	8000	20					
		BM206	Y16	6	12	7450	20					
		BM207	Y16	12	24	2000	37	1000				
		BM208	Y16	18	36	3350	75	800	190	880	280	675
		BM209	Y16	125	250	2600	60	880	280			
		BM210	Y10	246	492	500	85	50	280	50		

MEMBER & SIZE	REINFORCEMENT						DIMENSIONS					
	UNITS	MARK	TYPE & DIA.	No. PER UNIT	TOTAL No.	LENGTH	SHAPE CODE	A	B	C	D	EIR
COLUMNS	12	C01	Y25	8	96	3350	37	3000	200			
		C02	Y10	13	156	1400	60	440	440			
		C03	Y10	26	312	650	35	440				

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  - CONCRETE CURE STRENGTHS ARE CHARACTERISTIC STRENGTHS TO SANS 10100 PARTS 1 AND 2.
- CONCRETE STRENGTHS AT 28 DAYS:
 

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BEAMS	40MPa/18mm
WALLS	40MPa/18mm
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- COVER TO REINFORCEMENT:
 

WALLS	60mm
SLABS	60mm
- ALL EXPOSED CONCRETE TO BE CHAMFERED 20mm x 20mm UNLESS OTHERWISE SHOWN.
- REINFORCEMENT SHALL COMPLY WITH SANS 820 AND BENT TO SANS 282.
- SYMBOLS:
  - R - MILD STEEL WITH CHARACTERISTIC STRENGTH OF 250MPa
  - Y - HOT ROLLED OR COLD WORKED HIGH STRENGTH BARS WITH CHARACTERISTIC STRENGTH OF 500MPa
- CONCRETE WORK FABRICATED UNDER THE SABS MARK SCHEME SHALL BE DEEMED TO COMPLY WITH SABS REQUIREMENTS.
- 50mm MAX. FINISHING SHALL BE PROVIDED.
- FORMWORK AND SURFACE FINISH FORMED SURFACES:
  - a) UNEXPOSED SURFACE - SMOOTH
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S200157-2-001-S-SE-0001-01-00	STILLING BASIN - SECTIONS AND DETAILS

CONTRACTOR / CONSULTANT		TRANSNET CAPITAL PROJECTS		Transnet Port Terminals																						
TITLE	NAME	SIGN	DATE	TITLE	NAME																					
				DRAWN	TT																					
				CHECKED	SS																					
				DESIGNED	TT																					
				CHECKED	PM																					
OPERATING DIVISIONS			PRENG / PR TECH / PR ARCH																							
TITLE	NAME	SIGN	DATE	NAME	DATE																					
				P. Maharaj																						
SIGNATURE			REG. NUMBER																							
			2020070238																							
SCALE			NOTED																							
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AO52	0	1	5	7	2	0	1	S-LA-0003	01	00	TT															

