



BEAM LENGTH = 33740mm

X (mm)	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	13000	14000	15000	16000	16870
Y1	CABLE A	1700	1536	1363	1241	1109	988	877	777	687	608	539	481	433	396	370	354	350
Y2	CABLE B & C	500	393	305	237	189	159	150	150	150	150	150	150	150	150	150	150	150
Z	CABLE B & C	200	195	190	185	180	175	170	165	160	155	150	145	140	140	140	140	140

BEAM LENGTH = 33620mm

X (mm)	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	13000	14000	15000	16000	16810
Y1	CABLE A	1700	1536	1363	1241	1109	988	877	777	687	608	539	481	433	396	370	354	350
Y2	CABLE B & C	500	393	305	237	189	159	150	150	150	150	150	150	150	150	150	150	150
Z	CABLE B & C	200	195	190	185	180	175	170	165	160	155	150	145	140	140	140	140	140

**ELEVATION**

SCALE 1:50

PRESTRESSING TABLE						
BEAM No.	CABLE MARK	DUCT ϕ (mm)	NO. OF STRANDS	TENDON UNIT	JACKING FORCE (kN)	CABLE EXTENSION (mm)
BEAM 1A, 1G, 2A & 2G	A	97	14	6-19	2554.9	211
	B	97	15	6-19	2737.4	212
	C	97	15	6-19	2737.4	212
BEAM 1B TO 1F, 2B TO 2F	A	97	13	6-19	2372.4	211
	B	97	14	6-19	2554.9	212
	C	97	14	6-19	2554.9	212

STRESSING SEQUENCE:

STAGE 1:

ALL THE CABLES SHALL BE STRESSED UP TO 70% OF UTS. STRESSING SHALL BE DONE AFTER 7 DAYS OF BEAM CASTING OR WHEN THE BEAM ATTAINS CUBE STRENGTH OF 40 N/mm<sup>2</sup>, WHICHEVER IS LATER.

STAGE 2:

ALL THE CABLES SHALL BE RE-STRESSED UP TO 70% OF UTS AFTER 30 DAYS FROM THE DATE OF STAGE-1 PRESTRESSING OR WHEN THE BEAM ATTAINS CUBE STRENGTH OF 50 N/mm<sup>2</sup>, WHICHEVER IS LATER.

NOTES :

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
- PRESTRESSING STRANDS SHALL BE 15.2mm DIA. LOW RELAXATION STRANDS CONFORMING TO ASTM A416-85 GRADE 270 GUARANTEED NOMINAL BREAKING LOAD PER STRAND : 260.7kN FOR 15.2mm DIA.
- ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER.
- MINIMUM CONCRETE CUBE STRENGTH AT 28 DAYS FOR PRECAST POST-TENSIONED BEAM SHALL BE 50 N/mm<sup>2</sup>.
- MINIMUM CONCRETE CUBE STRENGTH AT TRANSFER SHALL BE 40 N/mm<sup>2</sup>
- SHEATHING SHALL BE ACCURATELY POSITIONED AND TIED TO REINFORCING CAGE.
- RECESSES PROVIDED FOR ANCHORAGES SHALL BE CONCRETED AFTER GROUTING HAS BEEN COMPLETED.
- NOMINAL CONCRETE COVER TO ALL REINFORCEMENT SHALL BE 30 mm. UNLESS OTHERWISE STATED.
- ALL EDGES SHALL BE CHAMFERED.
- TOLERANCE ON BEAM LENGTH + 0 AND -50 mm.
- PRECAST CONCRETE SURFACES INTERFACING WITH IN-SITU CONCRETE SHALL BE ROUGHENED PRIOR TO CASTING OF THE IN - SITU PORTIONS.
- THE CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS INDICATING THE CALCULATED EXTENSIONS FOR THE REVIEW AND APPROVAL OF THE ENGINEER PRIOR TO THE CASTING OF THE BEAMS.

DRAWING REFERENCES:

- W/EW-3/D/6/1A-1 - GENERAL NOTES (SHEET 1)
- W/EW-3/D/6/1A-1.1 - GENERAL NOTES (SHEET 2)
- W/EW-3/D/6/1A-4 - BEARING LAYOUT AND DETAILS
- W/EW-3/D/6/1A-5 - BEAM LAYOUT
- W/EW-3/D/6/1A-13 - 33.74m & 33.62m POST-TENSIONED T-BEAM DETAILS (SHEET 2) - DIMENSION
- W/EW-3/D/6/1A-14 - 33.74m & 33.62m POST-TENSIONED T-BEAM DETAILS (SHEET 1) - REINFORCEMENT
- W/EW-3/D/6/1A-15 - 33.74m & 33.62m POST-TENSIONED T-BEAM DETAILS (SHEET 2) - REINFORCEMENT

PRELIMINARY